Health Psychology for all: Equity, Inclusiveness and Transformation

BOOK OF ABSTRACTS

37th Annual Conference of the European Health Psychology Society
4-8 September, 2023
Bremen, Germany
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Open Digital Health: Leading digital health transformation in health promotion and treatment, most prominent issues

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Digital health tools (i.e., the use of technology solutions such as computers, smartphones, wearables, virtual reality) to deliver health promotion interventions and treatment are gaining popularity worldwide. Although some tools are effective, their robust evaluation and successful implementation remain limited to specific contexts and populations.

Open Digital Health (ODH) is a not-for-profit organization affiliated with the EHPS that aims to improve evaluation, scalability and reuse of digital health tools worldwide following the principles of open science. This workshop led by the ODH Directors will include a discussion on the topic of the most prominent issues in digital health transformation in health promotion and treatment.

After the initial presentation and opening discussion, the participants will work in small groups on the topic areas that they have the most interest in, including but not limited to interoperability, open science, digital ethics, scalability, and digital transformation. The main aim of the workshop is to form working groups that can continue the conversation post workshop and form active groups supported by the ODH, applying for relevant funding, collaborating, and publishing on the relevant topics.

The workshop will provide a stimulating environment for digital health researchers to share existing digital health tools, and to brainstorm how to best move forward in the digital health field. Basic understanding of digital health and digital health research principles is required to attend the workshop.

Digital health tools have yet to significantly and sustainably impact health and wellbeing at a large scale and are yet to be applied equitably across populations and settings with differing needs. This workshop is set to bring thinkers and researchers to discuss innovative breakthroughs that are still needed in this field. A commentary article will be one of the outputs of the meeting, together with networking, knowledge sharing, and setting potential collaboration plans.
Closing the diversity data gap: Proposing country-specific versions of a Diversity Minimal Item Set (DiMIS)

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Objective: The health sciences strive to provide high-quality evidence for all members of society, but there remains a considerable gender and diversity data gap, i.e., a systematic lack of data for traditionally underrepresented groups. Stadler, Chesaniuk, Haering, Roseman, Straßburger, the Diversity Assessment Working Group, and Schraudner (2022, doi.org/10.31234/osf.io/bjyms) proposed a brief, efficient Diversity Minimal Item Set (DiMIS) for routine data collection in empirical studies to contribute to closing the diversity and gender data gap. Yet, appropriate terms for concepts such as sex, gender, ethnicity or race – just to name a few – as well as their response options may vary across languages, cultures and legislations and may need to be adapted according to local context and target population. This full-day workshop aims to bring together researchers from various backgrounds to translate, revise, and adapt the DiMIS to several language and cultural contexts. Following the workshop, the results will be published to facilitate culturally-informed data collection to close the gender and diversity data gap in the health sciences. We hope to contribute to a more equitable and inclusive research practices in collaboration with fellow health psychologists.

Activities: In the introduction to the workshop, participants will learn about principles of diversity-sensitive data collection and review the English and German versions of the DiMIS. In break-out sessions, participants will then create versions in different languages and adapt these to regional contexts.

Participants: This event is aimed at researchers and stakeholders at any career stage who already have experience and/or interest in assessing social determinants of health and other diversity domains. Fluency in a language other than German and English is a plus.

Maximum number of participants: 100.

Format: full-day workshop.
Knowing what you’re talking about: creating comprehensive construct definitions and making them useful in practice

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Workshop overview:
A theory and measurement crisis have been argued to be root causes of psychology’s credibility crisis. In both, the lack of conceptual clarification and the jingle-jangle jungle at the construct definition level as well the measurement level play a central role. One way forward is producing more comprehensive construct definitions that are linked to corresponding instructions for quantitative and qualitative research (https://doi.org/jnjp).

In this workshop, we will introduce this problem and three open source technical tools: the R package {psyverse}, the Constructor Shiny App, and the PsyCoRe construct repository. Workshop participants will then work on producing a comprehensive construct definition and instructions for working with that construct in practice.

At the end of the workshop, participants will have produced a construct definition with a Unique Construct Identifier, along with instructions for developing measurement instruments for that construct, identifying measurement instruments as measuring that construct in a systematic review, eliciting construct content in qualitative research, and coding qualitative data as informative about the construct.

Schedule:
9:00-9:30 --- Interactive presentation to introduce the problem and a solution
9:30-10:00 --- Group work (comprehensive construct definitions)
10:00-10:30 --- Share experiences and discuss problems and challenges
10:30-12:00 --- Group work (construct-specific instructions); coffee/tea break included in this slot
12:00-12:30 --- Share experiences and discuss further steps

Objectives:
After this workshop, participants:
… will have been introduced to the problematic state of construct definitions in (health) psychology
… will be familiar with approaches to develop comprehensive construct definitions
… will be familiar with the aforementioned open source tools
… have produced a comprehensive construct definition, attached a Unique Construct Identifier to it, and stored in it PsyCoRe.one

Intended participants:
Researchers, practitioners, or policymakers who work with constructs. So, anybody, really.
Number of participants: 20
An Introduction to Research Data Management - Challenges and Opportunities in Health Psychology

9:30 - 17:00

An Introduction to Research Data Management - Challenges and Opportunities in Health Psychology

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Background:
Sharing research data can be considered one of the main cornerstones of good scientific practice and is becoming more important across disciplines. It not only allows the replication of research results but also increases the visibility of research projects, enables the reuse of scientific data and fosters new collaborations. Data sharing has become one of the major deliverables requested by funding bodies and journals and even the acquisition of federal as well as EU-wide research funding usually requires a data management plan. At the same time, working with sensitive and personal health-related data constitutes a particular challenge in regard to data handling and data security, as well as the legal framework and the digital infrastructure. Also, health sciences are entering the age of big data analysis, but the application of machine learning algorithms and applications requires high quality and machine-readable data. The implementation of the so-called FAIR-principles (make research data Findable, Accessible, Interoperable and Reusable) across the research data life cycle facilitates the realization of these new data handling requirements.

Objectives: During the workshop, a (1) general overview on the implementation of the FAIR principles across the research data life cycle will be provided. We will (2) discuss challenges when working with health-related data and (3) try out some tools and resources that help with the FAIRification of datasets. Participants are welcome to provide insights and share experience from their own research projects and data. At the end, participants should be able to (4) derive requirements for data management plans in accordance with most research funding bodies.

Intended participants: PhD students and PostDocs working with health-related data

Maximum number of participants: 15
Qualitative research in the age of open science: the Reproducible Open Coding Kit (ROCK)

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Workshop overview:
The Reproducible Open Coding Kit (the ROCK) is a standard to code plain text files, designed to be both human- and machine-readable; such a dataset can be further processed in a variety of software packages. The ROCK standard has been implemented in two Free/Libre Open Source Software packages: the iROCK interface for coding transcripts and the R package `rock` for processing and analysing coded transcripts.

In this workshop, participants will learn to use the iROCK interface to code transcripts, and the `rock` package to clean data, merge codes from coded transcripts, process deductive and inductive code trees, inspect the coded fragments either overall or based on participant attributes, and export the results to a comma separated values file.

Proposed schedule:
9:00-10:15 --- Interactive presentation (overview of the ROCK and problems it addresses)
10:15-11:00 --- Coding qualitative sources with the iROCK interface and setting attributes
11:00-11:30 --- Coffee/tea
11:30-12:15 --- Importing coded sources and conducting additional analyses
12:15-12:30 --- Conclusion
Note that although the workshop offers some hands-on training in qualitative research, the focus of the workshop is on data processing, not on theory and background.

Objectives:
After this workshop, participants:
... will have developed a basic understanding of methodological considerations in qualitative research through the ROCK standard
... can prepare qualitative sources for coding using the `rock` R package
... can code sources using the iROCK interface
... can merge coded sources using the `rock` R package
... can analyse qualitative datasets using the `rock` R package

Intended participants:
Researchers & practitioners who (want to) conduct qualitative research

Maximum number of participants: 20
Patient involvement in health research

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Objectives: Calls for proposals as well as journals are increasingly calling for patients to be involved in all phases of a research process – from the identification of a research question to the dissemination of research results.

In this workshop,
(1) the field of participatory research will first be defined more precisely. It will be explained who can be involved at which level and at which stages of the research process.
(2) opportunities for patient involvement in research projects are then presented on the basis of practical examples. Participants will reflect on benefits and challenges of patient involvement
(3) initiatives to support the implementation of patient involvement in different countries are introduced and contrasted.
(4) quality criteria and the evaluation of patient involvement of health research are discussed.

Activities: Participants will discuss their attitudes to and experiences with patient involvement. Participants can actively develop a patient involvement plan for their research projects. They will give and receive feedback for the developed involvement plans.

Description of the intended participants: Early stage researchers who are interested in including participatory elements in their research projects.

The maximum number of participants for the workshop: 15
Implementation of prevention and self-management interventions

9:30 - 11:00  |  B2900

Evaluation of social prescribers’ decision-making approaches for referrals related to lifestyle advice

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Background: Social Prescribing (SP) connects primary care patients with non-medical sources of support within the community. There are various SP models, with different referral routes. Many involve patients being referred to a link practitioner, who considers their needs and then “prescribes” or links them to appropriate local support services or resources, typically provided by the third sector. The present study aimed to explore the SP process and the decision-making of link practitioners, particularly around food and physical activity practices.

Method: Sixteen semi-structured interviews were conducted with link practitioners working across Aberdeen City. A constructivist grounded theory approach informed study design, data collection, and analysis.

Findings: Participating link practitioners described their approach with clients as building rapport and trust while maintaining boundaries and managing expectations, and their community role as resource mapping and networking. Three broad categories of factors were considered during referral: 1) practicality (e.g., location, cost, mobility, availability), 2) clients’ interest and motivation in engaging with services, and 3) link practitioners’ past experiences with services. Challenges identified included: navigating waiting lists and service limitations, low client engagement, time management, and sustaining support over time. All link practitioners considered diet and exercise to fit within the remit of social prescribing, but emphasised that clients should lead this discussion. Dietary support via SP typically revolved around poverty rather than health.

Discussion: The study provides insight into the practical reality of making social prescription decisions, and has potential to inform training and evaluation processes and support the development of SP interventions.
Impact of gender on prevention in primary care: preliminary results from a randomized vignette study

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Background
Primary care physicians (PCPs) play a key role in prevention of type-2-diabetes. However, little is known about the impact of patient gender on PCPs risk assessment, lifestyle counselling and behavior change interventions. (Unconscious) gender bias may lead to inequalities in primary prevention. Thus, the aim of this randomized vignette study is to determine whether PCPs preventative behavior differs according to patients' gender and diabetes risk.

Methods
Throughout Germany, N=151 PCPs completed the online survey (MAge=52.4 years, SD=9.2; 56% women, 41% men, 3% other). Each PCP was randomly assigned one of four vignettes with the dimensions gender (man vs. woman) and diabetes risk (moderate vs. high). Need for prevention (primary outcome), prevention strategies, priority of intervention targets, knowledge, and educational needs regarding gender-specific prevention were assessed. Differences across vignettes were analyzed with two-way ANOVAs.

Findings
Estimated need for prevention was significantly higher for high-risk compared to moderate-risk vignettes (F(3, 147)=34.35; p<.001). No gender differences were found. Descriptive analyses revealed that 13 % gave weight loss interventions the highest priority in vignettes with women, while this target never received the highest priority in vignettes with men. 49% of PCPs rated their knowledge of gender-specific prevention as low, 67% reported they would attend trainings on the topic.

Discussion
Effective lifestyle counselling must be tailored to gender-specific prevention needs. Our preliminary findings suggest that gender does not influence the assessment of prevention needs and applied intervention strategies in PCPs. Nonetheless, results indicate that intervention targets may differ by gender. Potential implications are discussed.
Exploring dental undergraduate students’ behavioural determinants to facilitate oral health behaviour change conversations with patients

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Background: A wide range of behaviours are involved in oral health with most oral health diseases preventable through optimal behaviours. Dental professionals play a crucial role for the delivery of oral health behaviour change however, there is variation on training and skills development across universities.

Methods: A total of 139 Year 3 Bachelor of Dental Surgery (BDS) students from 2 UK Universities completed a brief 10-item questionnaire used in previous studies with non-dental students. Out of the 10 questions, 8 used a 7-point and 2 used a 10-point Likert scale to elicit responses.

Findings: Across both Universities, dental students scored above average on self-efficacy (M(SD)=5.18 (1.12)), subjective norm (M(SD)=5.38 (1.20)), behavioural control (M(SD)=4.57 (1.64)), behavioural attitudes (M(SD)=1.17)), outcome expectations (M(SD)=5.66 (1.11)), action control (M(SD)=5.51 (1.15)) and identity (M(SD)=6.35 (1.06)). Only on action planning students’ average was low (M(SD)=3.98 (1.65)). Students reported currently talking to less than 1 patient for oral health behaviour change (M(SD)=.82 (1.36)) with a high reported expectation of talking about behaviour change to just under 7 out of every 10 patients (M(SD)=6.99 (2.40). Self-efficacy, behavioural control and behavioural attitudes showed significant correlations with a variety of variables.

Discussion: Dental undergraduate students feel that oral health behaviour change is part of their identity with their self-efficacy, attitudes and behavioural control determining how likely it is to initiate and be involved in such conversations. Targeting resources early on is crucial to ensure that sufficient foundations are created to allow for the facilitation of oral health behaviour change conversations.
IMPlementing IMProved Asthma self-management as RouTine (IMP2ART): pilot for a cluster randomised controlled trial

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Background: IMP2ART is a multidisciplinary, theoretically-informed strategy to improve implementation of supported self-management and asthma outcomes in routine primary care. The strategy includes 1) patient resources to support self-management 2) professional education 3) organisational strategies. This pilot, internal to a cluster RCT, aimed to test trial processes and recruitment feasibility, and to understand practices’ likely engagement with IMP2ART.

Methods: A mixed-method pilot was conducted in 12 general practices (May-September 2021). Practices were randomised to the IMP2ART implementation arm (n=6), or usual care control (n=6). Recruitment and set-up processes were monitored, with quantitative data analysed on key aspects of IMP2ART delivery (asthma review template uploads, audit/feedback reports sent, IMP2ART workshops held) and practice response (website views, education module completion). 10 qualitative interviews were conducted with implementation arm staff and IMP2ART facilitators. Interviews were analysed using framework analysis.

Findings: We recruited 12 practices to the study, one control practice withdrew. We delivered the strategy as planned; the review template was successfully uploaded, the annual audit report was sent, and practice workshops were held in all implementation practices (attendance ranged from 7-31). There were minor delivery delays for some monthly audit/feedback reports. Practice response analysis indicated ≈450 unique page views on the resource website, and 100% of practices completed the team education. Interview data were largely positive, with examples of how practices were using IMP2ART.

Discussion: The IMP2ART trial processes were successful and required only minor changes. Practices engaged with the implementation strategy and its resources, suggesting that IMP2ART is acceptable and feasible.
Barriers and facilitators to social prescribing in youth mental health: Perspectives from the frontline

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There is growing interest in the role of Social Prescribing (SP) to help promote mental wellbeing and support individuals with mental health difficulties. Yet, implementation of SP to children and young people (CYP) has proved slow and underdeveloped compared with adult populations. Understanding the barriers and facilitators will help key stakeholders to better embed SP for CYP into practice. Using the Theoretical Domains Framework (TDF), a comprehensive, theoretical-led framework, underpinned by 33 behaviour change theories and 128 constructs, perceived barriers and facilitators to SP were investigated. The sample comprised of 11 Link Workers and 9 individuals involved in facilitating SP with CYP, who took part in semi-structured interviews. Transcripts were analysed using a deductive thematic analysis, and themes were coded under each theoretical domain. Overall, 36 barriers and facilitators for SP were identified across 12 domains of the TDF. Under capability, barriers and facilitators were found for knowledge, skills, memory/attention/decision making processes, and behavioural regulation. For opportunity, barriers and facilitators were found for social/professional influences, as well as environmental context and resources. Finally, for motivation, domains covered included: beliefs about consequences, beliefs about capabilities, optimism, motivations/goals, reinforcement, and emotions. Findings suggest that a wide range of barriers and facilitators affect the implementation of CYP SP to improve mental health and wellbeing. Interventions that target different domains related to capability, opportunity and motivation should be developed to better facilitate CYP SP.
Smoking prevention within social work organizations: a qualitative study about youngsters’ and youth workers’ perceptions

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Background: Tobacco smoking uptake is still a major public health concern, especially among youngsters living in vulnerable situations. Finding optimal ways to engage youngsters in smoking prevention is important. Compared to traditional settings such as schools, social work settings providing sports-based and recreational activities (SR-settings) tend to reach and engage youngsters more. The aim of this study was to gain insight into the reasons for smoking uptake among youngsters living in vulnerable situations, as well as into the conditions through which SR-settings are potentially beneficial for smoking prevention initiatives.

Methods: Data were collected in two SR-settings in Flanders, Belgium, by means of five focus group discussions and six individual interviews with youngsters (N= 38, mean age=12.9 ± 2.61 years, 69.7% boys), and eight individual interviews with youth workers (N=8, mean age=27.5 ± 7.95 years, 87.5% men). A thematic analysis approach was applied to analyze the data.

Findings: Besides individual factors, such as attitudes, the desire to be part of a group and conformity to group norms seem to be important drivers of smoking uptake among youngsters in vulnerable situations. The presence of powerful role models in SR-settings with whom youngsters identify may counteract group norms by encouraging healthy behavior.

Discussion: Instead of acting as barriers, authentic group processes, having meaningful roles, and being heard can be used as a lever for the design and the uptake of smoking prevention. Such are the conditional characteristics of SR-settings making these contexts promising venues for smoking prevention efforts among vulnerable youngsters.
The power of participatory methods to align the perceptions of intervention developers and end-users

9:30 - 9:45

How do healthcare professionals perceive the threat of antibiotic resistance?

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Background: Antibiotic resistance (ABR) is one of the greatest threats to global health today. Risk communication is one means to promote healthcare professionals to act against ABR. Risk communication interventions are most effective when tailored to the existing perceptions of end-users. We applied a mental models approach to understand healthcare professionals’ perceptions of the threat of ABR and to inform the content of such risk communication interventions.

Methods: An expert model of ABR perceptions was constructed with Dutch ABR experts (n=4) and used to develop a questionnaire with open-ended questions for healthcare professionals (n=11). Inductive thematic analysis was applied to construct a mental model. This mental model will be tested with quantitative questionnaires among healthcare professionals in early 2023.

Findings: Qualitative results indicate that the consequences of ABR are perceived as severe (e.g., increased morbidity, mortality, worse treatments) and healthcare professionals are often mentioned as contributing to the causes of ABR (e.g., through antibiotic prescriptions). Many actions against ABR are perceived as highly effective and feasible (e.g., stewardship, education, collaboration).

Discussion: Healthcare professionals perceive ABR as a serious threat to which they contribute. While they mention many effective and feasible actions against ABR, too little action against ABR is taken in practice. Whether the threat appraisal of healthcare professionals leads to action against ABR needs to be investigated further.
The Public’s Perspectives on Lifestyle-Related Behavior Change for Dementia Risk Reduction: A Qualitative Study

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Background: Accumulating evidence demonstrates that dementia risk reduction is promising in mitigating dementia incidence rates. Insight in the public’s perspectives on dementia risk reduction initiatives is needed to inform future individual-level interventions and population-based approaches.

Methods: This qualitative study used interviews to investigate the extent to which people are open and willing to change lifestyle-related behaviors that reduce the future risk for dementia. Using a screening questionnaire, based on the validated LIfestyle for BRAin health index, twenty-three participants were purposively selected based on lifestyle behaviors that are associated with dementia. Independently, two researchers performed an inductive content analysis.

Results: Main themes identified in the data are:

a) Abstractness of dementia risk (i.e., participants had difficulty conceptualizing personal dementia risk and struggled to translate risk perceptions to lifestyle change);

b) Ambivalence towards behavior change (i.e., despite intentions towards a general healthier lifestyle the participants were resilient towards changing specific risk behaviors);

c) Negative self-image and low behavioral control (i.e., these feelings obstructed commencing to a healthier lifestyle);

d) Use of all-or-nothing thinking about lifestyle change (i.e., many perceived that radical lifestyle changes were a silver bullet, but most had no realistic goals or specific plans).

Conclusion: The concept of dementia risk reduction is difficult to translate to the personal context and translating healthy intentions into behavior for dementia risk reduction is complex as it involves overcoming specific barriers. This is problematic for interventions because a large proportion of the public needs a healthier lifestyle to reduce dementia incidence rates on population-level.
Perceived effect of online access on patient empowerment, the patient-provider relationship, and informed decision-making

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Background: Commonly envisioned effects of online access for patients include patient empowerment and increased patient participation in conversations and decisions about health. However, to date, the actual influence of online access is underinvestigated.

Methods: A nationwide two-wave longitudinal survey study among Dutch adults was conducted (N=2402). We examined the perceived effect of online access (measured at T1) on twelve factors (measured at T2) associated with use of online access to general practice medical records in previous research. Regression analyses were conducted to investigate the perceived effect of online access.

Findings: Users indicated more strongly that online access would lead to patient empowerment, increase patient participation in healthcare, and foster patient informed decision making. However, effects were very small. These results were robust even when adjusted for influence of socio-demographic factors and patient characteristics. Digital literacy and health literacy were causing differences in ratings of effects of online access across almost all effects.

Discussion: Effect of online access on patients seems to be small but might grow over time. Results alert that potential benefits of online access might be(come) unevenly distributed. There might be other factors, such as attitude of general practitioners, moderating the effects. More research is needed to prevent disparity in effect distribution and explore the conditions under which online access can improve healthcare system functioning and efficiency.
Development and evaluation of personal role model stories for sexual health prevention

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Background: In 2020-2022, the sexual health intervention Sense.info was evaluated using web-analytics and two think-aloud studies. Building on the first think-aloud study, we invited Sense.info end-users to share their personal experiences with chlamydia. These were used to create role model stories to increase self-efficacy and skills regarding chlamydia preventive behaviors.

Methods: Evaluation of systematically developed role model stories with web analytics and a think-aloud study. Participants were recruited via a banner on Sense.info and purposively selected based on demographic characteristics (N=20, Mage=19.7, SD= 2.65). Template analysis was used to interpret the data.

Findings: Participants expressed that the stories contributed to normalization, enhanced self-efficacy and skills, and led to an intention to engage in preventive behaviors. Regarding the conditions for effectiveness of the behavior change principle Modeling, identification with the role model differed per participant and story. Some participants indicated that the stories were too positive. Web-analytics revealed that all stories were noticed and clicked on by visitors. On average, the time spent on each story page was around 1 minute. Exit rates were relatively low.

Discussion: The personal stories seemed to effectively engage end-users and motivate them to adopt chlamydia prevention strategies. However, a balance needs to be found between adhering to theoretical conditions and end-users' perceptions. In a next optimization phase, we might for example include more information about role models' initial struggles to be more consistent with the condition that role models should be coping models.
When individuals at high risk of suicide meet emma, an assessment and prevention application.

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Background: A French multidisciplinary team co-constructed emma, a smartphone application to assess and prevent suicide on suicidal individuals based on Ecological Momentary Assessments (EMA). Human and non-humans actants such as clinicians, researchers, IT developers, suicidal individuals, secured data hosting software etc. designed emma. This set of actors involved the coexistence of various expectations, values and knowledge, all referred to actors’ own culture or, more specifically, socio-technical imaginary, i.e., a common vision of a desirable future. The application is the result of that compromise of socio-technical imaginaries.

Method: This qualitative study was conducted with 14 end-users who consented to semi-structured interviews. The objective was to gain access to the singular experiences each end-users had with the application.

Results: Our results highlight different appropriations and uses of the application by the participants. Regularly subjected to EMA completion notifications, some end-users felt a sense of intrusion that prevented them from completing the self-assessments. Others have developed a habitus. Over the 6-month research protocol, individuals used the application for up to 2 months, before drastically decreasing its use.

Discussion: The variable adherence to the tool, although co-constructed with end-users, demonstrates the gap between the design phase of emma and its use. We suggest that the technological promise shows its limits by a strong attrition. Loss of interest, improvement of the end-user's condition, the reasons are numerous. What do end-users and clinicians finally expect from new technologies? If the question seems trivial, a reflection on the real expectations of the digital tool is still needed.
Mental health and wellbeing

9:30 - 9:45

Longitudinal evidence shows that poor mental health in people living with obesity may be underestimated

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Background.
It is well-documented that people living with obesity are at greater risk of poorer mental health. We explored this pattern long-term, examining the trajectories of depression and anxiety in people living with obesity over two years.

Methods.
A secondary analysis was conducted across 8 waves of the COVID-19 Psychological Research Consortium Study online survey, reporting obesity and mental health outcomes during the pandemic (March 2020-March 2022) in a large nationally representative UK sample. We modelled the longitudinal trajectories of depression and anxiety using smoothing-splines mixed-effects models and investigated participation effects via a missingness analysis to check whether drop out over time was related to participant characteristics.

Findings.
Trajectories over time showed that those living with overweight and obesity consistently reported significantly higher rates of anxiety and depression compared to those in normal weight categories. Our missingness analysis revealed that depression and anxiety predicted the likelihood of responding to the survey over time, whereby those reporting higher rates of depression and anxiety were less likely to respond to the survey.

Discussion.
Our findings add to the literature surrounding the (long term) link between living with obesity and poor mental health. Notably, results from the missingness analyses suggest that people who were more depressed and anxious, were less likely to participate in the survey. We conclude that it is likely that this survey (and others) potentially underreport mental health problems and therefore the risk that living with obesity presents to mental health may be even more extensive than current figures suggest.
Predictors of well-being: longitudinal study among adults with overweight and obesity

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Background
Obesity and overweight are associated with numerous physical, social and psychological consequences. In particular, one of the most explored psychological correlates related to obesity is depression. Even though many risk factors of this relationship have been identified, the correlates of well-being in obesity are rarely considered. Therefore, the aim of this study was to identify the predictors of well-being in obesity.

Methods
Two-wave longitudinal data were collected from 75 overweight patients (92% were women; Mage = 42.76, sd = 10.41). They were included in the ESTEAM cohort, which encompasses Body Mass Index (BMI), eating self-efficacy, well-being, depression, physical hunger, self-esteem, body satisfaction and perceived stress assessments. Best subset regressions (BSR) and Hayes’ mediation and moderation analyses were performed to investigate the predictors of well-being.

Findings
BSR identified three significant predictors of well-being: BMI, physical hunger and performance self-esteem. Mediators and moderators of these links were then explored. The relationship between obesity and well-being is moderated by performance self-esteem and mediated by physical hunger, perceived stress and body satisfaction. Likewise, the link between physical hunger and well-being is mediated by body satisfaction and self-esteem. Finally, the relationship between performance self-esteem and well-being is mediated by body satisfaction and moderated by BMI and eating self-efficacy, while perceived stress plays a dual role by both moderating and mediating this link.

Discussion
The results of our research could serve as a basis for the implementation of a well-being-focused obesity intervention and for the development of an explanatory model of well-being in obesity.
Testing an intervention to reduce the negative effect of stress on mental health in students

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Introduction
Stress management issues are a major component affecting students' mental health. A recent successful intervention helps students to effectively manage their stress perception by changing their mindset towards stress. This study aimed to evaluate the efficacy of an extended version of an imagery-based intervention to change stress mindset, and examine the effect of the intervention on mental health outcomes.

Methods
A preregistered randomised controlled trial design was used for the investigation. University students (N = 82) filled out an online survey twice over a period of one week, assessing their stress mindset, perceived stress level, and mental health. In the first session, students received the intervention or control condition videos. After three days, students in the intervention condition completed another mental imagery task to boost the effect.

Findings
Mixed model ANOVAs revealed a significant difference in stress mindset among intervention group participants immediately post intervention, at one-week follow-up, and in comparison to the control group (F(2, 160)= 20.33, p < .001). The additional mental imagery task was successful in preserving the intervention's impact. There were also robust effects of the intervention on depressive symptoms (F(1, 80)= 3.18, p = .004), although not on anxiety (F(1, 80)= 2.04, p = .157).

Discussion
The findings suggest that the intervention is a potential approach for altering students' stress mindset and improving their well-being. Future research could focus on conducting intensive longitudinal designs to further investigate the stimulation of stress mindset, and developing interventions for different populations and various types of stress.
Causal attributions in people with depressive symptoms - an exploratory analysis of stability over time

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Background: According to the common-sense model of illness representations, illness beliefs, such as causal attributions, can influence the way people assess and cope with their illness and vice versa. To date, causal attributions in people with depressive symptoms have been studied mainly cross-sectionally and quantitatively. The purpose of this study is to examine the causal attributions of people with depressive symptoms in terms of their stability over time.

Methods: Data were collected by telephone within the framework of a prospective, population-representative study at two measurement time points (T0 and 12 months later at T1). Subjects with at least mild depressive symptoms aged ≥ 18 years were included at T0. Causal beliefs about participants' psychological complaints were collected with the open-ended question of the Brief Illness Perception Questionnaire. Participants (n=472) with at least one causal belief mentioned at both timepoints were included in the analysis. Causal attributions were analyzed qualitatively with a deductive approach using MAXQDA. For descriptive statistics of the coded data we used SPSS.

Findings: The causal attributions mentioned were assigned to 14 different main categories, of which "problems in the social environment" (59,9%), "negative life events" (57,0%) and "childhood, youth, parental home" (56,6%) were the most stable over time. In contrast, "unspecific stress and overload" occurred as one of the least time-stable categories (22,2%). Discussion: Causal attributions assigned to events in the past seem to be more stable over time than stress-related ones. Further research is needed to examine whether time-stability of causal attributions impacts individuals' coping strategies.
A valid and reliable tool for assessing the stress–drinking relationship

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Background: Stress exhibits detrimental effects on physical and psychological health. The multifaceted responses to stress include the use of maladaptive coping strategies such as consumption of alcohol. The current study aimed at validating a questionnaire specifically assessing the stress–drinking relationship.

Method: In two studies, with 639 unselected participants in study 1, and 20 inpatients for alcohol addiction/abuse and matched controls in study 2, individuals completed the ten-item questionnaire Salzburg Stress Drinking Scale (SSDS). The SSDS refers to stressful situations asking participants if they drink “much less than usual”=1 to “much more than usual”=5 with a higher mean characterizing a greater tendency to drink more in response to stress.

Results: Study 1 confirmed a one-factorial structure with an excellent internal consistency (α=.942). Convergent validity was shown via moderate correlations with the subscales “unpleasant emotions”, r(54)=.43, p=.001, and “social conflicts”, r(54)=.44, p<.001, of the Inventory of Drug Taking Situations (Alcohol), whereas no significant relationship emerged with the Lübecker Alcohol Screening Test, r(54)=.19, p=.17. The SSDS showed test-retest reliability after 4 weeks with r(210)=.72, p<.001. A significant difference between patients with alcohol addiction/abuse and controls was demonstrated, t(38)=3.28, p=.002, with patients (M=3.24) scoring higher than controls (M=2.59).

Discussion: The short questionnaire SSDS can reliably and validly assess the relationship between stress and drinking in unselected adults and can discriminate between individuals with and without alcohol-use problems. Hence, the SSDS can complement existing measures (e.g., stress-eating) to obtain a manifold picture of the stress response.
Gone Too Soon: Priorities to Prevent Premature Mortality Associated with Mental Illness and Mental Distress

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Background: Globally, too many people die prematurely from suicide and the physical comorbidities associated with mental illness and mental distress. The purpose of this paper is to mobilise the translation of evidence into prioritised actions that reduce this inequity.

Methods: The mental health research charity, MQ Mental Health Research, convened an international panel comprised of a multidisciplinary global team of academic, policy, clinical, lived and living experience experts (n=40) who used roadmapping methods and review evidence to identify key factors, mechanisms, and solutions for premature mortality across the social-ecological system.

Findings: We identified 12 key overarching risk factors and mechanisms, with more commonalities than differences across the suicide and physical comorbidities domains. We also identified eighteen actionable solutions across three organising principles: integration of mental and physical health care; prioritisation of prevention while strengthening treatment; and optimisation of intervention synergies across social-ecological levels and the intervention cycle. These solutions included accessible, integrated high quality primary care; early life, workplace, and community-based interventions co-designed by the people they should serve; decriminalisation of suicide and restriction of access to lethal means; stigma reduction; reduction of income, gender and racial inequality; and increased investment.

Discussion: The time to act is now, to rebuild health care systems, leverage changes in funding landscapes, and address the effects of stigma, discrimination, marginalisation, gender violence, and victimisation.
Psychological experiences of health and health behaviours

9:30 - 9:45

Psychological Correlates of Cancer Survival

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Objectives: The purpose was to identify psychological variables supporting cancer survival. The theoretical approach was the cognitive orientation health model (Kreitler) which assumes that the chances for survival are a function of psychological factors in addition to medical treatment and prognostic variables.

Methods: A questionnaire based on the cognitive orientation theory including beliefs about oneself, reality and others, goals and norms, was first validated by comparing responses of cancer patients with different survival degrees four years post-diagnosis. The themes in the questionnaire were attitudes towards activity, interpersonal relations, handling of stress, self-control, pleasing others, etc. It was used in the major prospective study with patients (80 breast cancer, 44 melanoma, 42 colorectal), administered 2 months post-diagnosis. Survival was checked after 5 years and after 12 years. The predictors in the regression analyses were prognostic medical variables (different for the different cancers) and the four types of beliefs. The dependent variables were disease-free survival, metastases, new cancers, no-survival. Kaplan-Meier analysis was also performed.

Results:
The results showed that the psychological and medical variables provided a significant prediction of survival rates. All predictors had significant contributions. After 5 years the medical variables had higher contributions than the psychological ones, which turned more important after 12 years, especially beliefs about self and about goals.

Conclusion and clinical implications:
The conclusion is that psychological variables may contribute to survival together with medical variables. The results suggest psychological interventions designed to enhance the survival effects of medical variables especially for long-term survival.
When East Meets West: Body image and eating behaviour concerns in young Middle-Eastern women

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Background: The rising incidence of maladaptive eating and body-image disturbance has become a global concern. However, research has tended to focus on outcomes in Western 'white' populations, and current conceptualisations reflect the Western experience. Few studies have investigated outcomes in non-western cultures, particularly Middle-Eastern populations.

Methods: The present study recruited 388 young women for an online survey from the Middle-East to determine how female family members may contribute to disordered eating and body dissatisfaction outcomes in a Middle-Eastern population. Guided by the Tripartite Influence Model, we investigated the relationships between influence/pressures to achieve appearance-related societal ideals, and fat talk (i.e., self-criticism relating to their physical appearance), from mothers and sisters, in predicting disordered eating symptomatology and body dissatisfaction, as mediated by appearance comparisons and internalisation of the thin ideal.

Findings: Greater mother and sisters’ influence/pressure to achieve societal ideals was associated with greater body dissatisfaction, restriction, and bulimia symptomatology. Likewise, sisters’ fat talk was positively associated with body dissatisfaction, restriction, and bulimia symptomatology. Mother’s fat talk was positively correlated with restriction and bulimia, but not with body dissatisfaction. Finally, participants felt significantly more influenced/pressured to achieve societal ideals by their mothers than their sisters. However, mothers and sisters exhibited equal levels of fat talk.

Discussion: Our final models revealed an overall good fit to the data, demonstrating that the Tripartite Influence Model, originally developed to explain the way in which sociocultural influences affect body-image and eating behaviour in a Western population, can be extended to young women in Middle-Eastern populations.
Awareness of COVID-19 cases in personal network and students' motivation to engage in protective behaviour

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At the beginning of COVID-19 pandemic young people were believed to be less vulnerable to the disease. Informed by the social amplification of risk framework (SARF) and motivation theories we explored what motivated youth to comply with recommended protective behaviour while being in a relatively safe position. Utilising self-reported data from 1,265 students we applied structural equation modelling to explore the role of different motivation types (self-interested, prosocial and controlled) in predicting the adherence to a wide range of protective behaviours. We also explored how the awareness of COVID-19 cases in personal networks was associated with perceived risks, motivation and behavioural response.

The prosocial motivation (to protect significant others) was equally strong as the self-interested (not to catch the disease) in explaining protective behaviours. Controlled motivation (to comply with external requirements) for this group was not significant in predicting behaviour. While the perceived COVID-19 severity was positively related with implementation of health-related behaviours, the perceived susceptibility to this disease was no or even reversely connected. The independent factor which affects both perceived risks and motivation to comply is the presence of the known COVID-19 cases in people’s social network. While awareness about severe consequences positively affects the perceived threat of disease and the motivation to comply, awareness about the mild cases, in contrast, decreases the perceived severity.

Our findings highlight that prosocial motivation is a promising way to engage youth in preventive behaviour as well as the importance of cautiously presenting narrative information about disease outcomes for this audience.
COuples’ OBesity (COOB) Initiative: Suitability of the interdependence and communal coping approach among couples

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Background: Obesity is reaching epidemic proportions, culminating in the rising development of non-communicable diseases and comorbidities associated with increased body weight. This makes it essential to emphasize couple-centered approaches in health-enhancing behaviours. The interdependence model of couple communal coping and behaviour change (IMCCCBC) has been used in explaining health-related behaviour change in couples. Thus, the COOB Initiative intends to explore the suitability of this model in exploring the mechanisms associated with dyadic weight management through a qualitative study.

Methods: Semi-structured (theory-driven) audio-recorded interviews were conducted with 35 Portuguese couples (both partners simultaneously). Inclusion criteria were: cohabitation for at least 12 months and at least one had the presence of obesity (BMI≥30kg/m²). The interviews were transcribed and analyzed through Directive Content Analysis, a predominantly deductive approach to the content. Questions reflected constructs of the theoretical framework of the IMCCCBC.

Findings: The fundamental mechanisms of the IMCCCBC were confirmed, including specific emergent categories associated with these constructs, obesity risk perception (e.g., absence of risk perception; presence of physical-related risk), communication style (e.g., active participation, caring), intention (e.g., joint or individual), weight loss preferences (e.g., dietary and physical activity), among others.

Discussion: This qualitative exploration provides initial clues to understanding mechanisms in a dyadic approach. It might inform couples’ interventions to improve several couple-based tools (e.g., communication; preferences), to promote a higher efficacy in weight management, and to engage in better dyadic coping. Future studies might benefit from exploring couple-related experiences that might establish either a barrier or a facilitator for weight management.
ME-WEL Project: A qualitative comparative study in menopausal transition based on Health Belief Model

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Background: Weight gain during the menopausal transition is one of the main consequences of menopause. This may be associated with the prevalence of risk behaviors at this stage (e.g., physical inactivity) and some health beliefs (e.g., low perceived susceptibility). However, some women manage to maintain their healthy weight during menopause. This study explores the mechanisms of action (MoA) of weight gain and weight maintenance during the menopausal transition based on the Health Belief Model (HBM).

Methods: Semi-structured theory-driven interviews were conducted with 62 Portuguese post-menopausal women, organized into two groups: 31 women who maintained their weight and 31 women who gained weight, during the menopausal transition. Interviews were analyzed with Maxqda using deductive-dominant content analysis; afterward, a multiple correspondence analysis was performed.

Findings: In both weight gain group (WGG) and weight maintenance group (WMG), perceived susceptibility demonstrated a two-factor structure (although with different factors). Considering perceived severity, a four-factor structure emerged in WGG, and a three-factor structure in WMG. In both groups, perceived benefits demonstrated a three-factor structure. Considering perceived barriers, a three-factor structure emerged in WGG and a two-factor structure in WMG. In both groups cues to action demonstrated a two-factor structure. Self-efficacy was only categorized as “presence” or “absence”.

Discussion: This study provides information about the different determinants’ theoretical structure, based on the HBM, in two different weight management groups: weight gain and maintenance during menopausal transition. This allows a better understanding of what MoA might be crucial to focus on future interventions, in order to develop more efficacious interventions, based on the HBM (e.g., increase perceived susceptibility).
„Vaccination? Ain't feelin' it.‟: How young Slovaks tried to make sense of COVID-19

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Our project was aimed at the role of conspiracy beliefs in how young people in Slovakia made sense of COVID-19, and COVID-19 vaccination. Firstly, we conducted a qualitative study with the use of Thematic Analysis focused on identifying how young people make sense of COVID-19 and vaccination (N=55). Secondly, we conducted a correlation study (N=303) focused on the relationship between conspiracy beliefs and scientific literacy. Thirdly, in two pilot projects (N=41 and N=48) we tried to see if strengthening scientific literacy in secondary schools by means of targeted interventions could reduce beliefs in conspiracies. We found out that young people in Slovakia perceived COVID-19 in four ways - as an unreal and unrelated threat, as a violator of their way of life, as a „scarecrow‟ that instills the fear of the unknown, and as a carrier of secondary benefits such as alleviation from one's duties. It seems that young people have increasing tendency to believe in hoaxes and conspiracy theories, and that the belief in conspiracy theories was found to be related to scientific literacy. Our two pilot trials found out that interventions focused on increasing scientific literacy were related to reduced conspiracy beliefs. We argue that increasing scientific literacy could be a way of renewing trust in the medical science and tackling conspiracy beliefs.
Women’s health issues across the lifespan: Identifying risks and opportunities for change

9:30 - 9:45

Education sessions versus a planning intervention: effects on a reduction of sedentary time among women

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Background: Sedentary behavior (SB) is a risk factor for poorer maternal health during pregnancy, breast and ovarian cancer, and other unfavorable women health outcomes. Although numerous studies suggest beneficial effects of planning interventions on physical activity time, there is a limited evidence for efficacy of planning interventions in the context of changing SB. This study investigated effects of forming plans to replace sitting with a physically active behaviors on sedentary time among women. The presence of gender differences was explored as well.

Methods: Participants were 393 SB-naïve women (aged 11-86 years old; 210 men constituted a comparison group). Sedentary time was assessed with Sedentary Behaviour Questionnaire applied at T1 (baseline), T2 (1-week post-intervention), T3 (2-month follow-up), and T4 (8-month follow-up). Participants were randomly assigned to an active control condition (SB education) or a planning + SB education condition.

Findings: Compared to baseline, there was a decrease of SB at T2 and T4 among women. SB time reduction was observed in both the planning and control (education) groups. These findings are in contrast to a significant reduction of SB at T3 and T4 among men, observed in the planning (but not education) condition. Effect sizes were small and similar across genders.

Discussion: Women benefited from a brief SB education, reducing their sedentary time, with a more complex intervention (SB education +planning) yielding similar effects. Minimal behavior change intervention may prompt an imitation of a process of reducing sedentary time, albeit more complex interventions may be needed to change SB among men.
9:45 - 10:00

Social and Interpersonal Predictors of Cancer Genetic Risk Assessment in Women with Cancer

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Background: Despite the established benefits of cancer genetic risk assessment (CGRA), it is underutilized in women with breast and ovarian cancer. We examined predictors of CGRA (i.e., genetic counseling and/or testing) uptake in women who received a theoretically guided, multi-component tailored psychoeducational counseling and navigation (TCN) intervention. Methods: Participants were 212 ethnically and geographically diverse cancer survivors in the TCN arm of a three-arm randomized trial. They completed baseline and 1-month and 6-month follow-up surveys, and the telephone-based TCN intervention. CGRA uptake by 6 months was verified through medical records. Stepwise logistic regression was employed. Findings: Predictors of CGRA uptake included having a letter sent to the participant’s physician notifying them of genetic testing guidelines and that their patient was at increased risk of hereditary cancer (odds ratio (OR) = 1.99, 95% confidence interval (CI) = 1.06-3.73, p = .032), being married/in a domestic partnership (OR = 3.20, 95% CI = 1.08-9.42, p = .004), and having lower educational attainment (high school or less) (OR = 2.68, 95% CI = 1.15-6.29, p = .023). Discussion: Physicians play a crucial role in influencing health behaviors such as CGRA. Psychoeducation and navigation had greater effects among women with lower educational attainment and who were married or in a domestic partnership, possibly due to lower awareness of CGRA prior to the study and stronger family social support. Interventions that bolster motivation gained through enhanced personalized knowledge and instrumental support that helps overcome barriers may promote wider use of CGRA.
Does oxytocin administration during childbirth increase risk for postpartum post-traumatic stress symptoms?

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Background:
Unplanned medical interventions are among the factors underlying negative and traumatic birth experiences, which increase risk for post-traumatic reactions at postpartum. Synthetic oxytocin is one of the most regularly administered medications to facilitate labor induction and augmentation. The present study examined the association between oxytocin administration during childbirth and postpartum post-traumatic stress symptoms (PTSS).

Methods:
In a multicenter prospective observational study, 386 women completed questionnaires during pregnancy (T1) and at two months postpartum (T2). Medical information was retrieved from hospital records. PTSS were assessed with the Impact of Event Scale. Logistic regression was used to examine the difference in PTSS at T2 between women who received oxytocin and women who did not.

Findings:
In comparison to women who did not receive oxytocin, women who received oxytocin induction were 3.06 times more likely to report substantial PTSS (p=.041, 95% CI: 1.05, 8.92), and women who received oxytocin augmentation were 3.16 times more likely to report substantial PTSS (p=.038, 95% CI: 1.07, 9.37), after controlling for mode of delivery, pediatrician presence in the delivery room, satisfaction with care during birth, and postpartum hemorrhage.

Discussion:
Oxytocin administration was associated with a three-fold increased risk of PTSS. The findings may reflect physiological effects of oxytocin on brain activity and/or psychological effects of the gap between the planned and actual birth, which may both be related to postpartum mental health. Future research should aim to establish the causal pathways underlying these relationships and the role of additional factors, such as greater pain during labour.
Dyadic regulation approach of coping and illness representations in female cancer patients and their partners.

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Background: Adjustment to any illness is a 'dyadic' process: patients and their partners mutually determine each other’s perceptions, behavior, and well-being. The aim of this study was to examine the relationships of dyadic coping strategies (i.e., the efforts to help relief partner stress and the common efforts of both partners to cope with stress) to illness representations in a sample of newly diagnosed female cancer patients and their partners.

Methods: Ninety-two (92) women with a recent diagnosis of cancer and their partners participated in the study. Representations of control and illness timeline, dyadic coping (overall support provided by self; overall support provided by partner; common coping efforts) and relationship satisfaction were assessed. The analyses were based on the Actor Partner Interdependence Model and all analyses were executed in a Structural Equation Modelling framework.

Findings: Patient evaluations of dyadic coping were related to all own illness representations. In certain cases, they were also related to partner illness representations of control. Partner evaluations of dyadic coping were not related to patient or own representations. Relationship satisfaction did not moderate the relationships between dyadic coping and representations either for patients or partners.

Discussion: Patients’ accounts of support provided by self and/or the partner seem to be important regarding their own illness representations. They are also important for their partners’ illness representations, but not vice versa. The reasons for this difference may be related to the different roles (i.e., patient vs. partner) or specific gender issues.
Risk perception and communication

Triadic communication in medical encounters regarding Congenital Heart Defects in the pediatric setting

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Background
Communication significantly affects delivering medical care and individuals’ adherence to recommended treatments. Little attention has been paid to communication in triadic medical interactions of doctors with parents and their children. This study aimed to examine pediatric cardiologists' views on communicating medical information in triadic cardiology consultations.

Methods
Semi-structured interviews were conducted with 17 experienced pediatric cardiologists and cardiac surgeons (5 females) from three medical centers in Israel.

Results
The findings revealed four main themes. Themes were portrayed based on a model of triadic partnership in pediatrics (De Civita, & Dobkin, 2004), stressing the physicians’ motivations and clinical examples: (1) “Centrality vs. peripherality”: the physicians' perception of who is their "targeted patient"; (2) “Wearing rose-tinted glasses”: the physicians’ position on communicating bad news for the children and the parents; (3) “Parents’ (over)protection”: the tension between parents' and physicians on how much to involve the children and (4) “Navigating the way through the developmental trajectories”: described the communication techniques that are chosen according to the child’s age/development as well as the course of the disease.

Conclusions
Involving children in a triadic discussion regarding Congenital Heart Defects is valued for pediatric cardiologists, who routinely employ multiple and diverse communication skills to manage parent-child encounters. Knowledge regarding children and parents’ emotional needs along the development stages and validated communication methods should be included in training and practice.
Psychological well-being and risk perception of patients with polycystic ovary syndrome

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Polycystic ovary syndrome (PCOS) is a multi-systematic disease with a genetic predisposition, manifesting in increased risks for various metabolic diseases and its comorbidities, such as infertility, hyperandrogenism, insulin resistance, type 2 diabetes, cardiovascular diseases and certain types of cancer. Apart from the physiological consequences, patients also often suffer from psychological consequences, such as depression, anxiety and a lower quality of life.

A recent study aimed to explore the relation of PCOS with depression, anxiety, satisfaction with life, self-efficacy as well as the risk perception of patients, by using standardised psychological questionnaires. 389 PCOS patients participated in the study. Analysing data of women with and without PCOS, statistically significant difference was observed in their values of depression [t(95.62)=-4.959, p<0.001], and satisfaction with life [t(99.40)=3.062, where p<0.05]. No significant difference was found related to their values of anxiety or self-efficacy. In terms of risk perception, using The Health-Related Quality of Life Questionnaire for Women with Polycystic Ovary Syndrome developed by Conin et al. (1998), among the 26 symptom bothers, most of PCOS respondents ranked esthetical problems more bothering than long-term metabolic consequences or the possible onset of cancer. This may be explained by the lack of information and low level of risk perception of PCOS patients.

The result of the research project suggests that screening and prevention of depression should be part of PCOS treatment, and patients need accurate information about the long-term risks associated with this condition in order to benefit from preventive care and to achieve a sustainable lifestyle change.
Experiences and acceptability of risk-stratified breast screening: qualitative comparison of two European countries (MyPeBS trial)

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Background: Risk-stratification should improve the ratio of benefits to harms for breast screening, whereby higher risk women receive additional screening and low-risk women receive less screening. This study compared how women in England and France experienced risk-based breast screening, to assess how healthcare context affects acceptability. Methods: Fifty-two women (23 Manchester, England, 29 France; aged 41-71 years) were purposively sampled from participants in the My Personalised Breast Screening (MyPeBS) trial’s experimental arm assessing effectiveness of risk-based screening. Their risk estimation was obtained by combining self-reported risk factor information, breast density and saliva DNA test. Women were thereby informed of their 5-year breast cancer risk category (low, average, high, very high-risk) which determined their future screening schedule and other prevention options. Audio-recorded semi-structured interviews following receipt of risk category were transcribed for thematic analysis (Framework Method). Findings: Overall, acceptability of risk-based screening was positive. However, French women received more varied communication formats than women in Manchester. Consequently, higher-risk English women described feeling more reassured as all accessed a specialist healthcare professional (HCP) appointment. Meanwhile, several French women had considerably less access to HCP support leading to higher perceived susceptibility and reduced control over breast cancer risk. Women’s views on risk-based mammogram schedules seemed linked to how breast screening and women’s health services are organised per country. Discussion: The organisation of risk-stratified screening influences the emotional impact of women who receive it. This highlights the importance of considering variations in healthcare context when examining acceptability of healthcare innovations, especially access to resources.
Socio-economic differences in cancer perceptions in France: a representative sample of the general population

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Background: Perceptions are a determinant of individuals’ health. The scientific literature shows that health perceptions are connected to socio-demographic factors: just a few studies analyze perception and differences in a representative sample of the general population.

Methods: Cancer Barometer is a cross-sectional phone-administered survey conducted in a representative sample of the general population in France in 2021 (n=4938). Participants were asked about opinions on cancer including 1) Cancer is often hereditary; 2) You can live several years with the disease; 3) Believe they are at risk of cancer. Descriptive analyses and multinomial logistic regressions were conducted.

Findings: For 67.7% of respondents cancer is often hereditary (significantly associated with occupation type and education lower level). Regarding the belief that one can live several years with cancer, executives were more likely to think so than employees (OR=3.74 [1.72-8.15]). This also applies to feeling that you are at risk of ever developing cancer that is more likely shared by people with an upper socio-occupational status (vs employee, OR= 1.65 [1.32-2.05]), a higher level of income (OR= 1.66 [1.40-1.96]) and diploma (OR= 1.76 [1.52-2.04]).

Discussion: Lower socioeconomic status is linked to beliefs that nothing can be done to prevent cancer (heredity), a higher perception of cancer mortality and a minimization of exposure to cancer risk. These perceptions may foster reactance mechanisms and hamper behavioral change. Further tailored prevention programs are needed to face health inequalities in cancer prevention and research to document peoples’ feelings of information on cancer risk factors.
The effects of YouTube sexual health vlogs on young adults' safe sex attitudes and intentions

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To stimulate health behavior change among young adults (18-25 years), institutions for health promotion increasingly collaborate with social media influencers. Recommendations of these popular content creators have proven to be highly successful in a commercial domain, but to date, only a limited number of studies have investigated the value of influencer-generated content as a health-promotion instrument. To address this knowledge gap, we performed a survey among 1456 Dutch young adults (Mage = 21.67, SD = 2.23), measuring safe sex attitudes and intentions in response to 140 Dutch or English-spoken YouTube vlogs addressing sexual health. Each participant viewed one vlog, and each vlog was viewed by at minimum 10 participants. The vlogs were selected from a corpus that was collected for a content analysis in an earlier phase of this research project. This content analysis identified 13 different strategies that vloggers use to communicate with their audience about safe sex practices. The present survey investigated to what extent these strategies contribute to more positive safe sex attitudes and intentions, and via which psychological processes these effects occur. Multilevel mediation analyses show that perceived influencer trustworthiness is one of the key mediators of influencer strategies positively affecting attitude change and safe sex intentions. Influencers are perceived as more trustworthy when they look straight into the camera, address viewers directly, and disclose intimate and authentic information in a narrative format, whereas the use of humor is counterproductive. This study is one of the first to reveal the persuasive potential of influencer-endorsed health information.
Purpose. This round table discussion will be led by international experts in behaviour change science and process research, focusing on valid measurement of theoretical constructs that underlie behaviour change.

Objectives. (1) Discuss barriers presented by different (a) labels and (b) construct definitions for measurement and theory testing in behavioural science. (2) Present empirical examples of the consequences of the problems associated with different labels and construct definitions. (3) Provide practical tools and methods for addressing these barriers in one’s own research.

Rationale. To build a cumulative science, it is essential that construct definitions are clear—and shared—across research studies. It is also critical to ensure that measures accurately reflect these constructs. However, behavioural scientists often use various labels and definitions, which greatly hinders the ability of the field to develop and advance theory and effective interventions. We will facilitate discussion of barriers associated with valid measurement of theoretical constructs in behavioral science, present empirical examples of the consequences of these barriers, and provide tools for practical solutions to improve definition and measurement of theoretical constructs in one’s own research.

Summary. Dr. Dixon will begin by discussing challenges faced by behavioural scientists regarding the measurement of theoretical constructs, including the translation of theory to empirical work. After inviting audience feedback regarding these challenges in their own research, Dr. Schenk will build on this by introducing the mechanism ontology as a tool to organize theoretical constructs in the field and develop shared language for the operationalization of these constructs consistently across research studies. Audience members will have the opportunity to engage with the mechanism ontology, and Dr. Schenk will close this portion with another brief presentation. Next, Dr. Cornelius will present empirical data linking precisely defined theoretical constructs to self-report scale items and discuss consistencies, discrepancies, and methodological challenges posed by this effort. Two tools—the Science Of Behavior Change Measures Repository and the Human Behaviour Change Project Theory and Techniques Tool—will be introduced, and audience members will be asked to engage with these tools. Finally, Dr. Johnston, will engage the audience in tasks illustrating the measurement challenges in the context of defining and investigating theoretical constructs. Tools will be described that can be applied in future research projects to ensure clearly defined theoretical constructs and the selection of valid measures of these constructs. After open discussion, Dr. Crombez will summarize the issues raised and potential solutions for moving the field forward.
Stigmatization and health: determinants, mechanisms and interventions

9:30 - 9:45

Predictors of stigmatizing attitudes towards people with psoriasis or Parkinson’s disease

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Background: People with health conditions often experience stigmatization, which substantially impacts their psychosocial functioning. To develop evidence-based interventions and define target groups, insight into predictors of stigmatizing attitudes is needed.

Primary study objective is to examine the extent and potential predictors of stigmatizing attitudes towards patients with psoriasis and Parkinson’s disease.

Methods: In this within-subjects cross-sectional study, 152 participants from the general population read vignettes describing encounters with a person with psoriasis, Parkinson’s disease, and a healthy person. For each vignette, participants completed measures of stigmatizing attitudes and potential predictors (i.e., sociodemographic, knowledge and familiarity, indicators of behavioral immune system, openness to experience).

Findings: Preliminary results showed higher levels of stigmatizing attitudes towards psoriasis (PS) and Parkinson’s disease (PD), compared to the healthy control (p<.001). We observed high levels of stereotype endorsement, e.g. rating patients as unattractive (PS: 74.0%; PD: 69.5%), having bad hygiene (PS: 51.9%; PD: 38.3%), and insecure (PS: 49.9%; PD: 46.1%). Multivariate analyses revealed that stigmatizing attitudes towards PS were related to poorer knowledge (p<.01) and higher levels of pathogen disgust (p=.01), while stigmatizing attitudes towards PD were related to stronger germ aversion (p<.05). Sociodemographic characteristics or openness to experience were unrelated to stigmatization.

Conclusions: Stigmatizing attitudes towards PS and PD were prevalent and associated with indicators of the behavioral immune system for both conditions, and with a lack of knowledge for psoriasis. These results suggest that lack of knowledge and disease-avoidance mechanisms may play a role in stigmatization and could be targeted in interventions.
Mechanisms of peer HIV-stigma among Men who have Sex with Men (MSM)

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Background:
There is much evidence for stigma as a major disruptor in the lives of people living with HIV. To understand stigma mechanisms we examined overestimation of perceived HIV severity which can be fear inducing and stigma propagating.

Methods: Mix Methods study
We approach perceived severity broadly as a construct of multifaceted perceptions of the burden of living with HIV. We compared data of 950 HIV-negative and 122 never-tested MSM on anticipated burden of HIV to the actual experiences of 438 MSM living with HIV. Data were collected with a self-reported, web-based survey and items were based on a preceding qualitative study. Overestimation of severity was established when the chance of perceiving specific aspects of living with HIV as burdensome was significantly higher among HIV negative/never tested than HIV positive men based on logistic regression analyses.

Findings:
Results indicated that, compared to HIV-positive MSM, HIV-negative MSM significantly overestimated 95% (37/39) of items assessing HIV-related burden. Never-tested participants overestimated 85% (33/39) of items. Highest effects of overestimations were recorded for items measuring interpersonal and relationships impact such as the burden of HIV-status disclosure. Overestimation in never-tested MSM was amplified with increasing age and having HIV-positive friends/relatives which can be regarded as contexts for HIV-testing avoidance.

Discussion:
Perceived HIV-severity is predominantly overestimated by HIV-negative MSM, especially sigma-sensitive themes such as interpersonal relations and disclosure aspects. To fight stigma, overestimation of HIV-severity needs addressing and that could be done by aligning perceptions with actual experiences of those living with HIV through targeted communication.
Interventions targeting social and self-stigma among people with chronic skin disease– Results from RCTs

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2Institute for Health Services Research in Dermatology and Nursing (IVDP), University Medical Center Hamburg-Eppendorf, Germany

Background: People with chronic skin disease (CSD) experience social and self-stigmatization. We will present data from randomized control trials testing feasibility and effectiveness of recent interventions—BEGINN and ECHT—targeting social stigma. We will also present an online-intervention, DEVISE, aiming to reduce self-stigma among the skin disease population.

Methods: Professionals with exposure to skin diseases (e.g., hairdressers, physical therapists, cosmeticians; n= 120) and medical students (n= 127) were randomized into an intervention or a control group for BEGINN and ECHT, respectively. The face-to-face intervention consisted of education, self-reflection, and a patient encounter. Measures assessed agreement to negative stereotypes, disease-related false assumptions, desire for social distance, and behavioral intentions (baseline, post-intervention, 3-month follow-up). For DEVISE, patients with CSD (n= 500) will be randomized for the online intervention promoting self-compassion and coping skills to lower self-stigma, or waitlisted. Evaluation will be administered at baseline, post-intervention, and 6-month follow-up.

Findings: Participants of the ECHT intervention reported lower stereotype endorsement (F(1.67,118.67)= 23.83, p<.001), lower agreement with disease assumptions (chi-squared(2)= 46.33, p<.001), less desire for social-distancing (chi-squared(2)= 54.32, p<.001), and greater changed behaviors (F(1.86,131.89)= 6.16, p<.01) towards people with psoriasis over time. Additional analyses with follow-up data for the presentation will address expected changes in stigmatizing attitudes among professionals providing skin-related services.

Discussion: Self-reflection and patient encounters improved stigmatizing attitudes and behaviors of medical students. Adapted interventions are being delivered to additional professions with forthcoming results. Further, a novel online intervention targeting self-stigma will provide a way for individuals to seek self-guided care and improve well-being.
Interactive storytelling design to reduce weight-related stigma

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Weight-related stigma’s have an negative health effect on the stigmatized. To reduce stigma, it is essential to create awareness and discuss the underlying beliefs and consequences. The problem is that people avoid talking and thinking about it.

To solve this we designed a storytelling space by means of a game (‘Ball & Stick’) for community centres in vulnerable neighbourhoods. The game consists of a gameboard and a mobile application that verbally guides the players through the storytelling space by narrated stories and discussion tasks. During the game, the players are confronted with stigmatizing situations that people with obesity encounter. The stories used in the game were created by an iterative co-creative research-through-design method that alternated between collecting, reflecting upon, and adjusting stigma related stories.

Study results at community centres (N = 22 in five groups) showed that all participants reported high or medium narrative transportation, (18) had personal similar experiences (19) indicated that the game raised their awareness, for (16) the game made it easier to talk about obesity and for (12) the game changed their attitude towards people with obesity.

Our game demonstrated that interactive storytelling is a powerful tool to reach and motivate people to become aware and reflect upon and discuss stigmatizing behaviour. This is likely to be generalizable to other taboo- and stigma-related subjects such as differences and inequality in gender, income, culture, immigration, religion, and mental health. Follow-up research is needed to set the next step from stigma awareness and discussion towards a behavioural change.
Pregnancy smoking stigma reduction in healthcare student through a video intervention

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\textsuperscript{3}Charles Perrens Hospital, France

Background. In France, 19.7\% of women smoke while pregnant and it is a demonized and stigmatized behavior. Stigma is a well-known source of distress, poor treatment adherence and less healthcare seeking behavior. Healthcare providers are not immune to negative views regarding their patients appearance, identity and behaviors. Those who hold stigmatizing attitudes toward people with substance use disorders are less engaged and empathic and more task oriented. However, it has been shown that video can be effective to decrease mental health stigma for example among medical students. Methods. This study aims to develop and test a video intervention to reduce pregnancy smoking stigma in healthcare students. General medicine and midwifery students (n=200) were recruited and randomly allowed to an experimental (stigma and addiction education and contact) or a control condition (tobacco education). They watched a video (experimental or control) and filled out scales assessing stigma and professional behavioral intentions before (T0) and one week (T1) and one month (T2) after the intervention. Findings. Preliminary results at T1 support the experimental video acceptability and efficiency to reduce derogative cognitions (d= 0.53) and troublesome behaviors (d= 0.31). Discussion. To our knowledge, this is the first intervention designed to decrease pregnancy smoking stigma in healthcare students. It could call into question the way we design students training. Our guess is that it is necessary to be more stigma sensitive, beyond our general praiseworthy intentions. This study is funded by the French International Cancer Institute [INCa-16121].
Loneliness and health: Understanding and overcoming challenges in times of crisis and beyond

11:30 - 11:45

The impact of the Covid-19 pandemic on socially isolated older people

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Background: The Covid-19 pandemic and actions to reduce transmission (stay at home orders, workplace closure, etc) has had an impact on mental health and loneliness, but with marked variations in response. It might be expected that socially isolated people would be particularly vulnerable. We therefore investigated loneliness, life satisfaction, and depression in 2020 among older men and women who were already socially isolated before the pandemic.

Methods: Data were collected from 4,636 participants in the English Longitudinal Study of Ageing (ELSA) in 2018/19 and then early (June/July 2020) and later (November/December 2020) in the pandemic. Respondents were classified as socially isolated or not isolated using an index including marital status, having limited contact with relatives and friends, and membership of clubs and organisations.

Findings: The sample was aged 66.8 years on average, and 29% were categorised as isolated. Before the pandemic, the isolated group reported greater loneliness and depression and lower life satisfaction compared with non-isolated respondents on standard measures. But their responses to the pandemic were small; it was the non-isolated participants who experienced greater increases in loneliness and greater reductions in life satisfaction after adjusting for age, gender, ethnicity, education, wealth, area deprivation, number of people living in the household, and long-term health conditions.

Discussion:

Compared with isolated older adults who generally experience greater loneliness and lower psychological wellbeing, the Covid-19 restrictions had a more deleterious effect on socially engaged older adults, who encountered more significant changes in circumstances during the pandemic.
“I am alone and I am stuck”: University students’ experiences of living alone during COVID-19

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Background: Younger adults, university students, and those living alone are at increased risk of loneliness and poor mental health. This study aimed to explore the experiences of young adult students living alone during the COVID-19 pandemic.

Methods: Semi-structured interviews were carried out remotely between March and April 2021. Participants were 18-24 year olds enrolled in undergraduate/postgraduate programmes in the UK who had lived alone for at least 2 weeks in the previous 8 months (N = 8; 4 males; 19-24 years, M = 21.75). Data were analysed using reflexive thematic analysis.

Findings: Four themes and two subthemes were developed. Participants’ experiences were predominantly aversive, involving a sense of confinement (Theme 1), negative feelings including loneliness (1.1), and perceptions of loss and injustice (1.2). The experience of living alone had a significant mental health impact (Theme 2), which was exacerbated by social isolation and withdrawal (Theme 3). Participants identified accessing social support and connection through technology as protective (Theme 4).

Discussion: Findings have implications for the design of interventions to deal with future public health emergencies that restrict social contact (e.g., pandemics, natural disasters). In addition to addressing loneliness and mental health symptoms directly, reducing isolation and preventing social withdrawal are important targets for intervention. Potential intervention modalities include internet-based social activities. Provision of supports for young students living alone may be particularly important for the mental health and wellbeing of this at-risk population.
Daily associations between loneliness and intra- and interpersonal ruminative thoughts in cancer patient-caregiver dyads

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Background: Several studies have found links between loneliness and ruminations. However, little is known about the specifics of this association and the connecting mechanisms. Based on the evolutionary model of loneliness and response styles theory, this daily report study considered whether variation in daily loneliness, reported each evening after hospital discharge following hematopoietic cell transplantation (HCT), contributed to daily intrapersonal passive (i.e. brooding) and active (i.e. reflection) ruminations in patient-caregiver dyads. We also explored whether the level of daily interpersonal ruminative thoughts (i.e. co-ruminations) mitigates the possible adverse effects of intrapersonal ruminations.

Methods: The sample consisted of 200 patient-caregiver dyads following first autologous or allogeneic HCT. Participants made independent, daily reports of loneliness, brooding, reflection, and co-ruminations for 28 consecutive days. Computations were based on the actor-partner interdependence model using multilevel structural equation modeling.

Findings: Participants reported higher brooding and reflection on days when they felt more lonely. Similar associations were found for average levels of these variables, in both patients and caregivers. Co-ruminations moderated the associations between loneliness and intrapersonal ruminations. A positive association between mean levels of loneliness and brooding and reflection occurred only at higher average levels of co-ruminations.

Discussion: The results indicate an unfavorable role of loneliness and co-ruminations in the adaptation process after HCT. The co-occurrence of loneliness and discussing one's problems and accompanying negative emotions with a loved one contributed to active and passive ruminative thoughts, in both patients and caregivers. Findings may serve future dyadic intervention studies on ruminative thoughts in recovery.
Volunteering motives, loneliness, quality of life, and Health care use

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Background: More and more general practitioners (GPs) are prescribing voluntary activity to reduce feelings of loneliness. Currently, the literature fails to demonstrate the effectiveness of social prescription. This study examines the range of motives for volunteering and their relationship to quality-of-life variables.

Methods: In an online survey in collaboration with a large Belgian health insurance company, 1361 respondents (Mage = 59.76 years, SD = 15.446, range 19-86; 54.9% female) involved as volunteers completed the Volunteer Motives Inventory (VMI), quality-of-life questionnaires (identity fusion, loneliness, happiness, meaning in life, perceived social support, and perceived health) and allowed access to their health care data.

Findings: Multivariate analyses of VMI data identified five clusters. Two of them included coping motives. One of these clusters (N = 324) involved the sole coping whereas the other (N = 293) comprised also self-development and socialisation. Compared to volunteers with broader motives, those motivated solely by coping motives had lower levels of identity fusion, meaning in life, social support, and happiness. However, the latter also evidenced higher level of loneliness. The two clusters did not differ for perceived health no for health care use (medication and GP contacts).

Discussion: The mere motive to volunteer for coping is not sufficient to reduce loneliness and health care consumption.
ConnectUp – Developing a physical activity based social online platform with people with disabilities

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Background: Although social connection and engagement in physical activity (PA) are associated with improved quality of life for people with disability (PWD), few platforms exist that offer information about opportunities for engagement in PA for PWD and their carers. There is a need for accessible co-designed online platforms for PWD which offer opportunities to increase social inclusion and PA participation. Limited studies have addressed the perspective of the carers and PWD in designing such platforms.

Objective: The objective of this study was to examine the preferences, expectations, and perspectives of PWD and carers towards PA and online platforms enabling social connection.

Methods: Six focus groups (N=17) were conducted. Participants were PWD (n=6) or carers of PWD (n=6), or both (n=5) aged between 20 – 73 years (M=52.94, SD=15.21). This qualitative study applied a phenomenological approach with elements of co-design. Data were collected by a person with disability who led the focus groups. Four student researchers conducted data analysis independently using an inductive approach of reflective thematic analysis.

Results: Four main themes were identified: (1) safety and vulnerability; (2) disability inclusion and creating authentic social connections; (3) physical activity and disability; and (4) online platforms for disability.

Discussion: Genuine inclusion, authentic social connection, and physical activity for PWD can be facilitated by accessible and user-friendly online platforms. The study findings can inform future online platform designed for PWD (such as ConnectUp – platform that is currently developed based on this research) to increase social inclusion and participation in PA.
Health-related quality of life in the wake of multifaceted stressor exposure in later adulthood

11:30 - 11:45

Longitudinal association between self-perceptions of aging and health-related quality of life in older stroke patients

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Background: Over 70 large-scale longitudinal studies suggest that self-perceptions of aging (SPA) are associated with health outcomes in later life. However, little is known about the impact of SPA on recovery after serious health events, with even fewer studies examining clinical samples. Based on a clinical sample, the present study examines if SPA are related to recovery of health-related quality of life (HRQoL) after stroke.

Methods: Since May 2021, N=330 individuals were recruited in the Neurology Department of the University Medicine Greifswald. Patients were interviewed during their in-patient stay, at 6 weeks, 3- and 6-months post-stroke. Data of n=282 was considered for the present analysis. HRQoL was measured by EQ-5D, gain- and loss-related SPA by the AgeCog-scale. A linear mixed effects model was fitted to examine changes in HRQoL and adjusted for age, sex, education, HRQoL at baseline, living alone, requiring care, diagnosis, NHISS.

Findings: Of all cases (Mage=70.9; 43% women), 59 (17.9%) were diagnosed with transient ischaemic attack. First results of the ongoing study suggest that SPA related to personal development are associated with better recovery of HRQoL after stroke (B = 2.11, [0.68; 3.54]); SPA related to physical losses were not (B = -0.15, [-1.69; 1.39]). Findings were independent from HRQoL at baseline (B=17.67, [11.43; 23.98]) and further characteristics.

Discussion: Results corroborate previous findings on the differential role of SPA for different health outcomes. Recovery after stroke may be supported by measures that promote gain-related SPA, which encourage patients to make plans and learn new things.
The comorbidity of depression before and after stroke: A network analysis

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Background: According to network theories of mental disorders, unravelling the symptom-level links between depression and stroke-associated deficits is essential to better understand the etiology and development of comorbid depression in stroke. This study applies network analyses to map associations between depressive symptoms, functional limitations, and memory deficits before and after first-ever stroke.

Methods: Data from 10,797 participants from the English Longitudinal Study of Ageing without a history of stroke at baseline (wave 1) was analyzed. 425 (3.94%) participants with first-ever stroke during the 12-year follow-up (waves 2-7) were matched to stroke-free individuals using propensity scores accounting for age, sex, education, ethnicity, and vascular risk factors. Symptom-differences between stroke cases and controls were computed using pairwise comparisons (FDR-corrected). Association networks and bridge statistics between single depressive symptoms, functional limitations, and memory, were estimated and plotted at five time points before (– 6 years and – 2 years) and after stroke (0 years, + 2 years, + 6 years).

Findings: Functional limitations and somatic symptoms of depression were increased at the assessment before stroke, while verbal memory and affective symptoms increased after incident stroke. Network analyses revealed that somatic symptoms are most important in bridging depressive symptoms and stroke-associated deficits.

Discussion: The network approach highlights the unique role that somatic symptoms play in the comorbidity of depression and stroke, which arises even before incident stroke.
Trajectories of well-being and self-rated health before and during the COVID-19 pandemic among German adults

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Background: The COVID-19 pandemic has challenged individuals’ everyday lives and might have also affected trajectories of well-being and self-rated health in middle-aged and older adults. However, so far only little is known regarding interindividual differences in “COVID-19 reactivity”, as well as the extent to which pandemic-related changes in well-being and health are temporary or permanent. Methods: We investigated trajectories of subjective well-being (life satisfaction and depressive symptoms) and of self-rated health across up to 7 years (pre-pandemic measurement occasions: 2014 and 2017; peri-pandemic measurement occasions: summer 2020 and winter 2020/2021) among middle-aged and older adults (n = 10,856; mean age in 2014: 64.3 years, SD = 11.58 years), using data of the German Ageing Survey. Findings: Based on longitudinal multilevel regression models, we found that depressive symptoms remained on average overall stable across seven years, but revealed a temporary increase in summer 2020. This increase was steeper among individuals with more chronic diseases. Life satisfaction revealed a significant mean-level increase while self-rated health revealed a significant, but small mean-level decrease over time. However, no specific pandemic-related change was observed for life satisfaction and self-rated health. Discussion: Our findings suggest that whereas life satisfaction and self-rated health were not affected by the onset of the pandemic, depressive symptoms revealed a susceptibility to “COVID-19 effects”. Particularly individuals affected by multimorbidity were at a heightened risk of greater depressive symptoms after the onset of the pandemic. However, increases in depressive symptoms were temporary, potentially reflecting processes of adaptation in middle-aged and older adults.
Quality of life in and after cardiac rehabilitation: a one-year longitudinal study

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Background: Cardiac rehabilitation (CR) has been shown to be successful in improving physical functioning and quality of life (QoL). However, the initial benefits are often not maintained over time. Research supports that subjective views on aging, e.g., positive attitudes toward own aging, go along with positive health-related outcomes. This study investigates trajectories in health-related QoL of patients with coronary heart disease across one year following discharge from CR. Furthermore, the relationship between subjective views on aging and QoL is investigated over time.

Methods: A longitudinal study was conducted with n = 156 patients (Mage = 63 ± 11 years, 81% male) attending inpatient CR. The MacNew questionnaire was used to assess physical, social, and emotional QoL at the beginning of CR, at discharge, and in follow-up measurements at 1, 6, and 12 months, respectively. Patient characteristics, subjective views on aging, and time are regressed on different QoL facets using multilevel modeling.

Results: On average, patients reported a moderate-to-high QoL at discharge from CR (M = 5.9 – 6.3 / 7). At the 1-month follow-up, we observed a significant reduction in all QoL facets. Six months after discharge from CR, QoL increased significantly and was stable at the one-year follow-up. A more positive view toward own aging was related to higher QoL within and across patients.

Conclusion: Participants reported relatively high QoL one year after discharge from inpatient CR. However, individual differences therein require closer examination. Patients holding negative views on aging could benefit from continued support after CR.
The mental health impact of the COVID-19 pandemic on older adults: A systematic review

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Background. Early in the COVID-19 pandemic, many experts pointed to potential adverse mental health effects for older adults. By contrast, many studies in young to middle-aged adults found older age to be associated with reduced mental burden. However, a systematic review on older adults is missing. We aimed at addressing this gap by comprehensively assessing the pandemic’s mental health impact on older adults.

Methods. We searched nine databases from 12/2019 to 04/2022 and included longitudinal and repeated cross-sectional studies assessing pre- and/or peri-pandemic mental distress and/or positive mental health indicators (e.g., wellbeing) on at least two occasions. Preregistration-doi: 10.17605/OSF.IO/SDR45

Findings. We identified 108 studies comprising 102,136 participants. After removal of outliers, there was a small increase in mental distress from pre- to peri-pandemic assessments, SMD=0.10, 95% CI [0.01, 0.18]. Furthermore, a small peri-pandemic decrease in anxiety symptoms was observed, whereas other symptoms remained unchanged. For positive mental health indicators, wellbeing and quality of life showed an initial decrease, whereas overall positive mental health increased during the pandemic, SMD=0.08, 95% CI [0.01, 0.15]. Being female was related to larger peri-pandemic increases in mental distress.

Discussion. Based on many studies, this review demonstrated small decreases in mental health during early stages of the pandemic in older adults, with evidence for later recovery. These findings are similar to those for younger adults and correct earlier claims that older adults are at particular risk for negative mental health consequences. The results ask for further research into resilience and adaptation processes active in older adults.
Digital health tools: development, engagement and evaluation

11:30 - 11:45

Equity, Inclusiveness and Transformation through co-creation: Improving user engagement in digital health tools.

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Background:
There is a need to evaluate the impact of taking equitable and inclusive approaches to developing digital health interventions. The TeamBaby digital health tool is a web-app, providing guidance for pregnant women on communicating effectively. This study set out to measure the impact of co-creation methods on user engagement, using Version 1 (no user inclusion) and 2 (end user inclusion) of the web-app.

Methods
Version 1 (n = 485) was live between April 2020 and July 2022, whilst Version 2 (n = 175) was live between August 2022 to March 2023. App usage data was used to derive measures of frequency, intensity and duration of engagement. Multivariate multiple regression was carried out to evaluate the impact of risk perception, perceived usefulness, and use of co-creation methods on each user engagement metrics.

Findings:
There was evidence that the use of co-creation methods added value to the digital health tool. The use of co-creations methods was associated with users progressing further through the app (β = .24, p < .001), more likely to complete an action plan (β = .12, p < .05), and spending more time using the app (β = 7.00, p < .001).

Discussion:
This study demonstrates that co-creation methods could be a feasible approach for improving user engagement of digital health tools. By encouraging inclusion of users in the design and transformation of health interventions, a higher level of user engagement, and in turn greater access to digital interventions targeting health and well-being can be achieved.
Co-designing a psychological support app based on acceptance and commitment therapy for Parkinson’s disease

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Background: Living with Parkinson’s disease presents daily challenges which can affect psychological wellbeing. Current provision of psychological support is limited and can be challenging for people who have difficulties with speech and mobility. We aim to describe the development of a psychological support app and the integration of user feedback using a co-design and person-based approach.

Methods: We conducted 6 workshops with people with Parkinson’s and carers. Participants were purposively selected to represent different symptoms and familiarity with using technology. We followed the PERCEPT (persona centred participatory technology) co-design approach. Personas of users were co-created and used to make decisions about app content and features. The person-based approach was used to integrate workshop discussions into intervention planning through the development of guiding principles and table of changes.

Results: 10 participants took part (3 carers and 7 people with Parkinson’s). Key themes that informed intervention planning included the struggle with acceptance of Parkinson’s disease, how attitudes and outlook could affect behaviour, not being overwhelmed by self-management, and the inter-relatedness of physical, cognitive, and psychological aspects of Parkinson’s disease. The guiding principles identified the importance of accessibility of design and activities, being able to see the benefits of the activities, and receiving feedback and rewards for making progress. The resulting app prototype was presented at the workshops and feedback used iteratively to make it more engaging and acceptable to people with Parkinson’s.

Conclusions: Adopting a co-design and person-based approach ensured that intervention components were relevant, engaging, and accessible to the target population.
Engagement with a digital intervention to support patients with long covid in the UK’s NHS

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Long covid is a disabling condition, posing a challenge to stretched healthcare systems. We developed a digital intervention for long covid: ‘Living With Covid Recovery’. The current study aimed to explore uptake and engagement (usage) of this application of health psychology.

Methods
We conducted rapid co-design with people experiencing long covid and, drawing on evidence and theory based rehabilitation techniques (e.g. cognitive behavioral therapy). An app provided self-management programmes for symptoms (e.g. fatigue, anxiety), self-monitoring and messaging with a healthcare professional. This implementation study employed usage data (collected in the app) and descriptive statistics.

Results
Thirty-five clinics and 380 clinicians used the DHI across the NHS. Overall, 5684/7239 (78.4%) of invited patients used the DHI. Patients had a mean age of 47, 68.7% were female and 87.6% were white. Most patients on registering reported significant disease burden affecting functionality and quality of life. At 4 weeks, 64% of patients were regularly using the app; this dropped to 40% by 8 weeks and 29% by 12 weeks. Differences in patients’ usage were seen between the different clinics, with better engagement seen in clinics able to provide more human support.

Conclusion
There was rapid uptake of the DHI by clinics across the NHS. Patient uptake and engagement was also high, but then declined at a rate similar to face-to-face rehabilitation. The DHI was a feasible way of supporting patients with long covid with human support important for uptake. Evaluation of the impact of the DHI on patient outcomes is ongoing.
Therapeutic respiratory exergaming in the Pediatric ICU: a pilot feasibility study

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Background: Early mobilization (EM) in the pediatric intensive care unit (PICU) is of significant importance for patient recovery, especially respiratory muscle training. However, professional and informal caregivers perceive barriers for implementing EM, such as the perception of low motivation among patients and insufficient technical support. To tackle these barriers, this study explores the feasibility of therapeutic respiratory exergames in PICU care.

Methods: This mixed-methods pilot study contained four sub studies: a) convenience sampled patient observations (N=4) of 1-3 sessions, b) semi-structured user satisfaction interviews with patients, informal caregivers and formal caregivers (Ntriad=4), c) semi-structured acceptability interviews with patients and informal caregivers (Ndyads=4) and d) semi-structured acceptability interviews with formal caregivers (N=4). Data was analyzed with descriptive statistics and content analysis.

Findings: Patient observations showed an average total duration of game sessions of 20.1 minute (SD=5.9), including installation time (M=4.0, SD=2.2) and clean-up time (M=3.1, SD=1.3). Range of game sessions varied between 1-3 sessions. The interviews showed that the game was generally perceived as enjoyable by patients, informal caregivers and formal caregivers. The interviews with professional caregivers showed positive attitudes towards therapeutic respiratory exergaming, the added motivational value to patient care but also revealed some system- and process-related issues to be tackled.

Discussion: This first exploration of therapeutic respiratory exergaming shows that these games might be a promising motivational support for EM in PICU care. Future research and implementation protocol adaptations are recommended.
Do Technology Acceptance Factors, Health Related Factors and Contextual Factors Predict Use Discontinuance of eHealth?

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Background: Early use discontinuation is a known problem for eHealth in general and for contact tracing apps (CTAs), which were introduced to combat COVID-19. Prolonged use is crucial for the effectiveness of CTAs. There is little scientific understanding of use discontinuance of CTAs, which distinguish themselves from other eHealth in terms of usage mode and goals. We assessed which technology acceptance factors, health-related factors (Health Belief Model; HBM) and contextual factors predict use discontinuance of CTAs.

Methods: As part of the governmental evaluation of the Dutch CTA, a longitudinal survey study was executed among a representative sample of CTA users (N=762) between October 2020 (1.5 week after activation of the CTA) and March 2022 (2 weeks before deactivation), across six waves. Survival analysis was performed to establish which factors predict discontinuance of CTA use.

Findings: An integrative model including technology acceptance and health-related factors resulted in an optimal model fit (R²=0.35). Younger and lower educated users were more likely to discontinue use. Technology acceptance variables performance expectancy, social norms, and effort expectancy were associated with CTA discontinuance in the expected directions. Regarding the HBM, perceived susceptibility, perceived barriers, and perceived benefits were associated with CTA discontinuance in expected directions. None of the contextual factors were associated with CTA discontinuance.

Discussion: Our findings increase understanding of the factors associated with CTA discontinuance. This can support policy makers with identifying factors for promoting prolonged use of health-protecting technologies in future pandemics and more generally when promoting the prolonged use of eHealth.
A systematic review and meta-analysis assessing the effectiveness of biofeedback for patients with hypertension

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Background:
Globally, hypertension is the leading preventable risk factor for stroke, cardiovascular disease and premature death. Hypertension is mediated by the autonomic nervous system, and biofeedback has been demonstrated as a suitable intervention due to the associated effects on self-regulation and the baroreflex. Technology advances have made biofeedback a more accessible intervention, including the availability of wearable devices. This review aimed to understand the current literature to help inform patient care and intervention design.

Methods:
This review assessed the effectiveness of biofeedback on blood pressure for patients with hypertension. The review was pre-registered on PROSPERO and followed the PICO strategy.

Results:
A total of 1489 articles were retrieved, 20 met the inclusion criteria. Sample sizes ranged from 15 to 301 participants, with mean age ranged from 35-68.5 yrs, and 45% female. There was heterogeneity across intervention design and biofeedback modalities, with 6 different types of biofeedback used across the studies. Quality assessments showed the studies to be of low quality.

The meta-analysis showed that biofeedback had a significant effect on systolic blood pressure -4.52 (mmHg) (Z=2.25, P=0.02, CI [-8.38, -0.58]) and diastolic blood pressure -5.19 (mmHg) (Z=3.54, P=0.0004, CI [-8.07, -2.32]). Heterogeneity was high and publication bias was non-significant.

Discussion:
This systematic review suggests that biofeedback has a significant beneficial effect on blood pressure. However, the review was limited by dated literature, high heterogeneity, and dated biofeedback devices. Further research representing the current biofeedback technology and improved methodology is required to understand the effect of biofeedback on hypertension.
Motivational processes in health behaviour

Relative Effects of Implicit and Explicit Attitudes on Behavior: Meta-Analysis and Test of Key Moderators

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Application of dual process models to examine attitude-behavior have come to the fore in recent research. An overarching prediction of these models is that behavior is associated with both implicit and explicit forms of attitude and represents non-conscious and reasoned processes that guide decision-making. We tested the relative effects of each form of attitude in a meta-analytic synthesis of 1108 samples across 720 studies. Multi-level meta-analytic structural equation models revealed unique effects of implicit and explicit attitude on behavior across samples, with a larger effect size for explicit attitude. Tests of a longitudinal model revealed unique effects of both forms of attitude on behavior when controlling for effects of past behavior, and both forms of attitude partially mediated the past behavior-behavior effect. Categorical moderator analyses and meta-regressions revealed relatively few effects of moderator variables: sample age, explicit attitude type, target behavior, measurement characteristics, social desirability concerns, and degree of conscious control. Across moderator analyses implicit attitude predicted behavior independently of explicit attitude in the vast majority of moderator groups. Findings suggest implicit attitude is a consistent and independent correlate of behavior across a broad range of contexts and samples, lending support to the basic assertions of dual process models. However, the high levels of residual heterogeneity in effect sizes across samples highlights the need for high-quality tests of effects that also systematically vary or adjust for key moderators.
Intention-health behavior moderators: Strength, stability and goal properties

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Background: The present research tests whether predictors of intention strength and stability plus goal properties (priority and conflict) moderate intention-health behavior relations.

Methods: In two prospective multi-behavior studies, UK representative samples of participants (Ns = 603, 503) completed measures of past behavior, intentions, intention strength and goal properties (priority, conflict in Study 2) in relation to Covid-19 protection behaviors at time 1. Self-reported behavior was assessed two months later. Intention stability was assessed over one (Study 1) or two (Study 2) months.

Findings: Intention strength moderated the intention-behavior relationship in both studies. Intention stability partially mediated this effect in both studies. Intention stability plus goal priority and goal conflict also moderated the intention-behavior relationship and fully mediated the moderating effects of intention strength in Study 2.

Discussion: The present findings identify intention strength as a moderator of intention-health behavior relationships (an effect partially mediated by intention stability). The moderating effects of intention strength appear to be accounted for effects of goal priority and conflict.
Identifying theory-informed behaviour change techniques in randomized trials of audit and feedback

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Background
Audit and feedback (A&F) is a frequently used quality improvement strategy to improve healthcare professional practice. The aim of the present study was two-fold: (1) to identify the behaviour change techniques (BCT) within randomized trials of A&F interventions and (2) to describe the extent to which randomised trials of A&F incorporate theory-informed BCTs.

Methods
We used the BCT Taxonomy (v1) to content analyse 290 A&F trials included in a Cochrane review update (searched up to June 2020). We extracted constructs from five behaviour change theories relevant to A&F (Goal Setting theory, Control theory, Feedback Intervention theory, Health Action Process Approach and Social Cognitive theory) and mapped these to the BCT taxonomy. For cross-validation, eight theory experts cross-checked the BCT mapping onto constructs.

Findings
47/95 BCTs (mean=5.2, range=1-29) were identified across all intervention arms in A&F trials (n=363). High expert consensus that a BCT mapped onto a theoretical construct extracted from A&F theories was achieved for 59 BCTs. On average, theory-based BCTs were included in 31 intervention arms (range: 1-334) with ‘Feedback on behaviour’ being the most frequently included theory-based BCT (n=334). Least frequently included theory-based BCTs related to supporting change in response to feedback (e.g. ‘Goal setting (outcome)’ (n=6), ‘Review behavioural goal’ (n=8)).

Discussion
Whilst a wide range of potential BCTs from the taxonomy was used in A&F trials, there are still many BCTs that remain unexplored, especially BCTs targeting mechanisms of action in A&F-related theories and therefore could be used in future intervention development and evaluation.
Delay discounting mediates the effect of trait impulsivity on soft drink consumption

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Background
Excessive soft drink consumption has been linked to obesity, type 2 diabetes, and cardiovascular disease, making it a significant public health issue. Using the two-factor model of impulsivity, the present study aimed to investigate the relationships between facets of trait impulsivity (rash impulsivity and reward sensitivity), decision-making patterns, and soft drink consumption and tested the hypothesis that decision-making patterns would mediate the effect of impulsivity on soft drink consumption.

Methods
The study used a cross-sectional design. Participants were a community sample of 300 adults (19-75 years, 64% women). They completed self-report measures of impulsivity (SUPPS-P), reward sensitivity (RST-PQ), beverage consumption (BEVO-15), and the decision-making patterns of delay discounting, the ability to make choices based on long term consequences (IGT) and risky behaviour (BART).

Findings
Both rash impulsivity and reward sensitivity were positively associated with soft drink consumption, and each independently predicted soft drink consumption. Additionally, the effects of both rash impulsivity and reward sensitivity on soft drink consumption were mediated by the decision-making pattern of delay discounting, but not the ability to form long term strategies or the tendency for making risky choices.

Discussion
The results support the logic of the two-factor model of impulsivity in predicting soft drink consumption. The finding that delay discounting mediates the effects of trait impulsivity on soft drink consumption provides insight into a possible causal mechanism of excessive soft drink consumption. It further suggests that delay discounting may be a viable target for reducing excessive soft drink consumption in clinical practice.
An extended Theory of Planned Behaviour model to understand cervical cancer screening attendance

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Background: Population-based cervical cancer screening (CCS) programs are effective in decreasing mortality. Nevertheless, the participation rates are still unsatisfactory in many populations, including Italian. We draw from relevant psychosocial literature to test a widely integrated Theory of Planned Behaviour (TPB) model applied to CCS attendance. Within the hypothesised model we took into account some additional proximal (anticipated regret and self-identity) and distal (via attitude) predictors (trust in institutions and both affective and cognitive perceived risk) of intention. Besides, we considered the role of two additional self-regulation mediators - action and coping planning - to bridge the intention-behaviour gap.

Methods: A total number of 324 women (age: 25-62; M = 34.7; SD = 6.85) residing in Campania (Italy) filled out an online questionnaire assessing psychosocial variables of interest. Findings: Full Structural Equation Model (SEM) results showed that both action and coping planning were predicted by intention and, in turn, significantly predicted attendance. Also, attitude, subjective norms, perceived behavioural control, anticipated regret and self-identity significantly impacted intention. Attitude was predicted significantly by trust in institutions and affective perceived risk.

Discussion: The proposed comprehensive model explaining CCS attendance can orienteer future interventions aimed at increasing CCS attendance, as well as inform actions towards the improvement of healthcare access.
Covid-19 vaccination intention in Italy: A repeated cross-sectional study applying the Theory of Planned Behaviour

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Background: Vaccination against Covid-19 is a crucial tool to combat the disease and control the pandemic. In Italy, despite the initial success of the vaccination campaign, vaccination rates are still not optimal in some population groups, as well as adherence to booster doses. To clarify whether and how vaccination acceptability has changed over time, this repeated cross-sectional study aimed to test the efficacy of an extended Theory of Planned Behaviour (TPB) model (including anticipated affects, risk perception, trust in science, trust in government, and religiosity) in predicting intention to get vaccinated in three different stages of the pandemic. Methods: Three self-report questionnaires were administered to three different convenience samples of Italian adults: at T1 (November 2020; N = 657), we evaluated intention to receive the future vaccine against Covid-19; at T2 (April 2021; N = 818), we measured actual vaccination intention; at T3 (February 2022; N = 605), we evaluated intention to continue vaccinating. Findings: Results from ANCOVAs indicated significant differences between the time points in all investigated variables, highlighting that vaccination acceptability was higher at T2 than T1, and lower at T3 compared to the other two stages. However, a multi-group SEM analysis, considering the time point as the moderation variable, showed that the strength of the structural relationships investigated within the model did not change over time. Discussion: Results confirm TPB validity in predicting Covid-19 vaccination intention at different stages of the vaccination campaign and shed light on the factors to be targeted to continue promoting vaccination.
What makes an effective habit-based intervention?

11:30 - 11:45

The roles of habit and self-control in physical activity and healthy eating

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Background: Risk of non-communicable diseases such as cancer and diabetes increases if people do not engage in health behaviours such as eating vegetables and engage in higher risk behaviours such as excess alcohol consumption. Rates of binge drinking in Australia are high and consumption of vegetables does not meet recommendations.

Aim: The aim of this study was to determine the importance of intention, self-control, planning and habit in predicting vegetable consumption and alcohol use.

Method: Participants (N=252) were recruited through the UK based paid participation pool Prolific. They completed two online surveys one week apart to assess psychological and behaviour over time. Approach and avoidance intention, habit, planning, and inhibition were assessed at time one and behaviour at time two.

Results: For vegetable consumption 7.2% of variance was explained, and habit was the only significantly unique contributor.

For alcohol consumption a significant 26.3% of variance was accounted for, and gender, avoidance-intentions and habit were all significantly unique contributors.

Conclusions: Enacting an intention to avoid a particular behaviour is harder than enacting an intention to engage in a behaviour. There was also partial support for the importance of planning as both a predictor and a moderator of vegetable consumption. Alcohol consumption was not associated with planning, nor were any interaction effects present. Future research needs to consider the type of behaviour being assessed to determine when planning will play a role in predicting behaviour or moderating the intention-behaviour relationship.
Identifying habitized elements of self-harm behaviours: An alternative approach to intervention?

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Background: Self-harm behaviours are commonly considered to be guided by a range of underlying motivations such as affect regulation, peer bonding or sensation seeking. This study explored if self-harm behaviours possess features of habitized behaviour and contrasted the predictive validity of motivations and habit in a 4-week prospective study of self-harm behaviour.

Methods: Participants (n = 244) who perform self-harm were recruited via social media to complete a qualtrics survey at t1 and a follow up survey 4 weeks later (t2). They completed measures of types of self-harm, context type and stability, frequency, habit strength and motivations from the ISAS inventory of self-harm functions. At follow up they reported upon past month frequency of self-harm and perceived stress.

Findings: Participants (16-61, M = 24 years) engaged primarily in cutting (62%) severe scratching (21%) or banging/hitting (16%). 60% reported self-harm 2-3 times per month or more frequently. 27% of participants reported self-harming ‘always in the same location’, 60% ‘sometimes in the same location’. At t2, self-harm frequency in the past month was significantly associated with t1 measures of habit strength (r = .515), and 6/13 functions from the ISAS; affect regulation (r = .167), selfpunishment (r = .192), self-care (r = .149), antisuicide (r = .138), marking distress (r = .2018) and autonomy (r = .191).

Discussion: Evidence suggests that for some people self-harm behaviours may have become habitized as a consequence of repetition in stable contexts. Interventions that focus on interrupting the context-action automatic association might be valuable.
Maximizing the prophylactic impact of a salubrious diet: A higher-order habit intervention

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Background: Healthy eating helps prevent chronic illness, yet only 28% of adults eat the recommended amount of vegetables. This project aimed to advance the science of maintenance of dietary behaviours by evaluating whether a higher-order habit-intervention for purchasing vegetables increases access within the home-environment. Methods: Participants were 204 adults who ate fewer than three servings of vegetables per day and reported being responsible for most of their own grocery shopping. Participants were randomized into a control or intervention group and received a goal-setting intervention to purchase a variety of vegetables to consume with dinner and an educational video on how to prepare vegetables alongside recipe recommendations. The intervention group also received action- and coping-planning and mental imagery interventions. Participants reported on their vegetable-buying habit, self-efficacy, and purchases immediately post-intervention, weekly over four weeks, and at a three-month follow-up. It was hypothesized that the intervention group would increase more strongly over time on these constructs in comparison with control. Findings: Using repeated-measures ANOVAs, it was found that both groups increased on habit (F = 18.71; p < .001), self-efficacy (F = 4.82; p = .001) and decreased on vegetable purchases (F = 6.81; p < .001) over the course of the study. These changes did not differ between groups (ps > .05). Discussion: A one-off habit intervention did not improve vegetable-buying habits or behaviour more than an education and goal-setting intervention. Thus, when given adequate resources, individuals may be motivated to perform a behaviour and more easily form habits on their own.
An app and brief habit-based behavioural support to promote physical activity after a cancer diagnosis

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Background: The APPROACH pilot aimed to investigate the feasibility and acceptability of trial procedures for a definitive trial which would aim to test the efficacy of an app-based walking intervention, informed by habit theory, for patients with cancer.

Methods: Ninety participants living with breast, prostate or colorectal cancer, who reported not meeting physical activity guidelines (150 minutes moderate to vigorous activity a week) were recruited from one hospital in South Yorkshire, UK, and randomly allocated to intervention or usual care. The intervention group received a leaflet recommending brisk walking and the use of a smartphone app (Active-10), a planning sheet and two phone calls to provide habit-based behavioural support. Outcomes (assessed at 0 and 3 months) were accelerometer measured and self-reported physical activity, and patient-reported outcomes of quality of life, fatigue, sleep, anxiety, depression, self-efficacy, and habit strength for walking. The intended primary outcome measure for the definitive trial is accelerometer measured average daily minutes of brisk walking (≥ 100 steps/min).

Results: Of those potentially eligible to participate 64% were willing to answer further eligibility questions, and of those then eligible 61% enrolled. 98% of the intervention group received a behavioural support call and 96% reported downloading the app. 96% completed follow-up assessments. The intervention group increased their weekly minutes brisk walking by 65, compared to 26 in the usual care group.

Discussion: The trial procedures are feasible, and this habit-based intervention shows promise for increasing brisk walking in adults diagnosed with cancer.
Can habit-based intervention components be adequately described using behaviour change technique taxonomies?

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Background: Recent theoretical advances have specified multiple means through which health-related habits (i.e., learned cue-response associations) can be ‘made’ (e.g., formation; substitution) or ‘broken’ (inhibition; discontinuation), and different ways in which health behaviours can be ‘habitual’ (i.e., habitually instigated, habitually executed). It is unclear whether habit change methods outlined in extant behaviour change technique taxonomies (e.g., the Intervention Mapping approach, the Behaviour Change Technique Taxonomy v1) adequately reflect these intricacies. This study provides a critical analysis of the utility of dominant behaviour change taxonomies as the basis for understanding and developing interventions to change health habits.

Methods: An expert meeting, facilitated by the EHPS Habit Special Interest Group, was held at EHPS 2022 to generate critical appraisals of existing and emerging behaviour change technique taxonomies. Notes from the workshop, and written contributions from 10 workshop attendees, were synthesised by the first author into a set of critical problems and recommendations for further taxonomy development.

Results: Core problems inherent in existing taxonomies are that: (a) the term ‘habit change’ lacks specificity; (b) most, if not all, behaviour change techniques are by definition conducive to habit change in some way; (c) ‘habit formation’ and ‘habit disruption’ are variously treated as behaviour change techniques, outcomes, and mechanisms of action; and (d) some purported ‘habit change’ techniques lack a clear link to theory.

Discussion: Adopting more precise terminology regarding how habits may be changed would clarify behaviour change taxonomies, and so facilitate the development of more effective habit-based health behaviour change interventions.
Exploring minoritisation and exclusion: How and why it happens

11:30 - 11:45

Who will take care of those children?” Perspectives on prevention among underserved women in Bulgaria

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Background: Inequities in cervical cancer incidence and mortality between countries and communities are highly evident. Such inequities are avoidable and unjust as they are due to systemic barriers in screening access and to cultural gender stereotypes. Bulgaria is participating in the CBIG-SCREEN Horizons 2020 project, which aims to create a Europe-wide collaboration to identify barriers and develop innovative approaches to reducing inequities. The aim of this presentation is to highlight the experiences of underrepresented women in Bulgaria regarding cervical cancer prevention in a cultural context.

Methods: The methodology of the project is informed by Participatory Action Research and employs qualitative methods. Participants are underserved women from remote areas, of ethnic minorities such as Roma, low socio-economic status, unemployed, with disabilities. It includes in-depth interviews with 27 underserved women. Analysis is based on reflexive thematic analysis.

Findings: Themes regarding experiences of inequities and exclusion include: Overwhelmed by multiple responsibilities and their impact on wellbeing and preventive behavior; Resisting the cultural association of women exclusively with childbearing; Invisibility of marginalized women within the healthcare system; Helplessness in navigating structural barriers and frustration with the absence of clear pathways in the healthcare system.

Discussion: The discussion highlights the relevance of cultural constructions of prevention at the intersection of gender, ethnicity and SES. It argues for participatory approaches in cervical cancer screening research and in the development of approaches for prevention.
Accessibility of mental health care for deaf and hard-of-hearing people: perspectives of caregivers and users

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Background: Deaf and hard of hearing (DHOH) people have an increased risk of serious mental health problems. Concurrently, they experience major barriers accessing mental health care. Deaf stigma, i.e., the non-recognition of the target group and exclusion as a result, is a factor related to mental wellbeing and accessibility to mental health services. This study aimed to explore accessibility barriers of DHOH people in mental health care, from the perspective of care users and caregivers.

Methods: Semi-structured in-depth interviews were conducted with nine DHOH people and nine healthcare professionals. Data was analyzed using thematic analyses.

Findings: The accumulation of deaf stigma during the life course contributes to self-stigmatization and psychological vulnerability and impedes entry into care. When DHOH people do seek help, they experience inadequacy of care, including difficulties in registering for treatment, and limited information facilities, interpreter availability and sensitivity to deaf culture. Although caregivers act from the intention of providing inclusive services, they experience little awareness and knowledge around perceived barriers. Insufficient education and experience in working with DHOH clients was mentioned as an important barrier in providing adequate care. Caregivers indicate that foreign good practice examples offer insight into more culturally sensitive and language-appropriate tailored care.

Discussion: Structural stigma manifests itself in the gap between expectations of care users and caregivers around an inclusive mental health system. Knowledge and awareness raising of caregivers can broaden the understanding of inclusive mental health care for DHOH people and facilitate shaping of tailored care.
The patient-provider relationship with aphasic patients: a study with nurses and care assistants

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Context: Stroke affects 150,000 people in France each year and is the first cause of aphasia. Stroke care is provided in Neurovascular Units (NVU) with a multidisciplinary approach. However, healthcare providers, e.g. nurses and care assistants, may have difficulties interacting with aphasic patients, as they have limited training in communication with aphasic patients. The aim of this study is to determine which dimensions of the care relationship between aphasic patients and nurses/care assistants are altered by aphasia.

Method: We conducted observations of patient-provider communication (nurses/nursing assistants and aphasic patients) in a NVU over 3 months. Qualitative data (field notes) were analyzed using grounded theory and a participatory analysis approach with a nurse and a care assistant.

Results: 21 situations of communication with aphasic patient were observed. The analysis highlighted the major role of communication in establishing a care relationship and in achieving patient-centered care. Furthermore, the uncertainty of the functional prognosis generated stress for providers in their relationships with patients, but especially with their families, whose emotional distress was experienced as difficult to manage. Indeed, providers expressed low perceived self-efficacy on how to reassure patients and their families without being able to inform them precisely about the functional prognosis.

Discussion: The patient-provider relationship may benefit from strengthening collaboration within the healthcare team, training providers in communication with aphasic patients, and supporting family members during diagnosis announcement in order to promote emotional recovery.
"I don’t know how to react": Emotional responses towards cervical cancer screening in vulnerable women

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Background: Cervical cancer is the third most diagnosed type of cancer in Romanian women, with the highest mortality rate across EU countries. The national cervical cancer screening (CCS) programme in place systematically fails to address vulnerable women. In this research, we aim to analyse the complex emotional reactions towards having CCS among vulnerable (low-income and low literacy) women.

Methods: The study involves twenty Romanian women, with little access to health services. The interview guide brings at the forefront women’s feelings towards having CCS as well as to subjective obstacles and opportunities attached to it. The analysis is informed by thematic analysis by using a top-down approach (starting from concepts of the Health Belief Model), and a bottom-up one, guided by the spontaneous recounts of the participants.

Findings: Fear is the dominant concept emerging from the analyses. The fear of a cancer diagnosis is both empowering and disempowering in decisions related to screening. Women shared stories of fear of bad news (connected with feeling helpless), fear of leaving children behind (connected to cancer as a final verdict) but also of fear as a signal that CCS is important for their health. Bringing CCS within women’s reach, offering clear instructions for self-sampling, and close follow-up are ingredients that increase empowerment and counterbalance the force of fears.

Discussion: While it may seem that CCS is the rational choice of health-conscious women, addressing the concerns and fears of the vulnerable ones and bringing CCS "within their reach", are keys to a good screening coverage.
A qualitative exploration of prisoner experiences during incarceration and its effect on exercising self-control

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INTRODUCTION: Recent research demonstrates negative effects of incarceration on prisoner self-control, even following short term imprisonment. These findings are concerning given that poor self-control is a key contributor to criminal propensity. Despite well-documented evidence of the negative impacts of incarceration on prisoner adjustment and post-release outcomes, contemporary research understanding these issues, especially on prisoner self-control, is lacking. Studies are therefore needed to help uncover the mechanisms through which custodial placements have deleterious impacts on self-control, identifying opportunities for protective and rehabilitative measures that will enhance prisoners' wellbeing. METHODS: Prisoners (N=15) incarcerated in a Queensland prison participated in semi-structured interviews. Data were analysed using thematic analysis methods. RESULTS: Physical space of the environment (e.g., environment perceived as "crowded", "claustrophobic", "feeling stuck"), low self-efficacy ("helpless", "stolen liberty", "loss of control"), and daily structure ("having no structure, that’s when there is violence in here") were identified as major themes. A key finding was that prisoners assigned to the workers unit (and given jobs), expressed a more positive outlook and felt more in control of their prison experience. CONCLUSION: This study is the first to explore through prisoners’ perspectives the impact of incarceration on prisoner self-control. The findings of this research will enable understanding of the mechanisms underlying reductions in self-control, a key predictor of criminal behaviour and recidivism. Identification of factors involved in self-control may provide target areas for rehabilitation and treatment, thereby reducing the likelihood of recidivism. Identification of the effects of short prison sentences may encourage diversion strategies for low-risk prisoners.
Lifetime polyvictimization and mental health in women: A population based latent class analysis

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Purpose: This study uses data from the Add Health, a national and longitudinal survey, to identify women with (n = 418) and with no incarceration histories (n = 5,099) to compare lifetime trauma exposure and risk for distal mental health and substance use outcomes in women with vs. without incarceration histories.

Method: With a detailed list of traumas that captures the category (e.g., sexual, physical, psychological), the perpetrator (parent, partner, other), and timing (e.g., childhood, adolescence, adulthood) of the exposure, we used Latent Class Analysis to identify distinct groups of polytrauma exposure in the two groups of women. Multivariate logistic regressions examine the association between class membership and mental health (depressive symptomatology, PTSD, anxiety, suicidal ideation, and suicide attempt), and substance misuse (alcohol, marijuana, and other illicit drug misuses) outcomes, after adjusting for relevant covariates.

Results: we identify a unique pattern of trauma exposure characterized by high exposure to multiple types of childhood abuse that persisted during the preschool and middle childhood years in the group of women with incarceration histories. Different groups of polytrauma exposure were associated with distinctive mental health and substance misuse outcomes among women with incarceration histories, but not in women without incarceration histories.

Conclusion: Our findings highlight the common prevalence of polyvictimization exposure in both women with and without histories of incarceration; and point to distinct patterns created by the type, frequency, and timing of the trauma exposure, and their distinct associations to distal psychological health outcomes, and possibly criminal justice involvement.
Joining forces to improve environmental health effectively

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Purpose: Human health is inherently connected with the health of the environment and nature. Protecting environmental health (i.e. the health of humans and the surrounding natural systems they depend on) requires actions that integrate a wide range of disciplines. For health psychology, this implies, first, joining forces with other scientific (sub-)disciplines, including environmental psychology, and second, to increase collaboration with stakeholders from policy and practice. This roundtable brings together contributors from health and environmental psychology as well as from political sciences to present and discuss the necessity as well as the chances and challenges of tackling environmental health issues through inter- and transdisciplinary research.

Objectives:
- Encourage health psychologists to unite efforts with colleagues from other scientific (sub-)disciplines to take a more systemic view on environmental health issues
- Illustrate the relevance of collaboration and dialogue with stakeholders from policy and practice
- Illustrate the need, chances, and challenges of inter- and transdisciplinary research on environmental health issues
- Discuss implications for health psychological research and the EHPS

Rationale: According to the World Health Organization, the current environmental crises are human health crises because a healthy planet is a prerequisite for prosperous and healthy human life. Mitigation of and adaptation to environmental degradation are thus among the most important human health challenges of our time. The EHPS 2023 conference provides a great opportunity to discuss how health psychological research can contribute to addressing these challenges and how inter- and transdisciplinary research could strengthen the impact of such endeavours.

Summary: Our contributors from both health and environmental psychology as well as from political sciences will give kick-off presentations to introduce their perspective. Jutta Mata and Anne van Valkengoed will discuss how health psychology and environmental psychology, respectively, contribute to tackling current environmental health issues and where and how the two subdisciplines could (or should) join forces. Next, Rea Pärli will discuss key findings on the requirements for and outcomes of successful transdisciplinary research. Finally, Cornelia Betsch will give insights into her experience with translating research into policy and practice. Each presentation will be followed by a round of flash reactions by the other contributors. The following panel discussion will be structured by impulse questions from the conveners. In the final, interactive discussion, the audience will have the opportunity to (a) ask questions and (b) participate (temporarily) in the discussion by using the ‘guest chair’, which will be added to the roundtable.
Health inequalities are not a footnote to the health problems we face, they are the major health problem. Marmot, 2015, 29.

Exclusion has become a powerful concern for health psychology, given the startling rise in health inequalities nationally and globally. This has alerted us to the gross unfairness operating within our health care systems and provisions, and encourages us to find out what is going on so that we can devise effective ways to make healthcare more inclusive.

Epidemiologists like Michael Marmot have successfully used inductive techniques to bring home the sheer scale of health inequalities. Morbidity and mortality data can be very helpful in highlighting geopolitical, structural differences, which can indicate what may be the reasons: for example maternal mortality. In Italy the rate (at the time of his writing) was about one maternal death in the reproductive years of 17,000 women. The comparative rate in the USA at the time was one in 1,800, despite its GDP being so much greater. Data like these are excellent at highlighting inequalities, but less good at explaining them.

In order to get answers to why such differences occur, for some time now health psychologists have been developing innovative research strategies that go beyond traditional inductive and deductive logics of inquiry and move into abductive and retroductive ones (Blakie, 2006). These seek to gain insight by interpreting the ways in which people make sense of what is happening to them and what they should do about it – in other words, qualitative methods.

In this presentation I will outline the philosophical assumptions underpinning this approach (including a fuller account of abductive and retroductive logics), describe a range of qualitative methodologies (including thematic, discourse and conversational analyses and Q methodology) and illustrate them with research offering different insights into reasons for health inequalities.
Adolescent Well-Being during the COVID-19 Pandemic: Relation to Physical Activity, Social Contacts, and Screen Time

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During the COVID-19 pandemic, implemented social distancing measures led to behavioral changes and decreased well-being in adolescents. The aim of this study was to examine the relation between daily behaviors that were affected by pandemic-related changes (i.e., physical and sport activity, social contacts, screen time) and adolescent well-being. For this, we conducted a 28-day ambulatory assessment study in Summer 2021. Daily data of 125 German adolescents (11-20 years) was collected every evening through self-report and analyzed with multilevel models. Between and within individuals, physical activity was positively, and screen time was negatively related to well-being. Social contacts were positively related to well-being within individuals only. Explorative analyses merely supported a positive effect of in-person but not digital social contacts, and revealed differences between the contexts in which sport activity took place (sports club, leisure time, school). Our findings suggest that physical activity and in-person social contacts are positively related to adolescent well-being and should, thus, be enabled during the pandemic. Further, the negative role of screen time should be considered in health promotion.
How bedtime procrastination affects our daily mood – a diary-based study

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Background: Sleep behavior influences health and well-being. Bedtime procrastination refers to the postponement of scheduled bedtime, independently of external circumstances. This behavior usually leads to sleep deprivation. In this diary study the consequences of bedtime procrastination on daytime mood, as well as the interaction with sleep quality and sleepiness were investigated.

Methods: A total of 104 participants (76.92% female, 21.15% male, 1.92% diverse) completed the initial interview and at least seven out of ten daily interviews. During the daily interviews, three facets of daily mood (valence, energetic arousal, and calmness), bedtime procrastination and sleep patterns were assessed. The data was analyzed with multilevel analyses with within subject moderation. Exploratively, a mediation analysis was performed.

Findings: Bedtime procrastination had effects on nearly all three aspects of mood on personal and time level (valence b = -0.13, b = -0.14; energetic arousal b = -0.21, b = -0.25; calmness b = -0.10, all ps < .05). The interactions with sleep quality and sleepiness were not significant. However, sleep quality (valence b = -0.10; energetic arousal b = -0.11; calmness b = -0.06, all ps ≤ .001) and sleepiness (valence b = -0.14; energetic arousal b = -0.18; calmness b = -0.08, all ps < .000) were mediators between bedtime procrastination and mood.

Discussion: Bedtime procrastination has a negative impact on mood in daily life. These negative effects could be circumvented by getting enough sleep and maximizing sleep quality. In future research, consequences of bedtime procrastination for health and well-being should be investigated.
Cumulative associations between health behaviors and mental well-being over 30 years in mid-adulthood

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The aim was to examine cumulative associations between health behaviors and mental well-being in mid-adulthood. The data were from the Jyväskylä Longitudinal Study of Personality and Social Development. The same participants have been followed since 1968 and they represent the Finnish age cohort born in 1959. This study utilized data collected at ages 27, 36, 42, 50, and 61 (n=206–326). Risk scores representing the accumulation of risky behavior over time for smoking, heavy alcohol consumption, and physical inactivity were calculated for each time point (e.g., a risk score for smoking at age 42 included information on smoking at ages 27, 36, and 42). Their associations with life satisfaction and depressive symptoms (assessed at age 36 onwards) were analyzed with linear regression models adjusted for gender and education. Risk scores of smoking were associated with lower life satisfaction at age 36 (β=-0.12, p=0.040) and with depressive symptoms at age 36 (β=0.17, p=0.004) and 42 (β=0.21, p<0.001). Risk scores of alcohol consumption were associated with depressive symptoms at age 36 (β=0.35, p<0.001) and 50 (β=0.24, p=<0.001), and with lower life satisfaction at age 50 (β=-0.18, p=0.008). Inactivity was not associated with the outcomes at any time point. None of the three risk scores was associated with the outcomes at age 61. Accumulative risks of smoking and heavy alcohol consumption are associated with lower mental well-being in mid-adulthood. Further investigation is needed to understand how the accumulation of more than one risk behavior over time is related to mental well-being.
Meaning on life matters: Implications for public health surveillance and promotion of mental well-being

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Background. To experience one’s own life as meaningful has been identified as one important resilience factor in terms of challenging life situations, prevention of mental disorders or suicide. During the COVID-19 pandemic, evidence on the potential of positive effects from experiencing meaning of life as well as meaning making as a coping strategy has become increasingly dense. However, meaning of life has been largely unconsidered in public health research and measures so far.

Methods. We investigated meaning of life (MoL) in two population-based studies including 5,100 18- to 79-year-old German adults (one representative, one balanced regarding age, sex and educational status) conducted in 2023. With the help of path analysis, we tested associations of MoL with several relevant sociodemographic, health and other resilience factors, and the additional contribution of meaning of life to other mental well-being indicators was analyzed by means of exploratory factorial analyses.

Findings. With about 80% the vast majority reported MoL. MoL was higher with older age and close personal relationships but unrelated to sex or socioeconomic status. Moreover, there were significant moderate associations with both mental and physical health outcomes (e.g., depression and anxiety symptoms, pain), as well as resilience factors (e.g., optimism, self-efficacy). Considering MoL in addition to other measures (e.g., satisfaction with life) substantially contributed to capturing the structure of mental well-being comprehensively.

Discussion. The findings have practical implications for national public health surveillance and promotion emphasizing the benefit of increased attention to meaning of life.
Behavioral activation and well-being: An update

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Background: One of the most promising ways to increase well-being and prevent mood problems is to engage in valued and enjoyable activities. Behavioral activation (BA), originally developed in depression treatment, has been shown to be adaptable for non-clinical populations. Its simple and easily transferable techniques allow the individual to intentionally engage in pleasant activities, resulting in favorable effects on well-being. Many recent studies expand our knowledge about the specific effects BA can have (or not have) on well-being across diverse outcomes, populations, age groups, settings, and application forms while the growing technological advancement increases its accessibility. Even during the COVID-19 lockdown, BA-inspired interventions have been demonstrated to provoke benign efforts in action planning and mood changes, accordingly.

Methods: We will provide a series of meta-analyses based on PRISMA guidelines summarizing the existing evidence across the strata: outcome indicators for well-being, population (healthy and populations with chronic diseases), age groups, settings and application forms (internet and mobile-based versus face-to-face).

Findings: The review demonstrates that BA provides a ready and attractive intervention for promoting mental health and well-being in a wide range of populations in both clinical and non-clinical settings. However, many studies still lack the methodological quality for inclusion in the meta-analyses.

Discussion: Essentially, BA is a simple intervention, which can be easily adapted for different populations and for the less well-educated. On the methodologic level, we will discuss deficits in present studies and possible designs for studies analyzing the preventative effects of BA.
Living the transition to adulthood in Achondroplasia and Osteogenesis Imperfecta patients

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Background: Achondroplasia (ACD), and Osteogenesis Imperfecta (OI) are among the most prevalent rare genetic disorders affecting the musculoskeletal system, and can have substantial impact on families, patient, and on healthcare systems. Youth is a period of great challenges with future repercussions. The characteristics of the clinical condition are a risk to the accomplishment of the developmental tasks of the young adult with OI and ACD. Research on this issue is scarce.

Objective: To explore the experience of young people with OI and ACD during the transition phase to the adult world, as well as the perspective of their parents regarding this experience.

Methods: Four focus group with a guide with the 5 dimensions was used: (1) experiencing autonomy; (2) health and wellness; (3) social and sentimental life; (4) transition to adult health services; (5) worries and concerns. A inductive qualitative analyses was performed. Sample: 18 youngsters (11 OI and 7 ACD) age 17 to 28y, and 14 parents, participated.

Findings: Autonomy was referred by all as "a constant struggle and the goal of life". Facilitators and obstacles were mentioned. In general, good physical and mental health was reported. However, some mentioned anxiety and depression, identifying causes, coping and sources of support; social life and friends were highlighted: in general, they reported a bad experience in the transition to adult services, admitting the decrease in adherence. Similarities and differences between parents and young people were identified.

Conclusion: the results can contribute to the improvement of support conditions for these and other young people with similar clinical situations.
Testing the usefulness of Social Cognitive Theory to explain physical activity behavior in German adults

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Background: Albert Bandura's Social Cognitive Theory (SCT) is one of the most prominent psychological theories regarding human behavior. It is also one of the most commonly used theories that serve as a theoretical basis for interventions. Previous studies found SCT useful to explain or predict physical activity behavior, but most of these studies were based on pathogenic samples and did not include all SCT components. Therefore, the purpose of the study was to test the explanatory value of SCT for non-pathogenic adult physical activity behavior.

Methods: 335 German adults (109 male) with a mean age of 30.27 years (SD = 12.78) participated in an online study in which they were asked to complete a questionnaire concerning their physical activity and expressions on the SCT components of self-efficacy (Cronbach's α=.93), action-outcome expectations (Cronbach's α=.79), goals (Cronbach's α=.54), and sociostructural factors (Cronbach's α=.69). The sample had average proficiencies on the scales and moved more than the minimum recommended by the WHO.

Findings: We modeled SCT using a manifest structural equation model. The model had a good fit to the data ($\chi^2(2)=2.447$, $p=.294$, CFI=.999, SRMR=0.016, RMSEA=0.026, $p=.549$). There were significant effects of self-efficacy on action-outcome expectations (.590, $p<.001$), goals (.672, $p<.001$) and sociostructural factors (.492, $p<.001$). Furthermore, there were effects of self-efficacy on physical activity (.287, $p<.001$).

Discussion: The results seem to support the use of SCT as a basis for interventions to reduce physical inactivity. Systematic development and testing of interventions based on the theory could therefore prove promising.
Psychosocial correlates of physical activity resilience: the case of step counts during the COVID-19 pandemic

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Background:

Physical activity (PA) resilience describes a process of returning to pre-stressor PA levels following a stressor event, which had caused a sudden decrease in PA. As sufficient levels of PA provide benefits to mental and physical health, we evaluate the resilience process and its predictors, here in the case of the first COVID-19 lockdown.

Methods:

We analyzed 110 participants (44% women; Mage=40, SD=9.4, 19-65) who i) were in the longitudinal Healthy Aging in Industrial Environment study both 4 months pre- and post-lockdown start date and ii) experienced a 10% decrease in steps during lockdown compared to their pre-lockdown levels. Daily steps were measured using Fitbit and adjusted for seasonality. PA resilience was calculated using the relative area under the curve of the step count trajectory after the lockdown started. Predictors of resilience, measured via online questionnaire (at least 4 months pre-lockdown), were mapped against the COM-B model: mental health status and PA self-regulation (capabilities), population density (opportunity), intrinsic motivation (motivation).

Findings:

Among the 110 participants, 59 recovered to their pre-lockdown PA levels within 4 months; average recovery time was 48 days (SD=33). Better pre-lockdown mental health status (β=.259, p=.006, R²=.065) and stronger PA self-regulation skills (β=.212, p=.032, R²=.039) were linked with higher resilience. Other predictors were not significant.

Discussion:

We show that more capabilities are related to higher resilience in step counts against COVID-19 lockdown. This stresses the importance of evaluating the resilience process and its predictors to direct interventions and help individuals maintain healthy PA levels.
**Physical activity maintenance: Holy grail or existing phenomenon?**

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**Background:** Physical activity (PA) maintenance is of fundamental importance for health and wellbeing; however, there is no consensus around its conceptualization. Methodological limitations, such as low-resolution and self-reported assessment of PA, have hindered robust investigation of this phenomenon. In this paper, we assessed whether patterns of PA maintenance can be detected from objectively measured PA time series.

**Methods:** We performed secondary data analysis of SMART 2.0, a behavioral weight loss intervention in which inactive participants had the goal to perform 225 minutes of moderate-to-vigorous PA (i.e., MVPA) per week. PA was assessed using activity trackers. We operationalized PA maintenance according to the 225-minute threshold and analyzed 189 time series (length = 366 days) to measure the frequency, duration, and amplitude of fluctuations around it. Time series were analyzed using generalized additive models and cluster analysis of state sequences.

**Findings:** MVPA trajectories crossed the 225-minute threshold an average of 11 times (SD=6.28, min=0, max=25). The average duration of the phases with MVPA below the threshold was 33.00 days (SD=55.11, min=3.3, max=366) and the average amplitude was 111.45 minutes (SD=43.80). Results from cluster analysis of state sequences suggested the presence of four clusters, with one of them (n = 34, 18%) pointing to a PA maintenance phenomenon.

**Discussion:** Multiple fluctuations characterize PA trajectories and patterns of PA maintenance can be observed only in a small cluster of individuals. The current study provided empirical evidence to be used for the refinement of operationalizations of the existing conceptualizations of PA maintenance.
Resilience moderates the relationship between physical activity enjoyment and habit

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The emotional style denotes a consistent pattern of responding to live experiences and is thus related to healthy emotionality. Dual-process approaches emphasize the role of affect and habit for the maintenance of health behaviour. For physical activity, there is evidence suggesting a positive relationship between enjoyment and habit. However, this relationship may not be equally strong for everyone. Thus, the aim of this study was to examine whether the emotional style dimensions, specifically, outlook and resilience moderate the relationship between physical activity enjoyment and habit. Participants completed a survey that included measures of physical activity enjoyment (PACES-S), physical activity instigation habit (SRBAI), outlook and resilience (ESQ). Data from 578 individuals was analyzed applying Hayes’ PROCESS macro for SPSS (controlled for demographic variables). In the regression for outlook (F(5,572) = 39.169, R² = .255, p < .001), only the main effects were significant (enjoyment: β = .440, p < .001; outlook: β = .097, p = .010). In the regression for resilience (F(5,572) = 39.960, R² = .259, p < .001), enjoyment (β = .441, p < .001) and resilience (β = .106, p = .005) positively correlated with habit, and the interaction negatively (β = -.071, p = .035). These results suggest that habit formation in individuals low in resilience benefits particularly when they experience physical activity enjoyment. These individuals tend to be emotionally unstable, so generally experience less positive affect during physical activity. Thus, affect-based interventions to promote physical activity habits may be particularly effective for these individuals.
An agent-based model of dyadic physical activity: a novel approach to understand social interactions

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The addition of interactions such as social support and influence make understanding dyadic health behaviour a particular challenge. Gathering precise ecological interaction data is very difficult, whilst standard statistical techniques struggle to understand dynamic, interacting processes.

To address these issues, we took a two-pronged approach. Firstly, we gathered empirical data from a longitudinal dyadic physical activity (PA) study of 38 couples across 55 days. Using wearable sensors and daily diaries we measured physical activity and interactions within romantic couples. We then used a bespoke agent-based model (ABM) to identify the latent processes and causes of changed PA, which when fit to our empirical data provided unique insights into the processes behind dyadic health behaviour change.

After calibration, our model identified that situational effects are fundamental to determining PA, and that interactions within the dyad are key for increased PA. We found large individual differences in how couples interacted, and that it is rare for both participants in the couple to interact in the same way at the same time. Simulation experiments show that our agents frequently pressured their partner to perform PA according to their plan during difficult situations.

This work demonstrates the contribution that formal models can make to the study of dynamic processes in dyads. By using ABMs the time evolution of psychological processes can be understood at the individual level, whilst matching models to data can provide insight into the processes that it is often difficult to understand empirically.
Computational modelling of real-world habit change: a conceptual review and practical guide

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Background: Creating and breaking health-related habits are considered an indispensable part of promoting long-lasting behavior change. In recent years, there is a thriving effort in formalizing habit theories as computational models. For health psychologists, these models can be useful tools for predicting, explaining, and changing habits. However, applications of such models are rare in applied research, due to a lack of awareness and the “know-how” of using these new tools.

Methods: To address these issues, we aimed to review and synthesize computational models about habit and to provide an accessible guide to their use cases in health psychology. We surveyed the literature and identified models in two categories: (1) Models that explain how behavior repetition in a specific context builds up a habit (i.e., cue-behavior association); (2) Models that specifies the mechanisms through which the cue-behavior association influences behavior together with other behavioral determinants.

Results: Three use cases were identified through the narrative review. First, computational models can help to clarify conceptual issues in defining and applying habit-related constructs. Second, these models can be used to make more precise and testable predictions about habit formation and how habits interact with goal-related constructs to influence behavior. Third, they can be implemented in digital health systems to represent users’ habit strengths and to inform interventions.

Discussion: Adding computational modeling to our methodological toolbox will benefit both theory and intervention developments in habit research. Remaining challenges are also discussed, such as model validation and the matching of theoretical models to real-world habit phenomena.
Health communication: Communication strategies

14:00 - 14:15

Icon arrays for communicating medical information: The role of color and icon type

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Background: Visual aids, such as icon arrays, have been shown to be an effective method of communicating medical risk information. Research on how icon type and color affect the perception of icon arrays, however, is limited. Methods: 866 participants aged 40-90 years from a demographically diverse panel completed an online experiment. Using a 2x2 between-subjects design, participants were randomly assigned to one of four experimental groups. They were presented with their hypothetical 10-year cardiovascular risk using an icon array that varied according to icon type (smiley vs. person) and color (black/white vs. red/yellow). We assessed risk perception, emotional response, intentions of taking action to reduce the risk (e.g., increasing one’s physical activity), risk recall, and graph evaluation/trustworthiness. Results: Icon arrays using person icons were evaluated more positively (p = .003), whereas smiley icons resulted in significantly higher risk recall (p = .040). We found no effect of icons or color on risk perception (ps > .05), emotional response (ps > .05), or intentions of taking action to reduce the risk (ps > .05). Conclusions: Differences in the perception of the tested icon arrays were rather small, suggesting that they are equally suitable for communicating medical risks. Further research on the robustness of these results across other colors and formats could add to guidelines on the design of visual aids.
How to debunk misinformation? An experimental online study investigating text structures and headline formats

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Background: Misinformation is a crucial problem, particularly online, and the success of debunking messages has been limited. In this study, we experimentally test how debunking text structure (truth sandwich vs. bottom-heavy) and headline format (statement vs. questions) affect the belief in misinformation across topics of the safety of COVID vaccines and GMO foods.

Methods: A representative, German sample of 4906 participants was randomly assigned to read one of eight debunking messages in experimentally varied formats and subsequently rated the acceptance of this message and the agreement to misinformation statements about the targeted topics and an unrefuted control myth.

Findings: While the debunking messages specifically decreased the belief in the targeted myth ($F(1.95, 9556.51) = 219.70$, $\eta_p^2 = .043$, $p = < .001$), these beliefs and the acceptance of the debunking message were by-and-large unaffected by the text structures (all $F \leq 1.96$, all $\eta_p^2 < .001$, all $p \geq .142$) and headline formats (all $F \leq 3.19$, all $\eta_p^2 < .001$, $p \geq .043$). Yet, they were slightly less successful when addressing individuals with strong pre-existing, incongruent attitudes (all $F \geq 6.09$, $\eta_p^2 \geq .001$, $p \leq .003$) and distrust in science ($F(1.99, 9710.46) = 18.96$, $\eta_p^2 = .004$, $p < .001$).

Discussion: The risk for backfire effects in debunking misinformation is low. Text structure and headline format are of relatively little importance for the effectiveness of debunking messages. Instead, writers may need to pay attention to the text being comprehensive, trustworthy, and persuasive to maximize effectiveness.

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Background: Antimicrobial resistance causes 1.3 million preventable deaths annually. In high-income countries, ethnic minority groups are disproportionately affected. Effective communication strategies are needed to reduce inappropriate antibiotic use in these groups. We tested two communication strategies to lower antibiotic expectations by informing participants about the viral nature of the illness and antibiotic ineffectiveness for it.

Methods: Participants (N = 4,038; 1,990 from minorities, the general adult population from the UK and the US) assessed their expectations for antibiotics and requests for a hypothetical viral illness during a doctor’s visit. We manipulated the information communicated by the doctor in a between-subjects design (baseline, viral nature of the illness, viral nature of the illness and antibiotic ineffectivity).

Findings: Participants from ethnic minority groups expected and requested more antibiotics during the doctor’s visit, ps<.001. The communicated information significantly reduced antibiotic expectations and requests, ps<.001. However, it interacted with ethnicity, p=.013 and p=.042, respectively. Reducing diagnostic uncertainty lowered expectations and requests only for the participants from the White majority, whereas providing information on illness and antibiotic efficacy reduced expectations and requests similarly in both groups.

Discussion: People from ethnic minority groups in the UK and the US were more likely to expect and request antibiotics for a self-limiting illness during the doctor’s visit. Only providing information on the viral nature of the illness and the inefficacy of antibiotics for such illness reduced effectively antibiotic expectations and requests across ethnic groups, highlighting the importance of tailored interventions to address ethnic disparities in antibiotic use.
Health advice at face value: Valence and dominance effects on receptiveness for health information.

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Background: Health communication research often focusses on content of messages, communication strategies, when we explore who delivers the message sources credibility is emphasised. However, people rapidly and involuntarily evaluate faces, which affects many behaviours (i.e., voting). We aim to explore whether face dimensions (valence and dominance) affect rated receptiveness to health advice, about Covid-19 and sexual health.

Methods: In two studies cross-sectional studies participants (NCovid = 159, NSexualHealth = 165) randomly rated 50 (male/female) faces on advice receptiveness: ‘How likely would you be to [trust information/take advice] about [Covid-19/sexual health] from this person?’ (1 much less than average, 7 much more than average). A linear mixed effects model assessed whether valence and dominance predicted advice receptiveness.

Findings: Study 1 showed participants were more receptive to Covid-19 advice from faces scoring high on valence (standardised Beta (B)= 0.224, Standard Error (SE)=0.016) and low on dominance (B=0.083, SE=0.016). Study 2 replicated this for sexual health advice (B=0.257, SE=0.016 and B=0.043, SE=0.012 respectively). In addition, participants were more receptive to advice from female faces (B=0.158, SE=0.048). Finally, participants were more likely to trust sexual health information than to take the advice (B=0.172, SE=0.047).

Discussion: Overall, people were more receptive to advice about Covid-19 and sexual health from attractive and non-dominant faces. Receptiveness to sexual health advice seems more complex, which might be explained by sexual health being related to sexual behaviour being more gendered and difficult. Appearance-based perception may be a factor that is typically overlooked when developing intervention materials.
Training nurses on distress screening to establish an interdisciplinary approach

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Background: For many patients, cancer is accompanied by physical and psychological stress, which can manifest itself in increased distress (approx. 50%) or a psychological disorder (approx. 30%). Psycho-oncological screening is necessary to identify psychologically distressed patients in a targeted manner and to provide them with psycho-oncological/psychotherapeutic care according to their needs. A special training on psycho-oncological screening (OptiScreen-training) for nursing staff was developed to reduce barriers in the screening process and to establish an interdisciplinary screening approach.

Methods: N = 64 nurses from visceral oncology inpatient care at Hannover Medical School participated in the training and evaluation. The 6-hour training consisted of three modules (psychological disorders/psychological distress, psychooncology, psychooncological screening, communication in the screening process, selfcare) and was conducted by psychotherapists/psychooncologists. The nurses evaluated the training with a pre- and post-questionnaire (screening knowledge, uncertainties, hurdles, satisfaction, usefulness, acceptance, feasibility).

Results: Overall, the results show high satisfaction (62.0-98.6%) with the OptiScreen-training. Feasibility and overall acceptability for the training were also rated positively (69.0-94.3%). Personal uncertainties were significantly reduced by the training (t(63) = -13.322, p < .001, d = 1.67).

Discussion: The OptiScreen-training was rated as useful in reducing personal uncertainties regarding communication in the screening process. Acceptability, feasibility, and satisfaction with the training from the nursing perspective were achieved. The training contributes to minimize barriers on the part of the treatment team to inform about psycho-oncology and to recommend appropriate support services to patients.
'What is old and natural is harmless': Traditional, complementary, and alternative medicine in online media

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Background: When the media does not adhere to reporting guidelines regarding traditional, complementary, and alternative medicine (TM/CAM), this may deceive or mislead consumers about the safety and efficacy of these practices. We analyzed whether Serbian online media adheres to reporting guidelines and described dominant psychological appeals used to promote TM/CAM. Methods: We conducted a content analysis of 182 articles from six news and six magazine websites, published July–December 2021. Findings: Biologically based treatments – predominantly herbal products – were the most common (205/289 practices). TM/CAM practices were claimed to improve general health (71/386 claims), as well as to alleviate respiratory problems, boost the immunity, and detox the body. The tone was overwhelmingly positive, with most of the positive articles (145/176) neglecting to disclose the potential harms of TM/CAM. Few articles provided a recommendation to speak with a healthcare provider (24/176). Articles tended to appeal to TM/CAM’s long tradition of use (115/176), naturalness (80/176), and convenience (72/176). They used vague pseudoscientific jargon (105/176) and failed to cite sources for the claims that TM/CAM use is supported by science (39/176). Discussion: Given that TM/CAM use may lead to harmful outcomes (such as adverse events, avoidance of official treatment or interaction with it), Serbian online media reports on TM/CAM are inadequate to assist consumers’ decision-making. Our findings highlight issues that need to be addressed towards ensuring more critical health reporting, and, ultimately, better informed TM/CAM consumption choices.
Risk and protective factors in chronic illness?

14:00 - 14:15

“You develop realistic views on life”: Peer relations and communication of chronically ill young adults

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Background: Maintaining social relations (e.g., to peers) can be important for young adults’ coping with chronic diseases in everyday life. In the framework of social representations theory, our study (funding: DFG) pursues research questions such as: How do young adults with chronic diseases (YACD) communicate with their peers (friends, partners) about their illness in their everyday life? Which are their peers’ representations of the chronic diseases and related needs?

Methods: In a comparative qualitative study, we interviewed N=60 YACD (age 18-32; 16 male, 44 female) with diabetes/type 1, cancer, inflammatory bowel or rare, complex diseases, and N=30 of their close friends or partners (age 18-35; 14 male, 16 female) with episodic interviews, which are analyzed with thematic coding.

Findings: YACDs’ peers differ in their understanding of chronic diseases. They reduce them to single strategies of self-management or describe them more holistically in their physical and psycho-social consequences. YACD either a) talk to peers in details about their disease, its consequence for everyday life and about disease management, b) inform selected peers in a general way about their disease or c) are not sure to whom to reveal their disease and finally refrain from talking about it.

Discussion: Studying how YACD communicate with their peers about their illness focuses on an aspect of coping relevant from a health psychology perspective. Our results provide insights into what makes communication and relations between YACD and peers work or complicated, which can be used for designing instructions peers and partners of chronically ill adults.
How do relatives of ill/disabled people cope with their illness? A pilot study.

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Background: Persons who have to adapt to an illness/disability of relatives are given significantly less attention in research. The aim of this study was to record coping strategies of relatives of cancer patients and of children with cognitive impairment.

Methods: The wording of the Essen Coping Questionnaire (ECQ) was revised so that it was suitable for relatives. Sample 1: 219 relatives of cancer patients with an average age of 43.7 years (±13.8), 52.1% female, filled in the Mini-SCL and the Oslo Social Support Scale in addition to the ECQ. Sample 2: 125 parents of children with cognitive impairment (39.8 years ±6.4, 95% female, 18% single parents) filled in questions on locus of control (LOC) and self-efficacy.

Results: Overall, the internal consistency of the ECQ was between $\alpha=.58$ (trust in the medical care, TMC) and $\alpha=.87$ (active, problem-oriented coping). Except for TMC, there were statistically significant differences between the two groups; parents (sample 2) consistently had higher mean values in ECQ-scales. They described a lower internal and higher external LOC than the normalization sample, as well as lower self-efficacy. In addition to the lower coping efforts, the relatives of cancer patients (sample 1) showed remarkable psychological distress and less social support than the normative samples.

Conclusion: In summary, it can be seen that the modified ECQ is suitable for recording the coping strategies of relatives. Psychometrics should be examined in further studies. The other results indicated that the relatives should also receive support in coping with the illness.
The extent and context of subjective cognitive complaints in haemodialysis
and implications for patient outcomes

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Background: Cognitive impairment is common in haemodialysis patients. However, patients’ subjective experience with cognitive difficulties remains less well-understood. This mixed-method study investigates the extent and context of subjective cognitive complaints in haemodialysis patients, and their implications for key dialysis outcomes.

Methods: A total of 268 haemodialysis patients completed the Montreal Cognitive Assessment (MoCA) and measures of cognitive complaints, mood, fatigue, functional status, and treatment adherence. A subset of 29 patients with high cognitive complaints were interviewed to contextualise cognitive lapses and coping responses.

Findings: In the current sample, 64.2% of patients were classified as having cognitive impairments as per MoCA dialysis-specific cut-off. While mean cognitive complaints were in range of “infrequently”, 36.2% of patients met the cut-off for significant complaints. Complaints about memory were the most frequent, followed by language, motor/sensory-perceptual, and executive function. Within patients reporting significant complaints, 45.9% reported significant interference of daily living due to cognitive difficulties. Regression analyses showed that cognitive complaints predicted functional interference and treatment nonadherence, whereas MoCA scores did not, even after controlling for socio-demographics, mood, and fatigue. Consistent with quantitative findings, qualitative interviews identified cognitive complaints in multiple domains and highlighted individual variability in perceived causes/consequences of cognitive changes and coping strategies for cognitive lapses.

Discussion: While impairments are shown in cognitive screening, the experience of cognitive complaints vary widely across individuals and cognitive domains. Subjective cognitive complaints have clinical significance and hence assessing these complaints in renal settings may help understanding patients’ needs and identifying those at risk of poor outcomes.
Factors associated with depression and benefit finding in a Singapore population of incident hemodialysis patients

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Hemodialysis marks transition to lifelong, intensive treatment with multiple psychosocial demands and is associated with high emotional burden and depression. Emerging research shows benefit finding is commonly experienced in health adversity but evidence in context of ESKD is lacking. This study aimed to document rates of, and factors associated with depression and benefit finding in incident hemodialysis patients (<6 months).

N = 147 incident hemodialysis patients completed measures assessing mood (HADS) and benefit finding (BFS) at baseline as part of an intervention trial. Logistic or linear regression were used to assess results.

29.9% and 26.5% of participants met cut-offs (HADS scores ≥ 8) for anxiety (N = 44) and depression (N = 39) caseness respectively. Younger age was significantly associated with depression (OR = .942, p = .011). Younger age (OR = .910, p < .001) and Chinese race (OR = .300, p = .011) were significantly associated with anxiety. 42.2% of participants reported high overall BFS scores (37.4% high personal growth (PG), 55.1% high acceptance). Non-Chinese race was predictive of overall BF (B = .397, p = .001), PG (B = .456, p < .001) and acceptance (B = .328, p = .014). 36.4% of those with anxiety caseness reported high BF (29.5% high PG, 50.0% high acceptance). 28.2% of those with depression caseness reported high BF (23.1% high PG, 43.6% high acceptance).

New hemodialysis patients do not solely experience poor mood, there is also growth and positivity. Patients may experience high benefit finding despite anxiety and depression caseness.
Network and Dynamic Modelling of Physical and Psychological Symptoms in Rheumatoid Arthritis

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Background:  
Rheumatoid Arthritis patients suffer from physical and psychological symptoms but there is a lack of research investigating symptoms and symptoms’ connection changes after exposure to a treatment.

Methods:  
This study uses a preliminary sample of 12 that completed 6 surveys a day for 14 days, and 1 survey a day for 16 days on physical and psychological symptoms. Physical activity and sleep data were also collected using a FitBit.

Results:  
Physical symptoms such as pain, stiffness, and fatigue significantly decreased after treatment. Positive affect such as relaxed and content also significantly decreased. Temporal differences using dynamic mixed modelling were also investigated, and it was discovered that prior to treatment, psychological symptoms do not have a significant impact on physical symptoms in the next time point, while after treatment this impact is significant. Network plots also showed that before treatment, fatigue is strongly connected to physical symptoms, while after treatment fatigue is connected with psychological symptoms instead.

Conclusion:  
Exposure to treatment results in significant decrease in physical symptom severity which is expected. Temporally, it can be seen that the effect of psychological symptoms on physical symptoms in the next time points are significant, suggesting that psychological symptoms of patients after exposure to a new Biologic treatment needs to be carefully monitored. The effects of fatigue is also shown to impact differently on other symptoms upon using network modelling, which is a finding that was not shown before.
Sexual problems in older age and barriers in help-seeking behaviours. A qualitative Polish study.

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Seeking medical or psychological help for sexual problems among older adults is uncommon, which can negatively impact their sexual health and satisfaction. This study aimed to identify the barriers to help-seeking among older adults in a conservative European country, Poland.

Seventy in-depth, semi-structured interviews were conducted among Polish women and men in two age groups: 50-65 years (40 individuals) and 65-82 years (30 individuals). Reflexive thematic analysis was used to analyse the data, with coding validity and analytical rigor ensured throughout the process.

Among those aged 65 and above, barriers to help-seeking included not recognising symptoms as related to treatable sexual problems, fearing or experiencing dismissive attitudes from doctors, and lacking knowledge of how to access appropriate services. The majority of those aged 50-65 have not sought professional help for sexual problems and tend to view consultations as a last resort, preferring to use the internet anonymously should problems arise.

This study findings suggest that several actions could be taken to address the situation. Educational campaigns about sexual problems in later life and the available services should be tailored to both older and middle-aged adults who may have missed out on sexual education. Health psychology should advocate for the inclusion of topics related to sexual health and well-being in older age in the curricula of professionals such as doctors, psychologists, and therapists. It would be beneficial if professionals, equipped with adequate knowledge, initiated discussions about sex-related issues during consultations and were mindful of their attitude towards their older clients.
Social Relationships and Health: New Insights from Dyadic Research

14:00 - 14:15

Daily support and emotion regulation strategies in romantic couples: women’s and men’s intrapersonal experiences

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Background: Emotion regulation strategies have been associated with better physical health, greater wellbeing, and stronger relationships. Previous research has focused on emotion regulation as an intrapersonal process, though many individuals regulate their emotions with others, e.g., through emotional social support. This study examines the daily links between emotional support receipt and provision and emotion regulation strategies in romantic couples.

Methods: Ninety heterosexual couples completed daily diary entries for 35 days. Three multilevel models were used to examine within- and between-person links between emotional support and emotion regulation. Support receipt and provision were examined in separate models, and then included together in the third model.

Findings: In Model 1 focusing on support receipt, support receipt was associated with reappraisal and problem-solving on the between- and within-person level for both men and women. In Model 2 focusing on support provision, support provision was associated with reappraisal and problem-solving on the between-person and within-person level for women, but less consistently for men. In Model 3 with support provision and receipt in the same model, emotion regulation was linked to provision only for women, and to receipt only for men, on the between-person level.

Discussion: We found links between support receipt and provision and emotion regulation for both men and women. However, when accounting for both support receipt and provision, the associations coalesced around provided support for women and received support for men on the between-person level. This study illuminates the role of gender in support receipt and provision and emotion regulation processes.
Health-related social influences among siblings in families with Li-Fraumeni Syndrome

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Background. Health-related social influence refers to efforts by others to change a person’s health beliefs and/or behavior. In families with inherited cancer syndromes such as Li-Fraumeni Syndrome (LFS), social influence may be likely to occur among siblings, who are often caregivers and support providers to each other and their parents. We sought to understand perspectives on influence among siblings in LFS families.

Methods. An interprofessional team conducted 13 semi-structured interviews with sibling groups (n=40, 2-3 siblings per group) enrolled in the National Cancer Institute’s LFS Study. A semi-structured, IRB-approved interview guide included questions about family closeness, information sharing, and perspectives on screening and cancer care. The research team collaboratively conducted thematic analysis on verbatim transcribed transcripts.

Findings. Participants reported attempts to influence their siblings’ thoughts or behavior regarding LFS-related genetic testing, cancer screening, and health behaviors. Participants articulated diverse opinions on the degree to which influence was relationally and personally acceptable. Some participants expressed respect for sibling autonomy regarding risk management decisions. Others reported, given concern for their siblings’ health, that they used different influence tactics aimed at changing their siblings’ perspective or behavior (e.g., directly challenging their siblings’ decision to decline testing, giving their sibling a testing kit).

Discussion. Findings suggest siblings believe that influence may meaningfully impact LFS risk management, suggesting a pathway for increasing cascade testing, screening participation, and other risk management behaviors. Future research might examine how siblings influence one another’s likelihood of participation in testing, screening, and care that could be encouraged amongst LFS families.
Impact of Social Influence Strategies on Romantic Couples' Daily Physical Activity and Affective Outcomes

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²University of Zürich, Switzerland

Background:
Physical inactivity poses a significant health risk, and romantic partners can have a crucial impact on promoting physical activity through health-related social influence strategies. We investigate the impact of influence strategies on both the target and the influencing partner (agent) in social interactions within romantic couples' daily lives. Specifically, we examine the effects of persuasion, pressure, and a specific form of pressure we call "pushing to stick to a plan" (pushing) on physical activity, daily affect, reactance, and affective outcome expectancy regarding physical activity.

Methods:
We monitored 38 couples over 55 days, using wrist-worn accelerometers and daily questionnaires. Multilevel modeling and the Actor-Partner Interdependence Model (APIM) framework were used to uncover within-couple same-day associations.

Findings:
The results indicate that persuasion was the only effective strategy: When agents used more persuasion, both targets and agents were more physically active. When agents exerted more pressure, targets, and to a lesser degree agents, reported more reactance. Pushing did not impact the target but was associated with more positive affect and higher outcome expectancy in the agent.

Discussion:
The distinct effects of pressure and pushing suggest that a binary classification of strategies as persuasion and pressure might not adequately capture the complexity of social influence. Thus, a more nuanced perspective could benefit our understanding of health behavior change. This study's findings provide insight into the benefits and drawbacks of different types of social influence strategies. These results may help inform more effective interventions that leverage social influence dynamics within romantic relationships.
Dyadic just-in-time adaptive interventions to increase physical activity in romantic couples: A micro-randomised trial

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Background: Social relationships play a crucial role during health behaviour change. Social exchange processes such as social support and social control can foster as well as hinder health behaviours. However, these processes are often neglected when investigating health behaviour change.

Aim: The aim of this study was to investigate the effects of dyadic just-in-time adaptive interventions (JITAIs) to increase the physical activity of romantic couples.

Method: We conducted a micro-randomised trial over 55 days, including 38 couples (Mage = 34.01; SDage = 11.03). We implemented dyadic JITAIs to improve the couples’ social exchange processes that were hypothesised to increase engagement in physical activity. Psychological constructs and social exchange processes were assessed through daily diaries. Moderate-to-vigorous physical activity was measured through daily diaries and wrist-worn accelerometers. We used the weighting and centring estimation method for micro-randomised trials to estimate the treatment effects of the dyadic JITAIs.

Results: The dyadic JITAIs effectively increased the targeted partner’s self-reported and device-based physical activity. However, when controlling for covariates, the dyadic JITAIs only increased the self-reported physical activity of the other partner.

Discussion: This is one of the first study to examine dyadic JITAIs. Concrete opportunities, but also challenges of dyadic JITAIs, will be discussed. Further research should investigate the mechanisms of action that explain the effects of the dyadic JITAIs on health behaviours such as physical activity.
A buddy support intervention for active commuting - Pre-post analysis of a dyadic N-of-1 study

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Background: Active commuting (i.e., walking, cycling) can increase physical activity and is an environment-friendly behaviour, but individuals often struggle to initiate and maintain behaviour change. We aimed to examine a dyadic active commuting intervention to increase physical activity, targeting self-regulative processes at the individual (i.e., action/coping planning) and at the dyad level (i.e., helpful communication training/support planning).

Methods: We report preliminary results from an ongoing study with a dyadic N-of-1 design. So far, four dyads (friends, colleagues) reported their daily commuting and social support during weekdays across 12 weeks (i.e., up to 60 workdays) on a smartphone app. After a two-week baseline phase, dyads participated in an online intervention and received a booster intervention five weeks later. Piecewise linear models were computed.

Findings: Participants had valid data for 18-45 days. Five participants planned to increase walking and three participants planned to increase cycling. Two of the latter planned in their coping plan to walk more when cycling was not an option. Six participants reported higher social support during the post-intervention phase compared to baseline. Two participants significantly increased their walking, one participant significantly increased their cycling. For the remaining five participants, no significant changes in active commuting occurred.

Discussion: Findings indicate that the intervention worked for some participants. As social support changed after the intervention for most participants, the intervention seems promising in strengthening social processes as potential facilitators for individual behaviour change. Adding a buddy to individual behaviour change in commuting seems feasible and promising in implementing environment-friendly behaviours.
Development and delivery of prehabilitation interventions to support behaviour change and emotional well-being pre-surgery

14:00 - 14:15

A qualitative stakeholder analysis of beliefs, facilitators, and barriers for prehabilitation before lung cancer surgery

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Background: In order to develop feasible prehabilitation before surgery of NSCLC, this study aimed to gain insight into beliefs, facilitators, and barriers of 1) healthcare professionals to refer patients to prehabilitation, 2) patients to participate in and adhere to prehabilitation, and 3) informal caregivers to support their loved ones.

Methods: Semi-structured interviews were conducted with healthcare professionals, patients who underwent surgery for NSCLC, and their informal caregivers. The capability, opportunity, and motivation for behavior-model (COM-B) guided the development of the interview questions. Results were analyzed thematically.

Findings: The interviews were conducted with twelve healthcare professionals, seventeen patients, and sixteen informal caregivers. Healthcare professionals mentioned that multiple professionals should facilitate the referral of patients to prehabilitation within primary and secondary healthcare involved in prehabilitation, considering the short preoperative period. Patients did not know that a better preoperative physical fitness would make a difference in the risk of postoperative complications. Patients indicated that they want to receive information about the aim and effects of prehabilitation. Most patients preferred a group-based physical exercise program organized in their living context in primary care. Informal caregivers could support their loved one when prehabilitation takes place by doing exercises together.

Conclusion: Prehabilitation should be started as soon as possible after the diagnosis of lung cancer. Receiving information about the purpose and effects of prehabilitation in a consult with a physician seems crucial to patients and informal caregivers. Support of loved ones in the patient’s own living context is essential for adherence to prehabilitation.
Systematic development of an evidence and theory-informed digital prehabilitation intervention (iPREPWELL)

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Background:
Improving physical and psychological health of patients before surgery can reduce perioperative risk and hospital length of stay. Digitally delivered interventions targeting health behaviour change are increasingly utilised, yet frequently lack a rigorous, systematic development process. This impacts negatively on patient engagement and outcomes. We co-developed an evidence and theory-informed multibehavioural digital prehabilitation intervention (iPREPWELL).

Methods:
Perioperative healthcare professionals (HCPs), and patients awaiting major surgery were recruited from two hospital trusts. Participants completed a COM-B self-evaluation questionnaire (COM-B SEQ) and took part in a semi-structured interview. Data were thematically analysed using the Theoretical Domains Framework. Domains identified facilitated selection of behaviour change techniques that underpinned digital intervention components with reference to the Behaviour Change Wheel.

Results:
19 HCPs and 17 patient participants completed the COM-B SEQ and took part in an interview. HCPs reported the need for ‘promoter’, ‘prompter’ and ‘overseer’ roles to facilitate intervention delivery. The need for training focusing on skill development was considered important to provide remote support to patients. Patients emphasised the need for information about the benefits of prehabilitation in relation to each target behaviour, linked to a clear plan to prepare for surgery. Social support and positive reinforcement from the digital intervention and supporting HCPs was considered essential. IT skills emerged as a potential barrier to ongoing engagement.

Conclusions and implications
iPREPWELL is a co-designed, theory and evidence-informed scalable intervention that provides surgical patients with individually tailored prehabilitation. Delivery during routine care relies on training of clinical teams and allocation of specific roles.
Impact of a cancer prehabilitation and recovery programme on emotional well-being: A multi-perspective, qualitative evaluation

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Background: Prehabilitation interventions aim to enhance individuals' physical and emotional wellbeing, seeking to improve ability to cope with, and recover from, treatment. The Greater Manchester Cancer Prehab4Cancer and Recovery Programme provided physical activity and nutritional support. Well-being was also assessed, with referral to psychological specialists where appropriate. The present research explored the impact of participating in the Prehab4Cancer Programme on emotional well-being. The study integrated views and experiences from programme participants and healthcare staff involved in referral.

Methods: Sixteen patients who received cancer surgery and participated in the Prehab4Cancer Programme took part in qualitative interviews; twenty-four healthcare staff involved in referral completed an online survey. An inductive, multi-perspective, thematic analysis was conducted, structured using Framework.

Findings: Patients appeared to gain emotional benefits from participating in the programme, even without referral to psychological specialists. Individuals reported experiencing reduced anxiety and gaining confidence in their ability to cope with surgery. Having something to focus on alongside other cancer-related experiences, and an opportunity to gain a sense of control, appeared to be beneficial. Implicit, ongoing support from exercise specialists seemed valued; staff were perceived to be approachable, accessible, expert and authentically caring. Being able to talk about cancer with professionals and peers also seemed important; some participants reported experiencing discomfort in talking about cancer with other people, outside of the programme.

Discussion: There appear to be important emotional well-being benefits of taking part in a prehabilitation and recovery programme, even without involvement of specialist psychological services.
Addressing and Overcoming Power Relations in Health Psychology (Research): An Interactive Discussion

14:00 - 15:30

M. Blöchl¹ ², V. Tomberge³, C. Emmer⁴, A.L. Brütt⁵

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Purpose: This session aims facilitate a dialogue on why and how we can address power relations in health psychology (research).

Objectives:
• To reflect upon the role of power relations in health psychology theories, methods, and samples.
• To introduce and discuss strategies on interacting levels for overcoming challenges related to power relations in health psychology (research).
• To engage in a collaborative dialogue among speakers and participants on how to move forward and advance to a more just and equitable health psychology.

Rationale:
Power refers to the influence of specific groups through the processes of persuasion, authority, and coercion, which leads to the creation and control of resources. This discussion will start from with reflections how power dynamics can have a pervasive influence in health psychology and how they shape health behaviour and health outcomes, as well as our research. We will discuss how overlooking power relations can reproduce power in theoretical models and research methods and might eventually contribute to the reinforcement of inequalities. Importantly, the discussion will bring together interested people and take a collaborative perspective on how to move forward: What could be done to address power relations in health psychology research? The overarching goal is to facilitate an open dialogue on how to advance towards a more just and equitable health psychology.

Summary:
To start the discussion, four speakers will share their perspectives and experiences. First, Vica Tomberge will define the different aspects of power and discuss how power can affect health behaviour, using research on the relevance of unequal gender power relations as guiding examples. Second, Maria Blöchl will introduce how reflexivity and positionality might help us to become more aware of how our biases shape our research. Third, Christine Emmer will provide an input on samples we do (not) study and what this tells us about health inequality and health research. Fourth, Anna Levke Brütt will focus on power relations between researchers and participants and introduce the principles of participatory research.

Following these presentations, each speaker will facilitate a small, collaborative group discussion with participants on each presented topic. The overarching aim of small group discussions is to further discuss and advance these perspectives and work together on potential solutions. The results of the small work groups will
be shared and discussed in the plenum.
Putting the Behaviour Change Intervention Ontology (BCIO) to work in health psychology

14:00 - 14:15

Characterising all aspects of behaviour change intervention scenarios using the Behaviour Change Intervention Ontology (BCIO)

L. Zhang¹, R. West¹, J. Thomas¹, M. Johnston², M. Kelly³, A. Wright⁴, A. Finnerty Mutlu¹, E. Norris⁵, M. Marques⁶, J. Hastings⁷, S. Michie¹

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Background: Behaviour change interventions tend to be reported very differently, making it difficult to synthesise evidence. To make recommendations and answer questions about intervention effectiveness, we need to organise our accumulated knowledge and use a structure that can link different aspects of interventions. One such structure is an ontology. We aimed to create a Behaviour Change Intervention Ontology (BCIO) to represent all aspects of behaviour change interventions in a clear and consistent way.

Methods: Specific ontologies making up the upper-level BCIO were developed through a systematic and iterative process of reviewing existing ontologies, expert consultation, and applying classes to annotate intervention reports. The ontologies were disseminated in human- and computer-readable formats, and available online for use. Two online tools, BCIOSearch and BCIOVisualise, have been created to enable users to access, search and visualise the BCIO and its parts.

Findings: The ontologies making up the upper-level BCIO include specifications of intervention content (behaviour change techniques), intervention delivery (mode, schedule, source and style), outcome behaviour, mechanisms of action, context (population and setting), engagement, and fidelity. The BCIOSearch and BCIOVisual tools allow users to browse and visualise ontology content, find specific entities to use in their work, and apply the ontology in designing and reporting interventions.

Discussion: The BCIO provides many uses for advancing evidence and knowledge within research and practice. This includes identifying research gaps, evidence synthesis, building models, developing interventions and study protocols, and writing and evaluating intervention reports. The BCIO will continually be maintained to reflect developments in knowledge.
From BCTTv1 to Behaviour Change Technique Ontology (BCTO): What’s the difference and what’s the benefit?

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Background: The Behaviour Change Techniques Taxonomy v1 (BCTTv1) was published in 2013 and labelled v1 to indicate that it would be further developed. This study aimed to update BCTTv1 based on feedback from users. However, the 16 groupings of 93 BCTs, based on cluster analyses of expert opinion, made additions and changes to the structure difficult. Therefore, the aim was to progress from a taxonomy to a more flexible ontology.

Methods: Feedback on BCTTv1 was obtained from six sources: user survey, consultation, website, experts from 2 projects and published literature. The research team reviewed each item of feedback to improve the specification of each BCT, revised BCT groupings to a logical ontological structure, and developed definitions for each entity and each parent class. Further stakeholder feedback from behaviour change experts and ontologists was used to improve the emerging BCT ontology (BCTO).

Findings: 282 items of feedback were received and suggested additional BCTs, improvements to labels, definitions and groupings. Following extensive review, the number of BCT entities increased to >170, organised in logical groupings of >23 parent classes. Each BCT has a label and a definition meeting ontological standards.

Discussion: BCTTv1 was extensively used but needed updating. The new ontological structure of BCTO has improved definitions of all entities and relationships between them, with unique computer-readable identifiers. Like all ontologies, it is a 'work-in-progress' with a structure that facilitates future improvements.
Using the Human Behaviour Ontology (HBO) to precisely characterise behaviours in research and practice

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Background: Behavioural science requires precise specification of behaviours. Currently behaviours are labelled and characterised in ways that are often vague and idiosyncratic, making interpretation and synthesis of research findings problematic. The Human Behaviour Ontology (HBO) aims to provide a framework for precise characterisation of behaviour in a way that is consistent and shows how different behaviours relate to each other and to their causes.

Methods: Existing ontologies and classifications of human behaviour and research studies involving behaviour were reviewed to arrive at a preliminary classification system. This was supplemented by a review of behavioural attributes that were combined in descriptions of behaviours to characterise them in research studies. Successive versions of the HBO were involving classes of behaviours and attributes of behaviours with repeated discussion and testing until a version.

Findings: A top-level distinction was made between behaviours (single occurrences) and behaviour patterns (repeated occurrences) and between individual human behaviour and population behaviour. Classes of individual behaviour were defined (e.g., locomotive behaviour) together with attributes (e.g., behavioural goal, social evaluation, behavioural function, temporal patterning, physical exertion). A syntax for expressions was created so that instances of behaviour could be precisely characterised by combining the classes and attributes.

Discussion: The HBO offers the possibility of precisely characterising behaviour by means of a formal expression that combines the class that they belong to and a set of attributes relating to their content, function, consequences, structure and timing.
Formally specifying mechanisms of action for behavioural interventions: The Mechanism of Action Ontology

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Background: Behaviour change interventions work through ‘mechanisms of action’ (MoAs) to influence behaviour. Their reporting is often underspecified and/or inconsistent across interventions, undermining efforts to understand how interventions have their effects and how to use theoretical understanding to inform intervention development and evidence synthesis. An ontology is a shared classification system that can specify, label and define MoAs, reducing ambiguity and making communication and evidence accumulation easier.

Methods: We developed the Mechanism of Action Ontology by (1) Identifying MoAs from constructs extracted from 83 behaviour theories, (2) Grouping MoAs based on shared attributes, and converting these groupings into an ontology; (3) Applying the ontology to code 135 interventions; (4) Refining the ontology’s clarity and completeness through expert review; (5) Testing whether researchers can reliably apply the ontology to code intervention reports; (6) Refining the ontology’s structure and aligning it with other ontologies.

Findings: We identified 1062 potential MoAs from 1733 theoretical constructs. In Steps 2-5, an initial MoA Ontology with 261 classes was developed. Inter-rater reliability of the coding with the ontology was “acceptable” (α=0.68) for researchers familiar with it, and α=0.47 for those unfamiliar with it. Following Step 6, the final ontology had 271 classes (e.g., ‘mental process’ and ‘behavioural opportunity’) on seven hierarchical levels.

Discussion: The MoA Ontology captures a wide range of MoAs and provides unique and clear labels and definitions for these. As this ontology is refined through user feedback, it can become an increasingly useful tool to consistently report and synthesis evidence about MoAs.
Being an autistic woman – experiences, social stressors and protecting factors: a qualitative study

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Background: There is a growing number of studies exploring the specificity of presentation of autistic traits in females. However, the theme of autistic women’s experiences, understood as what happen to them in their lives, what meaning they give to it, and what are the psychological consequences of such events, rest understudied. Therefore, following research questions were formulated in this study: (1) What are the experiences of women on the autism spectrum related to being autistic and being female? (2) How do they understand the impact of their gender and social view of women on the spectrum on their lives? (3) How do they describe their identity? (4) How important is it for them to connect with the autistic community?

Methods: Eight semi-structured in-depth interviews with women aged 25–40 years with ASD diagnosis without intellectual disability were conducted and will be analysed using Interpretative Phenomenological Analysis methodology.

Expected results: Themes emerging from the analysis are expected to reveal socially determined stressors faced by autistic women, but also factors that potentially attenuate the detrimental impact of these experiences on their mental health and well-being.

Current stage of work: Data has been collected, analyses will be completed in spring 2023.

Discussion: This study will increase knowledge of the mechanisms contributing to health disparities observed in the autistic population, especially in females. Awareness of risk and protective factors for the mental health and well-being of autistic women can be used to refine diagnostic and support services to alleviate inequities.
The wellbeing and health of queer people, including gay and bisexual men, are on average worse than those of endo, cis, and heterosexual individuals (e.g., Pöge et al., 2020). The minority stress model (Meyer, 2003) states that stress resulting from experiences of discrimination (distal minority stress) as well as feared discrimination and internalized stigma (proximal minority stress) are responsible for the comparatively poorer wellbeing and health values among queer people. There are many international studies that support the minority stress model, but the evidence for Germany is scarce. The "How are you?" study (Timmermanns et al., 2022) focused on the psychosocial wellbeing of queer people (N=8700) with an online survey using established and self-constructed scales.

The data from gay (n=5594) and bisexual men (n=810) were analyzed in greater depth. It was shown that gay and bisexual men in Germany experience little stigmata (enacted, felt, and internalized stigma). Based on path analysis, stigmata are still related to health (subjective, physical, and mental health), mostly with small effects. Some differences between gay and bisexual men in the experience of stigmata (enacted and internalized stigma) as well as between relationships of stigmata with health could be identified. Of four considered resources (social embeddedness, community connectedness, educational level, and income), social embeddedness was shown to be most important. Based on the results, it can be stated that anti-discrimination is health promotion. In addition, different mechanisms emerge for gay and bisexual men that need to be considered in health promotion, anti-discrimination, and empowerment.
Associations of LTC status, access, engagement, and treatment modality offered in UK IAPT services.

E. Jenkinson¹, R. Hackett¹, R. Moss-Morris¹, J. Hudson¹

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Background: In England in 21-22, only 30% of individuals referred to Improving Access to Psychological Therapies (IAPT) accessed treatment and only 53% attended 2+more sessions. There is evidence suggesting that having a long-term condition (LTC) may predict even lower rates of access and engagement with IAPT, yet this is not conclusive. It has been suggested that mode of delivery may also be a barrier to access and engagement in IAPT for those with an LTC. Therefore, we aim to quantitatively explore associations between LTC status and access engagement intervention modality offered within IAPT services.

Methods: Routine data was collected from two inner-London adult IAPT services between 1 January 2022-31st December 2022. Only participants with complete LTC data were included in the analysis (n=16,523). Usage outcomes were defined as (a) access to treatment (attendance at one clinical appointment, following referral) (b) engagement with treatment (receiving 2+ treatment sessions). Intervention modality was defined as digital vs non-digital. Logistic regression models with LTC status were performed to determine the associations with access, engagement, and intervention modality offered.

Expected results: We expect that access to, and engagement with IAPT treatment may be lower for people living with an LTC compared to their non-LTC counterparts. We expect that there will be no difference in intervention modality offered by LTC status.

Current stage of work: Data-analysis.

Discussion: Exploring the associations between LTC status and IAPT access, engagement, and intervention modality offered may provide useful insight for developing treatment pathways and improving outcomes.
Systematic ReviewProtocol for a critical discourse analysis of research on HIV PrEP among gbMSM

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Background: HIV pre-exposure prophylaxis (PrEP) is used by gay, bisexual, and other men who have sex with men (gbMSM) to prevent HIV transmission. Public health and health psychology research often biomedicalises experiences of PrEP access and use, thereby potentially problematising gbMSM by relying on prevailing risk-based narratives. This review will analyse the interpretive repertoires that researchers draw on when discussing HIV PrEP use by gbMSM and the subject positions they afford to gbMSM who use PrEP.

Research Question(s):
1. How does PrEP research construct access to PrEP for gbMSM?
2. How are PrEP users positioned in research on PrEP use by gbMSM?

Methods: Relevant Articles will be systematically identified through timebound searching (2012-present) in ProQuest ASSIA, EBSCOhost PsycInfo, OVID MEDLINE, OVID Embase and EBSCOhost CINAHL. Two reviewers will undertake title and abstract screening, full-text screening, and data extraction. Results will be synthesised using a social constructionist perspective, informed by critical discourse analysis and critical interpretive synthesis. The research team and key stakeholders will then discuss findings and assess any need for changes.

Expected Results: Results may demonstrate the need to challenge the dominance of biomedical discourses in research on PrEP use by gbMSM.

Current Stage of Work: The systematic review protocol is under development.

Discussion: It is hoped that highlighting issues with current narratives of PrEP among gbMSM will enhance reflexive engagement with assumptions underlying research on PrEP use by gbMSM. This may broaden the inclusivity of future research and prevent further stigmatisation of sexual and protective practices of gbMSM.
Experiences of loneliness across the lifespan: a qualitative systematic review

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Background: Loneliness is a fundamentally subjective experience which is associated with poor health outcomes and a heightened risk of death which is comparable to risk factors like smoking. This research aimed to explore how people describe their experiences of loneliness by providing a thorough review of the qualitative literature on experiences of loneliness. This may help to inform approaches to ameliorating loneliness and reducing its impact on health and healthcare utilisation.

Methods: A systematic review was performed on studies qualitatively investigating experiences of loneliness in people of any age from non-clinical populations. Twenty-nine studies of 1,321 participants from 7 to 103 years old were included. The data were synthesised using thematic synthesis. The impact of lower-quality studies and specific age groups were assessed through sensitivity analysis.

Findings: Fifteen descriptive themes and three overarching analytical themes were developed: (1) Loneliness is both psychological and contextual, (2) Loneliness centres on feelings of meaningful connection and painful disconnection, and (3) Loneliness can exist in a pervasive sense or relate to specific other people or relationship types. Studies indicated that people experienced their loneliness as impacted by functional decline and health issues, particularly for older adults.

Discussion: Loneliness experiences involve psychological factors, social factors, and elements of one’s personal context, with physical and mental health as issues which were perceived as provoking or intensifying loneliness. These findings indicate the importance of considering loneliness in relation to poor health and functional decline, particularly for older adults, and supporting social wellbeing in people experiencing health problems.
Social, emotional, and existential dimensions of loneliness from youth to older adulthood

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Background: Loneliness is a common experience which negatively impacts health. It appears that loneliness can be conceptualised as comprising social, emotional, and existential dimensions, but there is a dearth of research examining these dimensions across the lifespan. This study aims to evaluate whether loneliness has this multidimensional structure, levels of these loneliness dimensions across life stages, and the contribution of predictors like health.

Methods: A cross-sectional online survey will collect data from adults (approximate N = 600) in the UK and Ireland. Data will be collected on socio-demographics, social, emotional, and existential loneliness, health-related quality of life, and social and psychological variables. Structural equation modelling will assess the validity of the three-dimensional model and one-way ANOVAs will assess age-group differences.

Expected results: We expect to find a three-factor structure for loneliness including the proposed dimensions. Based on literature and theory, we expect to observe higher levels of emotional loneliness in younger adulthood and higher levels of existential and social loneliness in older adulthood. We expect that poorer health-related quality of life will predict all dimensions of loneliness.

Current stage of work: This study is awaiting ethical approval. A recruitment plan is in place; data collection is expected in March 2023.

Discussion: Loneliness has deleterious impacts on health and is associated with higher healthcare utilisation. Accurately conceptualising loneliness is vital to understand its impact and target appropriate interventions. This research will contribute to this aim by exploring links between loneliness dimensions, age, and health in adults in the UK and Ireland.
Interventions to prevent exclusion

15:30 - 17:00

Improving access to cancer screening among people with intellectual disabilities: development of a complex intervention

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Background: Screening can reduce deaths from cancer if the people invited participate. Participation in cancer screening is substantially lower among people with intellectual disabilities (PWID). The potential impact of lower uptake is most evident with colorectal cancer, with PWID 2.5 times more likely to die from colorectal cancer. This project aims to develop complex interventions to improve screening access among PWID.

Methods: This project has four stages. I) A systematic review of effective interventions to improve access to cancer screening for PWID following PRISMA. II) Semi-structured interviews with 30 PWID, 15 carers of PWID, and 56 professional stakeholders, analysed using the Framework Method. III) A participatory stakeholder workshop to triangulate findings and develop recommendations on improving screening access for PWID. IV) Refinement and acceptability testing of interventions to address low colorectal screening uptake.

Expected results: I) A systematic review of components, mode of delivery, and intensity of interventions to increase screening among PWID. II) Identification of key facilitators and barriers to PWID’s screening participation. III) Policy and practice recommendations to improve screening access for PWID. IV) Refined interventions acceptable to stakeholders for feasibility testing.

Current stage of work: Data extraction from 10 publications included in the systematic review is in progress. Interviews have been completed with 28 PWID, 4 carers, and 47 professional stakeholders. Analysis is ongoing.

Discussion: This project represents a rigorous, evidence-based, multi-sectoral co-design approach to improving screening participation for PWID. Future research will examine the effectiveness of the developed interventions.
The influence of SES on the success of an online counseling service for children/youth

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Children and youth from low subjective socioeconomic status (SES) families have a higher risk of developing mental health disorders. Online counseling has emerged as a powerful tool to reach those children who are less likely to seek professional help. However, less is known about the success of online counseling regarding different SES backgrounds. This thesis aims at identifying the extent to which SES affects the success of the chat-based online counseling service krisenchat.

Children and youth (N = 784) ages 10-24 reported on SES, negative feelings before and after the chat, and perceived helpfulness of the chat via an online survey. The results of a latent change score model showed a significant effect of SES on negative feelings before chatting, indicating that lower SES was associated with more negative feelings. SES had no influence on the amount of change in negative feelings or the perceived helpfulness at any time point. Exploratory analysis revealed that a high amount of negative feelings before chatting was associated with less change due to the counseling session. Moreover, independent of SES, no effects of positive achievements accomplished due to the counseling session were found four weeks later.

Current findings extend research on online counseling programs to the context of SES. Children and youth from low SES backgrounds experience higher needs for psychosocial counseling. However, they do not profit accordingly from existing services. Future research on barriers and mechanisms and specialized psychosocial training programs for counselors are needed.
Uptake, engagement, and delivery of community-based dietary interventions within low socioeconomic populations

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Background: Socioeconomic status (SES) is a common risk factor for obesity, with the most deprived areas in Scotland having higher rates of obesity compared to those in the least deprived areas. The community setting provides the opportunity for feasible and cost-effective interventions to be delivered to reduce the burden of non-communicable diseases on the health services. However, people living in areas of lower SES usually demonstrate lower rates of engagement with interventions and studies are more prone to attrition. This systematic review aims to (1) identify whether community dietary interventions are successful in recruiting and engaging low socioeconomic groups and (2) identify mode(s) of delivery and factors associated with successful interventions.

Methods: Relevant studies published before 12/12/22 were identified through a systematic search of Scopus, Medline, PsycArticles, Web of Science, Embase and PsycINFO. The full search strategy and protocol was registered with PROSPERO (ID: CRD42022376 484). After deduplication, 3899 records were included in title/abstract screening and 802 records were retrieved for full-text screening.

Current Stage: Full-text screening is currently in process where records are being selected for inclusion in the review. Records will then be prepared for data extraction.

Expected Results: After data extraction of key outcomes related to uptake and engagement, data will be assessed for quality, grouped by outcome, and analysed using a narrative review approach.

Discussion: This review will provide a better understanding of the delivery modes associated with higher rates of uptake and engagement from low SES groups, which will in turn inform future intervention development.
Photo and graphic elicitation in health psychology: methodological considerations on the analysis of visual data

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Background: Photo and graphic elicitation methods are underused within health psychology despite their methodological potential for qualitative research. There is no agreement about how one goes about applying them in research, especially in terms of the use and interpretation of images. We aim to provide a clearer guidance on how to apply these visual methods in a way that is theoretically and methodologically sound, with a specific focus on the analysis of photos and other (digital) graphic representations. Health psychologists need to be clear about how they apply these methods, including how they use images.

Methods: A review of the literature and an overview of the use of photo and graphic elicitation methods in health psychology are included. The discoveries regarding what is methodologically new and/or valuable, and the proposed original framework for the analysis of images, are presented.

Findings: Methodological challenges and opportunities that photo elicitation and graphic elicitation methods bring into health psychology are outlined. These visual methods are presented in relation to other qualitative approaches (e.g., photovoice, interpretative phenomenological analysis). The typology for the analysis of visual data, and guidelines to those wanting to analyse images in a more deliberate and robust way, are provided.

Discussion: Photo and graphic methods are flexible and useful for qualitative research in and beyond health psychology. The framework for the analysis of visual data shows different ways in which images can be used and interpreted, including our phenomenologically-inspired model of visual analysis – supplemented by our ongoing research as an example.
Evaluating the process of adapting a co-created intervention to promote healthy sleep among adolescents

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Poor sleeping behavior among adolescents is highly prevalent and can cause physical and mental health problems. One promising approach to the development of effective interventions is co-creation, i.e., developing an intervention in collaboration with the target group and key stakeholders via shared decision making. Co-created interventions are, however, limited to the context in which they were initially developed, suggesting that a shortened co-creation process is needed to adapt the co-created intervention to a new context. This study aims to evaluate adolescents’ experiences during a shortened co-creation process, in which an existing co-created healthy sleep intervention was adapted to a new context.

An action group was installed in a secondary school in Flanders, including eight adolescents and two researchers. The shortened co-creation process consisted of eleven sessions and started with a needs assessment. Goals and expectations were discussed and the existing co-created intervention was introduced and adapted. Adolescents’ experiences were assessed using focus groups during and after the process. Qualitative data are analyzed in NVivo.

Preliminary results showed that the adolescents enjoyed the co-creation process and reported feeling heard, which is also reflected in their engagement during sessions. Moreover, adolescents mentioned the potential of establishing new friendships during the process, which can be seen as an additional benefit of co-creation.

This provides evidence that a shortened co-creation process is promising to adapt an existing co-created intervention. Adolescents experienced similar benefits in the shortened co-creation process as in a regular co-creation process. Effectiveness of the adapted intervention will be tested.
Equitable and culturally-inclusive digital patient empowerment interventions: lessons learned from the AFFIRMO project.

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Background: Developing equitable and culturally-inclusive digital empowerment interventions implies addressing cultural beliefs and practices behind patients’ health behaviors. Using the case study of the AFFIRMO project, an EU-funded project under the European Union’s Horizon 2020 research and innovation program, this study discusses lessons learned in the transcultural development and adaptation of a digital patient empowerment initiative for patients with atrial fibrillation (AF).

Methods: A participatory research process was adopted as follows: 1) collection and classification of educational materials relevant to empower patients; 2) co-creation workshops involving patients’ and clinicians’ representatives to get input to developing and culturally adapting the materials; 4) materials’ translation and linguistic adaptation; 5) in-depth interviews with patients and clinicians to revise, pilot, and culturally enrich the materials.

Findings. The participatory research process allowed a culturally inclusive adaptation of the selected materials. Across cultures, some features were optimized (i.e., content simplification to make it easier for patients to understand the materials and adaptation of the epidemiological data and drug names reported based on the health guidelines of each country). There were also cultural-specific adaptations related to the actual organization of healthcare services (i.e. presence/absence of psychological services).

Discussion. This evidence claims enhanced cross-cultural sensitivity when developing empowering digital tools, particularly when different health cultures are concerned. To consider the cultural, organizational, and political specificities of the different countries where the interventions are to be delivered is thus warranted, especially when vulnerable populations (such as patients with AF) are involved.
Background: Persons with lower socioeconomic status (SES) have poorer health and die earlier than persons from higher SES groups. Social inequalities in health are mainly caused by the negative effect of low SES on mediating health-relevant behavioral, psychosocial, and material factors. Although social inequalities in health have also been documented in persons with spinal cord injury (SCI), little is known about the mechanisms leading to this unequal distribution of health. Previous research has shown that psychological resources are associated with mental health and well-being. Understanding mediating paths is indispensable for developing targeted interventions to reduce health inequalities. Therefore, the overall objective is to investigate the mediating role of psychosocial resources in the association between SES and mental health in persons with SCI.

Method: Cross-sectional data from 1294 participants of the Swiss Spinal Cord Injury Cohort Study community survey 2017 was analyzed. Using structural equation modeling to test direct effects between SES and mental health and to investigate the potentially mediating path through psychosocial resources.

Results: Higher SES was significantly associated with better mental health. Moreover, higher self-efficacy, self-esteem, purpose in life, optimism, and sense of belongingness positively mediates the association between SES and mental health.

Discussion: This study provides evidence to inform future research and psychosocial treatment targets to reduce social inequalities in mental health inequalities in individuals with SCI. In this regard, strengthening psychosocial resources may be a suitable intervention target to specifically support persons from low SES groups with mental health issues.
The role of physical activity for well-being and integration in acculturative stress

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Background: Following acculturation and resilience theories, our study examines daily physical activity as a protective factor to explain why acculturative stressors differentially impact well-being (positive/negative affect) and integration (fluctuations in national and ethnic identification).

Methods: In a smartphone-based one-week daily diary study, 215 participants (1,351 observations) with migration background (Mage = 32.60, range: 18–69) reported on their affect, national and ethnic identification, physical activity, and activity-related mechanisms (self-efficacy and relatedness). Study materials were translated into German, Russian, and Turkish and validated qualitatively and quantitatively.

Findings: Acculturative stress was significantly associated with positive (β = -.18) and negative affect (β = .30, ps < .001); and predicted fluctuations in ethnic (β = .09, p = .020) but not national identification. As expected, daily physical activity predicted positive (β = .24) and negative affect (β = -.17, ps < .001) but did not buffer the negative effects of acculturative stress nor predict fluctuations in identity. Exploratory analyses suggest that social relatedness explains the protective function of physical activity for well-being. Fluctuations in national and ethnic identification were related to less, stronger identification to greater well-being.

Discussion: Physical activity may enhance resilience against acculturative stress for well-being, potentially through increased feelings of relatedness. This is the first study showing that daily fluctuations in national and ethnic identification might be a risk and strong identification a protective factor for well-being. Considering integration as key aspect of well-being and examining protective factors like physical activity may be a promising approach to promoting well-being for all.
Understanding health professionals’ responses to patient complaints – a behavioural systems analysis

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Background
Patient-raised healthcare complaints contain valuable but underutilised data for monitoring quality of care provision. The aim of the research was to describe the relationships between key actors, behaviours and influences on behaviour involved in healthcare professionals’ (HCPs) first response to patient-raised complaints.

Methods
We developed a behavioural systems map (BSM) to supplement findings from previously conducted systematic review exploring HCPs’ first responses to complaints in secondary/tertiary care within the UK National Health Service (NHS). Based on data obtained in the review, we created a BSM describing actors, behaviours and influences on complaints management. The main pathways and feedback loops were identified and characterised as positive or negative in relation to effective complaints resolution. The map was reviewed by our Patient and Public Involvement (PPI) and HCP group in a participatory workshop.

Results
A BSM representing 8 actors, 22 behaviours and 24 influences on behaviour was produced. Analysis showed that HCPs’ beliefs of the value of complaints and perceptions of how their employing organisations handled the patient complaint process influenced the quality of the HCP’s relationships with patients. HCPs’ perceptions of organisational mishandling of complaints led to defensive practices and/or trivialising patients concerns. Conversely, perceptions of a well-managed and fair complaints handling process minimised unhelpful responses and increased effective complaints resolution and learning.

Discussion
Our BSM helped us identify pathways which sustained unhelpful behaviours. Policy recommendations include promoting organisational practices such as reframing organisational narratives around the meaning of patient complaints to make use of complaints as quality improvement opportunities.
Dutch adolescents’ sexual health and wellbeing: A qualitative comparison of high and low educated youth

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Background: There are large sexual health inequalities between Dutch adolescents with a low and high educational level: low educated adolescents score consistently worse on a range of sexual health outcomes, including increased risk of unplanned pregnancy and STDs. There is a need for a deeper understanding of the processes underlying these educational differences in adolescent sexual health, and of factors that could promote positive sexual health among adolescents. To gain insight into adolescents’ lived experiences surrounding sexuality and sexual health, the current study utilizes a qualitative approach.

Methods: Participants will be recruited though convenience sampling. In-depth semi-structured interviews are planned with Dutch adolescents aged 15-17 attending either a vocational track (VMBO; n = 10-15) or academic track (VWO; n = 10-15). The data will be analyzed using thematic analysis.

Expected results: We expect adolescents with a low and high educational level to view sexuality, sexual health, and the influences on these topics differently. Further, we expect that compared to lower educated youth, higher educated adolescents may be able to rely on more psychological resources to facilitate positive sexuality and sexual health.

Current stage of work: The study has obtained ethical approval. Currently, the interview guide is being developed and recruitment of respondents will start. All data will be collected before June 2023 and will be analyzed before the conference.

Discussion: The findings of this study could contribute to a better understanding of educational differences in adolescent sexual health, and could inform policy aiming to minimize sexual health inequalities.
Preliminary testing the acceptability of an information brochure for colorectal cancer screening: a qualitative analysis

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Background.
Risk of developing colorectal cancer (CRC) varies among individuals, permitting targeted use of screening tests such as fecal immunochemical test (FIT) or colonoscopy. Clear communication is essential, especially among people with lower educational and French level (EFL). We assessed the acceptability and usability of brochures used in a randomized controlled trial.

Methods.
We collected qualitative and quantitative data from participants in the trial. A trained psychologist conducted semi-structured interviews using visio-conferencing with 12 participants eligible for CRC screening in Vaud, Switzerland. There were 6 women; 10 participants at low and 2 at moderate CRC risk; 3 at moderate and 9 at high EFL; 8 received the intervention brochure recommending FIT, 4 a brochure where FIT and colonoscopy were presented equally (2 low-risk controls and 2 at moderate risk). Interviews were recorded and transcribed. We used Morville’s User Experience Framework, assessing credible, useful, desirable, usable, and valuable. Framework and thematic analyses were conducted. We followed COREQ criteria. Quantitative analyses of questionnaires from all 500+ participants are forthcoming.

Findings.
In interviews, brochures were perceived as usable and credible. Participants receiving a brochure presenting both screening options as equal perceived it as confusing to make their choice. Participants with high EFL receiving a FIT recommendation intended to follow it. Participants with moderate EFL had difficulties understanding practical aspects of screening, recommendations, and instructions.

Discussion.
The information provided was acceptable, but usability could be improved by emphasizing practical aspects of screening. These results will be completed with data from quantitative questionnaires.
Psychosocial aspects of high cancer risk status: a systematic review and meta-analysis

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Background: Individuals at high risk of cancer face unique challenges in terms of their psychological and social wellbeing. However, the specific prevalence rates and risk factors for high psychosocial distress in this population have not yet been systematically evaluated.

Methods: A search of relevant databases, including PubMed, CINAHL, PsycINFO, and Embase, was conducted in November 2022. Included articles will focus on people with a high risk of cancer, through pathogenic genetic variants, family or personal history. Eligible studies include cross-sectional and longitudinal observational studies, experimental and quasi-experimental research, clinical trials, and case-control studies. Screening, data extraction, and quality assessment will follow PRISMA guidelines.

Expected results: A random-effects model in Stata will calculate pooled prevalence rates of psychosocial distress factors including anxiety, depression, cancer worry, and low social support. Potential risk factors for high psychosocial distress including gender, BRCA-confirmed risk, pre-existing mental health difficulties, and adverse childhood experiences will be identified and assessed. A narrative synthesis will summarise qualitative study results and quantitative data unsuitable for meta-analysis.

Current stage of work: The review protocol has been registered on PROSPERO (CRD42022376358), and the literature search is complete. Two independent reviewers are screening titles and abstracts using Covidence software.

Discussion: This review will improve our understanding of psychosocial factors and risk factors for high psychosocial distress among individuals at high cancer risk, highlighting their unmet psychosocial needs. These findings may help to inform future research and interventions to reduce distress and improve quality of life for this vulnerable population.
Jetting around the globe for 15-minute presentations? Comparison of face-to-face versus hybrid EHPS-conference travel emissions

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Background: The EHPS works actively to promote planetary health, e.g., by having developed a special consultative status of the EHPS at the United Nations, hosting a Special Interest Group in Equity, Global Health and Sustainability, and establishing a conference track on Climate Change and Sustainability. Adding to these efforts, this work in progress poster compares the CO2 emissions associated with traveling to the last in-person conference in 2019 to the first hybrid conference in 2022.

Methods: We will use two CO2 estimating methods and information sources: a) travel information from the post-conference survey 2022 to extrapolate individual estimates to the number of attendees; and b) attendee affiliation data from abstract books to extrapolate CO2 emissions using climate physics methods. The methods and years will be compared (adjusting for total distances, attendance rates), enabling a comparison of CO2 emissions between the in-person versus hybrid conference.

Expected results: 138 delegates provided travel information (departure city, modes of travel) to/from Bratislava, and 81 provided travel information to/from Dubrovnik. The CO2 reduction potential of introducing an online format in addition to the in-person format of EHPS conferences will be highlighted.

Current stage of work: We are currently preparing and cleaning the data; the poster will show final estimates and a visual map.

Discussion: As climate change inevitably affects health, health psychologists have become interested in sustainable behaviours. This poster reports data on the environmental impact of attending two different EHPS conference modes, and it discusses how conference travel emissions could be reduced.
Low urgency, low agency: Exploring climate change perceptions of high SES people in the UK

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Climate change is an ongoing health emergency that threatens the health of billions of people. Addressing climate change requires significant individual behaviour change, as well as deep societal transformations to dramatically reduce greenhouse gas emissions. It has been argued that people with high socioeconomic status (i.e., high levels of education, wealth, or income) have an especially important role to play in these changes. They have disproportionate levels of greenhouse gas emissions due to lifestyle choices (e.g., air travel, heating large homes), and hence have a large responsibility to reduce these emissions through changing their consumer behaviour. In addition, they have disproportionate power to influence the emissions of others through other societal roles, for example as investors or in organisations. However, little research has examined how people with high SES perceive these roles and opportunities to affect climate change mitigation. The current qualitative online survey examined this issue in 80 UK consumers (high subjective SES; average income > £87,000). We performed reflexive thematic analysis and found that participants largely perceived climate change as a distant problem and expected others to act on it, especially the government. Participants perceived themselves predominantly as consumers, rather than as having other societal roles. Despite often holding managerial and high-level professional jobs, participants saw limited opportunities to affect change within their workplaces. These findings suggest that to unlock the transformative potential that high SES people can bring to climate change mitigation, tailored education is required – an area that health psychologists have unique expertise in.
SITUATIONAL predictors of climate anxiety

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Background: Climate change is increasingly affecting mental health. Although more research has recently investigated climate anxiety, little is known about the situations in which it is experienced. To better understand those situational effects, we investigated how specific situations influence climate anxiety in different individuals.

Methods: In a within-subjects design, we took a novel approach that identifies situational factors influencing climate anxiety (n = 303; aged 18-79). Based on the Situated Assessment Method, inspired by grounded cognition, we created the situated Climate Anxiety Measurement. In linear regressions, we included climate anxiety as the dependent variable, with 13 predictors (e.g., perceived threat, rumination). Each participant evaluated 31 situations where climate anxiety might be experienced (e.g., “Seeing litter in the street”, “Traveling by aeroplane”).

Findings: On a group level, situations beyond one’s control and those affecting individuals personally exhibited the highest anxiety across participants (e.g., “Thinking about my future”). Overall, our measurement explained a median 76% of climate anxiety variance across regressions. Individual differences additionally identified situations with the highest climate anxiety for each participant, which varied widely (average agreement between participants of .21).

Discussion: By identifying situational predictors for each individual, our approach provides a much more detailed understanding of climate anxiety and insight into the diversity of situations that affect it. This can inform research into climate change anxiety and help develop individualised mental health support by targeting trigger situations specific to each individual.
Coping with climate anxiety: A narrative literature review

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Background: As a novel psychological phenomenon, climate anxiety summarizes negative emotional states that follow the awareness of worsening environmental conditions. Providing evidence-based strategies and techniques to address climate anxiety is an important task for research and practice. Our aim was therefore to summarize the available evidence on coping strategies for climate anxiety and how these can be promoted through interventions.

Methods: We searched seven databases with a PICO-search-string. Two researchers independently scanned n = 398 abstracts, resulting in n = 52 reports assessed for full-text screening. We used the following exclusion criteria: language not English or German; no article, meta-analysis, or review; not peer-reviewed; out of context; interventions or coping strategies not a key concept. We included n = 21 reports in the systematic overview. Following an inductive approach, we mapped sub and main concepts in a descriptive qualitative content analysis.

Findings: We identified five meta-strategies to cope with climate anxiety: (1) problem-focused coping on an individual and collective level; (2) emotion-focused coping including de-emphasizing, distancing, social support, hyperactivation; (3) meaning-focused coping including positive reappraisal, positive thinking and hope, trust in external sources; (4) proactive coping; (5) coping flexibility. Furthermore, we clustered interventions from the literature into five fields: (1) social support, (2) active engagement, (3) nature connection, (4) encountering emotions, (5) psychotherapeutic conversation.

Discussion: This overview provides a basis for designing interventions and testing them empirically, deriving recommendations for multi-faceted, low-threshold and more community-based interventions that can help individuals to build constructive psychological responses to climate change.
A Scoping Review and Behavioural Analysis of Factors Underlying Overuse of Antimicrobials

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Overuse of antimicrobials is a challenging global issue that contributes to antimicrobial resistance. Despite widespread awareness of the problem among medical community members and various attempts to improve prescription practices, existing antimicrobial stewardship programmes are not always effective. In our view, this may reflect a limited understanding of factors that influence the prescription of antimicrobials as empirical therapy, implying a need to address the psychological mechanisms behind some of the specific behaviours involved. To bridge this gap, we conducted a scoping review of the literature on the factors underlying empirical antimicrobial prescription decisions, following the protocol designed using PRISMA guidelines. From a final sample of 90 sources, we identified a range of clinical and non-clinical factors important in antimicrobial prescription decisions. In the second stage of our analysis, we grouped them into five final categories. The first category relates to the nature of the decision and includes such factors as high levels of uncertainty, risk, time scarcity and high cognitive load. The second category includes social influences, i.e., patients' requests to prescribe and willingness to reach a consensus with colleagues. The third category is related to individual differences of the prescriber, such as their age and specialism. The fourth category covers the characteristics of the patient, such as symptoms, age, gender, and socioeconomic background. Finally, the fifth category includes contextual characteristics. These findings allow for a more tailored approach to the design of antimicrobial stewardship solutions.
Patients' perspective on sustainable healthcare

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Background: A growing number of general practitioners incorporate sustainable healthcare into their daily practice. However, it is unknown how recommending sustainable treatment options is perceived by patients. As this information is essential for implementation, an online study was conducted to study the effect of including sustainability arguments in treatment recommendations on patients' trust and satisfaction and to explore patients' overall perspective on sustainable healthcare.

Methods: An online study was conducted among 404 Dutch GP patients. Part 1 was an experimental vignette study with a 4 Treatment (between subjects) x 3 Health complaint (within subjects) design. Four dependent variables on satisfaction and trust were assessed in vignettes on asthma, knee pain, and bacterial skin infection. Data was analyzed using 3 x 4 ANOVA's with $\alpha$ set at 0.0125 to correct for multiple testing. Part 2 was a questionnaire addressing importance, fairness, appropriateness, effectiveness, trust, expectations and satisfaction of sustainable healthcare.

Findings. Results from the experimental vignette study showed that the Treatment x Health complaint interaction was significant for all 4 DV's ($p$'s < 0.01) indicating overall positive evaluations of sustainable treatment which was highest when sustainability was included as an argument for knee pain but not for the other two complaints. The questionnaire indicated relatively negative evaluations of sustainable healthcare practices ($M$'s 2.41-2.97 on 5 point-scales), contrasting results from the experimental vignette study.

Discussion. Patient acceptance may be an important barrier to implementing sustainable healthcare. More research is needed on how and when sustainable treatment recommendations are acceptable and trusted.
Combining audit & feedback with other interventions to optimise GP antibiotic prescribing: systematic review protocol

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Background: Antimicrobial resistance (AMR) has been designated by the World Health Organisation as a threat to global health. A factor identified in the proliferation of AMR is over-prescription and consumption of antibiotics. As most antibiotic prescriptions originate in primary care settings, it is important that clinician focused interventions are used to decrease inappropriate antibiotic prescribing. Audit and feedback on antibiotic prescribing has not been found by itself to have a significant effect on inappropriate antibiotic prescribing behaviours. This systematic review aimed to evaluate the efficacy of interventions combining audit & feedback with other interventions to optimise GP antibiotic prescribing.

Methods: A search strategy will be developed in conjunction with research librarians in University of Galway to identify relevant intervention evaluations. Databases to be searched will include PubMed, EMBASE, Ovid PsycINFO, CINHAL, the ISRCTN registry and the Cochrane Central Register of Controlled Trials. Databases will be searched from inception to present and also backward and forward reference searching of the included studies will be conducted.

Expected findings: This systematic review will evaluate the efficacy of complementary interventions to audit and feedback, where audit and feedback is part of a multifaceted intervention addressing antibiotic prescribing, compared to audit and feedback on antibiotic prescribing by itself and identify those that may be most salient for primary care settings.

Discussion: As audit & feedback is already used in primary care settings it is important to identify other interventions that will potentially enhance the efficacy in addressing inappropriate antibiotic prescribing.
Background. Shifting dietary choices towards more vegetarian options by altering the menu design is an effective tool to reduce carbon emissions. In this study, we investigate if availability of vegetarian food options on a hospital menu and menu framing reduce meat consumption without affecting menu satisfaction.

Methods. A representative German sample of 1000 participants aged 18-69 years will be asked to imagine being hospitalised for 14 days and to choose one of three lunch options for each day of their stay. The study uses a 2x2 between-subjects design with the factors availability (daily choice between two/one meat dishes and one/two vegetarian dish) and menu framing (conventional framing: full diet, light diet and vegetarian vs. neutral framing: menu 1, 2, 3). Two ANOVAs will be conducted to determine the effects of the factors on the total number of vegetarian lunch choices and menu satisfaction.

Expected results. We expect that higher availability and neutral menu frames will lead to the highest selection of vegetarian food choices. We do not expect that availability and framing affect menu satisfaction, as previous studies report no impact of choice architecture on choice satisfaction.

Current stage of work. We are about to start data collection in March/April 2023.

Discussion. This study is part of a larger project supporting the University hospital Bonn’s transition to a (nearly) vegetarian menu. In a next step, we will test the modified menu design in the hospital and measure meat consumption and menu satisfaction in the field.
Carbon foo(d)prints – Perceived carbon emissions for food items from German retailers

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The present study investigates how accurately consumers estimate the carbon footprint of 18 common food items from German retailers and three product categories (ready-to-eat meal, dairy, F&V). Specifically, we selected six food item “twins” encompassing a high and low carbon footprint (CF) alternative, i.e. animal-meat and plant-based lasagne within the category “ready-to-eat meal”, respectively. In total, 397 German participants were presented with pictures of the 18 food items and asked to estimate the carbon footprint using an 8-point rating scale. 2 (high vs. low CF) by 3 (food item) repeated ANOVAs for the three different product categories were conducted for the (a) raw CF estimate and (b) difference score (estimated-true CF). Results show that on average, participants accurately differentiated between high and low CF twins (Fmeal (2,389)=986.82, p<.001, partial η²=.717; Fdairy (2,384)=440.74, p<.001, partial η²=.532; Ffruit/vegetable (2,388)=1781.95, p<.001, partial η²=.821. However, the absolute CF was generally overestimated and more importantly, beyond the “high” or “low” distinction, the actual size for the CF did not modulate the estimates, (Fmeal (2,388)=552.61, p<.001, partial η²=.729; Fdairy (2,383)=1248.52, p<.001, partial η²=.867; Ffruit/vegetable (2,387)=2971.86, p<.001, partial η²=.939). For example, within the ready-to-eat meals, the “high” CF products were rated equally while they differed by a factor of 1.5. The data support the notion that people use simple heuristics for estimating CF of food products. To enhance sustainable eating, a standardized CF label could be an efficient way to enable consumers to compare different food items and to make informed as well as sustainable food choices.
Co-designing a new international master's Programme in psychology applied to food, health and environment

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Background. Sustainable Development and Global Health goals cannot be achieved by scientific and technological development alone. Psychology is crucial for behaviour change and acceptance of any innovation in the agri-food system and health sciences. However, in Europe there is a relatively limited offer of tertiary education for psychology students interested in this field. We worked collaboratively with agri-food and health academics and stakeholders in Italy and internationally to design a new training programme for psychology students.

Methods. We surveyed 53 industry stakeholders on their need of consumer understanding. Two workshops were conducted with an interdisciplinary panel of 15 stakeholders that contributed to designing the training contents; interviews with international renowned health psychology researchers (N = 4) were conducted to optimize the programme core concepts.

Findings. Core competencies identified included (1) the psychology of behaviour change applied to the promotion of sustainable consumption, healthy eating, and wellbeing (e.g., Consumer psychology, Clinical and Health psychology, Decision making and Nudge Theory, Social and Community psychology); (2) Advanced qualitative and quantitative research methods, including artificial intelligence, and big data; (3) Knowledge of the agri-food system and human nutrition, including basics of food processing, farm-to-fork systems and food-health relations.

Discussion. A new two-year international M.Sc. in interfaculty of Psychology and Agriculture, Food, and Environmental Sciences titled "Consumer Behaviour: Psychology Applied to Food, Health and Environment" was designed for students interested in addressing health and environmental challenges by implementing behaviour change interventions that bridge the gap between society and hard scientists and policy makers.
Fostering local seasonality: an extended Theory of Planned Behaviour model to understand sustainable food choices.

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Background: As entire global food system accounts for a significant share of total global greenhouse gas emissions, shifting towards diets that are both environmentally sustainable and healthy has become crucial. By prioritizing local and seasonal foods individuals and communities can help to reduce the environmental impact of their food choices, while also supporting local producers and economies. Psychosocial literature has already shown that Theory of Planned Behaviour (TPB) is a solid theoretical framework to understand and predict healthy and sustainable food choices. Moreover, other studies have taken into account the additional role of biospheric values, pro-environmental beliefs, and green self-identity. In light of this, the present study aimed at testing an extended TPB model (supplemented by biospheric values, pro-environmental beliefs and green self-identity) to understand university students’ intention to consume local and seasonal food. Methods: 315 university students (age: 18-62; M = 21.61; SD = 5.15; 86.3% females) have completed a self-report questionnaire to assess the variables being studied. Findings: Results from a Structural Equation Modeling (SEM) showed that intention is significantly predicted by attitude, subjective norms, and green self-identity, while perceived behavioural control (PBC) was not significant. Moreover, pro-environmental beliefs had a positive impact on attitude, subjective norms and green self-identity, but not on PBC. Furthermore, biospheric values were predicted by pro-environmental beliefs. Discussion: Overall, the abovementioned model could inform future interventions aimed at promoting more sustainable food choices among university students.
The benefits of playful physical activity on psychological health

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Background: Physical activity has many health benefits, including improved mood. Previous research has split exercise in various ways to assess its effects on mood, but none has analysed the impact of play in physical activity. Based on recent theories of exercise and mood, this study investigated how playful activity impacts mood through self-esteem, self-efficacy, enjoyment and emotion regulation.

Method: Using a cross-sectional design, 136 Australians (17-45 years, 108 women) completed an online survey that incorporated measures of physical activity (intensity and type, coded as playful or not), positive and negative affect over the past week, and psychological constructs (general and physical self-efficacy, self-esteem, trait playfulness, emotion regulation, physical activity enjoyment).

Findings: Serial mediation analyses showed that playful activity had a positive indirect effect on positive affect, first through general self-efficacy (0.37) and enjoyment (0.23) independently, and second through emotion regulation. Playful activity also had a negative indirect effect on negative affect, first through general self-efficacy (-1.10), enjoyment (-0.59) and self-esteem (-0.73) independently, and second through emotion regulation. Trait playfulness did not moderate any relationship between physical activity and affect.

Discussion: The results demonstrate the psychological health benefits of engagement in playful physical activity. Playful exercise will likely be more enjoyable than non-playful exercise and better enhance general self-efficacy and self-esteem, resulting in better emotion regulation and further improving mood. Furthermore, the results suggest that individuals do not need to be inherently playful to gain these benefits. Therefore, playful activity may be important for improving overall health through exercise.
The Influence of a Self-induced Laughter Intervention on Expatriates’ Happiness, Well-being, and Experience of Homesickness

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Laughter boosts well-being, happiness, and self-esteem, reduces anxiety and stress, and is a noninvasive, cost-effective, natural behaviour. This non-equivalent-groups pre-post-test between-subjects study aimed to contribute to self-induced laughter research in the context of improving expatriate happiness, well-being, and reducing homesickness. Forty-one expatriates, recruited through social media platforms (mean age=34, SD=10; male=9, female=31, prefer not to say=1) were allocated to one of three groups: self-recorded laughter, loved-one-recorded laughter, or a no-laughter control group condition. The laughter intervention took place over seven days. Data was collected using pre-and post-intervention test scores of the Subjective Happiness Scale, World Health Organisation (five) Well-being Index, and the Utrecht Homesickness Scale. The two intervention groups used the Laughie tool to create a laughter recording and use it to induce laughter and laugh alongside the recording. Data were analysed using the Wilcoxon-Signed Rank Test, Kruskal-Wallis H Test and Mann-Whitney U Test. Unexpectedly, the average homesickness scores for the no-laughter control group indicated a decrease in homesickness between pre-to post-test scores, p=.03. No significant differences were found between groups; therefore, the H0 was partially rejected. However, there was an average increase in happiness and an average decrease in homesickness in both intervention groups and an average increase in well-being in the self-recorded laughter group. In conclusion, there is evidence to suggest there was a trend for self-induced laughter to promote happiness and well-being and decrease homesickness in this sample of expatriates, although homesickness also improved in the control condition, which warrants further exploration.
Affective and cognitive symptoms associated with burnout in a general population

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Background: Research indicate that cognitive and affective factors are related to burnout. However, there is a lack of knowledge about the extent to which specific symptoms are related to burnout. The aim of the study was to identify specific cognitive and affective symptoms that are particularly associated with burnout as well as to examine the risk of burnout for these symptoms.

Methods: Cross-sectional data were used from a large population-based questionnaire study consisting of 3406 participants (18-79 years). Cognitive and affective symptoms were assessed with the Environmental Hypersensitivity Symptom Inventory, and the Shirom-Melamed Burnout Questionnaire (SMBQ) was used to assess burnout. Participants scoring ≥ 4 constituted the case group, and those scoring < 4 on the SMBQ the reference group.

Findings: The prevalence rate was higher in the burnout group for all specific symptoms, as was also the total number of symptoms. The most common symptoms were feeling tired/lethargic, concentration difficulties, absent minded and feeling depressed. The results further showed a 1.68 times increased risk of having burnout for each additional symptom. Experiencing individual cognitive and affective symptoms, in particular feeling depressed, concentration difficulties and feeling tired/lethargic, were associated with being at high risk of burnout.

Discussion: The findings suggest that burnout is associated with a rather large number of cognitive and affective symptoms, in particular feeling tired/lethargic, having concentration difficulties, sleep disturbance, feeling depressed and being absent minded. The results add to the understanding of symptomatology in burnout, which might have implications for early identification and prevention of burnout.
Bi-directional relationships between self-rated health and burnout, sleep quality and somatic symptoms

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Health is an asset, both for the individual and for society. The single-item question on self-rated health, “how do you perceive your health” (SRH), is a good predictor of future general health. Still, its relationship to mental and somatic symptoms is not perfectly understood.

The aim of this study was to investigate the temporal relationship between SRH and burnout, sleep quality and somatic symptoms severity.

Two waves from the population based Västerbotten Environmental and Health Study, in which 2 336 adults participated by answering a questionnaire with three years apart, was used. The Shirom-Melamed Burnout Questionnaire, the Karolinska Sleep Questionnaire and the Perceived Health Questionnaire assessed burnout, sleep quality and somatic symptom severity. Logistic regression was used to study direction of prediction and the results showed a bidirectional relationship. Suboptimal SRH predicted caseness of burnout (OR 2.75; 95 % CI 1.60-3.01), disturbed sleep quality (OR 1.84; 1.94-2.35) and somatic symptom severity (OR 2.51; 1.91-3.29). Reversed analyses showed that burnout, disturbed sleep quality and somatic symptom severity increased the risk of suboptimal SRH but by smaller magnitude (OR burnout 1.43, 1.03-2.00; OR sleep quality 1.47, 1.10-2.00; and OR somatic severity 1.92, 1.44-2.57).

This study shows a bidirectional relationship between suboptimal SRH and caseness of burnout, disturbed sleep quality and somatic symptoms in a population-based sample. The highest odds ratios were found for the direction in which suboptimal SRH was the predictor, with the highest risk related to severity of somatic symptoms.
A qualitative study of emotional eating in an acceptance and commitment therapy-based weight management programme

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Background: Emotional eating (EE) has been identified as a barrier to weight management. Interventions based on Acceptance and Commitment Therapy (ACT) promote the recognition of food cues and acceptance of uncomfortable feelings, which can reduce the urge to use food as a coping mechanism. We aimed to explore how participants in an ACT-based weight management intervention (WMI) experience EE and relevant intervention content.

Methods: We conducted semi-structured telephone interviews with participants of a digital ACT-based guided self-help WMI. Fifteen participants were purposefully sampled to represent a range of demographic characteristics and EE scores, with sample size determined by information power. We used reflexive thematic analysis to explore experiences of EE.

Expected results: Participants who experience EE described the intervention helped EE by improving the recognition of triggers, disconnecting eating from emotions, and supporting the implementation of alternative coping mechanisms. These included altering food availability, substituting EE with alternative behaviours, and experiencing emotions without acting on them. Some participants with EE expressed wanting more intensive support to manage and examine causes of EE. People who already managed EE well described EE content as a useful reminder. Participants without EE found this content irrelevant and wished to skip it.

Current stage of work: We are finalising themes.

Discussion: ACT-based WMIs teach strategies that may support participants to manage EE. However, differences in pre-existing management and presence of EE influenced how participants perceived EE content. Thus, future research could explore whether personalising WMIs based on EE levels improves intervention acceptability and effectiveness.
The impacts of gratitude writing on mental health of college students: a randomized controlled trial

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Background: Although there is a growing interest in the mental health of college students, the current situation of the mental health of college students is not optimistic. Effective interventions targeting the mental health of college students are needed. The present study therefore attempts to explore the effects of gratitude writing intervention on the mental health of college students.

Methods: A total of 81 Chinese college students (67 female) completed a two-week intervention. Participants were randomly assigned to one of the three groups: gratitude writing, self-compassion writing, and active control group. Mental health was measured by General Health Questionnaire across three time points: baseline, post-intervention, and 2-week follow-up. To test the intervention effects, a 3×3 repeated measure ANOVA was performed using SPSS.

Results: Findings showed that there were significant time effects (p<.001) and group effects (p=.007) on mental health of college students. However, the interaction effect was non-significant (p=.821). Post-hoc analysis indicated that mental health at both post-intervention (p<.001) and follow-up (p=.014) was significantly lower than baseline, while the difference between post-intervention and follow-up was non-significant (p=.122). Results of post-hoc analysis also showed that mental health of gratitude intervention group was significantly lower than active control group (p=.002), while self-compassion group indicated a marginally significantly lower mental health than the active control group (p=.055).

Discussion: Overall, findings of the current study showed that gratitude writing intervention can help improve mental health of college students. Given its convenience and scalability, gratitude writing should be promoted to improve mental health of college students.
COVID-19-related behaviours, consequences, and lessons learned

15:30 - 17:00

Did the COVID-19 restrictions frustrate the fulfillment of important psychological needs? – Longitudinal evidence

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Background: Theoretical and empirical evidence suggests that the satisfaction of important psychological needs maintains mental health. However, many prevention measures for COVID-19 had a high likelihood of frustrating this satisfaction. This raises the question, if COVID-19 restrictions increased distress via the frustration of important psychological needs.

Methods: Longitudinally, data from four measurements (2019: n = 428 (T1) until 2022: n = 410 (T4)), including one just before and three during the COVID-pandemic, was analysed. The sample consisted of formerly unemployed people. We conducted multilevel mediation analyses to test whether the association between COVID-19 restrictions and distress was mediated by psychological needs.

Findings: Multilevel analyses showed that phases of stronger COVID-19 restrictions predicted decreases in social contact, activity, and time structure. However, stronger restrictions increased the satisfaction of autonomy and competence. Moreover, analyses showed indirect effects from the intensity of COVID-19 restrictions on distress mediated via the fulfillment of certain needs: the indirect effects via social contact (R²marginal = 0.32), activity (R²marginal = 0.30) and time structure (R²marginal = 0.23) increased distress. However, the indirect effects via autonomy (R²marginal = 0.36) and competence (R²marginal = 0.43) decreased distress. Unexpectedly, competence was the most important psychological need according to the effect sizes.

Discussion: COVID-19 restrictions reduced the fulfillment of important psychological needs. Unexpectedly, they also increased fulfillment of other needs, neutralizing the former process’s negative effects on mental health. The results can be used to create countermeasures aiming at buffering negative psychological effects of pandemic lockdowns and restrictions in the future.
Health Belief Concerns and Preventive Measures in Lawyers During Early Years of Covid-19 In Pakistan

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Background: covid-19 had been challenging in the initial years. Like other countries, to combat the spread of COVID-19 in workplace settings or outdoor places, protective measures such as social distancing, frequent hand washing, and wearing face coverings in public were instructed. Offices tried to implement the instructions for employees and customers to follow covid-19 preventive behaviors. This current research study examined the relationship between health belief concerns and preventive measures of lawyers during COVID-19.

Methods: A sample of N=100 participants comprising men and women high court lawyers (M=60; F=40) was taken from different law firms and associations in Lahore, Pakistan. This study employed a cross-sectional research design. Non-probability purposive sampling is used for the selection of participants. An online questionnaire comprising a Health Belief Model Scale (Shahnazi et al., 2020), Preventive Measures and Preventive Practices Scale (Adeleke et al., 2020) and Multidimensional Face Mask Perception Scale (Howard., 2020) was used to collect responses from the participants.

Findings: The results were generated using the Pearson Product-Moment Correlation, Simple linear regression and Independent Samples t-test analyses. The study findings revealed a significant relationship between health belief concerns, face mask perception and preventive measures against coronavirus. Simple linear regression revealed that health beliefs significantly predicted preventive measures against COVID-19. There are no gender differences across the study variables.

Discussion: Applying the Health Belief Model is crucial for health professionals to develop effective communication messages for COVID-19 prevention and future health outbreaks.
Academic behavioural science impacting public health policy and practice: Implementing a collaboration process model

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Background: COVID-19 emphasised the crucial role behaviour change plays in protecting population health. However, the interchange between academic behavioural science and Public Health (PH) policy and practice could be strengthened. We aimed to establish a sustainable method of joint working between two groups in the North of Scotland to enable rapid impact of behavioural science on population health.

Methods: An implementation-sciences based approach tested the initial 4 steps of an 8-step collaboration process model, designed to identify a health problem (step 1), develop and test messaging interventions (step 2-4), implement the intervention (steps 5-6), and evaluate impact (steps 7-8). Interim assessed outcomes were perceived collaboration usefulness, collaboration-process barriers, and facilitators.

Findings: Since October 2022, fortnightly meetings were established, implementing the process model. The assessment identified three barriers: (1) time required to gain University ethics approval for intervention testing, (2) participants recruitment for intervention testing, and (3) agreement and ownership around health problem identification. Having someone from communications and someone directly working in the identified health problem area within the NHS-PH agencies’ teams join regular meetings, were process facilitators.

Discussion: The study successfully linked academic behavioural scientists to their PH counterparts, creating ongoing knowledge exchange. This interim assessment shows that different perspectives can enrich collaboration and increase impact. However, sustainable collaboration can be impeded by differences in the pace of progress, placing of different weights on process steps, and challenges related to other work prioritisations. As normal for implementation science this project is underway, and refinement of the process will occur.
The effects of psychological resilience and habit on adaptation to living with COVID-19

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Background: The pandemic of COVID-19 has continued for more than three years, and people have become accustomed to living with the coronavirus. Life recovery from socioeconomic losses due to the pandemic and adaptation to living with COVID-19 are important issues. This study examines the effects of psychological resilience and habit of preventive behaviors on life recovery and adaptation with the assessment method of the recovery calendar.

Method: 1000 nationwide respondents based on the Japanese population rate participated in our web survey. The study measured psychological resilience, risk perception (Severity, Knowledge), the habit of preventive behaviors, life recovery and adaptation during the pandemic with using the recovery calendar. This study implemented a Bayesian GLM to predict recognition of life recovery and adaptation.

Findings: In addition to the main effects of severity, knowledge, and habit, the interaction effects of knowledge × resilience on both life recovery (MAP= .037, 95%CI= .008 ~ 064) and adaptation (MAP= .043, 95%CI= .013 ~ 073) were found. The higher resilience, the more life recovery and adaptation were observed when people had knowledge about the coronavirus.

Discussion: This study indicated that risk perception and habit of preventive behaviors are related to life recovery and adaptation during the pandemic. Psychological resilience strengthens the effect of knowledge, although it does not relate to life recovery and adaptation directly. This study suggests that both behavioral aspects such as the habit of preventive behaviors and psychological aspects such as resilience are important to promote people's adaptation to living with COVID-19.
Exploring university students' information needs and beliefs towards COVID-19 vaccination: Implications for policy and practice

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Background: The COVID-19 pandemic created a need to develop policies at universities to provide a safe environment. As part of a larger study, we aimed to gather information on a) students’ information needs around COVID-19 vaccination, b) preferred communication channels, and c) what students consider trusted sources of information. We also aimed to explore students’ reactions to a COVID-19 vaccine requirement within a university setting. Methods: The survey was conducted at Maastricht University in March 2021; all student panel members (N=908) were invited to participate. Current stage of work: We are performing qualitative content analysis, presently at the phase of inductive code development, after which the entire dataset will be coded deductively with the Reproducible Open Coding Kit (ROCK). Code co-occurrences within designated segments of data will be modelled with Epistemic Network Analysis (ENA) to explore the patterns therein. Discussion: Our findings have implications for policy and practice, as they emphasize the importance of involving students in the development of vaccination policies to ensure that they are both effective and acceptable to the student population. These findings can inform decision-making processes and contribute to better pandemic preparedness in the future.
Cognitive complaints and fatigue over time following COVID 19

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Background: Despite evidence on the cognitive sequelae in patients with severe COVID-19, the risk of subjective cognitive complaints and cognitive deficits across the spectrum of symptom severity are not well understood. The aims of this study were to document and compare rates of cognitive complaints and impairments in post-symptomatic and -asymptomatic COVID-19 patients, changes in cognitive indices over time, and associations with sociodemographic and clinical parameters.

Methods: Using a prospective design, N=59 (M=47.64, SD=14.24; Male=54.2%) were assessed with a computerized neuropsychological test battery by the UK BioBank (memory, executive function, processing speed, attention) and a self-report questionnaire on subjective complaints (PAOFI), mood, and fatigue measures at 6 to 18 months post-COVID infection with a follow-up 4 to 6 months later.

Findings: Overall, 27.1% of participants reported subjective complaints on PAOFI across the domains of memory (44.1%), motor (18.6%), language (16.9%), and higher cognition (15.3%) with rates comparable across COVID severity groups. Comparison of neuropsychological test results (2×2 ANOVA) also indicate no significant difference between groups and time. However, a time effect was present for self-report measures as number of memory complaints significantly reduced over time. Fatigue, on the other hand, with a substantial rate of 44.1% being reported at baseline, had further increased among all participants over time, indicating that this may be a more persistent residual symptom.

Implications: The findings of this study can help to determine the cognitive and quality-of-life domains with persistent impairments that should be targeted in interventions to provide rehabilitative support to recovering patients.
Exploring energy-balance related behaviours

15:30 - 17:00

The role of psychosocial well-being and emotion-driven impulsiveness in food choices among European adolescents

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\textsuperscript{12}Department of Public Health, Faculty of Medicine and Health Sciences, Ghent University, Belgium
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Background:
Low psychosocial well-being (PWB) and high emotion-driven impulsiveness (EDI) are associated with unhealthy eating. Yet, it is unclear whether a hypothetical intervention on one or the other might be more effective in reducing unhealthy food choices. Therefore, we aimed to compare the (separate) causal effects of PWB and EDI on European adolescents’ sweet and fat propensity.

Methods:
We included 2,362 adolescents (mean age: 13.6), providing data from three waves of the IDEFICS/I.Family cohort (2009-2022). Food choices were operationalized using sweet (range: 0 to 100%) and fat (range: 0 to 72.6%) propensity scores calculated from self-reported food frequency data. Self-reported EDI was assessed using the negative urgency subscale from the UPPS-P Impulsive Behaviour Scale. PWB was assessed using the KINDLR Health-Related Quality of Life Questionnaire. We estimated, separately, the average causal effects of PWB and EDI on sweet and fat propensity applying a semi-parametric doubly robust method (targeted maximum likelihood estimation).

Findings:
If all adolescents, hypothetically, had high levels of PWB, compared to low levels, we estimated a decrease in average sweet propensity by 1.65 [-2.75 to -0.56] percentage points. A smaller effect was estimated for average fat propensity. Similarly, if all adolescents had low levels of EDI, compared to high levels, average sweet propensity was decreased by 1.86 [0.59 to 3.13] percentage points and average fat propensity by 1.46 [0.52 to 2.40] percentage points.

Discussion:
Comparing both psychological factors, an intervention on EDI appears marginally more effective in reducing
the consumption of sweet and, especially, fatty foods.
To understand whole-grain consumption among young adults in Sweden applying HAPA Construct study

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Introduction: High intake of whole-grain decreases the risk of type 2 diabetes, cardiovascular diseases and certain forms of cancers. The lowest consumption in Sweden is observed among young adults of ages 18-44 year. Whole grain intake can be explored through Health Action Process Approach (HAPA), a theory examining processes that contribute to health behaviors. The aim is to investigate self-efficacy, risk perception, planning and expected outcomes in relation to whole grain consumption in young adults aged 18-44 years.

Method: In the frame of a pilot study, data from 67 participants was collected through a digital survey regarding whole grain intake and consumption behaviors, elaborated according to HAPA Construct Study.

Findings: Participants considered themselves to possess self-efficacy and capacity to cope with obstacles, so long as the desired behavior did not entail a higher cost of difficulties in implementation. Nevertheless, only 20% planned their intake of whole-grain. Porridge and soft bread were the largest source of whole-grains. Most participants were unaware of health risks related to a lack of whole-grain consumption. Results showed that 75% of the participants did not reach current intake recommendations.

Discussions: Lack of awareness of risks associated with a low intake and inadequate planning appear to be significant barriers to the consumption of whole-grains. Overall, participants perceived themselves to possess self-efficacy and the capacity to cope with barriers according to HAPA, however, this was not reflected by their intake of whole grains.
Placebo effects on the intention to be physically (more) active – first results

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Background: Theory-based behavioral interventions show small-sized positive effects on physical activity (PA) behavior in adults. However, little is known about potential placebo effects (i.e., non-specific effects unrelated to treatment) of such interventions. Therefore, the aim of the present project is to investigate potential short-term placebo effects in the context of PA behavior.

Methods: Using a randomized controlled design, 22 low-active adults (50% female, mean age: 26.3, SD: 5.1 years) were allocated to either a placebo intervention (placebo-effects-inducing video clip followed by a short physical activity bout) or a control intervention (control video clip followed by a short physical activity bout). The intention to be physically active and steps per day according to an accelerometer were compared across groups using analysis of covariances with the values prior to the intervention as covariates.

Findings: Mean intention was significantly lower in the placebo group compared to the control group both immediately after the intervention, \( p=.040, \eta^2=0.20 \), but not one week after the intervention, \( p=.496, \eta^2<0.01 \). Steps per day were not significantly different between groups in the week after the intervention, \( p=.678, \eta^2<0.01 \).

Discussion: The findings suggest a transient short-term negative effect of the placebo intervention on the intention to be physically active, but not on actual PA behavior. This unexpected finding for the intention might partly be explained by a nocebo effect of the intervention (instead of a planned placebo effect). Short-term non-specific effects may play a role in PA interventions; however, designing an effective placebo-inducing intervention seems difficult.
Awareness of Implementation of Food Environment Policies: Engaging Youth Through Photovoice

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Background: This study investigated adolescents’ awareness of a presence and/or a lack of implementation of policies aiming at healthy nutrition through the development of a healthy food environment. The NOURISHING framework, developed by the World Cancer Research Fund, was applied to map the policies indicated by adolescents.

Methods: Forty-one adolescents (aged 16-19 years old, 90% women) were recruited in 3 locations representing rural environment, urban environment, low SES areas, or high SES areas. Data were collected applying a qualitative photography-based method, Photovoice. Adolescents were asked to take photos documenting an implementation of public policies (or a lack of thereof) that promote active lifestyle or healthy nutrition. All photos (N = 222) were coded by 3 independent coders and mapped using the NOURISHING framework.

Findings: The majority of photos indicate adolescents’ awareness of a lack of a policy. Considering the 10 domains of the NOURISHING framework, a lack of policies were most frequently indicated in such domains as ‘set incentives and rules to create a healthy retail and food services,’ ‘restrict food advertising/commercial promotion,’ and ‘improve nutritional quality of the food supply.’ Adolescents were also aware of already implemented policies from the domain of ‘set incentives and rules to create a healthy retail and food services.’

Discussion: This is the first photovoice-based study to assess adolescents’ awareness of a presence/lack of implementation of policies promoting healthy food environment. The findings might inform policymakers and youth organizations that aim to empower adolescents to participate in the development/implementation of food environment policies.
Participant narratives on workplace interventions’ impact on physical activity and Theory of Planned Behavior constructs

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The success of interventions can be evaluated based on induced changes in target behaviors and their underlying socio-cognitive constructs. This study explored participant narratives on the impact of a workplace intervention on physical activity (PA) and constructs of the Theory of Planned Behavior.

The 9-month intervention occurred in a Finnish financing firm, aiming to increase PA according to the national guidelines. Employees were provided two 90-minute expert lectures and phone application access to track their PA and interact with one-another.

We used a longitudinal qualitative research design. Twelve employees aged 27-58 with higher level education and varying levels of baseline PA and intentions participated, all providing informed consent. Three semi-structured one-on-one interviews were conducted, one after each lecture and one 1-2 months post-intervention. The interviews were recorded and transcribed verbatim. Thematic analysis was applied to explore themes of interest, while allowing emergence of latent themes.

Main findings indicated positive changes in attitudes towards light PA after the lectures. Highly active participants associated this with attenuation of PA-related anxiety, while less active participants described increases in their intentions, general activity and perceived behavioral control (PBC). Notably, attitudes and PBC towards intervention methods emerged as a key theme explaining intervention engagement. Positive attitudes and higher PBC elicited greater engagement.

In conclusion, targeting attitudes towards light PA may be useful in increasing PA intention, general activity and PBC, and lowering PA-related anxiety. Participant’s attitudes and PBC towards intervention methods should be studied and considered in the intervention design.
Greater weekday sitting time is associated with better academic performance in Japanese students

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Introduction: Association between higher physical fitness and physical activity has been researched with regards to academic performance in children and adolescents (Coe et al., 2006; Hillman et al., 2008). However, whether sitting time and academic performance are correlated is unknown. Therefore, the aim of this study was to examine the relationship between sitting time and academic performance in Japanese students.

Methods: There were 140 students who participated in the study (mean age: 13.0 +/- 0.9, female: 49.3%, mean body mass index [BMI]: 19.7 +/- 3.0) from 1st to 3rd grade (7th to 9th grade in USA). These students belonged to public junior high schools near Saga area in Japan. All of the students completed the International Physical Activity questionnaires which measured sitting time and moderate-to-vigorous physical activity (MVPA). Physical fitness scores and academic performances (school grade) were obtained from school records. The physical fitness tests that were used, were authorized by the Japanese Ministry of Education, Culture, Sports, Science and Technology. The total tally of five subjects’ grades (Japanese, social studies, math, science, and English) was used as academic performance scores.

Results: Weekday sitting time was significantly correlated with academic performance (r=0.22, p<0.05), but weekend sitting time was not correlated (r=0.13, n.s.). Multiple regression analysis was used for controlling several covariates (age, gender, BMI, physical fitness score, and MVPA) and weekday sitting time showed significant correlation with academic performances (beta=0.25, p<0.05).

Conclusions: Greater weekday sitting time was positively associated with better academic performances among Japanese junior high school students.
Intervention Mapping as a guide to developing, implementing, and evaluating health-related stigma reduction interventions

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Stigmatization is a complex and deeply ingrained process, not easily amenable to change. Health-related stigma reduction interventions are not usually systematically developed or implemented, nor are they commonly evaluated. In this presentation, we outline how to go about applying Intervention Mapping in health-related stigma reduction interventions. For each of the six Intervention Mapping steps, we provide concrete examples and discuss current stigma and behavior change literature. We thus demonstrate that, for stigma reduction to be effective, a number of actions are essential. We must: 1) ascertain, at various socioecological levels, relevant and changeable determinants of stigmatizing behavior and target them specifically in our interventions; 2) delineate exactly what change our stigma reduction interventions aim to achieve at the level of determinants; 3) ensure that the methods employed to reduce stigmatization are aligned with the determinants of stigmatizing behavior, and that the theoretically-defined conditions under which those methods are most effective are considered, along with characteristics of the target population and intervention context; 4) pre-test and pilot-test newly developed interventions, and ensure budgetary capacity for these; 5) consider intervention adoption, implementation, and maintenance right from the outset, and approach these systematically as well; and 6) measure, in our evaluations of interventions, not only the desired endpoint (i.e., stigma reduction) but also more direct intervention objectives and changes in the determinants of stigmatizing behavior, and complement effect evaluations with process evaluations that assess implementation reach, completeness, and fidelity.
Preventing smoking initiation in adolescents living in vulnerable socioeconomic situations: a study protocol

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Background: Adolescents living in vulnerable socioeconomic situations are confronted with tobacco-related health disparities. As school-based interventions appear to be less effective among these youngsters, other approaches are necessary. One promising avenue are social work settings that offer sport and recreational activities (SR-settings). SR-settings have been examined as a levering context for health promotion, but evidence regarding smoking prevention is currently lacking.

Methods/design: This study describes the protocol of a non-randomised cluster controlled trial evaluating a smoking prevention intervention. At least 10 SR-settings are needed for the intervention and control group. A mixed-method design will be used. Quantitative measures will assess effectiveness, involving validated questionnaires on smoking behaviour (e.g. smoking attitude, intention, self-efficacy, norms) and other factors influencing smoking (e.g. family and peer tobacco use, physical and mental health, general risk taking behaviour). In addition, feasibility will be assessed with regard to intervention fidelity, dose and reach. Measurements will be taken at baseline, and at 3 and 9 months following the intervention. Qualitative interviewing methods among the users (youth) and implementers (youth workers within the SR-settings) of the intervention will help to gain deeper understanding of the processes of impact underlying the intervention.

Discussion: The results of the trial will provide new insights in the effectiveness of a smoking prevention intervention targeting adolescents living in vulnerable socioeconomic situations. Moreover, using a mixed-method design will enable us to evaluate the process of implementation and increase our knowledge on whether and why SR-settings are good settings for intervention implementation.
Does co-creating an implementation plan with school staff improve the implementation of a school-based intervention?

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Purpose: Studies show that reduced effectiveness of school-based interventions is related to suboptimal implementation by school staff. Involving school staff in developing an implementation plan might benefit the implementation quality of an intervention. The aim of the study is to examine whether a co-creation approach is more beneficial for the implementation process compared to a standard approach, and how the implementation itself is perceived by school staff.

Method: An intervention to promote healthy sleep will be implemented in two secondary schools in Flanders, Belgium. In the co-creation school, the implementation plan will be developed together with school staff (n=7), herewith tailoring the implementation plan to their needs and the school curriculum. In the standard school, the implementation plan was designed by two researchers, resulting in one training and a manual to implement the intervention. Implementation mapping was used to structure the development of both implementation plans. To evaluate the implementation process focus groups and questionnaires will be analysed using NVivo 12.

Results: We hypothesise that co-creating an implementation plan with school staff is beneficial for the implementation of school-based interventions, as it fulfils their needs and takes into account school specific barriers and facilitators for implementation. Data will be collected between November 2022 and June 2023. Results will be presented at EHPS.

Conclusions: This study will demonstrate whether co-creating an implementation plan with school staff is beneficial for successful implementation, i.e. the fidelity, reach, and dose delivered of the intervention. Furthermore, school staff’s experiences of the implementation will be highlighted.
Self-initiated breathing exercises and sleep quality increase daily work engagement

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Background: This study examined the effect of vital exhaustion, self-initiated mindful breathing and sleep quality on daily work engagement. It was hypothesized that higher daily work engagement (i.e., vigor, dedication and absorption) would be predicted by a) low baseline exhaustion, b) number of breathing exercises, c) better sleep quality.

Methods: Students (N = 224) were taught a breathing exercise within a university course. The baseline questionnaire assessed sociodemographic variables and exhaustion. During the following five workdays they were instructed to initiate the breathing exercise at least once a day and to answer a questionnaire in the evening assessing work engagement and the predictor variables. Data was analyzed with multilevel modeling using R statistics.

Findings: The hypotheses were mostly supported. Vigor was predicted by vital exhaustion (β = -0.06, t(222) = -5.67, p < .001) and sleep quality (β = 0.41, t(890) = 6.85, p < .001). Dedication was predicted by vital exhaustion (β = -0.05, t(222) = -3.75, p < .001), number of breathing exercises (β = 0.17, t(890) = 3.47, p < .001) and sleep quality (β = 0.23, t(890) = 3.95, p < .001). Absorption was predicted by vital exhaustion (β = -0.04, t(222) = -3.49, p < .001), number of breathing exercises (β = 0.21, t(890) = 4.19, p < .001) and sleep quality (β = 0.21, t(890) = 3.57, p < .001).

Discussion: It should be emphasized that a significant increase in dedication and absorption can be achieved even with minimal effort in performing breathing exercises.
Scaling up the Dental RECUR Brief Negotiated Interview for improving oral health in children nationally.

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It is crucial for public health that effective health behaviour change interventions are adopted by health services to improve reach. Developing a model for scaling up existing interventions would help facilitate this and ensure future success. The dental RECUR Brief Negotiated Interview DR-BNI has been successfully evaluated within the NIHR-funded Dental RECUR trial. This single low-cost, low-intensity health psychology intervention was successful in significantly reducing the risk of recurrence of dental caries in children. This trial has implications for changing paediatric dental practice internationally. Training in, and implementation of, a brief motivational interviewing–informed behaviour change intervention provides opportunities for dental nurses to facilitate behaviour change improving the oral health of children at high caries risk. The aim of this paper is to describe a model of a way to scale up the DR-BNI intervention so that it can be delivered in a sustainable and cost-effective way while ensuring fidelity and maintaining the conceptual background and theoretical basis of the DR-BNI intervention. A series of proposed work packages are described with key milestones to reach over a three-year period. Activities range from developing new training and assessment resources to evaluating programme reach, barriers, and facilitators to incorporation into NHS dental care. It is hoped that this model can act as a blueprint for the scaling up of future health behaviour change interventions.
Health behavior change through psychedelics: an international population survey.

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Background: Alongside psychedelics' potential for treating mental health conditions (e.g., depression, anxiety), there is ongoing interest in the potential for psychedelics to promote healthy behavior changes in the general population. Evidence suggests that behavior changes in areas ranging from diet and physical activity to substance misuse are common after psychedelic experiences. This study is the first to specifically investigate these associations in naturalistic settings.

Methods: This study will be a retrospective online survey of participants' changes in a range of health-related behaviors (e.g., physical activity, diet, substance misuse) following the use of psychedelics in non-clinical settings. The sample will include at least 400 adults who report lifetime psychedelic use and measures include self-constructed items to assess perceptions of health behavior change in relation to the setting of psychedelic use.

Expected results: We will describe the prevalence of change in the behaviors assessed, as well as associations between those changes, demographic, and characteristics of the psychedelic experiences' setting. We will also measure the extent to which people intended to change health behaviors and how that relates to actual self-reported change. Finally, given the exploratory nature of this study, we will include an open-ended question to identify participants' perceptions of the association under study, to be analyzed with qualitative methods.

Current stage of work: Ethics (IRB) approval is currently being sought and recruitment will start immediately after.

Discussion: We aim to contribute to the knowledge of whether psychedelic experiences can, in the future, be used to deliberately promote health-related behavior changes.
Endometriosis knowledge and stigmatization in a German online sample over 16 years of age

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Endometriosis is a menstrual disorder affecting one in ten women. It is a disease in which tissue similar to the lining of the uterus grows in other places in the body and causes severe pain and inflammation. Despite severe consequences for women’s health, diagnosis takes several years. This is possibly linked to low awareness and menstrual-related stigmatization. In an online survey with N=829 participants between 16 and 74 years of age, we investigated the effects of health information on endometriosis knowledge and stigmatization. A control group read a text about heat control as a health-relevant topic in the summer. Overall, about 50% have heard the term endometriosis before, whereby the awareness among women was 74.7% (n = 316) and 32.6% (n = 132) among men. We developed a 9-item knowledge scale, including a correct definition, incidence, symptoms, consequences, diagnosis, symptom, and treatment options (single choice, one right answer, three noises). On average, participants aware of endometriosis answered 6 out of 9 questions correctly. Moreover, endometriosis information indirectly decreased stigmatization through increased knowledge. Results speak for more educational campaigns to increase knowledge and decrease the stigmatization of menstrual-related health problems.
Perceived symptoms of smoke related to the use of biomass fuel cooking stoves in Rwanda

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Background
The parental lifestyle such as drinking alcohol at home is concerned to affect their young children’s future lifestyle. The purpose of this study was to investigate parental drinking behavior among young families, which was with pregnant or infant children, and to consider the influences on future drinking habits for their children.

Methods
Three hundred mothers (150 pregnant women and 150 mothers with three to four-months-old babies), and three hundred fathers (150 pregnant women’s husband and 150 fathers with three to four-months-old babies) in Japan completed an online survey, which was containing the Alcohol Use Disorders Identification Test (AUDIT) and questions about experiences that they were required to drink alcohol by their parent(s) in their childhood or that they required their children to drink alcohol to their children.

Findings
74(24.7%), 14(4.7%), 7(2.3%) mothers were classified as “Low-Risk Drinkers”, “High-Risk Drinkers”, “Probable Alcohol Dependence” respectively from AUDIT. 76(25.3%) were required alcohol by their parent(s) in their childhood, and 18(6.0%) required alcohol to their children. 177(59.0%), 43(14.3%), 8(2.7%) fathers were classified as “Low-Risk Drinkers”, “High-Risk Drinkers”, “Probable Alcohol Dependence” respectively. 83(27.7%) were required alcohol by their parent(s) in their childhood, and 34(11.3%) required alcohol to their children.

Discussion
Childhood drinking experiences have a certain influence on drinking behavior when they become parents among young families. Appropriate education programs about alcohol-related knowledge for young parents are necessary for the future health of children.
Awareness of Physical Activity-Related Policies Operating in Local Environment: a Photovoice Study of Adolescents' Perceptions

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Background: This photovoice-based study analyzed adolescents' awareness of the presence and/or lack of policy solutions related to physical activity (PA) in the context of the political actions that are implemented in the local environment. The MOVING framework by World Research Cancer Fund was used to map the policies recognized by adolescents.

Methods: Forty-one adolescents aged 16-19 years old (90% women) were recruited in three locations representing the rural, rural-urban, and urban environments. Participants were asked to document the implementation of public policies/solutions (or a lack thereof) that promote PA. A qualitative photography-based method, Photovoice, was applied. A total of 222 photos were coded by 3 independent coders and mapped according to the MOVING framework.

Findings: The photos document adolescents' awareness of PA policies (n = 91 photos) or a lack of the implementation of PA policies (n = 34 photos) concerning two domains of the MOVING framework: ‘structures and surroundings which promote PA’ and ‘transport infrastructure and opportunities that support active societies’. No photographs indicated awareness of the implementation (or a lack) of policy solutions, referring to such domains of the MOVING as: ‘normalize and increase PA through public communication’, ‘PA training, assessment/counselling in healthcare settings’, and ‘initiatives that promote PA in schools’.

Discussion: This is the first photovoice-based study to assess adolescents’ awareness of the presence/lack of implementation of public PA-related policies operating in the local environment. Instead of addressing policies targeting young people only (e.g., through schools), adolescents focused on policies relevant to the community as a whole.
Psychosocial factors influencing Italians’ vaccination acceptance during the Covid-19 pandemic: A grounded theory approach

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Background: Mass vaccination against Covid-19 represents the most cost-effective and powerful tool for controlling the pandemic. Psychosocial studies have identified several factors that can facilitate or hinder vaccine acceptance. However, most research used a quantitative approach, which hardly provides a complete picture of people’s opinions and experiences with Covid-19 vaccines. To fill this gap in the literature, this qualitative study aimed to explore, from a psychosocial point of view, participants’ representations and experiences regarding prevention, vaccination in general, and vaccination against Covid-19. Methods: We interviewed 25 Italian adults (Women = 64%; Mage = 44.6; SD = 14.8) and analysed data using a Grounded Theory Methodology. Findings: Results showed that, from participants’ perspective, vaccination against Covid-19 represented little more than “half prevention”, a way to limit rather than prevent damage. In this sense, the identified core category – which was related to the relationship between “knowledge and time” – expressed a gap between the representation of the “new” Covid-19 vaccines and that of traditional preventive behaviours, whose usefulness, safety and effectiveness, in the view of the respondents, was instead recognised and legitimised in the course of time and history. Discussion: These results suggest that interventions should aim at reducing this gap, encouraging the idea that vaccination against COVID-19 is in all respect a safe and effective preventive tool, and fostering trust in the official sources of information about the vaccine, in particular doctors, health professionals, and policymakers.
WHY DID I GET ENGAGED IN CANCER SCREENING? WOMEN POSITIONING IN NARRATIVES ABOUT PREVENTIVE PRACTICES

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Today, the promotion of breast and cervical screening programs is considered a key phenomenon in health psychology studies. However, in Italy, only 41% and 28% of the target populations, respectively, take part in these screening programs.

The epistemological framework of shared decision-making (SDM) in the healthcare field recognizes the engagement of both the individual and other actors as a determining factor in the decision-making process. Although engagement is a gold standard in the healthcare sector, we highlighted a gap in the literature concerning, in particular, the topic of cancer screenings. The aim of the present study is to investigate the first phase of the engagement process – called recruit – through the exploration of the meaning-making processes employed by women engaged in preventive practices.

In ‘Mirade’ project, a semi-structured interview was built ad-hoc and administered to 40 women participating in breast and cervical cancer screening. The Framework Method was employed for the qualitative analysis of data. The results show that in 70% of cases the engagement begins with an invitation from the NHS. In 30% it is a word of mouth. We identified four categories of meaning-making: risk of disease monitoring; self-care mastery; fear of death management; by chance. The results show that there is no univocal meaning-making mode concerning the initial moment of the engagement process in preventive practices. Instead, there are specific ways of meaning-making in which women undergoing screenings insert their perception of health, risk, healthcare relationships, highlighting the need for a personalization of preventive practices.
University-based mental health counselling in Russia: audit of existing models and challenges

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Development of mental health services targeted on students and/or faculty has become a standard practice for many higher educational institutions around the world and it has been spreading around different parts of the world. At the same time little effort has been made in order to overview the existing practices and a model of such services especially in settings other than high income countries.

Interned-based survey of university-based mental health clinics in Russia (N= 402) was implemented to identify the existing models of such facilities and associated challenges.

The identified classification of psychological services based on two dimensions. First is the level of development. It vary from the zero (initial) level (35.8%) with non-formalized activities performed as a rule, by a single psychologist to the advanced service framed as a separate division, performs a wide range of work, including of an analytical nature. The second dimension is the level of service integration with educational activities. It ranges from the outsourced services (2%) to the ones closely integrated with the education system by using it as a base for students’ practice (33.8%) and/or parallel work of psychology lecturers. The identified challenges usually include the high overload, the conflicts of interest of different nature, organizational and methodological challenges although their magnitude varies between those different models.

The present study shows further need for quantitative and qualitative evaluation of University-based mental health counseling facilities and their impact on students’ well-being having in mind the different models of their organization.
Rolling out a physical activity digital intervention for older adults; a qualitative study of implementation

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Background

A digital behaviour change intervention ‘Active Lives’ was safe and effective for increasing older adults’ physical activity in a randomised controlled trial (RCT). Following the trial, we partnered with NHS and community organisations to roll out the intervention. This study explored the implementation process, focusing on what influences are at play when trying to spread ‘Active Lives’.

Methods

We conducted a qualitative study. Data collection involved interviews with implementation partners (n=13) and the implementation team (n=3) plus extensive field notes from meetings and communications. Inductive thematic analysis was used to analyse the data.

Findings

Five broad themes were developed, capturing implementation barriers and facilitators 1) Complex, opaque networks and influencers, 2) Developing understandings of ‘Active Lives’, 3) Competition and conflicting interests, 4) Navigating unclear approval processes and 5) Shifting strategies; small and effortful to high reach and passive.

Discussion

There were multiple challenges to implementing ‘Active Lives’. Implications for health psychologists implementing digital interventions included building in time to identify influencers and decision-makers, and allowing for burden introduced by ill-defined pathways to gaining approval. Working with relevant policy stakeholders from an early stage could help to navigate these pathways. Having clear messages to communicate the purpose and unique selling points of the intervention was essential for bringing stakeholders onside, especially those who may have misconceptions about the intervention. User endorsements and examples of other services which have implemented the intervention were powerful and tended to be more convincing to potential implementers than RCT evidence.
Improving cancer preventive behaviours in cancer surgery patients and their families: a feasibility study

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Background: Prehabilitation for cancer surgery patients can improve surgical and patient related outcomes. This project aims to develop a prehabilitation programme consisting of physical activity, nutrition, and psychological support and to examine whether family support can improve cancer preventive behaviours in cancer patients, with the additional goal of improving cancer preventive behaviours in the family member.

Methods: This project has three stages. I) A systematic literature review identifying behaviour change techniques (BCTs) used in previous gastrointestinal and intra-abdominal cancer prehabilitation interventions. II) Co-production approach interviews with 10 cancer patients and 10 family members enrolled in an existing patient-focused prehabilitation programme, and five healthcare professionals facilitating prehabilitation. III) Findings will be incorporated in a feasibility study of an optimised family supported prehabilitation programme for cancer surgery in Paisley, Scotland.

Expected results: I) Identification of effective BCTs used in previous prehabilitation interventions. II) Insights on views on supporting cancer preventative behaviour change in cancer patients and family members. III) Established acceptability and feasibility of the intervention and trial methods.

Current stage of work: Data were extracted from 16 publications included in the systematic literature review. Ethical approval for interviews with healthcare professionals has been granted and recruitment is underway. Ethical approval for interviews with cancer patients and family members is ongoing.

Discussion: The findings will inform the design of a future large RCT testing the intervention. It will also lead to improvements in the service currently run which will benefit from the public engagement in this project.
Moving diabetes prevention programs into the real world: Systematic search and review on implementation strategies

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Background: Greater understanding of how to implement evidence-based programs in real-world settings is needed. To increase transparency and improve implementation science, the Expert Recommendations for Implementing Change (ERIC) created a standardized tool to report implementation strategies. Implementation strategies are specific actions used to change organizational practice. The aim of this systematic search and review was to identify implementation strategies described in the literature when diabetes prevention programs were implemented within a real-world setting.

Methods: Relevant articles were identified using a comprehensive peer-reviewed search strategy developed in collaboration with an academic research librarian. Studies were retrieved from four electronic databases (Medline, Embase, Web of Science and Google Scholar) and specific inclusion and exclusion criteria were applied. Study details and implementation strategies using the ERIC definitions were extracted. A narrative approach will summarize extracted data and frequencies of reported implementation strategies will be presented.

Expected results: Results will report commonly used implementation strategies, identify reporting gaps when diabetes prevention programs are implemented in the real world, and make recommendations for future implementation science research.

Current stage of work: Data are currently being extracted from studies that met inclusion criteria. Data analysis is forthcoming.

Discussion: To positively impact individuals at risk for type 2 diabetes, evidence-based programs must be implemented into real-world settings. Yet, research identifying strategies used to implement programs is lacking. This review will synthesize existing literature and identify implementation strategies used to-date. Results will provide recommendations to guide future implementation projects in diabetes prevention within real-world settings.
Optimizing Implementation: Elucidating the Role of BCTs and Corresponding Strategies on Determinants and Implementation Performance

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Introduction: Behavior change techniques (BCTs) are considered as active components of implementation strategies, influencing determinants and, ultimately, implementation performance. In our previous Delphi study, experts formulated ‘implementation hypotheses’, detailing how determinants and outcomes may be influenced by specific BCTs and strategies (i.e., BCT-strategy combination). These hypotheses have not been tested in vivo yet.

Method: We performed a cross-sectional study among practitioners and management professionals working in youth (health)care organizations. Using questionnaires, we obtained data regarding the presence and perceived value of BCT-strategy combinations and the association between BCT-strategy combinations and determinants and ultimately, implementation performance. Chi-squared tests and multivariate regression analyses were performed to determine whether determinants and implementation performance were influenced by specific BCT-strategy combinations.

Results: Data from 104 practitioners and 34 management professionals were used for analyses. Most of the management professionals stated that the BCT-strategy combinations (could) positively affect(ed) their implementation performance. Results on practitioners’ level showed that half of the implementation hypotheses could be confirmed. Practitioners who reported an absence of BCT-strategy combinations were skeptical regarding their potential influence on determinants and implementation performance.

Conclusion: To our knowledge, this is the first study that assessed the influence of specific BCT-strategy combinations on determinants and implementation performance. Several BCT-strategy combinations improved or could improve implementation performance of practitioners and management professionals. When developing and evaluating implementation efforts, we recommend clearly describing the goal of the effort, the BCTs through which the goal is expected to be achieved, and the strategies in which these BCTs will be applied.
Behavior change techniques and effectiveness of interventions targeting people with lower socio-economic position: Scoping review

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Background. The link between health behavior and socio-economic position (SEP) is well established. Behavior change interventions can unintendedly widen health disparities. Hence, understanding why interventions are (in)effective among people with lower SEP is essential. This scoping review therefore describes how behavior change techniques (BCTs) are implemented within interventions, by outlining whether they are separately identified and effectively promote healthy eating, physical activity, smoking cessation, and reduced alcohol consumption according to SEP. Method. In total, 7394 papers were identified of which 36% of abstracts was screened with ASReview. Full-texts of 510 papers will be screened*, and those meeting inclusion criteria will be coded for health behavioral outcomes, BCTs (type, number), effectiveness, and SEP-indicators (objective, subjective). Findings. Preliminary findings of a subset of papers suggest that current studies on behavior change interventions for people of different SEP do not consistently identify specific BCTs. The effectiveness of these interventions seems to be evaluated by outcomes of interventions overall. Only a small proportion of studies examines the effectiveness of BCTs solely. Objective SEP-indicators (e.g., income, neighborhood SEP) are frequently used to operationalize SEP, while subjective SEP-scales are used rarely. Discussion. Not distinguishing between BCTs and using different SEP-indicators could result in conflicting findings regarding the effectiveness of interventions according to SEP. This can impede our ability to accumulate evidence. To determine which BCTs effectively improve health behaviors among people with lower SEP, future intervention studies must deliberately select and describe BCTs and SEP-indicators.

*Please note that full results are expected for the conference.
Understanding contextual adaptation, implementation barriers and facilitators for psychosocial interventions in South Asia: Scoping Review

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Background:
Cultural adaptation and implementation factors of evidence-based interventions must be identified to address the mental health burden in LMICs. This scoping review aims to report; i) an overview of adaptation, implementation and usage of WHO-developed intervention Problem Management Plus (PM+), ii) an overview on efforts to implement low intensity interventions in South Asia.

Methodology:
Separate searches for each objective with focus on PM+ or psychosocial implementation in South Asia were conducted in five electronic databases until April 2022. From 93 studies for objective i) and 152 for objective ii), screened by two authors independently, k=20 and k=10 studies respectively met the inclusion criteria.

Results:
PM+ was reported to be effective in general (k=14), mostly accepted among participants (k=11), and feasible, if the setting was accounted for in implementation processes (k=12). In several studies, PM+ was adapted to the local setting, mostly in terms of cultural aspects like language (k=14) and religious beliefs (k=11), but also culturally shared concepts of mental illness (e.g. "heart-mind problems" in Nepal) (k=8). Implementation of psychosocial interventions and PM+ were linked to restrictions due to low resources (k=27). Besides barriers to implementation of PM+ and other interventions, facilitating factors, e.g. the employment of local community members to conduct PM+ were reported (k=19).

Discussion:
Factors specific to local and cultural contexts play a major role in the implementation of PM+ and other psychosocial interventions, especially in settings where a large percentage of the population has only limited access to mental healthcare.
Obstetric violence in the words of Lithuanian mothers: perceptions and lived experiences

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Background: Obstetric violence is defined as any act or action by a health provider that makes women feel dehumanized, abused, or violated during pregnancy, childbirth, or the postnatal period. The purpose of this study was to investigate and describe women’s perceptions and experiences of obstetric violence in Lithuania. Methods: Ten women who gave birth in Lithuanian hospitals participated in the study. Semi-structured interviews were used to collect research data, which was then analyzed using inductive thematic analysis. Findings: The concept of obstetric violence was primarily defined by examples of mistreatment that women have experienced themselves. The women described a lack of support during childbirth, verbal abuse, a failure to provide necessary information, rudely performed procedures, underestimating the woman’s psychological well-being, and disregarding the mother’s opinion when making decisions related to childbirth, lack of competence in supervising the delivery. Women who experienced obstetric violence indicated that this experience led to their reluctance to give birth in the future, disappointment with medical staff, a traumatic experience that required professional psychological help, and some also reported post-traumatic growth. Discussion: Women also disclosed factors that lower the risk of experiencing obstetric violence, such as the partner’s presence during childbirth. The fear of resisting the inappropriate behavior of obstetricians because the health and life of the woman and the baby depend on them during delivery is an example of the factors that strengthen the existence of obstetric violence. The knowledge about the aspects related to the existence of obstetric violence could help create effective interventions against it.
Barriers and facilitators to the delivery of smoking cessation advice in private dental consultations

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Objectives: To identify the barriers and facilitators for providing smoking cessation advice (SCA) in private dental consultations using the Theoretical Domains Framework (TDF).

Design: Data were collected using semi-structured interviews based on the TDF. A qualitative approach provided a rich insight into the attitudes and views of dentists. Dentists practicing privately were recruited since research has indicated that private dentists are more likely to provide SCA compared to NHS dentists.

Method: Twelve dentists practicing privately were recruited through personal contacts and dentist groups on Facebook. Data were analysed inductively using thematic analysis and then deductively with identified themes/subthemes mapped onto the TDF.

Results: Key barriers and facilitators were identified in 10 theoretical domains (goals; social/professional role and identity; optimism; beliefs about consequences; beliefs about capabilities; memory, attention, and decision making; emotion; behavioural regulation; environmental contexts and resources; and skills) and 16 subthemes.

Conclusion: Although dentists believed it was their professional responsibility to provide SCA, this was hindered by dentists’ pessimism about the effectiveness of SCA, perceived lack of patient motivation to stop smoking, limited training, personal discomfort providing SCA, and lack of time. There is an ongoing need to provide dentists with further training in the provision of SCA, enhance dentists’ optimism for SCA provision, and demonstrate the feasibility of fitting SCA into consultations. A strength of the study is the use of the TDF to guide the identification of the barriers/facilitators for delivering SCA. However, we recognise that snowballing sampling may have led to selection bias.
Exploring physiotherapists views of ACT informed Physiotherapy for patients with persistent pain in routine care

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Background:
Persistent pain is a common problem and major cause of global disability. Physiotherapy informed by Acceptance and Commitment Therapy (ACT-P) is a promising new approach to treating it aimed at improving function. There is currently little research about how to implement this into routine clinical work in a sustainable way. This study explored physiotherapists’ views about remote ACT-P training and support and any impact this had on their practice.

Methods:
12 physiotherapists working clinically in the UK NHS received four sessions of remote ACT-P training and support. Semi-structured interviews were conducted remotely 6-months after online training to explore practitioners’ thoughts on training and implementing ACT-P into their practice. Interviews were transcribed verbatim and independently coded by two researchers. Themes were generated following Braun and Clarke’s six-step thematic analysis process.

Findings:
Five themes were identified: sufficiency of the training; communicating about pain; practical restrictions; recognition of individual differences in patients; role of supervision in implementing ACT-P. Clinicians reported remote training was acceptable and potentially implementable within the NHS, recognised the value and fit of ACT-P within their role; but acknowledged the necessity of patients being open to ACT-P.

Discussions:
Findings highlighted the acceptability of ACT-P remote training for physiotherapists working in clinical practice, provided there were also ongoing supervision sessions to increase their confidence in using it with patients with persistent pain. While practical challenges to delivery were identified, findings suggest it is implementable within the NHS and has potential to improve routine clinical practice for patients with persistent pain.
How should the probability of side effects be verbally expressed? A pilot study in Poland

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Background: Although using numbers to convey the risk associated with the probability of side effects of medical therapy is recommended, verbal descriptors that accompany the numbers make the message more understandable. Difficulties in interpreting the words can affect not only the patient's perception of risk but also the initiation or continuation of treatment.

Aim: The aim of the study was to find out how people understand words referring to the possibility and probability of a side effect of medical treatment. Furthermore, the respondents' perceptions of the ambiguity of these verbal risk labels were assessed.

Methods: Respondents were asked to adjust percentages for 13 verbal labels related to the probability of a side effect, i.e., headache, and to indicate how clear and unambiguous they found the word. A total of 311 people took part in the study. The study was divided into 175 older (n = 175) and younger (n = 136) adults.

Findings: Different connotations were assigned to words that described the possibility and probability of a side effect of medical treatment. A more significant variation between the percentages attributed to verbal terms was observed among older adults compared to younger adults. At the same time, older adults rated verbal risk labels as less ambiguous.

Discussion: Words describing the probability of a side effect may be understood differently by laypeople. Older adults used sharper criteria for object class membership. When preparing materials for patients, it is also worth paying attention to age-related changes in information processing.
Background. Cancer is a disease that poses several difficulties for patients, even once they are considered “survivors”. One way to support these patients and survivors is through the use of interventions directed at guided self-management and quality-of-life improvement, often grouped under the term “coaching”. Many forms of coaching or coaches appear in both healthcare settings and in interventional research (as highlighted in our current literature review). We however do not clearly know their place and added-value in the healthcare system and what should be their role in helping patients.

Objective. Exploring how Belgian healthcare professionals and associations conceive the role of coaches and coaching in supporting cancer patients and survivors.

Methods. A Delphi study will be implemented. It will aim at reaching a consensus on the place, role, and requirements for coaches/coaching in the Belgian healthcare system. Stakeholders will be included from Dutch- and French-speaking communities; from different backgrounds, whether as healthcare professionals (e.g., oncologists, psycho-oncologists), associations (e.g., patient associations), and members of the executive power (e.g., members of governments and administrations).

Expected results: A (set of) definition(s) of coaching in the context of oncology to support patients and survivors, as well as techniques, aims, and requirement, to be able to be a coach or to coach; a framework to situate coaching in the healthcare system.

Current stage of work: Preparation and recruitment.

Discussion: This Delphi will provide a consensus on what coaching in oncology is and should be, therefore giving a framework for future implementation in the healthcare system.
Mediators of Intervention Effects in a Randomized Controlled Trial
Motivating Cancer Genetic Risk Assessment

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Background: A theory-guided Tailored Counseling and Navigation (TCN) intervention successfully increased
cancer genetic risk assessment (CGRA) uptake among cancer survivors at increased risk of hereditary breast
and ovarian cancer (HBOC). We examined whether the TCN intervention exerted effects on CGRA uptake
through hypothesized theoretical mediators. Methods: Cancer survivors at elevated risk for hereditary breast
and ovarian cancer were recruited from three statewide cancer registries and were randomly assigned to one
of three arms: TCN (n = 212), Targeted Print (n = 216), and Usual Care (n = 213). Theoretical mediators
guided by the Extended Parallel Process Model were assessed at baseline and at the 1-month follow-up;
CGRA uptake was assessed at 6 months. Generalized Structural Equation Modeling was used to assess
putative mediators. Findings: Compared to Usual Care, TCN directly increased perceived susceptibility (βDE =
0.25, 95% confidence interval (CI) = 0.076-0.43) and self-efficacy (βDE = 0.21, 95% CI = 0.013-0.42). Similar
effects were observed when TCN was compared with Targeted Print. Increased perceived susceptibility and
self-efficacy improved CGRA uptake through strengthened behavioral intention. In addition, compared to Usual
Care, TCN also enhanced knowledge of HBOC (βDE = 0.20, 95% CI = 0.020-0.38), which improved response
efficacy about CGRA (βDE = 0.20, 95% CI = 0.066-0.35), and ultimately CGRA intention and uptake.
Conclusions: Risk communication and behavior change interventions for hereditary cancer should stress a
person’s increased genetic risk and the potential benefits of genetic counseling and testing, and bolster self-
efficacy beliefs and motivation by helping remove barriers to CGRA.
Developing a digital intervention for helping chronic patients adhere to their medication: The Stay-On-Track tool

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Background: Medication non-adherence is a complex problem that affects the quality of life of patients with chronic conditions. There is a need for evidence-based and theoretically informed digital interventions addressing both intentional and unintentional barriers to medication adherence (MA).

Method: The SoT intervention was developed using the Person-Based and the Acyclic Behavior Change Diagram (ABCD) approaches and delivered based on Acceptance and Commitment Therapy (ACT) principles. Review evidence was collated and triangulated with behavioral theories to decide on the intervention’s guiding principles. Qualitative data were collected from healthcare providers, nursing and medical students and from patients with chronic conditions to evaluate the acceptability and usability of the intervention prototype. Quantitative data were collected using an Ecological Momentary Assessment (EMA) approach to assess best-practice methods for measuring MA through the app.

Results: In general, qualitative data revealed that patients and healthcare professionals found the SoT intervention to be usable and acceptable. A total of 50 patients used SoT for four weeks, with 19 (38%) participants completing the EMA and 15 (30%) completing the post-treatment self-report questionnaire. MA assessment differed between the two methods (self-report vs. daily assessments) with participants demonstrating higher MA in the self-report measure with 47% classified as adherent, than in EMA where 7% were classified as adherent. Engagement data showed that most participants interacted with the app more than two times (n=15; 68%).

Conclusions: The SoT intervention has the potential to help patients with chronic conditions adhere to their medication and further evaluation is needed.
Motor Neurone Disease online support groups: A qualitative analysis of posted messages and member interviews

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Background: There is literature demonstrating the benefits of engagement in online support forums for chronic conditions, however, their use in the context of motor neurone disease (MND) remains unclear. This study sought to examine how individuals affected by MND engage with an asynchronous online support forum.

Methods: A two-part qualitative design was adopted to gain a comprehensive understanding of the role of the forum. Forum messages and online asynchronous structured interview responses were analysed using inductive thematic analysis (TA) and findings triangulated. Data from the MND Association forum was selected for this study, specifically active threads during May 2022 (31 threads, 331 messages) from the sub-forum ‘Life with MND’ were analysed. In addition, six forum users, recruited from the forum and MND Facebook groups participated in an asynchronous structured online interview, using MS Forms.

Findings: Four themes were generated from the TA: 1) Informational Support – describes how members sought information and advice as well as shared their own experiences (both good and bad) to help others; 2) Coping Strategies – describes the forum as a place to vent, be humorous and to normalise and validate experiences; 3) Social Support – describes the support received by members; 4) Issues of Healthcare – describes the challenges in accessing and receiving appropriate healthcare.

Discussion: MND asynchronous support forums would appear to be positive, helpful, and informative spaces for individuals affected by the condition. They may also provide a safe space where individuals affected by MND can share their experiences of healthcare.
Feasibility of a digital behaviour change intervention (VITALISE) for adults with non-alcoholic fatty liver disease.

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Background:
Non-alcoholic fatty liver disease (NAFLD), a disease predominantly linked to overweight and obesity, affects 25% of adults in Western countries. Lifestyle behaviour change to initiate weight loss is the recommended management approach. However, patients find weight loss challenging. Using intervention mapping, we developed a NAFLD-specific digital behaviour change intervention (VITALISE) with tele-coaching support to target changes in dietary and physical activity behaviours. This study will assess the feasibility and acceptability of VITALISE in a secondary care setting.

Methods:
We aim to recruit thirty-five newly diagnosed patients with NAFLD who will be given access to VITALISE for 6 months. A single-centre, one-arm prospective study design will assess feasibility, acceptability and fidelity of the intervention, recruitment, retention, uptake, engagement, and adherence. Qualitative interviews will inform intervention optimisation. Secondary outcomes include liver health (routine blood tests and FibroScan), physical activity (Godin Leisure-Time Exercise Questionnaire and accelerometry) and patient activation (Patient Activation Measure).

Expected results:
Early indications demonstrate recruitment and data collection is feasible, and acceptability of the intervention is good (i.e., engagement is consistent).

Current stage of work:
18 patients (male n=14) from White British (n=16), Hispanic (n=1) and British Asian (n=1) backgrounds (mean age 56 years; SD=11.68) have been recruited. Eleven patients have engaged with VITALISE, including three who have engaged with tele-coaching.

Discussion:
This study will determine the feasibility and acceptability of a digital behaviour change intervention (VITALISE) that aims to facilitate guideline implementation in clinical settings for people with NAFLD. Findings will inform intervention optimisation and larger scale evaluation.
Sources of support and views of e-mental health among caregivers of adults with kidney conditions

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Background: Caregivers of adults with kidney conditions often experience mental health difficulties such as anxiety and depression. E-mental health interventions may help improve access to mental health support. To inform intervention development, this study aimed to explore caregivers’ experiences of receiving support and views of e-mental health interventions.

Methods: Semi-structured interviews are being conducted with adults providing unpaid care to an adult with a kidney condition in the United Kingdom. Interviews explore topics such as experiences of receiving support, barriers and facilitators to accessing support, and views on the design and implementation of e-mental health interventions. Interviews are being analysed using reflexive thematic analysis.

Expected results: Preliminary findings highlight that caregivers’ situations are complex, challenging, and unpredictable. Informal sources of support (i.e., family, friends and community/social media groups) provide valued support. Support from healthcare professionals is minimal and varied across kidney care units. Limited time and competing responsibilities are major barriers to accessing support, and the flexibility of e-mental health interventions can facilitate access. Incorporating practical tools and activities caregivers could apply to their daily lives are important design considerations.

Current stage of work: Nine interviews have been conducted, transcribed, and are being analysed. Recruitment and analysis are ongoing.

Discussion: By understanding caregivers’ caring contexts, we can enhance our knowledge of caregivers’ needs, and identify factors to consider during intervention development to design e-mental health interventions tailored to caregivers’ needs and inform future implementation planning. Careful consideration of caregivers’ needs may also increase the acceptability and relevancy of the intervention.
Attitudes towards Digital Health Technology of people with Chronic Kidney Disease

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Introduction
Chronic Kidney Disease (CKD) is a long-term condition and a major health problem, which affects over 3.5 million adults in the UK. Use of digital technology has been proposed as a means of improving patient management. It is important to understand the factors that affect the acceptability of this technology to people living with CKD. This study used the Technology Acceptance Model 3 (TAM3) to investigate whether perceived ease of use and perceived usefulness could predict intention behaviour. It then investigated if intention to use digital technology predicted actual use.

Methods
This was a cross-sectional study whereby the TAM3 questionnaire was sent online to people known to have CKD via Kidney Care UK. The characteristics of the respondents (age, sex, CKD stage) were recorded.

Results
The questionnaire was sent to 12,399 people, of which 229 (39% drop out) completed it. The respondents’ age ranged from 24-90 years and 45% were male. Thirty-five percent of participants had advanced kidney care, 33% had kidney transplant and 22% had CKD. A multiple regression analysis showed a perceived ease of use and perceived usefulness of the technology predicted behaviour intention. Behaviour intention did not significantly predict actual use behaviour.

Conclusions
Perceived usefulness and perceived ease of use are important factors in determining the intention of people with CKD to use digital healthcare. However, a gap exists between this intention and readiness to actually use the technology. This needs to be overcome if digital healthcare is to gain future traction in the clinical scenario.
Augmented Reality for Chronic Back Pain: Psychoeducational Intervention Design - A Scoping Review

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Background: Chronic low back pain is the most prevalent chronic pain disorder. There is no clear pathomechanism and psychosocial factors form risk factors for pain chronification. Psychoeducation represents an independent method of education and shows positive effects on psychological components of the disease. At the same time, recent immersive reality training, specifically virtual reality, indicate positive as well as superior results in the treatment of back pain. The aim of the study was to present the state of research on psychoeducation for chronic back pain using augmented reality, another form of immersive reality, and to derive a psychoeducational intervention considering health psychological models.

Methods: The scoping review followed the PRISMA guidelines. Data evaluation was performed by qualitative content analysis. Results: Eleven out of initially 1,447 publications were included. Four main categories were identified (1) psychoeducation process and content, (2) motivation, (3) intervention duration, and (4) evaluation. The extracted data were discussed by incorporating the existing research on conventional intervention design and the Unified Theory of Acceptance and Use of Technology to conclude psychoeducational intervention design for chronic low back pain with augmented reality technology from a health psychological perspective. Conclusion: Based on these findings, well prepared efficacy studies with experimental designs are needed. As a first step in doing so, a feasibility study is planned. The feasibility study has been approved by the Ethics Committee of the University of Trier and was pre-registered with Open Science Framework (Registration DOI: https://doi.org/10.17605/OSF.IO/DSW5X) where further information can be found.
What means individualized telemedicine in palliative care?

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Background: Telemedicine in palliative care is becoming increasingly important as more patients with serious and chronic illnesses are being cared for in their homes. For telemedicine to be effective it is crucial to individualize the approach to each patient's specific needs.

Methods: The research was conducted by collecting qualitative interviews in two phases, which were followed up at least three months apart. Semistructured interviews were audio-recorded and then transcribed verbatim. Thematic analysis was used to analyse data. Codes were created through open coding in NVivo 2020. Two groups of participants were interviewed. Adult patients in palliative care, mainly diagnosed with cancer and cardiac failure. Ten (n=10) patients were interviewed, Age (n=10) mean age 58.4 (Med 59.5; MIN 37, MAX 80). The second group was parents of children in palliative care. All (n=10) paediatric patients were diagnosed immediately after birth and were enrolled in palliative care, Age (n=10) Mean age 8.1 years (MIN 1, MAX 17). Findings: Telemedicine is understood as any contact through technology with a doctor. Often, it can be text messages, whatsapp, emails or phone call. The use of the an application (provided by the University Hospital Olomouc) and the other tools that come with it (ordering medication, devices, communicating with other professionals) was most welcomed by those patients who perceived technology as beneficial and as a part of their lives.

Discussion: Despite positive experiences with telemedicine, patients wanted to maintain in person contact with physicians that may not have been as frequent but were important to them.
Severe fear of childbirth and depressive symptoms are common among pregnant women. Mindfulness, reflecting about the own emotional state and positive affirmations can improve fear of childbirth and depression. This study aims to investigate the potential effects of a mobile app-based self-directed 8-week intervention on the mental well-being of pregnant women.

A randomized controlled trial was used to evaluate the effect. The control group received no treatment. Included were: Pregnant women between the 20.1 and 27.0 pregnancy week. 76 women participated in the study, 38 in each group. Primary outcome measures: (1) Fear of childbirth (W-DEQ-A) and (2) depression scores (EPDS) at baseline and after 8 weeks.

A latent-change-model analyses was conducted. Preliminary analyses show a marginal superior effect on the IG, compared to the CG regarding depression scores (LRT (T1-T2)=0.09) and fear of childbirth (LRT (T1-T2)=0.07). Interesting effects for subgroups emerge: In the treatment group, changes in mindfulness are related to bigger changes in depression scores, compared to the control group (Modell FixD_epds~D_qfa: \(x^2=134.99; \text{df}=115; p=0.09; \text{LR-T}=0.024\)). Women, who reported birth complications, seem to profit more from the treatment than women, who reported no birth complication. Due to the smaller number of this subgroup (i.e. women with birth complications=37), additional sampling is undertaken.

The RCT-study confirms the hypothesis that the treatment group would have bigger improvements in fear of childbirth and depression scores. Effects are small, however. The differences in the effects regarding women with or without birth complication need to be confirmed before further conclusions can be made.
Optimization of a transdiagnostic emotion regulation mobile intervention for university students: a mixed-methods study

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Background and objectives: University students are at an increased risk of developing mental health problems. An adaptive, transdiagnostic mobile intervention teaching emotion regulation (ER) techniques is being developed, delivering user- and context-tailored interventions. This study evaluates the intervention effects on proximal [i.e., changes in emotional states] and distal outcomes [i.e., ER skills and distress symptoms], participants’ user experience, and the contextual moderators of intervention effectiveness.

Methods: The study adopts a mixed-method approach combining a Micro Randomized Trial (MRT) with semi-structured interviews. During the MRT, 200 students with subclinical levels of depressive symptoms, are prompted twice a day for 3 weeks to evaluate their emotional states and complete a randomly assigned intervention (i.e., ER exercise) or control intervention (i.e., health snippet). Twenty-one students with different levels of intervention usage will be further interviewed about their user experience with the intervention.

Expected results: We expect students to experience higher positive affect and lower negative affect when completing an ER exercise compared to when reading neutral health information. Secondly, we expect post-intervention improvements in ER skills and distress symptoms compared to baseline.

Current state of work: Data collection is ongoing and will be completed in April.

Discussion: The results will inform how the intervention functions, what needs improvement and what works for whom and when scaffolding the refinement of its design to maximize uptake and effectiveness before implementation. This study has the potential to inform how adaptive, transdiagnostic ER interventions stimulate behaviour change, contributing to the development of more dynamic models of ER.
Mental health related services in healthcare for people living with HIV (PLHIV) in Croatia

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Background
Since the first case until the end of 2022 there are 1934 people diagnosed with HIV in Croatia. Current number of PLHIV in care is around 1450. This makes Croatia a low prevalence country. Healthcare service for PLHIV in Croatia is centralized, located in the University Hospital for Infectious Diseases in Zagreb. We are offering comprehensive care: blood/urine test, STI screening, antiretroviral therapy, EmERGE mhealth application (always available test results) and psychosocial service – in person, via email or telephone and by newly available platform "HIV and Mental Health".

Methods
Platform is created by Europan AIDS Treatmen Group (EATG) and available since the end of January 2023 in 11 languages. It offers relevant materials, experts ready to answer questions and community forums. Members are gathered through snowball technique. Data is collected from information provided during registration.

Expected results
We expect to share good practice in providing mental health and psychosocial services to PLHIV and to improve collaboration between community and healthcare providers in addressing the mental health needs of people living with and affected by HIV.

Current stage of work
In the first month there have been 60 registered members from different countries and diverse topics are open. We are tracking the progress, advertising the platform and importance of mental health.

Discussion
Having the access to relevant and up-to-date information is very important for self management of mental health and HIV related questions. It can reduce the number of visits to the Clinic and waiting time for psychosocial help.
Attitudes towards digital technology use in health context according to a nationwide survey in Germany

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Background: Digitalization has led to a proliferation of digital health technologies and online health information. We aimed to assess the attitudes towards digital technology use in health context using a nationwide survey.

Methods: A cross-sectional nationwide survey of a panel sample of adult internet users living in Germany was conducted in November 2022. Participants completed computer-assisted telephone interviews using a self-developed, 30-item questionnaire. Survey data were analysed using frequencies and univariate multiple regression analysis.

Findings: Among 1,020 participants (18-92 years, 56±16 years, 47% female), 62% completed up to tertiary education and 42% reported the household income of up to 3500 Euro/month. The minority of participants reported that they trust health websites when recommended by friends and family (39%), that their social network relies on the internet for health information (35%), that they consider the internet as the immediate source of health information (39%) and that they are interested in digital health technologies (40%). Most participants (71%) reported that they prefer to receive health information in person or on paper. The preference for such sources of health information was associated with lower eHealth literacy (β= -.12, p<.001), worse health status (β= -.08, p=.026) and female gender (β= -.08, p=.033).

Discussion: The trust in the internet as the source of health information and the interest in digital health technologies were low among internet users in Germany. Interventions should strengthen eHealth literacy to empower adults to find, understand and assess reliable health information on the Internet.
Acceptability of a reward-based walking application in older adults: a latent profile transition analysis

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Background: Technology-based interventions are seen as an effective way to increase physical activity (PA) in older adults. “Weward” is a reward-based walking app converting steps into “wards” that can be converted into money. This study aimed to: (a) identify the app acceptability profiles of older adults at baseline (T1) and 12 weeks after using the app (T2), (b) examine stability or change in these profiles across time, and (c) determine whether acceptability profiles were related to motivation and PA level.

Methods: Six hundred and sixty-five adults (401 females, 264 males; mean age=62.3, SD=6.5) were recruited for this 12-week longitudinal study. They completed an online survey, at T1 and T2, including: app acceptability according to the Unified Theory of Acceptance and Use of Technology-2, motivation toward PA, the PA Dijon score, and sociodemographic data. A latent profile transition analysis was used. After extraction of profile membership, motivation and PA level were examined for each profile.

Findings: A 3-class model (high, intermediate, and low acceptability) best described the profiles at each measurement time. Between T1 and T2, 7.8% of users moved to a higher acceptability profile, 74.9% remained stable, and 17.3% moved to a lower acceptability profile. Only 5.1% of users, characterized by low levels of autonomous and controlled motivation, remain in the low acceptability profile.

Discussion: Results suggest that a reward-based app could be accepted by older adults to promote PA. However, further research is needed to better individualize this type of app according to each profile of older adults.
Healthcare students’ perceptions of technologies to promote physical activity: influence of explicit weight bias

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Background: Recent evidence suggests that weight bias may be pervasive, even among obesity professionals, including students. Technology-based physical activity (PA) interventions are promising for patients with obesity, specifically when they are theory-driven (e.g., basic needs satisfaction as stated in the self-determination theory). However, healthcare students’ perceptions of these technologies have been understudied.

The purpose of this study was to examine the influence of weight bias and technology type on healthcare students’ perceptions.

Methods: 502 healthcare students (360 females, 142 males; mean age=23.3, SD=5.0) were randomly exposed to one of four scenarios manipulating a hypothetical patient’s body mass index (22kg/m², 42kg/m²) and technology-based PA type according to the Self-Determination Theory (autonomy-supportive app, controlling app). They then completed measures of the hypothetical patient’s app acceptability, the hypothetical patient’s self-efficacy toward the app, and their intention to recommend the app to the patient. Multivariate analyses of variance were performed.

Findings: Students exposed to the patient with obesity (42kg/m²), versus normo-weighted (22kg/m²), perceived a lower patient’s app acceptability (i.e., higher social influence and less enjoyment in using the app), as well as a lower self-efficacy to use the technology. Students exposed to the controlling app were more likely to recommend it relative to those exposed to the autonomy-supporting app.

Discussion: These results suggest that some health students’ attitudes would be negatively influenced by explicit weight bias, and that in contrast to the literature, controlling app would be more recommended. Further study of the healthcare implicit attitudes toward technology would be needed.
Effectiveness of an app-based blended care intervention to maintain physical activity in the rehabilitation setting

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Interventions to increase physical activity (PA) in patients with musculoskeletal disorders can have a positive impact on pain and quality of life. The group-based intervention MoVo-LISA serves to promote a “motivational-volitional lifestyle-integrated sports activity” and has proven to be effective. Apps offer opportunities to perpetuate the newly acquired PA behavior. This study aims at investigating the effectiveness of a blended care intervention with regard to maintaining PA, in which the MoVo-App continues the content from MoVo-LISA in rehabilitation aftercare for 3 months.

In a randomized-controlled trial, 225 people with musculoskeletal disorders from orthopedic rehabilitation clinics were included. The control group (CG; n=112) received 3-week usual care including the MoVo-LISA intervention, the intervention group (IG, n=113) additionally the Mo-Vo-App. Measurement times were at hospital admission (T0), discharge (T1), six weeks (T2) and three (post-intervention; T3), six (T4), and twelve (T5) months after discharge. Intervention effects and group differences in PA are determined.

Both groups showed the same level of PA at T0 (58 min/week), the IG increased their level of PA at T2 to 214 min/week (CG: 178 min/week). PA levels decreased in the IG at T3/T4 (186/178 min/week), but even more in the CG (T3/T4: 173/149 min/week). At T5, the two groups converged (IG: 171 min/week, CG: 179 min/week). With the blended care intervention, it is possible to support patients independently of time and place. First results indicate an additional benefit up to 6 months. Converging PA at T5 could indicate that the app should be used longer.
Efficacy of online physical activity interventions with mobile elements within adults aged over 50 years

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Background: This study aimed to investigate the effects of adding mobile elements to evidence-based online physical activity interventions for adults 50 years and older. Effects on moderate to vigorous physical activity (MVPA) of interventions with three different mobile elements were compared to a waitlist control group and to each other.

Methods: A randomized controlled trial with repeated measurements was conducted. Participants were randomly assigned to the online program Active Plus or I Move including one of three mobile elements being an activity tracker, ecological momentary intervention (EMI) program or chatbot or to a waitlist control group (n=200 per group). MVPA was assessed subjectively via the SQUASH questionnaire and objectively via ActiGraphs at baseline (T0) and 6 months post baseline (T2). Multilevel linear regression analyses with time nested within participant were used to investigate MVPA effects between research groups over time.

Findings: No significant group*time interactions were found for subjective MVPA. However, significant group*time interactions were found for objective MVPA (P<.001). Post hoc analyses showed that the Active Plus interventions including activity tracker (P=.003) and chatbot (P=.004) were significantly more effective in increasing MVPA compared to the control group. No significant effects were found for Active Plus including EMI and the I Move interventions.

Discussion: Based on objective measurements, the addition of an activity tracker or chatbot to a computer-based intervention is promising for increasing MVPA in adults aged over 50 years. However, drop-out within the chatbot group was relatively high, which should be taken into account while interpreting these results.
Perspectives of neighborhood sport coaches towards using gamification to promote physical activity in the neighborhood

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Background: Gamification can be effective in promoting physical activity and can be applied in physical and virtual environments. In the Netherlands, neighborhood sport coaches (NSCs) play an important role in promoting physical activity in the neighborhood. While gamification activities hold promise for promoting physical activity, NSCs infrequently implement these activities. This study aimed to assess perceived barriers and facilitators of NSCs towards using gamification in their daily work to promote physical activity in the neighborhood.

Methods: Twenty-two semi-structured interviews were conducted with NSCs in the Netherlands. The interviews were audiotaped, transcribed, and analyzed by means of thematic analysis using Atlas.ti 22 software. The coding was informed by the COM-B model and the Theoretical Domains Framework.

Findings: Applying gamification to existing or new activities of NSCs to stimulate physical activity in the neighborhood was highly valued by NSCs. Themes that were identified related to support (i.e. in- and outside employer’s organization; established networks), skills (i.e. one’s level of technical or creative proficiency), knowledge (i.e. how to find gamified activities; proven effects), costs (i.e. high product costs; financial subsidies), time (i.e. time investment and prioritization), implementation (i.e. concerns about digital divide; integration versus extension to current programme), responsibility (i.e. within employer’s organization to promote gamification).

Discussion: This study outlines the need to strategically implement gamification in the work of NSCs, by the employer’s organization or municipality. Establishing a gamification network among NSCs could facilitate the implementation and support NSCs to translate best practices to their local offer.
Out of the Box: Co-creative multistakeholder study to enhance the effectiveness of cardiology eHealth intervention.

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Background: Cardiovascular disease is one of the leading causes of disability worldwide. eHealth has the possibility to improve health outcomes and quality of life adjunct to regular care. “The Myocardial Infarction Box” (MI Box) is an at home monitoring system using smartphone-enabled health monitoring devices. However, like many eHealth interventions, the MI Box had variable adherence. This variable adherence could be due to a misalignment with the needs of the users and the intervention. Through co-creation, this study aims to develop design strategies to enhance the effectiveness of the MI Box in the long term: to increase adherence in the first year and support MI patients in adopting a healthy lifestyle.

Methods: Six iterative co-creation session were conducted with various stakeholders. One with designers and with healthcare professionals. Four sessions with users. In these sessions, the patient journey and patient personas were discussed to identify needs and opportunities for enhancements to the intervention. Furthermore, design strategies for enhancing the intervention, aiming both to optimize adherence and to stimulate a healthy lifestyle, were discussed.

Findings: This resulted in themes such as personalized feedback, understanding the data, and regaining confidence in one’s own body to be key aspects to creating a more meaningful and personally relevant intervention.

Discussion: Involving the stakeholders in co-creation sessions provides invaluable insights into the user-experiences and opportunities for personalization. Adapting the intervention to these needs is the next step to increase engagement with the intervention and thereby increase adherence.
Exploring patient experiences of participating in digital cardiac rehabilitation: A qualitative study

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Background: Digital cardiac rehabilitation (CR) has emerged as an effective alternative to in-person CR. Understanding patients’ experiences and perceptions can provide valuable insights into what makes these programmes successful and identify opportunities for improvement. This study aimed to explore patients’ experiences of digital CR programmes and to understand the factors that make these programmes successful.

Methods: From March to August 2022, we conducted a qualitative study using semi-structured interviews with patients who were referred to one of two digital CR programmes offered on the island of Ireland. Interviews were audio-recorded, transcribed verbatim and analysed using reflexive thematic analysis. A public and patient involvement panel guided the recruitment strategy and assisted with data analysis.

Findings: Eleven patients, predominantly male (82%) and with a mean age of 64 (range 50 – 75), participated in the study. Five themes were developed: (1) Empowered patients; (2) Controlling the recovery; (3) At home but not alone; (4) Digital opens up new possibilities and; (5) Challenges of interacting online. Digital CR equipped patients with the necessary tools and support to modify their lifestyle and effectively manage their recovery. However, the opportunities for social interaction were limited and communicating online was not always straightforward.

Discussion: The findings suggest that digital CR can be instrumental in guiding patients towards recovery and improving their sense of empowerment and control. However, the limited opportunities for social interaction may represent a challenge for patients seeking social support.
**Efficacy and feasibility of a mHealth intervention to promote healthy lifestyle behaviors in cardiac patients**

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Background: Cardiovascular disease is the leading cause of death worldwide, yet most cases could be prevented through lifestyle changes. In current care, however, little attention is paid to individual risk factors and long-term success of existing secondary prevention measures is only modest. The Health Action Process Approach identifies crucial post-intentional strategies that may facilitate sustainable behavior change. mHealth can further increase adherence and accessibility of rehabilitative interventions. The present study evaluates a novel mobile intervention combining volitional strategies in a multimodal lifestyle program.

Methods: Cardiac patients (N=134) received a 28-day combined planning, action control, and self-efficacy intervention targeting physical activity, diet, and stress management. A single-arm pre-post-design was employed. Changes in heart-related quality of life, health behaviors, and self-regulation strategies were investigated using self-reported questionnaires. General linear models were used to assess changes over time.

Findings: 66 participants (49%) provided data at post-intervention. Clinically relevant improvements in quality of life and moderate changes in health behaviors were found. Self-regulation strategies improved, with greatest mean change in action control (.75, scale 1-6). On average, the app was used for 16 days and its benefit was rated as 4.5 (scale 1-5).

Discussion: The theory-based intervention app on lifestyle adaptation in cardiac patients showed evidence of feasibility and efficacy. Despite promising first results, larger randomized controlled trials are needed to confirm the intervention’s usefulness. Future studies should further address issues of attrition, e.g., through incorporating just-in-time procedures. This scalable app appears suitable for practical use and fosters a potential to improve cardiac aftercare.
Designing a health-promoting digital health intervention for midlife women using co-production and behaviour change theory.

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Background:
Digital health interventions (DHIs) are efficacious in promoting health behaviours in midlife women. Public/patient involvement (PPI) in co-designing such interventions is vital to ensure interventions are useful for people who use them.

Objective:
The aim of the study is to use participatory research approach (co-production) to systematically co-design theory-and-evidence-based DHI to improve healthy eating and physical activity in midlife women (aged 40 – 65 years) living in the UK.

Methods:
Co-designing the DHI with a group of midlife women (n = 7) in three 2-hr long group workshops. The intervention design workshops were informed by the Behaviour Change Wheel guide's worksheets. The group tasks were to select target behaviours for healthy eating and regular physical activity, identify what needs to shift for the target behaviours to be achieved and how to bring about that change.

Results:
Thirteen physical activity and eleven healthy eating target behaviours were identified (e.g., reducing alcohol intake, eating regularly, adding healthy snacks, reducing ultra-processed foods, increasing walking, incorporating strength training). On average 30 BCTs were mapped to each target behaviour, with 39\% of the BCTs targeting capability, 41\% motivation, and 20\% opportunity. The most frequently used behaviour change categories included ‘social support’, ‘self-belief’, ‘shaping knowledge’, ‘repetition and substitution’, and ‘natural consequences’. To operationalise the identified BCTs, a number of ‘if-then scenarios’ were designed to aid in the development of the prototype.

Conclusion:
The findings of this qualitative study indicate that co-designing DHIs with midlife women through co-production is feasible and acceptable.
Protocol for a multi-center, randomized controlled non-inferiority trial of internet-delivered CBT-I compared to face-to-face CBT-I

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Cognitive behavioral therapy for insomnia (CBT-I) is the first-line treatment for insomnia that is highly effective but not widely available. Internet-delivered CBT-I (iCBT-I) has the unique potential to disseminate the first-line treatment more widely, conveniently and cost-effective and proven effective against non-active controls. However, up to date, only few studies directly compared iCBT-I to face-to-face CBT-I and studies are suffering from methodological shortcomings (e.g. weak comparators or inadequate power). The current trial targets those shortcomings and aims at investigating the non-inferiority of iCBT-I compared to face-to-face CBT-I in a routine care setting.

In a multi-center randomized controlled non-inferiority trial, 422 individuals with insomnia will receive A) iCBT-I or B) face-to-face CBT-I treatment. Psychotherapists involved deliver both face-to-face CBT-I and guidance in the iCBT-I. The primary outcome is insomnia severity 8 weeks after randomization using the Insomnia Severity Index (ISI). The assumed non-inferior margin of 1.5 points on the ISI will be tested within a linear mixed model for repeated measures.

The iCBT-I is expected to be non-inferior compared to face-to-face CBT-I in regard to the primary outcome and other secondary outcomes (e.g. sleep-onset latency, wake after sleep onset and total sleep time according to daily sleep diaries).

At the time of presentation, the first phase of recruitment will have taken place.

The proposed trial contributes valuable evidence to the lively debate among health policy-makers about finding promising routes for the implementation of e-health. Innovations through e-health interventions have the potential to substantially improve the German health care system.
Pilot study with the Asthma app: promoting responsible Short-Acting Beta2-Agonist use in people with asthma

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Background: Asthma is highly prevalent, and medication overuse – specifically, short-acting β2-agonist (SABA) overuse – is common. It causes adverse health effects. A smartphone application, the Asthma app, was developed to help patients gain more insight into their SABA use (e.g. through psychoeducation and monitoring). This pilot study examines the app’s usage and usability.

Methods: Mixed-method study including (1) a quantitative usability questionnaire (System Usability Scale) assessed at three months, (2) objective user data, and (3) qualitative interviews focused on app usage and usability. Qualitative data were analyzed via the Framework Method.

Findings: The baseline questionnaire programmed in the app was filled in by 373 people. Majority were female (83%) with a mean age of 46, and used, on average, 10 SABA per week. Usability of the app was good: 80.71 (SD=14.8; n=53). User data showed that 335 users opened the app (75% were returning visitors), with an average session time of 1 minute, and SABA registration was most often used (57%). Qualitative data (n=4; 50% female) showed that participants found the app acceptable and clear. Three participants stated that gaining insight into their asthma and its triggers was helpful. Two participants no longer used the app because they perceived their asthma as controlled and, therefore, did not use SABA often or only used it regularly.

Discussion: The first results regarding usability are positive. However, drop-out was high and therefore, the results should be interpreted carefully. Future research should determine how the app can be tailored further to its users.
Successes and areas for improvement from an online diabetes prevention program coach training platform

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Background: Training programs and educational courses are often delivered without understanding the learning experience from the end-user perspective. The objective of this study was to qualitatively understand diabetes prevention program coaches’ experiences from taking brief online training to become a coach.

Methods: Semi-structured interviews were conducted with a sample of diabetes prevention program coaches (n=7) approximately three months after completing the training. Interviews were audio-recorded, transcribed verbatim, and analyzed abductively using interpretive description. Data were first deductively analyzed into two categories: successes and areas for improvement; and then inductively analyzed to understand specific areas within successes and areas for improvement.

Findings: Coaches expressed (a) successes with learning motivational interviewing and being able to apply it, the training platform resource centre, ease of using the training platform; and (b) areas of improvement related to wanting the training to include more examples of coach-client scenarios, more in-person training and practice components, and more ongoing support after completing the training.

Discussion: This qualitative study provides practical implications and future directions for online health coach training platforms and will inform modifications for this specific diabetes prevention program coach training. Results demonstrate the success of a brief online training platform for motivational interviewing.
The determinants and persuasive effects of virtual body ownership of an overweight virtual body

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VR could exceed the limits of traditional health promotion approaches that merely inform about unhealthy behavior, by enabling to virtually experience the physical consequences of unhealthy behavior (i.e., being overweight through the experience of an overweight virtual body).

To gain understanding of the potential role of virtual body ownership (VBO: the experience of a virtual body as one’s own) in health promotion, this study has two aims: 1) examining two possible determinants of VBO (i.e., visuotactile stimulation (VTS) and avatar body size (ABS)), which are for the first time examined in a setup including synchronized movements between the user and avatar; and 2) examining the effects of ABS on healthy eating intentions, which could, according to theory, run in both directions, and the moderating role that VTS (as a proxy for VBO) plays in this relationship.

A 2 (ABS: healthy-weight vs. overweight) by 2 (VTS: incongruent vs. congruent) between-subjects design was employed (N=114). Confirming expectations, it was found that those in the overweight ABS condition experienced less VBO than those in the healthy-weight ABS condition (p=.002, \(\eta^2=.09\)), and congruent VTS led to stronger VBO than incongruent VTS (p=.020, \(\eta^2=.04\)). Contrary to expectations, only in the incongruent VTS condition, healthy eating intentions were lower after embodying an overweight avatar, compared to a healthy-weight avatar (p=.031, \(\eta^2=.04\)). This shows that one tends to behave according to stereotypical thoughts about one’s avatar’s appearance, known as the Proteus effect. When designing behavioral VR interventions for healthy eating, ABS and VTS should be carefully considered.
Exposure to eating-related content on social media, body image and eating behaviours: A systematic review

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Background
Research has demonstrated a positive relationship between social media use, negative body image, and disordered eating. More recently, researchers have started investigating the influence of certain eating focused social media content (e.g., eating videos) on viewers’ body image and eating behaviour.

Methods
The current review collated the evidence around the effect of exposure to eating-related social media content on people's body image, food consumption, disordered eating, and eating-related opinions. Following PRISMA guidelines, searches were conducted from five databases (i.e., Medline, PsycINFO, Web of Science, Scopus, and ProQuest), resulting in 19 eligible studies.

Findings
Evidence showed positive correlations between exposure to eating-related material on social media and body image concerns, consumption of, or a willingness to consume the foods seen on social media, as well as increased disordered eating behaviours. Participants expressed positive feelings towards content such as healthy eating videos and negative feelings towards content such as nutrition information. Mukbang videos which records hosts eating a large amount of food received both positive and negative comments, with some reporting that watching these videos increased unhealthy eating behaviours and others indicating that they helped prevent problematic eating.

Discussion
There is a need for a consistent measure of exposure to different eating-related content, which could provide a more comprehensive overview of its influence. More generally, it is important that future research continues to investigate how eating-related content influences viewers to inform the development of interventions to reduce the negative health and psychological consequences of viewing some potentially harmful content.
Digital media use and cognitive functioning in European children and adolescents – the I.Family study

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Background: This study investigates the cross-sectional association between digital media (DM) exposure and cognitive functioning in European children.

Methods: Children aged 8-18 years, who participated in the multi-country I.Family study (2013-2014), self-reported their DM use (hours/day) for internet, smartphone, computer/game console (PC), and television viewing (TV). Media multitasking (MMT- simultaneous use of PC with another DM) was reported. Underlying patterns of DM use were identified via latent class analyses. Measures of cognitive functioning: cognitive inflexibility (continued erroneous responses following a rule change) and decision-making ability (making advantageous vs. disadvantageous choices) were assessed via computerized tests; impulsivity (emotion-driven impulsive response) was self-reported. Generalized linear mixed regressions adjusted for confounders were conducted to estimate regression coefficients ($\beta$) and 99.9% confidence intervals (CI–adjusting for multiple testing).

Results: A total of 4046 children provided data for decision-making ability (mean age/SD=11.6/1.9), 3441 for cognitive inflexibility (11.7/2.0), and 3261 for impulsivity (13.6/1.1). Increasing duration of smartphone exposure and one additional MMT activity were positively associated with cognitive inflexibility ($\beta$smartphone=0.32, 99.9%CI=[0.02,0.66]; $\beta$MMT=0.39, 99.9%CI=[0.01,0.77]) and impulsivity ($\beta$smartphone=0.74, 99.9%CI=[0.42,1.07]; $\beta$MMT=0.73, 99.9%CI=[0.35,1.12]). Negative associations were observed with decision-making ability ($\beta$smartphone=−0.47, 99.9%CI=[−1.50,0.55]; $\beta$MMT=−0.70, 99.9%CI=[−1.82,0.41]). We identified four DM use patterns. Children with high smartphone/internet use, medium TV/low PC use showed higher scores for cognitive inflexibility and impulsivity, but lower score for decision-making ability, compared to children with low use of all media.

Conclusion: Prolonged DM exposure is associated with poor cognitive functioning in children. These findings provide evidence of a pathway via which DM environment may impact mental health during childhood.
Smartphones have become an indispensable part of our everyday life substantially shaping peoples’ interactions. Although smartphones have beneficial properties for intimate relationships (e.g. allowing partners to stay in touch with each other regardless of physical distance), using the smartphone in the presence of one’s partner (i.e., phubbing) is associated with negative consequences (e.g., depressive symptoms and feelings of social exclusion).

In this preregistered 10-day daily diary study, we examined whether the person’s own phubbing behavior moderates the association between the perceived partner’s phubbing behavior and the experience of threat to fundamental needs. Each evening during the study period, both partners’ of 90 couples (N=180 individuals), rated the extent to which they themselves and their partner had used their phone as well as the level of threat to fundamental needs (4 items, adapted from Williams, 2009) while experiencing phubbing by their partner.

Results of a dyadic multilevel analysis revealed that partners perceiving more phubbing also experienced greater threats to their fundamental needs than partners who perceived less phubbing. As predicted, recipients’ own phubbing behavior significantly moderated this relationship: If a person engaged a lot in phubbing behavior himself/herself, the partner’s phubbing behavior posted less of a thread to his/her fundamental needs. These findings indicate that a person’s phubbing behavior influences a person’s own norm or attitude towards their partner’s phubbing behavior.
Adolescents' online opportunities and risks: a mixed-methods observational study on new communication methods

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Background: The widespread adoption of digital technologies has affected the way through which all segments of the population communicate, especially pre-adolescents and adolescents. The correct use of online communication tools among (pre-)adolescents is essential both to increase the personal awareness of their use and to reduce, in the long run, the risk of negative outcomes.

Methods: The present research project aims to evaluate how much digital technologies are present in the life of (pre-)adolescents, investigating (i) their online social media usage patterns, (ii) the association between Internet use and various behaviors (such as lifestyles), and (iii) some potential psychological predictors of the dysfunctional use of new technologies. This mixed method study will investigate the above-mentioned areas in a sample of students from primary and secondary schools in northern Italy. Specifically, 12 focus groups (each composed of 8-10 participants) will be conducted, investigating the topics mentioned above. We will also administer a survey to a representative sample of 2000 students, which will investigate socio-demographics, the role of technology in daily life (through ad hoc questions), and potential psychological predictors - such as moral disengagement and personality - related to the use of new technologies (through valid and reliable self-report questionnaires).

Findings and Discussion: Findings from this study may help policy makers, educators, teachers, and mental health professionals to better understand the adolescents’ online and offline communication patterns and, potentially, to design interventions for those at a greater risk of negative long-term outcomes.
Inequalities, cognitive functioning and mental health

9:30 - 9:45

Role of Acculturation and Acculturative Stress for Depression Risk Among Immigrants From Türkiye in Germany

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Background: Depression is a relevant mental health issue among people that originate from Türkiye living in Germany, and its etiology is so far not well understood. The process of cultural adaptation (i.e., acculturation) and subsequent stress experiences are believed to play a key role in ethnic mental health disparities. We examined associations between acculturative stress and depressive symptoms.

Methods: A convenience sample of 119 adult immigrants from Türkiye living in Germany participated in a cross-sectional online study in winter 2021/22 (age: M = 43.2, SD = 11.31; length of stay in Germany: M = 20.0, SD = 17.24). Participants completed among others the Center for Epidemiological Studies-Depression (CESD), the Multidimensional Acculturative Stress Inventory (MASI) for people of Turkish origin, and acculturation measures.

Results: In linear regression models, higher MASI scores were associated with higher CESD sum scores after adjustment for potential confounders (German competency pressures: β = 0.26, SE = 0.89, p <.01; Pressure to acculturate: β = 0.19, SE = 0.96, p <.05; Pressure against acculturation: β = 0.125, SE = 1.42, p <.01). Associations between MASI scores and CESD scores were partly moderated by acculturation measures.

Discussion: The interplay between acculturation and acculturative stress may be relevant for risk of depression. Longitudinal studies are needed to further elaborate these relationships, as are interventions to improve mental health situation of immigrants from Türkiye.
Discrimination, mental health and social inequalities in the UK during 2015-2020: a repeated cross-sectional study

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Background: Perceived discrimination is negatively associated with mental health. Social and political events in the UK (e.g., Brexit) may have increased prevalence of perceived discrimination in the population and in doing so worsened mental health, but recent trends and variations by sociodemographic subgroups remains unclear.

Methods: Using data from a nationally representative UK cohort study (Understanding Society), we explored changes between Wave 7 (2015/2016; n=10,264) and Wave 11 (2019/2020; n=7132). A repeat cross-sectional design was used to examine changes in perceived personal discrimination and probable mental health problems (GHQ-12) between waves. Variation of changes by population subgroups (e.g., sex, age, income) were tested using interactions. Mediation analysis was used to examine whether survey wave differences in perceived discrimination explained the association between survey wave and mental health problems.

Findings: The prevalence of perceived discrimination increased over time and was highest in 2019/2020 (20.1%) compared to 2015/2016 (14.6%). The prevalence of probable mental health problems also increased (22.1% vs. 17.9%). The probability of perceiving personal discrimination and experiencing probable mental health problems significantly increased between waves after controlling for sociodemographic differences between waves (p<.01). Interaction analyses revealed social inequalities in trends by population subgroups. Perceived personal discrimination experiences partially mediated (15.2%) the increase in probable mental health problems across waves.

Discussion: The prevalence of perceived discrimination and probable mental health problems increased in the UK between 2015-2020, with some social inequalities within trends. Worsening of population level mental health over time may have been caused by an increase in perceived discrimination.
Intersectional inequalities in the impact of becoming a grandparent on cognitive function: a longitudinal MAIHDA

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Background: as societies grow older, the role of grandparenthood gains importance for both older adults and their families. Similarly, more individuals are at risk of late-life cognitive decline. The transition to grandparenthood has mixed effects on people’s mental health, with clear differences related to separate social determinants. However, evidence on how social determinants intersect to modulate the effect of such transition and shape cognitive disparities is scarce. Our study examines the impact of transition to grandparenthood on cognitive function and the differences across intersectional groups.

Methods: Drawing from waves 1 to 8 of the Survey of Health, Ageing and Retirement in Europe (SHARE), we use a sample of 20,022 individuals aged 50-85 years at risk of becoming grandparents. We apply Multilevel Analysis of Individual Heterogeneity and Discriminatory Accuracy (MAIHDA) to classify people in 48 intersectional social strata, created by the intersections of sex, migration background, education and occupation class.

Findings: Transition to grandparenthood has an overall positive effect on cognitive function. However, we identify clear cognitive inequalities across intersectional groups, with 17% of this variance attributable to between-stratum differences. For instance, more underprivileged groups have worse cognition. We find modest intersectional effects, with 97.6% of cognitive inequalities explained by additive effects. Particularly, grandmothers experience larger cognitive gains after the transition.

Discussion: This study emphasises the value of intersectionality for understanding heterogeneities in the effect of transition to grandparenthood on cognition. Adopting an intersectional lens is useful to map, decompose inequalities and derive tailored interventions to promote equal healthy ageing.
Emic Views of mental illness among the Borena indigenous community in Southern Ethiopia

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The present study attempted to understand how the Borena indigenous community attributed the causes of mental illness and how mental illnesses are treated. The study employed qualitative approach with ethnographic study design. Data were collected from 30 (13 female and 17 male) purposively selected community dwellers through KII and FGD guides. The data collected from 14 interview participants and two FGD participants were analysed using thematic analysis. Borena community provided spiritual, biological and psychosocial causal explanations for mental illness. Spiritual causal agents include curse, Sagaara (scarified boy), poor participation in Ichima Buusu ritual, exposure to ‘evil spirit attack’ and rejecting orders from Borana holy man. Exposure to wind, heredity, malaria infection, and marriage within relatives were biological reasons for mental illness. Calamity, Miiraa consumption and cannabis use were psychosocial causal factors mentioned by the respondents. The Borena indigenous community believed that most mental illnesses are preventable through performing Ichima Buusu ritual and scarifying a boy (Sagaara). And mental illness can be treated via consultations with the Raaga (Borana wise man), using herbal medicine and spiritual healing. Spiritual causal explanations dominate respondents’ narrations, and culture-specific prevention and treatment modalities were stated by Borena indigenous community. There is an urgent need to investigate on how local practices and realities related to mental illness treatment can be aligned with modern treatment modalities for the benefit of indigenous communities.
The Physical and Psychological Consequences of Precarious Employment

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The precarization process is becoming almost a new norm by intensifying day by day both in Turkey and in the world. In this study, the negative effects of precarious employment on psychological and physical health outcomes were examined. In addition, it was examined whether the perceived employability would reduce the impact of precarious employment on health outcomes. Finally, it has been examined whether precarious employment increases the rate of presenteeism, which is one of the factors that negatively affect public health. The sample of the research consists of 457 employees over the age of 18 working with or without insurance. 64.3% of the participants were female and 35.7% were male. Pearson Correlation Analysis, moderator variable analysis, mediator variable analysis and regression analysis were used in the research.

According to the analysis, precarious employment has a direct and significant effect on psychological health outcomes (β=.49, t=12.07, p<.001) and physical health outcomes (β=-.45, t=-10.85, p<.001). It was observed that the perceived employability variable did not take place as a moderator variable in the relationship between precarious employment and psychological health outcomes (p>0.05). Precarious employment has a significant effect on presenteeism (β=.25, t=5.59, p<.001).

The results of this research show that the hypothesis that precarious employment has negative effects on the psychological and physical health of workers is also supported in the Turkish sample. Moreover, this negative effect is not being affected positively or negatively by perceived employability. Precarious employment also negatively affects public health in the long term by increasing presenteeism rates.
Moderating effect of grip strength in the association between cancer and depression symptomatology

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Background: Depression, as one of the leading causes of disease burden, frequently co-occurs with other diseases. Cancer seems to be strongly associated with depression more than any other disease. As an outcome of physical fitness, grip strength seems to have a protective effect on depression. This study aimed to analyse how grip strength moderates the relationship between cancer and depressive symptoms among older European adults.

Methods: Cross-sectional data from wave 8 (2019/2020), including 41701 participants (18003 men) of the population-based Survey of Health, Aging, and Retirement in Europe, were analysed. Grip strength, used as the moderator, was measured twice on each hand using a dynamometer. The EURO-D 12-item scale was used to measure depression symptoms.

Findings: Grip strength had a significant effect as a moderator in the association between cancer and depression symptoms (male: $B = -0.04$, 95% CI = -0.04, -0.03; female: $B = -0.06$, 95% CI = -0.07, -0.06). Also, the grip strength moderation values are below 55.7kg for males and 39kg for females.

Discussion: Muscular fitness, as measured by grip strength, moderated the relationship between cancer and depressive symptomatology. This supports the theory that recovery programs should include physical activity, namely muscle-strengthening exercises, to prevent depression.
Mentalhealth4all: Development of an online platform to improve access to mental healthcare for migrants/refugees

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Migrants and refugees are more at risk of experiencing specific mental health disorders as compared to EU citizens (Priebe et al., 2016), but their access to mental healthcare is often severely hindered due to language- and culture-related barriers (Satinsky et al., 2019). Therefore, the aim of the Mhealth4all consortium is to promote access to mental healthcare for migrants and refugees by developing and implementing a multilingual, culturally-sensitive online platform. The development and implementation is based on the five phases (listen, plan, do study, act) of the Spiral Technology Action Research (STAR) Model (Skinner et al., 2006). In the first phase, a mixed-method approach was used to explore already existing resources as well as the most important barriers and needs of migrants/refugees. Resources were collected and assessed on their quality, which resulted in a database of resources. Additionally, a review, survey, and interview study have been carried out to uncover the most relevant barriers and needs for migrants/refugees and providers. The results will be used as input for developing educational patient and healthcare provider videos, during the second phase. In the third phase, the platform will be created containing the resource repository and videos. The online platform will be evaluated during the fourth phase with a pretest-posttest design among healthcare providers (N=52) and patients (N=260) in terms of satisfaction, platform usage, and access to mental healthcare. If the evaluation is positive, the platform will be disseminated into the wider community to stimulate uptake for migrant/refugee patient groups in Europe.
Photovoice as Inclusion: Transforming University Education for Future Health Advocates

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In March, 2022 the journal Health Promotion Practice published a special issue dedicated to a participatory action research methodology—photovoice. Photovoice was pioneered with poor women in the Yunan Province in China. The researchers recognized the need to include the voices of those who were affected by reproductive health the most—the women themselves. Photovoice has been one avenue by which scholars dedicated to inclusive health methodologies have included the voices of those with the least power to affect change.

In their introduction to the special edition, the guest editors state “this photovoice collection stimulates us to think in new ways about health promotion and where it must go.” The collection includes articles that address current and relevant issues (e.g., COVID), refining the method, and ways that photovoice is developing as a method. One omission from this collection about “where we must go” is educating future health advocates.

Few studies have examined the role that photovoice may play in educating students and sensitizing them to issues of inclusion. SDG 4 (quality education) encourages action-oriented learning environments. I argue that photovoice can be used in a classroom setting for engaged learning communities, particularly as they relate to gender equality (SDG 5). I will share three studies using the photovoice methodology in my classes, all of which have a focus on issues of diversity, equity, inclusion, and justice.

Using photovoice in university courses may be a valuable way to transform classrooms as we educate future health advocates toward inclusion, equity, and justice.
Addressing positive health literacy: a pilot intervention study in the Netherlands

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Background
Health literacy is considered one of the most important determinants of health and socioeconomic health inequalities. Positive health identifies six dimensions of health: bodily functions, mental well-being, meaning, quality of life, participation and daily functioning. To take direction with regard to these dimensions one requires positive health literacy skills. With the aim to address these skills in people with limited health literacy, an intervention was developed and implemented in a pilot setting in 5 municipalities in the Netherlands.

Methods
Focus groups and co-creation sessions were held to explore the needs of people with limited health literacy, stakeholders and coaches. The intervention was developed based on the ‘Persuasive by design’ model, supported by language experts. The program consisted of an eight-week course with group sessions guided by a coach. A process-evaluation based on the model by Saunders, including interviews, and outcome measurements regarding self-efficacy (four questions on a likert scale 1-5) were carried out.

Findings
Recruitment resulted in 27 participants. Of these, 16 participants completed the program and indicated that the program had created awareness and started a positive movement in their lives. They reported the meetings to be fun and were grateful for the experience. Coaches and stakeholders reported the program to be useful and valuable. Mean end scores on self-efficacy were 4.2 (±0.4).

Discussion
The pilot intervention was successfully implemented. Main themes of the implementation were positive experiences, goalsetting and coping. Key-elements for future studies would be the development of evidence-based recruitment strategies and to study (cost)-effectiveness.
Community-partnership incentive-based interventions aimed at achieving or maintaining healthy weight: A Systematic Review

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Background: Interventions targeting weight-loss in disadvantaged populations often fail, possibly due to complex social context. A new approach to meaningful engagement is required, but there are no systematic reviews (SRs) in this area. Our review identifies and summarises existing evidence for incentive-based, community-partnership interventions which targeting obesity/weight loss. We also identify factors which support/hinder implementation.

Methods: We searched 5 major databases, clinical trials registries, grey literature and performed citation tracking. Two reviewers independently applied the pre-defined selection criteria; studies involving families/adults and incentive-based interventions developed/delivered in the community. STAR-LITE and PROGRESS Plus were used to profile intervention characteristics and equity factors. Data were tabulated and findings summarised narratively.

Findings: From 28304 records; 10 studies (6076 participants) met inclusion criteria. Most studies were conducted in the US; 4 studies employed a RCT design. Community participation levels varied widely. Interventions targeted diverse groups of individuals including church members and indigenous communities. All studies showed small improvements in BMI and/or weight (kg) or no effect. Prompt self-monitoring of behaviour was the most frequently reported BCT (n=4); reporting of BCTs was generally poor. Incentives were all categorised as positive rewards and mostly rewarded at an individual level. Factors impeding implementation included resource constraints and lack of planning/provision of long-term support. Low cost, adaptable innovations with ‘useful’ incentives and championed by community leaders were more likely to be implemented.

Discussion: Meaningful community-partnership incentive-based interventions may increase the relevance and acceptance of the intervention; and improving equity and self-efficacy in disadvantaged obese/overweight individuals.
A practical step-by-step approach for patient and public involvement in eHealth intervention research

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Background: The importance of patient and public involvement (PPI) in research has become more evident. PPI is a collaborative approach in which research is carried out with or by end-users. It can increase the relevance and quality of research, and can be beneficial for end-users. Although many resources for implementing PPI are available, a functional overview of how to apply PPI when developing eHealth is missing. This study aims to guide PPI by describing the steps that guided PPI implementation in two eHealth research projects.

Methods: Two projects developing and evaluating eHealth will serve as examples: one focused on a smart-inhaler program for asthma patients and another on a virtual coach for smoking cessation and physical activity enhancement. Six questions guided PPI implementation in these projects: 1) In which phase of the eHealth evaluation cycle is your project?; 2) Why do you want to use PPI?; 3) Who is your target population?; 4) How are you going to achieve your aims?; 5) What are conditions and considerations?; 6) How will you evaluate the process and impact of PPI?

Findings: For each step, practical examples, challenges and lessons learned are described (e.g., incorporate PPI in your project planning, use The Involvement Matrix to decide on end-users’ role of involvement). Resources for implementation, evaluation and reporting PPI are shared.

Discussion: There is no golden standard for implementing PPI. We aim to provide future projects with a systematic approach for incorporating existing guidelines. Thereby, we can work towards valuable PPI in research.
Bridging the gap: A guide to developing inclusive eHealth interventions

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Background: eHealth interventions have the potential to enhance health outcomes for people with a low socioeconomic position (SEP), but lack of knowledge on how to effectively meet the specific needs of this population can limit their effectiveness and widen the digital divide. Our study aimed to address this issue by developing an online guide for professionals (e.g., researchers and health professionals) to support the development and adaptation of eHealth interventions for people with low SEP.

Methods: During the initial phase, we conducted two studies: (1) a Delphi study with professionals, identifying barriers to developing, evaluating, and implementing eHealth interventions (top-down), and (2) a community-based study with people from low SEP, exploring their perspectives on health, healthcare, and eHealth (bottom-up). In the second phase, an iterative participatory process was used to develop the online guide, involving 11 professionals in think-aloud sessions and interviews to assess content and design acceptance. The presentation focuses on outcomes of this second phase.

Findings: Professionals found the online guide to be user-friendly and helpful, particularly the recommendations on barriers, facilitators, and user scenarios. However, they requested more practical examples and engaging content.

Discussion: This guide is an important contribution to addressing the knowledge gap in eHealth interventions for people with a low SEP and provides valuable information for professionals, whether they are new to the field or have experience. Future research should focus on enhancing the guide's usability and flexibility for its diverse audience, including healthcare practitioners, and other eHealth professionals working with this population.
Innovative research approaches to developing self-management interventions for diabetes

9:30 - 9:45

Context and mechanisms of an evidence-based text message intervention for people with type 2 diabetes

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Background: Taking medication as prescribed is a cornerstone of type 2 diabetes self-management. The Support through Mobile Messaging and digital health Technology for Diabetes (SuMMiT-D) programme of research has developed text messages delivering specific behaviour change techniques (BCTs) to support medication adherence. As part of a process analysis, we aimed to identify factors about the environment the messages are used in (context) and the ways the messages might have an effect (mechanisms) to help us to understand and refine this intervention.

Methods: Participants were adults (>18 years old) with type 2 diabetes who had participated in the SuMMiT-D programme of research. Interview data from the pilot (n=38), feasibility (n=26) and the full trial (n=14) stages of the research were analysed. Content analysis was used to identify relevant contextual factors and elicit potential mechanisms of action.

Findings: Four categories of contextual factors were identified: i) healthcare, ii) patient, iii) medication and diabetes and iv) technology. The potential mechanisms of action formed two categories i) those that had been expected as a result of the included BCTs, e.g. improved motivation and ii) those that were not directly linked to the BCTs, e.g. feeling supported by the messages.

Discussion: Identifying wider factors that can influence how an intervention operates is important to gain a fuller understanding of an intervention and to inform refinements in ongoing data collection. These findings will inform plans for future development and successful implementation, if an ongoing RCT with >1000 people with diabetes demonstrates benefit.
Development of an e-program to improve quality-of-life of diabetics based on ACT therapy

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Background: "Slow Diabetes" is an e-program for diabetics' patients based on virtual coaching and targeting mindfulness process. Mindfulness is also a core process of Acceptance-and-Commitment-Therapy (ACT). ACT aims to increase the patient's psychological flexibility by improving the acceptance of their internal experience and their committed actions. The main objective of this project is to compare the evolution of quality-of-life of diabetic patients participating in an online intervention based on ACT with other diabetic patients participating in a usual online Slow Diabetes program, and patients who did not participate in either program.

Methods: This project is a nationwide, randomized, online intervention study with three groups, combined with a case study with the single case protocol (15 participants in the ACT intervention group) and semi-structured interviews (another 15 participants in the intervention group).

Expected results: The expected results are a better improvement in quality-of-life in the ACT intervention group compared to the other two groups of the research project. Processes of the intervention efficacy will be explored among autonomous motivation, diabetes acceptance, adherence, basic psychological needs, and psychological flexibility.

Current stage of work: The intervention will take place in April 2023.

Discussion: This project aims to help diabetic patients to live with their disease by learning to enhance their flexibility with ACT processes with the help of a toolbox. It could represent an alternative to the traditional management of diabetic patients or health professionals, and a useful tool for health authorities leading to reduce complications and to change health behaviors for diabetics.
Exploring active ingredients of type 2 diabetes self-management programmes: A content analysis of two programmes

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Background
Despite evidence that self-management education (DSME) programmes for type 2 diabetes can be effective, the key components and active ingredients or behaviour change techniques (BCTs) of such programmes remain unclear. To develop more effective programmes, it is critical to understand how programmes work and why. This study aimed to describe the content of two existing programmes with proven effectiveness, the Community Orientated Diabetes Education (CODE) and the Diabetes Education and Self-Management for Ongoing and Newly Diagnosed people (DESMOND).

Methods
A content analysis of programme materials was conducted using the BCT Taxonomy v1, the Mode of Delivery Ontology v1, and the Intervention Source Ontology v1. Intervention functions were identified using Behaviour Change Wheel guidance, and mechanisms of action (MoA) were linked to the identified BCTs using the 26 MoA outlined in the Theory & Techniques tool. Relevant stakeholders reviewed preliminary findings and provided feedback.

Findings
A total of 28 unique BCTs were identified across the programmes, 19 of which were coded in both programmes. The most frequent BCTs were ‘information about health consequences’, ‘instruction on how to perform a behaviour’, and ‘goal setting (behaviour)’. Techniques linked with 11 unique MoAs mainly related to reflective motivation and psychological capability, and served seven unique intervention functions, especially ‘enablement’, ‘education’ and ‘persuasion’.

Discussion
Although programmes are effective, a wider set of BCTs could potentially be tested in the programmes to address other known barriers to self-manage type 2 diabetes. These findings can be used to inform refinement and development of future programmes.
Development of an innovative multi-factorial management intervention to address multi-morbidity in early-onset type 2 diabetes.

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Prevalence of type 2 diabetes in younger individuals with early-onset type 2 diabetes (defined as 16-40 years) is increasing. This priority population displays an extreme risk phenotype, with higher rates of multi-morbidity and complex long-term outcomes. However, they remain under-represented in clinical research and existing services are not tailored to their specific needs. We aimed to develop a multi-factorial management intervention to address multi-morbidity in early-onset type 2 diabetes. Underpinned by key psychological theories and concepts, including Burden of Treatment theory and Minimally Disruptive Medicine, we developed an intervention tailored to the needs of young people living with type 2 diabetes, to encourage shared-decision making and a holistic approach to diabetes care. Components of the intervention were informed by stakeholder involvement and a qualitative study with young people and healthcare professionals. The intervention consists of an online system for delivery of care, a patient-facing application, alongside an adapted version of a digital-based self-management programme and a bespoke healthcare professional training package. The intervention will be tested as part of a randomised-control trial, with the potential to re-structure the process of care that is less burdensome for people with early-onset type 2 diabetes. This project is funded by NIHR PGfAR and supported by the NIHR Leicester BRC.
Job factors and employee health

9:30 - 11:00  |  B1405

Associations between workplace design and office workers’ sitting patterns: A field study.

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BACKGROUND
Office workers often sit for prolonged periods of time, increasing physical and mental health issues. To inform the design of interventions, we explored associations between workplace design characteristics and office workers’ sitting patterns.

METHOD
48 office workers wore an activPAL monitor for a week to assess sedentary behavior. We analyzed the timing of stand-to-sit and sit-to-stand transitions with multilevel time-to-event analysis. Predictors were: (a) room function (office vs meeting room), (b) 16 office design characteristics, systematically observed during worksite visits, and (c) 15 workplace spatial layout characteristics, calculated from floorplans. We used cluster analysis to identify typical combinations of office design characteristics. To connect the data, participants filled in daily questionnaires listing all rooms they work in.

FINDINGS
Participants had a stronger tendency for prolonged sitting in offices than in meeting rooms (HR = 1.59). Participants had a stronger tendency for prolonged standing in offices shared with one colleague than in private offices (HR = 0.75), and in offices with additional chairs (HR = 0.80). Participants had a stronger tendency for prolonged sitting when waste paper bins were out of reach (HR = 1.43). Spatial layout was not related to sitting patterns.

DISCUSSION
Workplace design was mainly related to office workers’ sitting patterns through the function of the room, and the opportunities for social interaction that the room affords. Future research and sitting behavior intervention should focus on (private) offices rather than meetings rooms, as these were associated with a stronger tendency to sit down and remain seated.
Nature contact in the workplace, stress and workability: Nature connectedness as a moderating variable

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Background: Employees’ workability is essential in constructing the efficiency and competitiveness of businesses and industries. However, there is growing recognition of the need for a healthy balance between workers productivity and mental health. In an effort to raise workability levels, researchers found that environmental factors, such as exposure to nature have a positive impact, due to their stress-relieving effects. However, relevant research on the moderating effects of individual characteristics is lacking.

Aims: To examine: 1. whether the association between occupational nature exposure and workability is mediated by stress; 2. whether subjective nature connectedness moderates the association between nature exposure and stress.

Methods: 120 employed men and women completed self-reporting measures of occupational nature exposure, stress, subjective nature connectedness and workability.

Findings: Negative correlations were found between nature exposure and occupational stress (r=-0.189, p<0.05); and between occupational stress and workability (r=-0.342, p<0.01). Nature exposure and stress explained 14.1% of the variance in workability. In hierarchical regression analysis and Bootstrapping, occupational stress fully mediated the relationship between nature exposure and workability. Nature connectedness did not moderate the nature exposure and occupational stress association.

Discussion: The results highlight the positive effects of nature exposure at work on workability; and confirmed that stress mediates the relationship between objective nature exposure and workability. As occupational stress levels and expectations for efficiency are constantly increasing, the practical implications of the results are that this model could motivate development of nature exposure-based interventions for relieving occupational stress and increasing workability and efficiency while conserving employees’ psychological well-being.
Profiles of employees’ well-being over a one-year period: latent profile and latent transition analysis

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³KU Leuven, Belgium
⁴Utrecht University, Netherlands

Background. This study examines profiles of employees’ well-being as a combination of job burnout and work engagement, as well as the within-person stability of these profiles over a one-year period. In line with the Job Demands-Resources theory, the implications of the profiles for employees’ job satisfaction and health are also investigated, and job demands are analysed as covariates of profile membership.

Methodology. A sample of 1201 professionals took part in a longitudinal study consisting of two measurement points (before the pandemic and one year later during the first lockdown). The participants completed the Burnout Assessment Tool, UWES-3, Bern Illegitimate Tasks Scale, and the Energy Compass.

Results. Latent profile analysis revealed five well-being profiles representing highly engaged (14.4% of the sample), moderately engaged (40.2%), mildly burned-out (30.5%), highly burned-out (12.4%) and disengaged employees (2.5%). The last two profiles had the highest level of burnout, but with some differences regarding its components. The profiles also differed significantly on the level of job demands, job satisfaction and health.

In latent transition analysis, significant changes in belonging to a given profile were observed. The stability above 50% was noted for the highly engaged, moderately engaged, and highly burned-out profiles.

Conclusions. As Conservation of Resources theory suggests highly burned-out employees lose their resources if continuing to invest them, while disengaged employees seem likely to withdraw their resources. The instability of profiles may reflect dynamics triggered mainly by unusual external circumstances. In conclusion, a person-centred approach may provide important insights into individual pathways of employees’ well-being.
The Role of Organizational Climate in the Psychological Health of Canadian Armed Forces Members

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Background: Feeling psychologically safe in the workplace is one of the most critical factors in employees’ well-being, as individuals feel respected, empowered, and safe to raise concerns without fear of reprisal. Psychologically safe teams, respectful and fair supervisor, and supportive organizational climate contribute to an overall perception of the organizational environment as psychologically safe. Feeling psychologically safe is even more important in a military organization due to additional demands related to the military life. However, there has been limited research examining the relationships between psychological safety at the team, supervisor, and organizational levels and psychological health of military members in Canada.

Methods: Hierarchical regression analyses were performed separately for men and women to examine the relationships between team psychological safety, respectful leadership (supervisor’s interpersonal justice and transformational leadership), and an overall organizational climate (group climate, organizational inclusion, and organizational support) on the psychological health of a representative sample of Regular Force Canadian Armed Force (CAF) members (N=4,239).

Findings: Psychologically safe environment explained 26% of the CAF members’ psychological health variance. Team psychological safety remained a significant predictor for CAF men and women, even when other variables were taken into account. However, transformational leadership predicted psychological health for CAF women only. Group climate and organizational support predicted psychological health of CAF men and women over and above other variables.

Discussion: Gaining a greater understanding of the importance of psychologically safe environment helps to implement practices to ameliorate the organizational climate and, in turn, to improve the psychological health of military members.
Compendium of dyadic intervention techniques for health behavior change: State of research and conceptual implications

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Background: Close social relationships have a protective role for health. Dyadic interventions involving the romantic partner to achieve positive behavior change are promising. However, the active ingredients of such dyadic behavior change interventions remain largely uncovered. We aimed to systematically describe the dyadic intervention techniques (DITs) used in health behavior change interventions with romantic couples (i.e., involving an interaction between partners), and to contextualize them in theory.

Methods: A systematic review was conducted of dyadic interventions with romantic partners to change the health behavior of at least one partner using a controlled design. 165 studies with 122 distinct interventions were included. DITs were extracted and coded by two independent raters.

Results: We identified 76 intervention techniques linked to 31 theoretical determinants, nested in eleven domains of the theoretical domains framework. Most DITs (66%) were performed jointly by the couple, and most often also targeted the couple. Reporting on the theories used to inform the intervention was overall poor, and explicit dyadic theories were rare.

Discussion: DITs are highly diverse and target motivational, behavioral and social determinants. The compendium of dyadic intervention techniques allows for more precise and systematic reporting of dyadic intervention content and the targeted determinants. However, a more rigorous conceptualization of the specific dyadic mechanisms that are assumed to be elicited is urgently needed.
Family-Authored ICU Diaries to reduce Fear in Patients Experiencing a Cardiac Arrest (FAID Fear)

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Background: Dyadic Disruption Theory (DDT) addresses the potentially counterintuitive finding that close others sometimes contribute to patients’ distress during the early days following an acute medical event due to interdependent processes of social support, co-rumination, and shared reality. These dynamics may be particularly potent in dyads where a patient has experienced cardiac arrest (CA), because patients often have little or no memory of the CA or the associated stay in the ICU, and family members are highly distressed. The Family-Authored ICU Diaries to reduce Fear in Patients Experiencing a CA (FAID Fear) pilot RCT targets cardiac fear in family members as a proximal mechanism contributing to CA patients’ well-being.

Methods: 16 family members of patients experiencing CA were randomized 2:1 to receive the FAID Fear intervention or standard of care (MAge = 50.73, SDAge = 13.41; 80% cis-gender female; 60% White). Intervention participants were asked to write in the diary twice per week up until the end of hospital care. Assessments occurred at baseline enrollment, end of hospital care, and 30 days later.

Findings: Recruitment (64.0% [42.5%, 82.0%]), retention (87.5%, [61.7%, 98.5%]), and intervention adherence (70% [CI 34.8%, 93.3%]) were excellent. Most agreed that the ICU diary intervention was appropriate (70.0% [34.8%, 93.3%]), feasible (90.0%, [55.5%, 99.8%]), and acceptable (80.0% [44.4%, 97.5%]). Fear was nonsignificantly lower in intervention (v. control) participants.

Discussion: FAID Fear represents a first step in building theory-based dyadic interventions that can be implemented to support family members of patients experiencing CA in the ICU.
Utilizing Attachment Theory to Enhance Relationship Quality and Mental Health Among Cardiac Couples

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²Université du Québec en Outaouais, Canada

Background: Couple distress is associated with cardiovascular (CV) risk factors, whereas support is associated with heart-healthy behaviors and better CV outcomes. Interventions for patients with CV disease and their partners, focused on relationship quality (RQ), are limited.

Objective: To assess if participants in the Healing Hearts Together (HHT) intervention, an attachment-based relationship enhancement program for couples in which one partner has CV disease, report changes on their attachment dimensions, RQ, and mental health.

Methods: Patients recruited from a tertiary cardiac care centre and their partners attended the 8-session online HHT group. Participants completed validated, self-report questionnaires pre- and post-intervention, including the Experience in Close Relationships Scale, Dyadic Adjustment Scale, Beck Depression Inventory, and Generalized Anxiety Disorder-7. Paired-sample t-tests were used to assess changes over time. Pearson correlations examined relationships between attachment dimensions and the other outcomes.

Results: Overall, participants (N=104, 52 couples; 71.2% male; M age=61.7 years; 94.2% White) reported low to moderate psychological distress and had high RQ at baseline. Statistically significant changes from pre- to post-intervention were observed for RQ (DAS:+3.7 points; p<.001), depression (-2.48; p<.001), and anxiety (-1.1; p<.001). Significant changes in attachment dimension scores were not observed over time (ps >.05). Correlations between attachment dimensions and mental health (rs = .322-.459; ps≤.001) were significant. Attachment avoidance and RQ measured at baseline were correlated (r=-.273, p=.015).

Conclusions: The HHT intervention was found to be beneficial for participants’ RQ and mental health. The role of attachment and the link between this interpersonal variable and RQ requires further examination.
How minority stress acts as a potential additive stressor for same-gender couples

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²Stony Brook University, Switzerland

Background: Minority stress is known to act as a potential additive and chronic stressor (e.g. discrimination, prejudice, stigma) for individuals who belong to a minority group. The concept of minority stress helps to understand the association between high levels of stress and poorer individual well-being which is well documented for sexual minority individuals. For individuals being in a romantic relationship, minority stress may also have an impact on relational well-being.

Method: To discuss this potential impact, we present findings from a study with 68 same-gender couples examining the link between internalized heterosexism (a proximal minority stressor) and support processes between romantic partners. The study included different methods including baseline measures of partner support and relationships quality as well as daily self-report measures of support over 14 days to examine the link between internalized heterosexism and perceptions of support processes. We also included observed support interactions videotaped at couples' home. Dyadic data were analyzed with Actor-Partner-Interdependence-Models.

Findings: Relational well-being at baseline was not related to actor and partner’s report of internalized heterosexism. If individuals were stressed, however, those who reported higher levels of internalized heterosexism appraised their partner’s daily support as more negative relative to individuals with lower levels of internalized heterosexism. We also found a trend for a negative association between internalized heterosexism and the quality of support providing behavior coded by independent observers.

Discussion: How minority stressors such as internalized heterosexism should be considered when planning and delivering interventions to sexual minority couples will be discussed.
Should we focus on the dyad or the two individuals? Ways of conceptualizing dyadic data

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Background: When we think about the two people in a dyad there are two principal ways of viewing them: either as a dyadic unit containing two people or two individuals whose experiences or responses are related. Both viewpoints are legitimate and possible, but the different emphasis on a joint vs. individualistic view of the two partners in dyads has implications for theory, study methodology, data analysis, and interpretation of results. We illustrate the two viewpoints using an intensive longitudinal study of dyads comparing research questions traditionally studied with a more individual focus (How is positive affect related to negative affect in everyday life?) vs. with a more dyadic focus (How is companionship related to relationship satisfaction in everyday life?).

Methods: We present data from 57 heterosexual romantic couples over 35 days. In daily evening diaries, each partner reported positive and negative affect, companionship, and relationship satisfaction, with 3168 valid observations available for analysis. We conducted parallel multilevel analyses comparing dyadic score models with actor-partner interdependence models.

Results: Both models lead to cogent results. However, dyadic score models highlight couple processes, while actor-partner interdependence models highlight the processes in the two individuals.

Discussion: When conceptualizing dyadic research questions, researchers should consider whether the dyadic unit is theoretically relevant or if the pairing is merely incidental to individual processes. We discuss implications for developing theory and interventions of the two prototypical approaches presented and possible hybrid extensions.
Role of self-esteem and anxiety in the relationship between emotional competence and eating disorders

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Background: Emotional competence (EC) is recognized as an important factor in development and maintenance of eating disorders (ED). Furthermore, EC is positively related to self-esteem, which is in turn negatively related to ED, while for the anxiety the opposite is true: higher anxiety is related to lower EC and more ED symptoms. In this study we aimed to test possible serial (sequential) mediation of self-esteem and anxiety in the relationship between EC and ED.

Method: Study sample consisted of 923 (61.9% female) participants mean age 20.45 (SD=4.24). Participants completed measures of emotional competence, self-esteem, anxiety, and eating disorders symptomatology.

Findings: The results showed that there is no direct effect of EC on ED symptoms. As expected, there is indirect effect of EC on ED through self-esteem, but there is no effect via anxiety. Path analysis showed that self-esteem and anxiety mediated the relationship between EC and ED symptoms. Therefore, higher levels of emotional competence were serially associated with higher levels of self-esteem, which in turn had effect on lowering anxiety and finally ED symptoms.

Discussion: The findings support the notion that EC decreases ED symptoms. Deficits in EC might lead to reduced levels of self-esteem which is associated with higher ED symptoms. Higher self-esteem and decreased anxiety may be possible underlying mechanisms through which emotional abilities contribute to reducing ED symptoms. Obtained results are in accordance with existing studies on psychological mechanisms in the basis of EC effects on ED, and have practical implications for the prevention and treatment.
Self-compassion, self-coldness and healthy eating behaviour

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Background: Self-compassion has been found to promote the practice of health behaviours, including healthy eating. To gain a better understanding of the underlying mechanism this research examines the mediating role of perceived behavioural control (PBC). Most researchers use the total score on the Self-Compassion Scale (SCS) as an overall indicator of self-compassion. However, recent studies have identified two distinct factors: compassionate and uncompassionate self-responding (self-compassion and self-coldness). This research examines the unique relationships between the two subscales and eating behaviour and examines whether these relationships are mediated by PBC.

Methods: Study 1: Participants (N = 209) completed online questionnaires at baseline (SCS-SF, PBC) and 3 weeks later (eating behaviour, healthy/unhealthy food intake, hypothetical menu choice). Study 2: Participants (N = 186) completed an online questionnaire (SCS, PBC) followed by 7 daily assessments of healthy/unhealthy food intake and perceived healthiness of each day’s food intake.

Findings: Regression analyses showed that self-coldness was uniquely related to PBC and the eating behaviour measures in both studies, whereas self-compassion was not (apart from a small unique relationship with healthy food intake in Study 1). Bootstrapped mediation analyses showed that PBC mediated the relationship between self-coldness and all eating behaviour measures in both studies: greater self-coldness was related to lower PBC which in turn was related to unhealthier eating behaviour. No mediation was found with self-compassion.

Discussion: Self-coldness may be more relevant as a predictor of healthy and unhealthy eating behaviour than self-compassion. Targeting uncompassionate self-responding may be more important than increasing compassionate self-responding.
From Alexithymia to Eating Disorders symptoms: the mediating role of Mental Pain

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Background: The association between alexithymia and eating disorders symptomatology (ED) has been well established. Similarly, insights from the clinical field emphasized how mental pain may foster psychological suffering, nonetheless, a deeper knowledge is still needed to understand the relationship between the above constructs. For this reason the goal of this study was to assess whether the relationship between alexithymia and ED would be mediated by mental pain.

Methods: 251 individuals aged between 18 and 35 years old (M = 25.93; SD = 4.67) were recruited and asked to fill out a protocol including: TAS-20, Mental Pain Questionnaire, and EAT-26. SEM with latent variables was used to test a model with alexithymia as predictor variable, mental pain as mediator, and ED as outcome.

Findings: The model showed good fit indices: $\chi^2(24) = 36.32, p = .05$; CFI = .99, RMSEA = .05 (90% CI = .00 – .07), SRMR = .03. Significant paths were found from alexithymia to mental pain ($\beta = .71$), and ED ($\beta = .19$), and from mental pain to ED ($\beta = .51$). Furthermore, the indirect path between alexithymia and ED through mental pain was significant ($\beta = .14$).

Discussion: Difficulties in recognizing one’s and others’ emotions may be linked to perceptions of intense negative states and awareness of unpleasant changes in the Self. ED may be used, in turn, as a maladaptive strategy to manage such unpleasant states. Implementation of programs focused on alexithymia and mental pain issues may be helpful for the management of ED.
Loneliness and preferences for palatable versus healthy food: The role of coping

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Background: Loneliness is an important public health issue with consequences for health-related outcomes. Health-related behaviours is a proposed explanatory pathway. Evidence indicates that loneliness influences eating behaviour, but the reasons for this have not been fully examined. Across two studies, we tested whether loneliness is associated with favouring palatable over healthy foods, and two possible explanatory pathways: negative affect and using palatable foods as a coping strategy.

Methods: Study 1 (N = 375) used a within-subjects design to test whether chronic loneliness influenced food preferences in healthy vs palatable food choice task, and if negative affect and using palatable food to cope explained this preference. Study 2 (N = 164) aimed to replicate the dispositional-correlational associations from Study 1 and experimentally test whether situational loneliness influenced food preferences.

Findings: In Study 1, the indirect effects of chronic loneliness on preferences for palatable foods was significant for coping motives, ab = 0.095, CI = [0.045, 0.176], but not for negative affect, ab = 0.004, 95% CI = [-0.093, 0.099]. Study 2 findings mirrored those for Study 1 with significant indirect effects of loneliness on preferences for palatable foods through coping motives, ab = 0.304, CI = [0.037, 0.800], but not depressive symptoms, ab = -.332, 95% CI = [-1.310, 0.534]. The loneliness manipulation did not increase state loneliness, η² = .007, p = .34.

Discussion: Chronic loneliness may confer risk for using palatable foods to cope with negative emotions which in turn promotes favouring palatable over healthy food options.
The relationship between emotional intelligence, anxiety and risky behaviour: Sensing internal signals from the body

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Adolescents are more likely to engage in risky behavior. Recently, two types of risky behavior have been distinguished: positive (socially accepted) and negative (socially not accepted) risk-behavior. Yet little is known about these two types of behavior, especially, in clinical samples. The current study aims to investigate the relationship between anxiety and risky behavior and to determine the role of emotional intelligence and interoception in this relationship. Altogether, 290 adolescents (40 clinical participants) age from 14 to 17 participated in the study and completed the self-report questionnaires for measuring emotional intelligence, anxiety, and risky behavior. In addition, to investigate the interoceptive accuracy in clinical group, a heartbeat detection-based measure was used. Correlation, regression and moderation analyses were used to examine the relationships between the study variables. Results showed that there was a significant correlation between risk-behavior and anxiety in the non-clinical group. However, no significant relationship was found between risk-behavior and anxiety in the clinical group. Additionally, emotional intelligence had a moderating effect on association between anxiety and negative risk-behavior in the non-clinical group. Interoceptive accuracy was also negatively correlated with negative risk behavior in the clinical group. In sum, current findings are relevant for screening, prevention and treatment interventions targeting anxiety disorders in adolescents. The results shed the light to the inconsistency of empirical findings about the relationship between anxiety and risk behaviours.
The role of personality on weight loss interventions in people with metabolic conditions

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Introduction: It has become essential to identify effective ways to support individuals to manage metabolic conditions (e.g. Diabetes) in order to prevent life threatening complications associated. Weight loss interventions for metabolic conditions are the cornerstone of treatment but do not always have long-term success. One factor currently being investigated is personality and how it influences food choice but there is little research investigating the effects of personality on intervention success in people with metabolic conditions (PwMC). The review aims to synthesise literature on how personality affects weight loss interventions in PwMC, and identify further psychological measures which appear to be key in weight loss success.

Method: A systematic review was conducted using keywords associated with diet, metabolic conditions and personality on four key databases (PsychInfo, MEDLINE, CINHAL and EMBASE), through which 6,420 studies were identified. After applying the inclusion criteria, a total of 19 studies were identified for the review with a total of 3,392 participants. Quality and bias was assessed using the Cochrane risk of bias 2 tool.

Results: Preliminary results indicate a wide range of personality scales being proposed to predict weight loss outcomes, results include high scores for impulsivity, neuroticism and narcissism as inhibitory and traits such as conscientiousness, extraversion and sociability related scales as predictors of successful weight loss.

Discussion: Personality traits could be an additional factor to use to predict outcomes and play a role in weight loss interventions to help support individuals with their behaviour change weight loss goals.
Identifying person-specific associations between smartphone use and predictors of mental wellbeing with an N-of-1 design

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Background: Stress, bad mood and insufficient relaxation are indicators of the rising mental health problems among young adults, and are possibly caused by extensive smartphone use. However, not all young adults might experience undesirable effects from smartphone use. Therefore, this study aimed to get an in-depth understanding of person-specific effects of smartphone use on stress, mood and relaxation in young adults over time.

Methods: Dutch young adults (N=8) aged 18-25 participated in a multiple n-of-1 study using ecological momentary assessment (EMA). They received 5 surveys/ day over a 28-day period assessing reasons for smartphone use, stress, relaxation, and mood. After pre-whitening, a linear regression was done to assess associations between variables.

Findings: Some reasons for using a smartphone (e.g., to escape negative emotions) resulted in more undesirable outcomes (e.g., being less relaxed and happy, and more stressed) than others (e.g., using a mobile phone to search for social interaction). No desirable effects were found, while results were also found to be person-specific.

Discussion: This study was one of the first N-of-1 studies to relate smartphone use to potential predictors of young adults’ mental health. The results reveal that some but not all young adults might experience undesirable consequences of their smartphone use. In a follow-up study, we will aim to gain an even more in-depth understanding of the relations between smartphone use and possible predictors of mental health by including more participants and objective sleep-related measures (i.e., quantity and quality) – another possible predictor of mental health among young adults.
Resource recovery at work? The impact of private smartphone use on employees’ work and health

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Background: The smartphone is one of the most important communication tools at work and in the private life. Whilst many studies investigate the effect of work-related smartphone use on private life, research is rare regarding the influence of private smartphone use at work. Therefore, this study aims to investigate the relationship between private smartphone use during working hours with health and work-related outcomes (i.e., work engagement, work creativity and work-related well-being). Moreover, based on the effort-recovery model it is hypothesized that resource recovery mediates the assumed relationships.

Method: 82 employees with a mean age of M = 35.9 years (SD = 11.8) took part in a daily-diary study across two consecutive working weeks, resulting in 523 daily measures. Smartphone use, health- and work-related outcomes were assessed self-reported every evening.

Findings: Multilevel analyses showed that employees who spend more time on private smartphone use at work reported lower levels of work engagement, but there was no effect on work creativity and work-related well-being. Furthermore, we did not find evidence for the proposed mediating effect of resource recovery.

Discussion: The findings suggest that private smartphone use at work is not necessarily related to employees’ work and health-related outcomes. Future research should investigate further influential mediators (e.g., detachment) in the context of smartphone use and employees’ work and health. Furthermore, different purposes of private smartphone use at work (e.g., organizing private matters or active relaxation) need to be explored.
Exploring the Phenomenon of Smartphone Disconnection: A Systematic Review of Detox Practices

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Based on a systematic review of the digital disconnection literature (n = 110), we present a subsample focused on voluntary disconnection from smartphones and mobile devices. As interest in both temporary and permanent disconnection from these devices has grown among users and in academic discourse, there has been a rapid increase in research in this area. However, the research is still highly fragmented and lacks comprehensive work and consensus on key concepts. Our systematic review focuses on so-called detox practices investigating the prevalence, nature, and potential beneficial or harmful effects of digital disconnection. In particular, we analyzed eight themes of disconnection: (1) definitions, (2) measurements, (3) prevalence, (4) motives, (5) strategies, (6) consequences/effectiveness, (7) relapsing, and (8) interventions. The review provided further detail in conceptual ambiguities, differences, and overlaps in terminology, definition, and measurement. We discuss the identified empirical and theoretical shortcomings and provide recommendations for future research. We also provide a working definition, describing voluntary smartphone disconnection as a deliberate form of non-use of the smartphone, platforms, features, interactions and/or messages that vary in frequency and duration with the aim of restoring or improving one’s perceived overuse, social interactions, psychological well-being, productivity, privacy and/or perceived usefulness.
Study Smart! – The effects of a planning intervention targeting smartphone separation on health-related outcomes

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Background: Smartphone use has become an integral part of a student’s everyday life. However, prolonged smartphone use and the “always on” mindset might result in lower well-being or stress compromising students’ health. This issue could be addressed by a smartphone separation, that is, being unable to access or use the smartphone for a planned amount of time. As evidence on smartphone separation interventions is inconclusive and rare, the aim of this study was to examine the effect of a planning intervention targeting a smartphone separation during exam phases on university students’ health-related outcomes.

Method: Drawn from three student cohorts, N = 255 students (Mage = 22.98, range: 17-43 years) were randomized to an experimental group (EG) or a control group. Students in the EG formed up to three action and coping plans for a smartphone separation during their exam phase. Across a 3-week intervention phase, self-reported stress and well-being were assessed weekly. Time of smartphone use was assessed objectively with a mobile application.

Findings: Regression analyses indicated that students in both groups did not differ regarding their changes in perceived stress and well-being across 3 weeks. Moreover, no difference was found in smartphone use either.

Discussion: The findings suggest that a planning intervention targeting smartphone separation does not lead to better health-related outcomes. As the intervention only addressed smartphone use, future research should investigate the use of other digital devices (e.g., tablets). Moreover, the role for specific apps (social media versus news apps) for health and well-being should be examined.
Are offline meals healthy meals? — A smartphone field experiment to promote healthy family meals

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Background: Mobile devices are an integral part of daily family life. First studies suggest that parental mobile device use is associated with fewer parent-child interactions. Following the interference hypothesis of the displacement-interference-complementary framework, smartphone use during shared meals could negatively influence family interactions and healthy eating habits in children. The aim of the current study was to experimentally test the effects of smartphone use at family meals versus banning them from the meal table.

Method: The study was designed as a randomized within-family field experiment with daily assessments over 14 days (AB/BA crossover design). Directly after one family meal per day one parent (N= 81, M=42.6 years; SD=6.3) filled in self-reports about (un)healthy eating of the child (e.g., fruit consumption) and atmosphere at the dining table.

Findings: Multilevel analyses showed that a timeout from smartphone use during family meals was associated with lower consumption of sweet cookies and higher positive mood of the child, but not with better conversation quality or higher vegetable and fruit consumption.

Discussion: This is the first experimental field study on smartphone use at family meals. The results suggest that a smartphone ban at the meal table could be an effective tool to reduce unhealthy food consumption and improve the child’s mood. Future research should examine longer and habitual smartphone bans at family meals to test effects on conversation quality; especially at the beginning the absence of a smartphone could also lead to negative moods in parents or uncomfortable silence between family members.
Habit-stacking and salience nudge interventions increase hand washing in the office environment

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Background: Hand washing is an effective way of reducing spreading of virus particles and germs. Yet, increasing hand washing behavior has proven difficult. The current study investigates the effectiveness of habit stacking (where a new habit is effectively paired with habits that are already well-established in one's routine) and salience nudging to promote hand washing among office workers.

Methods: A field experiment was conducted in a governmental office building (daily occupancy ~300). Four interventions were implemented on different floors (salience nudge vs. habit stacking targeting one existing habit vs. habit stacking targeting multiple existing habits vs. all three combined). Soap use was measured for three days at baseline and after implementation of the interventions as a behavioral proxy for hand washing, followed by a survey probing awareness of and attitudes towards the interventions.

Findings: Soap use significantly increased in all four conditions, but substantial differences were found. Soap use increased most in the multiple habit stacking intervention condition (by 165%, p < .001), followed by the salience nudge (62% increase, p < .001) and combination of interventions (60% increase, p < .001). The one-target habit stacking intervention had the smallest effect (10% increase, p < .050). Survey results showed that people had positive attitudes toward all interventions and did not think the interventions affected their behavior.

Discussion: Longevity and generalizability of effects should be further investigated. Nevertheless, due to non-invasive and scalable nature of these interventions, the findings are promising for implementation in office environments on a larger scale.
Behavior change is important for preventing infectious diseases. While recommendations on what to change was ubiquitous during the COVID-19 pandemic, people had little evidence-based guidance on how to change their behavior most efficiently. As part of a multiphase optimization strategy (MOST), we developed and optimized the Soapp smartphone application, a theory- and evidence-based intervention to promote preventive behavior during a pandemic, at the example of hand hygiene. We present the results of the evaluation phase, testing the effectiveness of the Soapp application.

During a randomized controlled trial in 2022, N=193 (n=141 analyzed) interested members of the German speaking Swiss public were randomized to the intervention or control group. After baseline, both groups used the Soapp app for 32 days, receiving facts about hand hygiene. The intervention group’s app version additionally targeted motivation and habit formation. Hand hygiene (ranging from 0-4) was assessed using an e-diary. Data were analyzed using intention-to-treat.

Hand hygiene post intervention was 3.08 (SD=0.09) and 3.25 (SD=0.10) in the control and intervention group respectively. Robust repeated measures ANOVA showed a significant time effect, indicating greater hand hygiene post intervention (F[1, 71.0589]=4.61, p=0.035), but no group by time interaction (F[1, 71.0589]=3.89, p=0.053).

The results provide no evidence that a digital intervention targeting motivation and habit formation can promote hand hygiene during an ongoing pandemic over controls that used a basic version of the app. Possibly, receiving facts about hand hygiene or filling in the hand hygiene diary was effective enough for some behavioral change in this context.
Examining the Psychological Pathways Underlying a HAPA-based Influenza Prevention Intervention for Older Adults

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Background: Building on the theoretical model of Health Action Process Approach (HAPA), a telephone-delivered three-arm randomized controlled trial was conducted to improve influenza preventive behaviors among Hong Kong older adults (n = 312). The current study aimed to examine the mediating roles of HAPA-related psychological variables from the intervention to influenza preventive behaviors.

Methods: Variance-based structural equation modelling within the Warp PLS v6.0 software was used to examine the effects from intervention conditions (motivational + volitional intervention group, motivational intervention group, and measurement-only control group) to older adults’ influenza preventive behaviors via the HAPA-related psychological variables.

Results: Model findings indicated that the intervention had direct effects on older adults’ outcome expectancies, social support, and intentions which further lead to the self-monitoring and the influenza prevention behaviors. Coping planning and habit also had direct effects on older adults’ influenza preventive behaviors. However, the other HAPA-related psychological pathways were non-significant.

Discussion: Overall, it seems that there is a lack of consistent evidence on the effects of HAPA-based intervention on the psychological variables and the improvements in only a few psychological determinants translated into the influenza preventive behaviors. HAPA-based psychological variables as underlying changing mechanism of the intervention on influenza preventive behaviors need to be further explored.
Online Regulation of Craving Training to Promote Healthy Diet under Stress: A Randomized Control Trail

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Background: Stress negatively affects a healthy diet and leads to adverse consequences. Previous diet intervention programs did not consider the role of stress on diet. This study aimed to investigate the effectiveness of a regulation of craving training (ROC-T) intervention and its interaction with stress based on cognitive reappraisal theory and the drift diffusion model (DDM).

Methods: This study was a 2 (between-subject: stress vs. control) * 2 (between-subject: ROC-T vs. control) * 2 (within-subject: pictures of high- and low-calorie foods) mixed design. We recruited 118 Chinese adults who were randomly assigned to stress/control groups and ROC-T/NO intervention groups. The study was conducted online. Before ROC-T, intervention groups watched a short clip to induce stress, while control groups watched a neutral clip. During ROC-T, for the intervention groups, participants were reminded to recall the contents about food and health. On the seventh day after the initial tasks, all participants completed a set of follow-up questionnaires that assessed their emotion, perceived stress, and eating behavior.

Results: We employed DDM analyses of reaction times and food choices to examine the ROC-T differences in the stress or no-stress situation. Bayesian ANOVA analysis provided strong evidence for the role of the interaction effect (BF=27.35). The simple effect by Bayes t-test showed that, for the intervention group, the bias for low-calorie food was higher after intervention.

Discussion: In the future, ROC-T, which could be effectively disseminated using Web-based platforms, could potentially be applied to improve eating habits, including in individuals under high stress.
Background: Informal carers play a key role in supporting people living with Alzheimer’s Disease (PLWA) globally. Caring can be rewarding, but also brings significant challenges. Evidence shows that good relationship quality between the caregiver and PLWA can reduce carer burden and increase quality of life for both caregiver and PLWA. However, less is known about how to support the development of quality relationships. In partnership with Alzheimer’s Disease International (ADI) and Roche, this study uses cross country analysis (from the global north and global south) to better understand the factors supporting carer-reported positive relationship experiences.

Methods: Qualitative semi-structured interviews using photo-elicitation, were carried out with 34 carers across four countries (UK, US, South Africa and Brazil). Interviews were online and multi-lingual, covering experiences of support and coping during and beyond the pandemic. Interviews and participant-generated images were analysed using thematic analysis.

Findings: Two superordinate themes (‘knowing’ and ‘feeling’) were identified. Relationships organised around ‘knowing’ included strong narratives of self-expertise, resourcefulness and problem solving, as well as advocacy, while incorporating the structures and machinery of caring. Feeling-based relationships were characterised by empathy, learning together, self-reflection and accessing trusted sources of support. Quality relationships were further associated with subordinate themes of pride in the caring role, self-worth and added value to caring.

Discussion: Re-imagining carer-PLWA issues in relational ways provides more nuanced insight into the support needs of carers. These findings are being used to develop tangible recommendations for Alzheimer’s organisations globally to benefit carers and their loved ones.
A fate worse than death?: Longitudinal analysis of suicidal ideation among informal caregivers in Europe

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Background: This study examines whether transitioning into caregiving within or outside the household is associated with changes in suicidal ideation and whether this depends on the type of caregiver relationship, the age or gender of the caregiver, or the welfare system.

Methods: Longitudinal study with data from the Survey of Health, Ageing and Retirement in Europe was used, including participants aged ≥40 years from 10 European countries (waves 1, 2, 4, 5, and 6). Suicidal ideation was measured using the Euro-D scale. Caregiving was measured as care inside (N=10,148) and outside the household (N=44,998), and for different recipients. Fixed-effects logistic regression analyses, adjusted for health and sociodemographic factors, were conducted.

Findings: Transitioning into caregiving inside the household was associated with higher odds of suicidal ideation, in particular if they transitioned into care for partners or parents and within Southern and Bismarckian welfare systems. Transitioning into caregiving outside the household was not associated with suicidal ideation, except among those transitioning into caregiving for non-relatives (higher odds of suicidal ideation), and among male and older caregivers (lower odds of suicidal ideation). Suicide ideation was higher among caregivers in Southern compared to Bismarckian or Scandinavian welfare systems.

Discussion. Informal caregiving is associated with suicidal ideation among caregivers inside but not among all caregivers outside the household. The caregiver’s characteristics, the care relationship and the welfare system play an important role. Preventing suicidal ideation requires interventions that focus on informal caregivers and consider their individual and contextual factors.
Care-related interactions in families caring for children with rare genetic or undiagnosed diseases

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Background: Caregivers are embedded within a network system, with multiple people involved in or expected to be involved in care-related activities. These systems can be sources of support, buffering caregiving stress. Or, they can be sources of strain, exacerbating stress. This study investigates caregiver reports of care-related interactions that are malfeasant (conflictual), nonfeasant (disengaged), and uplifting (supportive) and how they relate to expectation of care involvement.

Methods: Primary caregivers (n=166) providing care to 104 medically complex children participated in study. Caregivers provided information about 2,806 familial network members and, for each, their care role involvement (i.e., direct care, care decisions, support), if their care roles met expectations, and care-related interactions representing nonfeasance, malfeasance, and uplift. Qualitative data provided deeper understanding of caregivers’ expectations and how they aligned with care-related interactions.

Findings: Malfeasance was positively correlated with nonfeasance (r=0.39) and uplift (r=0.45), and nonfeasance was negatively correlated with uplift (r=-0.22). We observe negative associations between meeting expectations and nonfeasance and malfeasance (ORs range 0.02-0.09, ps<.001) across all care roles. Uplift was only associated with support expectations (OR=1.98; p=.024). Caregivers qualitatively described adjusting expectations based on care recipients’ needs, network member attributes, and socially constructed roles.

Discussion: The positive association between malfeasance and uplift, along with qualitative data, suggests that conflict can reflect adaptive caregiving processes when situated within supportive relationships. Caregivers expected network members to be involved in the child’s life, though not necessarily by providing care. When this expectation is not met, such nonfeasance can lead to interpersonal strain.
A spiritual support intervention can prevent anxiety, depression and PTSD among relatives of ICU patients

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Background: Post-ICU syndrome (PICS-F) describes physical, mental, and emotional symptoms that can occur in families of patients who have been in an intensive care unit (ICU). These symptoms include anxiety, depression, and post-traumatic stress disorder (PTSD). Studies have reported prevalence rates ranging from 20-80% for symptoms of anxiety, depression, and PTSD in family members of ICU patients. Different strategies have been suggested to prevent this syndrome. Among these spiritual care, however, few studies have assessed its impact on PICS-F. The aim of the study was to evaluate a spiritual care intervention to prevent PICS-F among relatives of patients in the ICU.

Methods: Quasi-experimental design with 61 relatives in the control group and 58 in the experimental group (79.2% females, mean age 47, SD=12). Remotely trained volunteers implemented the intervention for relatives of patients treated in the ICU of a public hospital. All participants were evaluated on two occasions, at baseline and at three months (HADS and the Revised Event Scale). The Hospital’s Ethics Committee approved all procedures.

Results: The results show a reduction in anxiety and depression symptoms in both groups, but greater in those who received the intervention. Regarding PTSD, we found that participants in the intervention group presented a greater reduction in symptoms (p<0.02).

Discussion: The intervention has a positive impact on the symptoms of anxiety, depression, and PTSD in relatives of patients in the ICU. These results can provide some insights into how support in crisis situations, based on psychological first aid, can prevent mental health symptoms.
The experience of living with hidradenitis suppurativa for affected individuals and their partners

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Background: Hidradenitis Suppurativa (HS) is a long-term skin condition associated with painful flares that may affect intimate body areas. HS has been found to be distressing for patients and to have a significant impact on quality of life and relationship functioning. To date, no study has investigated the experience of couples in relation to the condition.

Methods: A dyadic interpretative phenomenological analysis was used to investigate the experiences of six couples where one person had HS. Participants lived either in the United Kingdom or the United States of America. All 12 participants were interviewed separately. The study focused on the couples’ experiences of HS with specific focus on flares, pain, and relational functioning. The study also explored experiences of healthcare use.

Findings: The interpretative analysis led to the creation of three superordinate themes. The first theme: ‘being unheard: a frustrating journey to receiving care’, captures the difficulties related to accessing healthcare during flares of HS. The second theme: ‘relational burden and dyadic coping’, details the impact of HS on the couple, the relationship and how they work together to find ways to cope. The final theme: ‘self-disgust and self-consciousness’, details the emotional experiences that people with HS face.

Discussion: The psychological aspects of HS flares are managed in part via the caring social support provided by partners. In order to facilitate this healthcare providers need to know how to assess the systemic burden of this disease and be able to provide access to both individual and couple psychotherapy where required.
Cross-country variations in caregiver values, meaning in life, illness beliefs and outcomes – ENTWINE-iCohort Study

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Background: The current analysis, deriving from a multinational study of informal caregiving, was aimed to examine cross-country differences in caregiver values, meaning in life, illness beliefs, and key psychosocial and health outcomes of caregiving across 8 European countries and Israel.

Methods: The study employed an online convenience cross-sectional sample of adult caregivers who took part in a quantitative survey (ENTWINE-iCohort) conducted across 8 European countries and Israel (N=946). Validated measures were used wherever possible. ANCOVA tests were conducted to examine cross-country differences in key psychosocial and health variables, controlling for the effect of demographics as appropriate.

Findings: Caregivers in countries typically characterised by individualist cultures reported lower cultural value of familism, higher self-enhancement values, and greater perceived illness threat compared to more collectivist countries. Search for meaning was higher in poorer countries than in wealthier countries. Higher negative caregiver outcomes and lower positive outcomes were generally observed in countries with a family-based model of care as compared to service-based countries, except for Sweden.

Discussion: The results emphasise the important role of contextual factors (country context) in caregiver values, meaning in life, illness beliefs, and key outcomes of caregiving. Psychological and social care interventions that aim to maintain/enhance positive caregiver experiences and reduce negative caregiver experiences should take these contextual aspects into account, namely the variations between countries. There is also a need for prospective studies that would examine how factors such as values, meaning in life, illness beliefs may predict caregiver outcomes.
Highlighting the importance of health psychology and psychological research in improving vaccine uptake?

11:30 - 11:45

Randomized Controlled Trials of Interventions to Change Vaccination Behavior: A Meta-Analysis

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Background: This article tests the efficacy of recommendations involving scientific and methodological aspects using vaccination studies. A greater effect on the vaccination rate was expected from interventions with high theoretical implementation quality. Finally, the efficacy of behavior change techniques (BCTs) was tested within interventions. Methods: Electronic databases (e.g., PsycInfo) retrieved 33 studies (participants: N = 219,073). This review was included randomized controlled trials (RCTs) and quantitative data for vaccine behavior. Studies were written in French or English. The Cochrane criteria, the Theme Coding Scheme, and the Quality of Survey Studies in Psychology checklist were used to assess the quality of RCTs. The BCTs taxonomy version 1 was used to code the BCTs within interventions. Findings: A significant effect of interventions of high theoretical quality was revealed (k = 21, OR = 1.47, 95% CI [1.27, 1.71]). Regarding the BCTs, results were mixed. A significant impact was observed for the BCTs 13.2 Framing/reframing (k = 5, OR = 2.1, 95% CI [1.27, 3.46]), and 9.2 Pros and cons (k = 5, OR = 1.90, 95% CI [1.16, 3.10]). However, non-significant results were noted for the other six BCTs (p ≥ .15). Discussion: The theoretical implementation quality of interventions via the Theory Coding Scheme seems important when developing them. More research is necessary to determine the BCTs’ positive or deleterious effects on behavior. These results provide a theoretical implementation framework for future vaccination interventions.
Predicting vaccination at different stages of the pandemic: Motivation, health concerns, risk perception, trust, context

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Background
We examined the role of different factors predicting vaccination intention and vaccination behaviors through stages of the pandemic (from November 2020 before the vaccine was available until March 2022 when booster doses were administered) in the Belgian context.

Methods
Various methods were used including cross-sectional, longitudinal and quasi-experimental designs (vignette studies).

Findings
We could contrast the role of participants’ infection-related risk perception and pandemic-related health concerns to predict vaccination. We showed that only risk-perception predicted more positive vaccination outcomes through fostering greater autonomous motivation for vaccination and lower distrust. We also considered the role of more distal dimensions such as trust in government and conspiracism. Both dimensions predicted COVID-19 vaccination intention (respectively positively and negatively). These relations were fully mediated by motivational factors, with identified motivations having a larger positive contribution. We also examined how people’s vaccination intentions changed during the vaccination rollout. Results highlighted that an increase in autonomous motivation was related to a positive shift in vaccination intention, while an increase in controlled motivation and amotivation was related to a negative shift in vaccination intention.

Vignette studies highlighted the factors that contributed the most to vaccination intentions. In addition to vaccine characteristics (e.g., severity of side effects), contextual variables such as the possibility to receive the vaccine at home or at the GP’s office increased vaccination intentions.

Discussion
The studies show how policymakers can act on some determinants that can be highlighted within communication campaigns when facing similar pandemics in the future.
Shared HPV vaccine readiness within families: a psychometric analysis of parent-adolescent dyads in France

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Objective. Papillomavirus (HPV) infection occurs among most persons early during sexual life and can lead to several cancer’s sites. HPV vaccination is safe and effective and is recommended for adolescents aged 9-14 years. In France, vaccination cannot be done without parental consent, but studies have shown that adolescents have the capacity to make informed decisions about their health. Thus, we aimed at understanding the weight of adolescents’ vaccination intention in parents’ vaccination decision.

Methods. This study is part of a larger cluster-randomised controlled trial aiming at evaluating the effectiveness of a multi-component intervention to improve HPV vaccine coverage in France (PrevHPV). Parents and teenagers from 61 middle schools, forming 649 parent-adolescent dyads, independently completed an online questionnaire about their knowledge of HPV and their attitudes toward HPV vaccination exploring seven psychological domains of vaccine readiness. We used multivariable and path analyses to understand the family decision process.

Results. Dyads had overall a favourable attitude toward vaccination, with more than 76% agreeing on the usefulness of HPV vaccination. Individual antecedents of vaccine readiness correlated poorly to moderately within dyads linked (coefficient [0.14; 0.36]). The defined path model showed shared decision processes between parents and adolescent girls, but not boys.

Conclusions. HPV vaccine intention among parents was influenced by the adolescents’ vaccine readiness for girls, but not boys. Furthermore, despite the fact that parents and adolescents overall shared relatively positive attitudes, vaccine readiness and the individual 7C-antecedents correlated moderately or poorly within dyads.
Are the 7C antecedents of COVID-19 vaccination an expression of personality or economic preferences?

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Background
Five psychological antecedents of vaccination have been identified, with a recent extension including confidence in system and social conformism (7C model). The French COVID-19 vaccination campaign provided the opportunity to study whether these antecedents predicted vaccine behaviours independently of underlying cognitive factors.

Methods
From February to June 2022, French adults participated in a study on circumstances of COVID-19 infection and completed self-administered questionnaires assessing COVID-19 vaccination history, the 7C antecedents of vaccination, personality traits, economic preferences, and public health determinants (e.g., self-efficacy and health literacy). COVID-19 vaccination behaviours were studied through three outcomes: ≥1-dose vaccine status, up-to-date vaccination level, and uptake speed since vaccine eligibility. We used multivariable logistic regressions and Cox models to evaluate the determinants of these outcomes, adjusting for socio-demographic characteristics.

Results
Among the 49,200 participants, 95.01% reported receipt of at least one dose of COVID-19 vaccine and 89.80% were up to date with vaccine recommendations. All 7C antecedents were significantly associated with the three outcomes, although effects were weaker for vaccination level and speed. The strongest effects (on vaccine status, most favourable vs. least favourable modality) were observed for collective responsibility (OR=15.71 [11.59-21.28]), calculation (OR=10.61 [7.75-14.53]), and confidence in system (OR=8.63 [6.23-11.95]). The effect estimates of the 7C antecedents did not change when models included personality traits, economic preferences, and public health determinants.

Conclusion
The 7C antecedents seem to capture specific psychological factors related to vaccine uptake, independently of other cognitive factors. This underpins the importance of developing vaccine promotion strategies considering the 7C antecedents.
Psychological health & well-being: Insights from behavioral and molecular genetics

Youth depression symptoms during COVID-19: Longitudinal evidence from a twin study on resilience factors.

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Background:
The COVID-19 pandemic has introduced new and exacerbated existing stressors. From a resilience framework perspective, we investigated which potentially protective individual and family factors are negatively associated with youth depression symptoms (DS) during COVID-19, and to what extent these associations are attributable to genetic and environmental factors.

Methods:
We considered 3,025 monozygotic and dizygotic twins in their adolescence and early adulthood from a representative German twin family sample. We performed a three-step analysis with variable selection via Augmented Backwards Elimination, followed by multiple regression analyses quasi-cross-validated across twins, followed by behavioral genetic analysis with a Cholesky decomposition model.

Findings:
Multiple regression models yielded small significant effects of pre-pandemic DS, life satisfaction, and optimism (β = .173, -.092, -.064, respectively). We found substantially smaller explanatory power of the considered predictors for pandemic (Adj. R² = .08) compared to pre-pandemic DS (Adj. R² = .57). Twin analyses showed major time-specific environmental effects. Genetic variance was fully explained by pre-pandemic DS, life satisfaction, and optimism. Consecutive increases in explained genetic variance across pandemic waves (65%, 94%, 100%) point towards plasticity.

Discussion:
Youth DS appear to be a more specific phenomenon when occurring in a pandemic context. Findings are discussed regarding the importance of individual social settings. Our findings call for further research into the matter of youth DS during the COVID-19 pandemic, and what might be particular about them. This appears all the more pressing given the possibility of future global disruptions that youths might have to face.
Polygenic score analyses of subjective well-being in the German TwinLife sample.

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Background. Polygenic scores (PGS) derived from genome-wide association studies (GWAS) are increasingly used in developmental psychology. As most GWAS are based on adult individuals, the predictive power of PGS may be limited for samples with a different age structure. Here, we investigated the predictive power of PGS for subjective well-being (SWB) across different age groups.

Methods. We examined associations between PGS for SWB and life satisfaction (LS; Satisfaction with Life Scale) in 4,930 participants of the German TwinLife study. PGS were constructed for a range of GWAS p-value thresholds using PRSice-2, based on genome-wide genotype data and a GWAS meta-analysis of the well-being spectrum. We performed exploratory cross-sectional regression analyses between the PGS and LS for 25 age groups.

Findings. In 17 age groups, PGS showed a significant positive association with mean LS (p<.05). The predictive power of the PGS followed an inverted U-shaped pattern, with regression coefficients increasing from childhood to adolescence and within young adulthood, peaking in the mid-thirties and declining in the forties. The variance explained by the PGS ranged from an incremental R² of .009 % of the best-fit PGS in 44-45-year-olds to .092 % in 34-35-year-olds.

Discussion. Our findings indicate that the predictive power of the SWB PGS varies across ages but is generally low. The results could reflect that the influence of genetic factors on LS is age-dependent. Furthermore, different genetic variants may be relevant for LS in childhood, adolescence, early and late adulthood.
Chronic minor stress in young adulthood has a lasting effect on health and subjective well-being. Dealing with stress and preventing a new one depends on coping mechanisms. When coping is not effective, it increases vulnerability to stressors and enlarges the allostatic load. The mechanisms of this effect are not clear. Reappraisals of emotions are one possible pathway. Adaptive coping transforms stress-generated emotions and decreases their intensity. Non-adaptive coping, oppositely, exacerbates negative feelings. One of these feelings in the social context is the emotion of shame. Shame encompasses anxiety, anger, and sadness. Experiencing shame is an additional burden which constitutes day-to-day stress.

We examined the mediating role of shame in the association of emotion-, avoidance-, and task-oriented coping and day-to-day stress in a sample of 616 twins aged 25-31. To understand the nature of the mediation, the biometrical mediation model with phenotypic pathways without shared unobserved pathways was compared to the classical trivariate Cholesky decomposition (ACE/ADE models).

The association of emotion- and task-oriented coping with day-to-day stress were mediated by feelings of shame in the female sample, but not in the male sample. For both coping styles, the biometrical mediation models fitted data better compared to ACE/ADE models, claiming plausibility of the mediations. Meanwhile, a comparison of AE models with the biometrical mediation models favoured AE models. Common unobserved effect in the mediations for emotion- and task-oriented coping was explained by different resources, assuming that genetics and environment play distinct roles in the effects of adaptive and non-adaptive coping.
The impact of polygenic risk and environments on stress-related disorders: a predictive modeling approach.

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Background:
Environmental risk factors for mental disorders are often studied in isolation without considering high intercorrelations. The exposome approach addresses this problem by including many environmental exposures over the entire life span and using advanced statistical techniques. We aimed to investigate the validity of this approach by constructing an exposome score for stress-related mental disorders using predictive modelling and analysed its utility for revealing gene-environment interactions (GxE) with polygenic risk scores (PRS).

Methods:
The sample consisted of 269 cases with lifetime diagnoses of depression, anxiety disorders, or PTSD and 104 healthy controls. Childhood adversity, traumatic events, and sociodemographic data were used as predictors. A sum score of dichotomized predictors was compared to a Bayesian model, simple logistic regression, and LASSO and Ridge logistic regression models. PRS for mental disorders were tested for additive GxE with the exposome using logistic regression.

Findings:
The LASSO-regularized model outperformed all other models (AUC=.68). The exposome score resulting from the LASSO model successfully discriminated cases from controls (R-squared=.32, p<.001) and significantly predicted several continuous measures of anxiety and depression (R-squared =.04-.26, p<.05). However, adding PRS did not improve prediction (delta R-squared=.01-.06) and no significant GxE was detected.

Conclusions:
These results indicate that the exposome approach is a useful model for studying environmental risk and mental health phenotypes, but additional benefits for GxE analyses were not demonstrated. Therefore, this talk will conclude with suggestions on how to increase the validity of the exposome approach and outline conditions under which incorporating genetic information might improve prediction.
Is well-being indeed a personal(ity) thing? a quasi-replication and extension of previous twin studies

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Background. Subjective well-being (SWB) is known to be related to personality traits. Recent twin studies have shown that personality traits and SWB share common genetic sources. The current investigation aims at quasi-replicating and extending these studies with the use of different but established and reliable measures of personality traits and both the cognitive and affective facets of well-being.

Methods. Using data from a sample of 220 monozygotic and 353 dizygotic twin pairs and multivariate twin modelling, we tested the hypothesis that genetic differences in SWB are entirely accounted for by genetic differences in the Big Five personality trait dimensions Neuroticism, Extraversion, Conscientiousness, Agreeableness, and Openness to Experiences.

Findings. The results of the analyses supported the hypothesis for both life satisfaction and affective well-being. Individual differences in both life satisfaction and affective well-being were accounted for by unique genetic differences in Neuroticism (−.360, p<.001; −.430, p<.001) and Extraversion (.291, p=.003; .304, p<.001), whereas unique genetic differences in Conscientiousness significantly accounted for genetic variance in life satisfaction (.157, p=.009) and unique genetic differences in Agreeableness significantly explained genetic variance in affective well-being (.240, p<.001). Specific statistically significant environmental links of SWB facets to Neuroticism (−.314, p<.001; −.342, p<.001) and Extraversion (.136, p=.005; .271, p<.001) were also found. The remaining unique variance in SWB was entirely environmental.

Discussion. These findings indicate that both cognitive and affective SWB facets are primarily genetically linked to personality traits and that personality differences play a role for SWB set-point maintenance and systematic set-point shifts over the lifespan.
Hip replacement surgery recommendations: Orthopaedic surgeons’ perspectives on implementation

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Background: The HipHOP study (ISRCTN11097021) evaluated the feasibility of conducting a randomised controlled trial to compare the effectiveness of two types of implant in individuals undergoing total hip replacement surgery. Embedded qualitative research aimed to understand factors which might affect implementation of the future trial’s findings.

Methods: Sixteen orthopaedic surgeons from four hospital sites in England participated in semi-structured telephone interviews. Interviews included discussion of issues around implementation of future trial findings. An inductive, thematic analysis was conducted, structured using Framework.

Findings: When considering changes to surgical practice, three issues seemed important. Strong evidence showing a clear difference between implant type appeared to be highly valued; well-designed research and support of national bodies’ guidance seemed to be influential. The impact of implementing recommendations on a surgeon’s personal surgical results was considered. There was a sense of orthopaedic surgery being a ‘craft’, and to change practice surgeons would want to believe that the new approach would work best within their own, personal practice, as well as for surgeons in general. Finally, participants identified the need for training to ensure that surgeons would be competent when changing practice. Apparent variability in willingness to retrain was observed.

Discussion: Implementation of recommendations in the surgical context is complex because of the skills needed to change practice and risk of poor outcomes for patients related to the learning process. High quality research with clear findings seems influential, but surgeons need to believe their own patients’ outcomes will improve, and training needs must be considered.
Implementation of a whole genome sequencing report form (SRF) to reduce UK hospital-based nosocomial SARS-CoV-2

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Background: Here we report on a process evaluation conducted as part of a large multisite non-randomised trial of the effectiveness of a whole genome sequence report form (SRF) to reduce nosocomial SARS-CoV-2 through changing infection prevention and control (IPC) behaviours during the COVID-19 pandemic. We detail how the SRF was implemented across a heterogeneous purposive sub-sample of hospital trial sites (n=5/14).

Methods: We conducted in-depth interviews from diverse professional staff (N=39). Inductive thematic analysis explored participants’ accounts of implementing the SRF. The resulting data-driven themes, concerning the way the SRF was used within sites, were then coded in relation to the key tenets of normalisation process theory (NPT).

Findings: Factors that enabled the implementation of the SRF included: elements of the context such as healthcare professional passion; the existence of whole genome sequencing infrastructure; effective communication channels; creation of new connections across professionals and teams; integration of SRF-led discussions within pre-existing meetings; ability of a site to achieve a rapid turnaround time. In contrast, we found factors that constrained the use of the SRF included elements of the context such as the impact of the Alpha-variant overwhelming hospitals. In turn, dealing with COVID-19 breached the limited capacity of infection prevention and control (IPC) to respond to the SRF and ensure its routinisation.

Discussion: We show preliminary support for the SRF being an acceptable, useable, and potentially scalable way of enhancing existing IPC activities. However, the context of both the trial and the Alpha wave of COVID-19 limit these insights.
Development of a CDSS and patient portal for the joint management of medication-related fall risks

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Background: Falls are a leading cause of injuries among older people. Medication is a major risk factor for falls. General practitioners (GPs) lack tools to assess individualized risks and struggle with fall-related medication management. Older patients are often not equipped to engage in shared decision making (SDM) concerning their medication. This project aims to develop a comprehensive data-driven science intervention for predicting and lowering the medication related fall risk, consisting of a clinical decision support system (CDSS) and patient portal.

Methods: The user-centered design process followed the first two phases of the MRC guideline for complex interventions. Prototypes of the CDSS and patient portal were developed, informed by a systematic review on barriers and facilitators for CDSS usage (N = 63 papers), focus groups with GPs (N = 13), and semi-structured interviews with older patients (N = 12). The prototypes were improved based on usability testing with GPs (N = 5) and older patients (N = 5).

Findings: The CDSS visually presents a personalized fall risk, and provides patient-specific guideline-based advice on how to alter the medication, also linking the sources underlying the advice. The patient portal has a simple interface, tailored to its target group. It provides patient-friendly general information on fall risk, and prepares the patient for engaging in SDM using a question prompt list.

Discussion: The intervention uses innovative technologies to support GPs in identifying patients at risk of falling, provide advice on lowering the medication-related fall risk, and stimulate SDM between GP and older patient.
Health professionals’ behavioural responses to patient complaints: A systematic literature review and theoretical analysis

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Background:
Healthcare complaints can be used to ‘reflect and correct’ services to improve patient safety in secondary and tertiary care. Previous research has highlighted patient factors in the complaints process, but sparse research has explored how complaints are responded to by healthcare professionals (HCPs).

Methods:
A systematic review was conducted of peer-reviewed and grey literature published from 2002-2022 (including Scopus, Medline/Ovid, Embase, CINAHL, HMIC). Studies were included if they reported primary data on how HCPs respond to patient complaints in secondary and tertiary settings. We extracted data on actors involved in the complaints process, behaviours and influences.

Findings:
25 studies met the inclusion criteria and were included. Eight actor groups, performing 22 behaviours were identified. Factors influencing effective management of patient complaints included: limited time, support, and knowledge of the process. High stress levels among HCPs were linked to lack of managerial support and avoidance or defensiveness when responding to complaints. Patient complaints perceived as aggressive were seen as particularly challenging to respond to. Organisation-level factors that impede the resolution of complaints included role ambiguity and conflict.

Discussion:
Findings from this study contribute to a better understanding of behaviours and what may influence them during complaints management in secondary and tertiary care. This includes the perceptions health professionals have about complaints, the negative impacts of complaints on staff, and the organisational barriers to using complaints as learning and quality improvement opportunities. There is a need for systemic change and for service providers to become learning organisations when complaints arise.
Regional variations in antibiotic prescribing in Germany: Understanding differences through an adapted Theoretical Domains Framework.

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Background: Analyses of health insurance claims data have identified substantial regional variations in outpatient antibiotic prescribing in Germany, both in the paediatric and adult population. Person- and region-level information in claims data explain some differences; however, substantial unexplained variation remains. To explore potential additional factors, we apply a behavioural perspective by adapting the Theoretical Domains Framework (TDF) to assess regional factors deemed relevant for antibiotic prescriptions by relevant physicians (paediatricians, general practitioners).

Methods: Qualitative study with telephone interviews of 40 physicians from high- and low-prescription regions, stratified by urbanity. TDF domains were adapted into a guideline to assess region-level resources and barriers to rational antibiotic prescription behaviour. Interviews lasted 30-61 minutes (M = 45 minutes). Mixed methods analyses combining thematic analysis and multidimensional scaling were used to identify thematic clusters through proximity estimation.

Findings: Both paediatricians and general practitioners in low-prescribing regions reported supporting contextual factors (in particular good collegial support, good collaboration with laboratories) and social factors (collegial support and low patient demand for antibiotics) as important resources. In high-prescribing regions, poor coordination between in-patient and ambulatory health services, lack of region-level information, few professional development opportunities, and patient-level characteristics (language and socio-economical) were identified as barriers to rational prescription behaviour.

Discussion: Qualitative analyses based on the TDF can help to understand regional differences identified in claims data. We identified professional development, better collaboration structures with laboratories, user-friendly guidelines as well as better networking and social support among physicians as potential areas of improvement to support rational antibiotic prescribing.
Barriers and facilitators to sustainable operating theatres: a systematic review using the Theoretical Domains Framework.

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Background
The health sector contributes significantly to the climate crisis, with twelve European countries ranked amongst the major emitters. Operating theatres are a particularly high source of emissions. There are several evidence-based guidelines on reducing emissions, however guidelines are not often followed. We systematically reviewed the literature to identify determinants of sustainable behaviour in operating theatres using the Theoretical Domains Framework (TDF).

Method
Medline, Embase, PsychInfo, and Global Health databases were searched with a range of January 2000-December 2022, using the concepts: barriers and facilitators, sustainability, and surgery. Identified studies were screened by two independent reviewers, data were extracted and quality assessed. Identified determinants were mapped to TDF domains and further sub-domains as required.

Findings
Fourteen studies were identified (ten surveys and four interview studies) comprising 6047 participants, including surgeons, nurses and anaesthetists. Nine TDF domains were identified, and fifteen coded sub-domains. The most common barriers were (number of studies; example sub-domain): ‘knowledge’ (N=13; of sustainable practices); ‘environmental context and resources’ (N=9; personnel shortage and workload); ‘social/professional role and identity’ (N=6; organisational hierarchy/lack of agency). Six studies cited ‘intention’ as a facilitator. Qualitative studies focused more on barriers of knowledge and environmental context, and did not cover facilitators.

Discussion
Despite intentions to adopt sustainable practices in operating theatres, this review identifies several barriers. Interventions should focus on mitigating these, especially staff’s knowledge of sustainability practices, working within environmental context pressures and the organisational culture. Furthermore, additional qualitative work should be conducted using behavioural frameworks, to more comprehensively investigate determinants.
Innovative approaches and to understanding psychosocial adaptation to chronic illness

11:30 - 11:45

Social and sexual well-being among young adults coping with stigma of visible chronic skin disease

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Background: People with visible chronic skin disease (VCSD) are often stigmatized by others. Social stigma can become internalized, impacting self-image and sexual well-being. Young adults might employ coping strategies or avoid social encounters to reduce the impact of stigma. This study examined relationships of social and internalized stigma to approach and avoidance coping, and their combined relation to sexual well-being, also exploring the influence of being in an intimate relationship.

Methods: 192 young adults with VCSD were recruited from an outpatient dermatology clinic, with current data for 85 participants (M age=28.19, SD=4.25; 48% female, 56% married or in a stable relationship). Skin diseases included psoriasis (49%), hidradenitis suppurativa (33%), and atopic dermatitis (18%). Hierarchical multiple regression was conducted (Step 1: stigma variables, Step 2: coping variables).

Findings: Preliminary analyses indicated that internalized stigma (Beta= 0.55, p <.001) and social stigma (Beta= 0.24, p <.05) were related to poorer sexual well-being, explaining 43% of the variance, F(4,66)= 12.58, p <.001. Coping variables contributed less than 1% to the variance. Those in a stable relationship had better sexual well-being than those who were not, t(56)=2.90, p <.01 and reported less social stigma, t(71)=2.24, p<.05, but not less internalized stigma.

Discussion: Social and internalized stigma may impair sexual well-being among young adults with VCSD, with internalized stigma having a stronger effect, but how one copes with that stigma was largely ineffective. Additional analyses with the full sample will address the possibility that approach and avoidance coping operate differently for those in intimate relationships.
Well-being trajectories in breast cancer and their predictors: A machine-learning approach

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Adaptation to breast cancer is a dynamic process that is determined by a series of factors and is not similar for all patients. The aim of this study was to detect the trajectories of psychological symptoms and subjective health over a period of 18 months following a breast cancer diagnosis and their predictors from an inclusive list of over 90 different medical/disease-related, socio-demographic, lifestyle, and psychological factors. Methods. Participants (N=474; mean age=55.79 years) were enrolled the first weeks after surgery or biopsy. Data from seven assessment points, at three-month intervals, were used. A novel and vigorous analytic plan based on Machine-Learning techniques was used to detect and predict trajectory patterns, achieve an unbiased selection of the most important predictors, and validate their discriminative capacity. Findings. Five trajectories were identified for each outcome: a stably high, an unstably high, a recovery, a deteriorating/delayed response, and a stably poor well-being trajectory. Several psychological factors (i.e., negative affect, coping, sense of control/positive expectations, social support, and coping self-efficacy), age, and medical variables (e.g., symptoms, body mass index, immune-related inflammation) predicted the trajectories. Discussion. There is a strong possibility that good adjustment to breast cancer (i.e., resilience) does not always reflect a stable response pattern, as there might be substantial interim fluctuations. The use of machine-learning techniques provides a unique opportunity for the identification of illness trajectories and a shortlist of major bio/behavioral predictors. This will facilitate the development of early interventions to prevent a significant deterioration in patient well-being.
Social support interventions using mobile applications to improve cancer outcomes: A systematic review

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The importance of social support for cancer patients is well-established and mobile applications offer promising opportunities for implementation. This systematic review aimed at synthesizing research on mobile interventions including app-based social support for cancer patients measuring cancer-related symptoms or psychological outcomes.

Out of 449 identified records, 17 studies were included of which 12 used a controlled design. While the majority of studies included formal support from healthcare professionals (n=15), informal support from family, friends, or peers was only included in seven studies. Social support was implemented through different functions of the app such as contact/chat functions (n=9), automatic alerts based on app input (n=5) and discussion forums (n=4). Cancer-related symptoms assessed varied between studies with promising effects in the area of pain, fatigue, nausea/vomiting, insomnia, constipation and overall symptom distress. Health-related quality of life was assessed in most studies with heterogeneous effects across studies.

Overall, results indicate very promising effects of social support interventions for cancer patients using a wide variety of features to implement social support through mobile applications. However, to improve effectiveness, future studies should focus on measuring and reporting social support as a mechanism of the intervention to allow more systematic investigation of its specific impact.
HED-Start: A positive skills intervention to improve psychological adjustment in new haemodialysis patients

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Background: Initiation onto hemodialysis marks a critical transition with intense psychosocial demands. Interventions using cognitive–behavioral therapy to improve distress have been variably effective but require trained staff and are typically delivered only to those who screen positive for disorder. Interventions guided by positive psychology are lacking. This randomised controlled trial (NCT04774770) aimed to develop and evaluate a positive life skills intervention "HED-Start" in improving distress, quality of life, illness perceptions and self management skills in patients new onto hemodialysis.

Methods: Hemodialysis patients (n = 147) were randomized to intervention (n = 97) or usual care (n = 50). HED-Start comprised 4 sessions delivered by health care staff on positive emotions, acceptance, and life-orientated goal setting. Measures were taken baseline and 12-weeks: distress/mood (HADS; SPANE); quality of life (KDQOL-SF, WHOQOL-BREF); benefit-finding (BFS, BIPQ); life-oriented skills (HEIQ, CD-RISC-2); self-efficacy (CD-SES). Intention-to-treat analyses were conducted.

Results: ANCOVA adjusting for age, indicated significant improvements for HEDSTART over time and relative to usual care in HADSDepression (p=.035), WHOQOLGeneral Health (p=.016), WHOQOLPsychological (p=.008), WHOQOLSocial Relationships (p = .025), BFSTotal (p = .019), BFSPersonal Growth (p =.015), BFSAcceptance (p = .041) and four HEIQ domains (p < .05). Rates of clinically significant depression and anxiety significantly decreased in HEDSTART pre to post intervention (p < .001)

Discussion: The significant positive effects of HED-Start, a low-intensity intervention, on adjustment indices, suggest that programs focusing on positive mood life skills can be value add to existing renal care and traditional self-management programs.
The role of individual factors in occupational health

11:30 - 11:45

Segmentation Preference Moderates the Workload – Work-Life Conflict – Stress Relationship Amongst Mental Health Professionals

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Background: For many mental health professionals the SARS-CoV-2 pandemic has led to increased workloads and increased stress levels, placing them at an elevated risk of stress-related mental health conditions such as burnout, anxiety, and depression. The current study sought to address the question why some professionals show a stronger workload-stress relationship than others. Specifically, it examined the role of segmentation preference (i.e., an individual’s preference for separating vs. integrating their work and private life) as a double moderator of the relationship between workload, work-life conflict, and stress symptoms.

Methods: A cross-sectional survey distributed in the second half of 2022 collected data from 152 Australian mental health professionals, including the workload and work-life conflict subscales of the MHPSS, the Segmentation Preference Scale, and the 10-item Perceived Stress Scale. Descriptive and inferential statistics were used to analyse the relationships between these work-related and psychological variables.

Results: Professionals with a stronger segmentation preference showed stronger positive relationships between workload and work-life conflict and between work-life conflict and perceived stress symptoms than those with a weaker segmentation preference. In fact, whereas workload positively predicted stress symptoms (fully mediated by work-life conflict) for those with a moderate or strong segmentation preference it did not predict stress symptoms for those who lacked a preference for segmentation over integration.

Discussion: The observed findings help improve our understanding of why some mental health professionals are more negatively affected by workload than others, which, in turn, will help inform the development of appropriate stress reduction strategies in the workplace.
Daily affect, stress, and self-efficacy in German preschool teachers during the COVID-19 pandemic

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Preschool teachers caring for young children have a high vulnerability to experience negative affect and exhaustion. During the COVID-19 pandemic, additional health, and work stressors, like risk of infection and low predictability of workflow were assumed to enhance this vulnerability. Studies increasingly explore risk (e.g., high stress levels) as well as protective factors (e.g., self-efficacy) influencing affect. However, most research has investigated these associations on the between-person level, lacking empirical evidence for within-person associations of affect, stress, and self-efficacy. In an ambulatory assessment study with measurement burst design, we assessed 69 preschool teachers (age 18 – 63 years) on four bursts for 10 working days each (40 measurement days in total) between December 2020 and June 2022 with regard to their affect, perceived stress level, and current perception of self-efficacy. Multilevel models revealed a significant negative between- and within-person effect of perceived stress on affect. No between-person effect, but a positive within-person effect of self-efficacy on affect was found. Time was not significantly related to affect, neither for the four bursts nor for the days within the bursts. The findings indicate that feelings of stress in general and on a daily level as well as self-efficacy beliefs on a daily level were associated with affect of preschool teachers. Future research building on these findings might investigate whether interventions to reduce stress and enhance self-efficacy might lead to better affect.
Explaining work addiction through behaviors of significant persons in family and organization: does gender matter?

M. Morkevičiūtė, A. Endriulaitienė

Vytautas Magnus University, Lithuania

Background: It was proposed in previous studies that work addiction could stem from observing addictive behaviors of significant persons in a family and organization (Ng et al., 2007). However, there are some authors (e.g., Gibson & Cordova, 1999; Marx & Roman, 2002) who state that men and women may aspire to increase the similarity to different persons. In line with this, the current study examined the role of perceived work addiction of managers and parents in determining the employees’ work addiction in separate male and female samples.

Methods: A total of 964 Lithuanian employees took part in a cross-sectional study. Work addiction was assessed using the Bergen Work Addiction Scale (Andreassen et al., 2012). The same scale was used to measure work addiction of the employees, their parents and immediate managers.

Findings: The results showed that higher levels of work addiction of female employees were predicted by perceived work addiction of both parents and managers. Perceived work addiction of mother contributed the most. Work addiction of males was predicted by perceptions about work-related behaviors of managers rather than those of parents.

Discussion: While most of the previous studies focused on the impact of work addiction on an individual itself, we shed light on the effects of addicted persons in determining work addiction of others. Also, the results have contributed to a literature by suggesting that the variable of gender plays an essential role in choosing the persons with whom an employee will seek to identify.
**How Practical is Health Psychology? Health communication and misinformation**

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⁵University of Helsinki, Finland

**Purpose:** This roundtable/discussion aims to improve audience understanding of how to best communicate health psychology research findings and how to deal with misinformation

**Objectives:**
- Discuss how different communication methods influence the health decisions made by populations;
- Understand the sources of information and misinformation in common health messaging;
- Describe the different purposes of health communication (i.e., advocacy, building health literacy, behaviour change);
- Describe techniques that can be used for effective health communication with individuals and populations;

**Rationale:** “Health Psychology for all: Equity, Inclusiveness and Transformation”, topic of this year conference captures very well why we need to improve our science communication and learn to deal with misinformation. We cannot achieve equitable and inclusive society without communicating research in clear and approachable manner. In order to transform health at population level, we also need to learn how to best deliver health information and how to deal with situations when health messages are inaccurate, biased or purposefully misrepresented.

**Summary:** In this discussion, we will take a deep dive into the challenges faced by health practitioners working in the modern world of misinformation, dark marketing and green/pink/social washing. The audience will learn to identify methods used by industry and others to influence the community. Relevant pervasive examples of messaging from industry will be scrutinised by the presenters. Audience will consider the challenges faced by policy makers and the public in identifying credible sources and identify methods to bolster the marketing literacy and health literacy of diverse populations. They will also discuss how to counter the challenges and address the different goals of health communication, such as advocacy, awareness raising and behaviour change.

The introductory talks will cover the modern approaches that can be utilised to meet the different health communication goals. The audience will discuss communicating health messages through community engagement, using diverse media (i.e., social media, EHPS Practical Health Psychology blog) and at an individual level.

**Timetable:** (90 minutes total)

20 minutes (4 x 5 minutes) – Short presentations, introduction to the topic and examples of how to best deliver health information and how to deal with misinformation
25 minutes – Group activity

5 minutes – Brief feedback

25 minutes – Group activity – discussion of:

- Different purposes of health communication (i.e., advocacy, building health literacy, behaviour change),
- Techniques used for effective health communication;

5 minutes – Brief feedback

10 minutes – Final summary and take-home messages
Views on Ageing in the Context of Health Psychology for all: Insights into Age Discrimination

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²Furtwangen University, Germany

Views on ageing have been identified as an important set screw for health behaviour, health and well-being up and even affects longevity. The way we think, feel and act about ageing does not only feed people’s motivation to get and stay engaged with their lives, but—in case of negative stereotypes—can also come with manifold forms of age discrimination. In light of challenges resulting from demographic change and increasing societal diversity, age discrimination is also a political issue. Embedded into further evidence, findings from the scientific network images of aging provide new insights and currently run into initiatives and joint action with stakeholders and policy makers.

The prevailing images of ageing underestimate the diversity of older people. Much of what is done with good intentions – protecting old people, designing ‘age-appropriate’ technology etc. – reinforces the image of frail, weak and inactive old people. Old people also do not receive the health care they could receive: Motivation, compliance and treatment success are underestimated and hence the preventive, curative and rehabilitative potentials are not exploited. Interestingly, older people themselves do not perceive this as discrimination: In fact, age discrimination is the most common form of discrimination, but at the same time is least consciously perceived. Older people widely practice self-discrimination across life domains, sharing the norms of "it's not worth it at my age" and "you can't teach an old dog new tricks".

Still, we need more evidence on lifelong dynamics in the predictors and outcomes of views on aging. We also must better address matters of diversity and sustainability. And we as health psychologists – scientists, stakeholders and practitioners – have to take responsibility to better sensitize for age stereotypes, change the discourse on ageing, and counteract age discrimination and consequentially anchor our strivings in our interventions and health programs.
Understanding COVID-related behaviours

14:00 - 15:30  |  B2900

Who keeps distance when? Physical distancing across settings in different stages of the COVID-19 pandemic

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Physical distancing is an important preventative measure during respiratory infectious disease outbreaks such as the Covid-19 pandemic. The Corona Behaviour & Well-being cohort study in the Netherlands provided the unique opportunity to study physical distancing behaviours across a range of settings (e.g., outdoors, supermarket, workplace) and types of social relations (family and friends, colleagues, strangers). We studied patterns in physical distancing across situations, as well as sociodemographic variation herein and changes over time.

We employed data from 5 rounds of the dynamic cohort study conducted throughout the pandemic by the Dutch RIVM (N≈50,000 per round). Participants indicated their distancing behaviour in 12 settings. We conducted Latent Class Analyses (LCA) to investigate patterns of physical distancing for each of the 5 rounds, followed by regression models to investigate associations between distancing behaviour and sociodemographic and work environment characteristics.

The LCA showed that participants mainly differed in typical physical distancing behaviour, with additional variation due to distancing with friends and family (vs. strangers), at work and outdoors. Physical distancing at work was strongly associated with work environment characteristics. Younger age groups were less likely to adhere to distancing guidelines, particularly in settings with friends and family and at work. Other sociodemographic differences were small and patterns were stable over time.

Because people mainly differed in typical distancing behaviour, improving opportunities to physically distance could improve distancing behaviour among a large part of the population. Additionally, improving possibilities to retain social contacts while adhering to guidelines is particularly important for younger age groups.
Determinants of handwashing to minimise COVID-19: a systematic review

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Background
During pandemics such as COVID-19, behavioural measures are called upon to help minimise the spread of the viruses. One commonly used behavioural preventive measure is handwashing. We aimed to identify and synthesise the evidence on malleable psychological and psychosocial factors that determine uptake of and adherence to handwashing in the context of COVID-19.

Methods
We searched various literature sources including grey literature. The search strategy was built around three concepts of interest including (1) context (terms relating to COVID-19), (2) behaviour of interest and 3) terms related to psychological and psychosocial determinants of COVID health-related behaviours and adherence or compliance with handwashing, to capture malleable determinants.

Findings
Searches yielded 23,587 results, of which 55 are included in this review. The included studies were cross-sectional in design, came from 22 countries and had a combined sample of 199,376 participants. The quality of the studies was good, with 8 rated high risk of bias, predominately due to lack of reporting of recruitment, sample characteristics and methodology. Thirty-four studies were included in the meta-analysis and 27 in the narrative synthesis. Self-efficacy, knowledge of COVID-19, and perceived social norms were among the malleable determinants most associated with handwashing.

Discussion
Understanding the effects of various malleable determinants on COVID-related handwashing can aid in the development and implementation of interventions and public health campaigns to promote handwashing behaviour in potential new waves of COVID-19 or other respiratory infections. This study highlights some variables that might be targeted in these interventions.
Exploring media use during the COVID-19 pandemic in the Netherlands: a longitudinal study

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³Radboud University Medical Center, Netherlands

Background:
According to the media system dependency theory, during (health) crises, such as the COVID-19 pandemic, media are key channels for informing the population about behaviours and regulations safeguarding public health. In this contribution, we studied (RQ1) what was the general news consumption in the Netherlands during the COVID-19 pandemic, (RQ2) which media sources were used most often, and (RQ3) by whom.

Methods:
Data were collected in a 21-wave longitudinal nationwide cohort study (online surveys) conducted in the Netherlands between 17 April 2020 and 11 September 2022. For this contribution, data from five waves (4,785 participants) were analysed with linear regression, logistic regression and principal component analysis.

Findings:
General news consumption about COVID-19 was mostly predicted by trust in government (β=.25, p < .001), age (β=.08, p < .001), and the male gender (β=.05, p < .001). PCA revealed seven main groups of news information sources (50.7% of variance explained): TV news (used by 90.0% of respondents), press conferences (83.7%), newspapers (69.2%), online news (66.7%), (online) interpersonal communication (41.6%), governmental sources (39.4%), medical sources (5.3%). The most common factors predicting usage varied over the seven sources, but overall were: trust in government, gender, age, education level, health vulnerability, and migration background.

Discussion:
News consumption varies in different population segments and different phases of a pandemic. Public health practitioners should consider socio-demographic characteristics in communication efforts during (health) crises. People with a lower trust in government are less likely to use news information sources and should therefore also be reached via other communication channels.
Investigating vaccination intentions and uptake in the context of COVID-19: A multi-country, prospective, longitudinal study

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Background: Health behaviors such as vaccine uptake are complex and reasons behind decisions to get vaccinated remain largely unknown, compromising the design and evaluation of public health campaigns. The aim of this study is to understand the determinants of vaccination intentions as well as actual uptake within and between different countries prospectively.

Methods: This is a prospective longitudinal observational study using an online survey with a representative sample from five countries between January and October 2021.

Results: The data from a total of N = 771 participants from five countries were included in the analyses. Vaccine coverage in all countries increased from 2.2% at the first measurement occasion to 78.3% at the third measurement occasion. The final model including all characteristics revealed that as trust in healthcare professionals increased across measurement occasions, the likelihood to vaccinate also increased (OR=1.35, 95% CI: 1.03-1.77) whilst increases in complacency (OR=.42, 95% CI: .34-.51), constraints (OR=.65, 95% CI: .53-.78), conspiracy (OR=.61, 95% CI: .51-.73) and decrease in collective responsibility (OR=1.56, 95% CI: 1.30-1.86) across time significantly increased hesitancy. Second, a multilevel model suggested that changes in the three psychological antecedents of vaccination explained vaccination uptake in those who had no initial intentions. Specifically, decreases in complacency (OR=.32, 95% CI: .14,.72, p=.01) and conspiracy (OR=.42, 95% CI: .22,.82, p=.05) and increases in calculation (OR=2.12, 95% CI: 1.20, 3.72, p=.01) increased the probability of getting vaccinated.

Conclusions: The study findings suggest where public health vaccination campaigns should be prioritizing when intentions are known.
A qualitative study exploring the legacy of Covid-19 vaccine communications and implications for future practice

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Objectives: The Covid-19 pandemic disproportionately impacted ethnic minority groups resulting in increased efforts to tailor Covid-19 communications by ethnicity. This longitudinal study explored the role of ethnicity in tailoring Covid-19 vaccine communications and the impact of Covid-19 experiences and communications on future vaccine intentions.

Design: Semi-structured interviews and focus groups were conducted with organisations and residents at three different timepoints (October-December 2021, February 2022, and June-July 2022) in two UK cities.

Methods: Residents were from Black Caribbean, Latin American and Pakistani backgrounds (n=84, n=79 and n=84 at timepoints 1, 2 and 3 respectively) and local public health and community organisations (17, 11 and 13 organisations at timepoints 1, 2 and 3). Participants were recruited via professional networks and invitations shared in community settings. Interview schedules were developed to explore drivers of change in vaccine uptake, anti-vaccine communication, and the role of ethnicity in tailoring communications.

Results: A thematic analysis indicates lower risk perception over time in response to the removal of Covid-19 restrictions, less acceptance of multiple vaccines and an increasingly negative response to communications from healthcare professionals. Engagement with, and impact of, anti-vaccination communication is linked to social identity and ranges from no attitudinal change to reinforcing personal vaccine hesitancy beliefs. Experience of the Covid-19 vaccine programme has impacted on views towards other vaccines resulting in delays to accepting routinely available vaccines.

Conclusions: Tailoring communications based on ethnicity is important but within-group heterogeneity and other demographic factors are also important and should be considered when developing future health communications.
Couples’ coping strategies with Left Ventricular Assist Device Implantation (LVAD) – A qualitative dyadic study

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Background
A left ventricular assist device (LVAD) is a mechanical device that treats advanced heart failure. Patients coping with LVAD need extensive instrumental and medical support, which is usually provided by the spouse. Therefore, it seems that dyadic coping strategies play a crucial role as either mitigators or hinderers of couples’ illness management in the context of LVAD. The aim of this research was to formulate a typology of dyadic coping strategies applied by these couples, as unfolded in their mutual and individual subjective experiences.

Methods
The research was performed in collaboration with a LVAD implantation unit at a medium-sized hospital in Israel. Couples (N = 17) participated in an in-depth dyadic interview using a semi-structured interview guide, and the data collected were analyzed using content analysis.

Findings
Our findings suggest that couples coping with LVAD develop strategies for handling fear, processing and accepting their illness narratives, adjusting their level of independence and intimacy, and utilizing humor. Moreover, our analysis showed that each couple utilized a unique mix of dyadic coping strategies.

Discussion
Our results may constitute a base for developing dyadic intervention programs and clinical recommendations to improve the quality of life and relationships of patients and their spouses while coping with LVAD implementation.
Acceptability of a couples-based intervention for patients with cardiac disease and their partners

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²Université du Québec en Outaouais, Canada

Background: The Healing Hearts Together (HHT) intervention is an 8-session attachment-based, relationship enhancement program for couples in which one partner was treated for cardiovascular disease at a large tertiary cardiac hospital. Clinically significant benefits for patients’ and partners’ relationship quality, mental health, and quality of life have been observed in a proof-of-concept study; participants’ acceptability of the intervention is also required to demonstrate efficacy alongside clinical outcomes. Method: Guided by the Theoretical Framework of Acceptability for Health Interventions, patients’ and partners’ retrospective acceptability of HHT (i.e., post-intervention) was investigated using closed and open-ended responses to a self-report questionnaire. Descriptive statistics and qualitative conventional content analysis were used to analyze the data. Results: Participants (N=75; 51% partners) reported high levels of acceptability (4.7/5) and 80% noted positive outcomes to their relationship. Participants stated that the program provided the impetus, language, and confidence to discuss distressing topics related to the cardiovascular event and relationship impacts with their partner. They noted that the group setting prompted a sense of relatedness, which helped to normalize their experiences. Participants desired more communication about the content to be covered prior to starting the program in order to help to manage expectations. Recommendations included providing partners-only classes, reducing duplicate content in the readings and in-class sessions, promoting balanced participation from couples, and offering follow-up sessions to discuss the sustainability of adopted changes. Conclusion: The high levels of acceptability of HHT provides substantiation for the continuation of the intervention; participants’ recommendations will be considered to improve further iterations.
Young females post-SCAD: Unique challenges and needs in recovery

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Background: Spontaneous coronary artery dissection (SCAD) is an acute cardiac condition that disproportionately affects younger females. Post-event psychological distress is high. Rates of morbidity and mortality are particularly high among younger patients as compared to similarly aged males and older females. The unique challenges facing younger female patients remain to be elucidated. Thus, this multi-site qualitative study compared the psychosocial and physical impacts of SCAD in female patients under and over the age of 50.

Methods: Female patients with SCAD (N=77) from five large tertiary care hospitals in Canada completed a sociodemographic and medical questionnaire and participated in a semi-structured interview; the transcribed data was subject to the framework method using deductive then inductive coding techniques. Predetermined codes and overarching categories were compared in the <50 and >50 patient groups.

Findings: Younger female patients (n=32; M= 40.22; SD=6.66) reported feeling isolated and distressed during recovery because of the lack of medical knowledge/support and the recommended restrictions for physical exertion, which were deemed too limiting for their age. Younger patients also reported pronounced difficulties in adjusting to career and family demands post-SCAD. In contrast to younger patients, those over 50 (n=45; M=57.84; SD=6.91) were more accepting of the recommended changes to their lifestyle (e.g., pacing and exercise limitations) post-SCAD.

Conclusions: This study highlights that younger females with SCAD have clinical needs and life circumstances that may require further differentiation in SCAD-tailored rehabilitation programming. Future observational studies are required to confirm the differences noted between demographic groups in this research.
Health related quality of life in heart failure patients undergoing a new model of medical telecare.

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Background
Shortness of breath, dyspnea, fatigue are symptoms of decompensated heart failure (HF). Recurrence of symptoms is associated with poor prognosis in HF patients and influences daily functioning in physical and mental component of health outcome. The purpose of our study was to assess the influence of a new model of medical telecare on quality of life (QoL).

Methods
The study was prospective, randomized, open-label, and controlled with parallel group: standard care and telecare group. In intervention group the remote regular teleconsultations with patients’ assessment and education focused on the prevention of HF exacerbations by trained nurses were performed. In standard care group patients were followed in existing healthcare system. The QoL was assessed, at baseline and at 12th months, using the SF-36 and The Minnesota Living with Heart Failure Questionnaire.

Findings:
There were no significant changes between groups at baseline assessment. Results showed higher improvement in QoL in telecare group in comparison to standard care group at 12th months follow up. Changes were noted in physical and mental domain of QoL as well as in coping with heart failure.

Discussion:
Telecare intervention enhance health status and influences QoL in heart failure patients. The implementation of education focused on the prevention of HF improve health outcome.
Significant improvements to psychosocial outcomes following a digital cardiovascular disease prevention and rehabilitation programme

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Background: Depression and anxiety are common among people impacted by cardiovascular disease (CVD). Cardiac Rehabilitation is associated with significant improvements in psychosocial outcomes. The aim of this study was to pilot test a cardiac rehabilitation (CR) programme delivered online, and assess the impact on outcomes including anxiety, depression and quality of life.

Method: Participants were referred from local hospitals following a cardiac event or diagnosis to a 12-week digital CR programme, delivered by an interdisciplinary team. Programme components included lifestyle modification, medical risk factor management, psychosocial and behaviour change support. Data were collected at three time points; baseline, end of programme and 6-month follow-up. Psychosocial outcomes were assessed using the Hospital Anxiety and Depression Scale (HADS), EQ-VAS and EQ-5D-5L.

Findings: 105 participants were referred with an uptake rate of 74% (n=77). Of these, 97% (n=75) enrolled in the programme, 85% (n=64) completing the programme and 86% (n=55) attended follow-up. Significant reductions were observed in median scores for anxiety and depression (p<.001), and were maintained at follow-up. Participants global assessment of their health was significantly higher at end of programme and follow-up (p<.001). Significant increases were found for all quality of life domains (p<.01), although improvements were no longer significant 3-months later.

Discussion: Our findings demonstrate that digital CR can produce similar benefits to in-person programmes, including psychosocial outcomes. Significant investment is needed to further test and scale-up digital CR and CVD prevention programmes to complement in-person models, and improve secondary prevention outcomes.
The mediating effects of process measures on smoking and physical activity in the TARS RCT

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Background: The TARS (Trial of Physical Activity and Reduction of Smoking) RCT evaluated the effectiveness of ≤8 Health Trainer support sessions on 6-month prolonged smoking abstinence, for smokers wishing to reduce but not quit. This paper examines how behaviour change processes mediated intervention effects on secondary smoking and physical activity (PA) outcomes.

Methods: Participants (N=915) in four UK sites (predominantly in disadvantage areas) were randomised to intervention or control. Survey process measures (5-point Likert scale – strongly agree to strongly disagree) and behavioural measures of smoking (with biochemical verification) and PA were collected at baseline, 3 and 9 months. Data were analysed comparing change from baseline to 3 and 9 months between intervention and control. The mediation analysis involved structural equation models with bootstrap resampling methods.

Findings: Changes between 0-3 months in 5 of the 10 smoking process measures mediated intervention effects on daily cigarettes smoked at 3 months, and 6 of the 10 measures mediated intervention effects on smoking reduction. Increasing beliefs in being able to reduce smoking, action planning, coping with setbacks and self-monitoring smoking all mediated intervention effects on cigarettes smoked and ≥ 50% reduction up to 3 months. At 9 months, only changes in confidence in reducing and self-monitoring had mediating effects on smoking reduction. Changes in confidence in doing PA and in self-monitoring mediated intervention effects on self-reported PA at 3 months.

Discussion: Participants engage in most targeted multiple behaviour change processes which appeared to impact on short-term changes in smoking and physical activity.
MedEx-UK: Feasibility trial of a Mediterranean diet and physical activity intervention among an at-risk population

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Background: A Mediterranean-style diet (MD) and physical activity (PA) can reduce dementia risk. We assessed the feasibility of an intervention delivered through a website, four group sessions, and provision of supermarket vouchers.

Methods: Participants were randomised to a 24-week MD intervention, MD+PA or control group, and invited to a 24-week maintenance phase. The website and group sessions, based on the COM-B model, included individualised targets and evidence-based techniques (BCTs), e.g., goal setting, action planning, and social support. We assessed feasibility, acceptability, mediators (BCT use, intention, perceived control), and self-reported MD and objectively measured PA at 24 and 48 months.

Findings: We randomised 104 participants; 74% female, mean age 67.4 years. Retention was 95% at 24 months and 64% at 48 months. Engagement with group sessions (3.6 sessions MD+PA group; 3.5 MD group) was high and voucher receipt 100%. 84% accessed the website once per month or less (average 15-30 minutes). 95% found the intervention acceptable, with lower ratings for the website. Self-reported BCT use was higher among intervention than control participants, with goal setting and incorporating behaviour change into routines most frequently used. Intention and perceived control were high at baseline and reduced at 24 weeks. MD behaviours improved significantly in intervention groups compared with control (24 and 48 weeks). A modest PA increase occurred in the MD+PA group (24 weeks) but not in MD and control.

Discussion: The intervention is feasible and acceptable, improved eating behaviours and increased BCT use. The website requires optimisation prior to a large-scale RCT.
Wellbeing behaviour benefits of co-designed park improvements: Natural experimental study in a deprived urban area

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Background
There is little good evidence of how sustainable parks impact on physical activity and other behaviours important for wellbeing. This controlled natural experimental study aimed to examine the effects of a co-designed sustainable park intervention, in a deprived UK urban area, on walking and other wellbeing behaviours.

Methods
Behaviour observations were conducted at two intervention sites and two matched comparison sites. Walking (primary outcome), and other wellbeing behaviours (vigorous, sedentary, social and take notice activities) were assessed at pre-intervention, and 3 and 15 months post-intervention (24 months and 36 months post-baseline). Outcomes were compared between intervention and comparison groups, controlling for baseline using multilevel negative binomial regression models. Additional behaviour observations were conducted in two unchanged nearby sites to assess potential displacement of activity. Intercept surveys (n=623) assessed change in self-reported outdoor space usage at intervention and control areas.

Findings
Observed walking increased 118% at 3 months (IRR 2.18) and 244% at 15 months (IRR 3.44), for intervention sites compared to comparison sites. In intervention sites, 384 people were observed walking at baseline and 698 people at 15 months (at comparison sites, 454 at baseline and 262 at 15 months). Large increases for other wellbeing behaviours were also observed. There was little evidence of displaced activity from nearby sites. Self-reported outdoor usage increased more in the intervention sites (p=0.001).

Discussion
Sustainable solutions can yield large increases in walking and wellbeing in deprived areas, especially where interventions are co-designed with residents. More robust natural experimental studies like this are needed.
Better TWOgether? A planning intervention to increase the physical activity among adolescent friends’ dyads

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Background: Most adolescents do not meet the recommendations for physical activity of at least one hour per day, although physical inactivity is considered a risk factor for poor health. However, research on adolescents concerning physical activity behavior change is limited. Collaborative-planning interventions where two persons plan when, where, and how they change their health-behavior together, are assumed to increase physical activity. Methods: N = 325 adolescent same gender friendship-dyads (target persons randomized; Mage = 16.0, SD = 1.2) attended a randomized controlled trial. The dyads were randomly assigned to a collaborative-planning- (CPG), an individual-planning- (IPG), a collaborative-control (CCG) or an individual-control group (ICG; ClinicalTrials.gov: NCT03575559). Within 26 weeks physical activity was accelerometer-assessed four times for one week each. Results: Across the 26 weeks, latent growth models indicated that physical activity in the individual planning and the individual control group significantly increased. For collaborative planning only a positive trend was found. Conclusion: Individual planning was found to be more effective than collaborative planning, possibly due to the Covid-19 pandemic restrictions that were in place during implementation of the study. However, the present findings highlight the effectiveness of plans in interventions to enhance adolescents’ physical activity.
Public and population health

Public Perceptions of Cervical Screening Following a National Public Health Controversy

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Research on the collective perceptions following failures of public health activities is scarce. Our study aimed to fill this gap by investigating the impact of the cervical screening controversy in Ireland. We asked whether (1) the controversy had affected public trust and attributions of blame for screening limitations, and (2) whether information materials about cervical screening – which had been reworked post-controversy to ensure greater transparency – mitigated the negative effects of the controversy.

We collected samples representative of those eligible to participate in cervical screening in Ireland (N=872) and Scotland (N=400), which is similar to Ireland in many parameters, including levels of institutional trust and satisfaction with healthcare. The Irish participants were randomised to read information materials (n=427) or to the control group. To assess the impact of the controversy, we compared the control group with the Scottish sample. To assess the impact of the materials, we compared the Irish treatment and control groups.

The level of trust in the Irish control group (M=4.99, SE=.06, SD=1.22) was lower than in the Scottish sample (M=5.6, SE=.05, SD=1.18) and the Irish treatment group (M=5.3, SE=.06, SD=1.13). The participants in the Irish control group (M=2.98, SE=.06, SD=1.20) attributed higher blame to the screening system than the Scottish sample (M=2.43, SE=.06, SD=1.17) and the Irish treatment group (M=2.74, SE=.06, SD=1.14). Overall, findings suggest that (1) the controversy damaged trust and increased attributions of blame to the screening system and (2) information materials can restore trust and diminish blame, but this effect is limited.
Knowledge and understanding of Fibromyalgia Syndrome in Ireland: Findings from a cross-sectional survey.

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Background: Patients with Fibromyalgia Syndrome (FMS) commonly report experiencing delegitimation, disbelief and a general lack of understanding from others. This study explored the appraisals of public and clinician knowledge of FMS in an Irish sample, comparing perspectives of individuals with and without chronic illness.

Methods: 319 participants (256 female) aged between 19-74 years (M= 46.9) completed a survey that investigated perceived knowledge and understanding of FMS. Beliefs about the nature, diagnosis and clinical management of FMS were assessed using Likert scales. Chi-square tests of independence were used to explore associations between variables.

Results: Sixty-six percent (n=211) of respondents were persons with conditions (PwC) and reported having one or more chronic illness. Most knew of FMS (n=280) and indicated having a good understanding of the condition. Ratings of public and clinician awareness of FMS were generally poor; only 7% appraised clinician knowledge as good/very good. A relationship was found between illness status and self-rated understanding of FMS, and illness status and perception of clinician knowledge. PwC rated their overall understanding of FMS more favourably, and clinician knowledge more unfavourably, than healthy participants. Appraisals were not associated with multi-morbidity, symptom severity or impact on quality of life. PwC with a formal diagnosis were more likely to rate HCPs knowledge and awareness of FMS as poor/very poor.

Discussion: Results suggest that negative appraisals of health professionals’ knowledge are associated with having lived experience and formal diagnosis of chronic illness. Further qualitative research is needed to investigate factors contributing to low confidence in clinicians.
A digital Informal care support platform: Covid-19 impact on functionality use and implementation recommendations

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Background: The growing need of support for informal caregivers and care recipients during Covid-19 increased the uptake of digital care collaboration platforms such as Caren (NL). However, insight on the impact of Covid-19 on the use of these kinds of platforms is still lacking. We performed a pre-post Covid-19 comparison of support functionality use and extracted recommendations for implementation.

Methods: Survey data was collected in 2019 (N = 11635) and 2022 (N =5573 ) among platform users to compare functionality usage by using descriptive and inferential statistics. Additionally, a focus group with platform developers (N=3) was conducted to extract implementation recommendations. Focus group data was first analyzed deductively, using the Consolidated Frameworks for Implementation Research domains namely: users, technology, inner and outer setting. Later, inductive analysis of overarching themes was performed.

Results: Frequency of overall use of the platform decreased significantly between 2019 and 2022, although usage of specific functionalities (calendar and messaging functionality) increased significantly. Several recommendations on continued implementation of Caren were identified, for example: a) mind the fluctuations and diversification of users; b) consider automated user support; c) continuous and timely flow of care information; d) invest in a sustainable and independent business model; and e) manage hesitation toward data transparency.

Conclusion: The present work offers quantitative and qualitative insights on the effects of the Covid-19 pandemic on the usage and implementation of digital care collaboration platforms. It also holds implications for improving the design and implementation of digital solutions to support informal care.
Divergent views on healthcare transformation: The social representation of telemedicine in the Italian public sphere

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Background: By employing novel information and communication technologies, telemedicine promises to transform traditional healthcare practices into more inclusive and equitable ones, such as overcoming spatial and time barriers. Moreover, it enables unprecedented participatory opportunities fostering collaboration and value co-creation between health professionals and patients. However, despite catching much public attention, telemedicine is still unevenly diffused in the Italian context. Thus, through social representations theory, we aimed to investigate how telemedicine was represented by the Italian press, laypeople, and health professionals. Methods: By integrating press and survey data, we performed the following analyses: (a) a salience analysis of the press, gauging the topic’s public relevance over time (1990-2022); (b) a qualitative content analysis of the articles published by Corriere della Sera (n=1704; 2019-2022); (c) descriptive analyses of survey data (n=2375), collected among a population of Italian news readers. Findings: Salience analysis showed that telemedicine’s popularity grew slowly until 2020, when it rocketed to 10447 published news. Content analysis showed that the press mainly represented telemedicine as a care facilitator (e.g., enabling care access, facilitating monitoring, fostering prevention). Likewise, survey results showed that laypeople conceptualised telemedicine in instrumental terms, cutting time and space barriers. Conversely, healthcare professionals referred to potential barriers concerning its employment in everyday care practices (e.g., digital grey divide). Discussion: While indicating that perspectives on telemedicine are mainly positive, results indicated sacks of resistance in the public sphere and showed that healthcare professionals remain cautious about its potential and – in turn – their attitude might hinder its diffusion.
Post-mortem organ donation in Italy, a large-scale focus group study on people’s perceptions and beliefs

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Background: Many factors can influence the decision about one’s post-mortem organ donation such as personal and cultural beliefs, misinformation, fear of death and inadequate will registering procedures. In 2021 in Italy only 63.5% of the population expressed their will and to date more than 8000 people are waiting for organ transplantation. The present study, conducted in collaboration with the National Centre for Transplantation, aimed to explore perceptions, beliefs and information around post-mortem donation and will expression in different groups of the Italian population, to orient future interventions and raise awareness.

Methods: A total of 38 focus groups were conducted in 6 representative regions of Italy between June and November 2021 involving 353 participants (healthcare professionals, young and adult citizens, registry office employees, and opinion leaders). Thematic analysis was conducted with the use of Atlas.ti.9.

Findings: Results pointed out 22 themes, grouped in five overarching themes: dilemmas regarding donation, resistances to donation, facilitators of donation, difficulties in terms of will expression, and proposals to encourage will expression.

Discussion: The present research highlights the importance of taking into account the complexity and multifaceted aspects regarding the choice of becoming a donor based on personal and community perceptions and experiences. These results go in the direction of enhancing the development and implementation of tailored and bottom-up interventions to support effective policy implementation around post-mortem organ donation and will expression.
Attitude, intention and will expression on post-mortem organ donation in the Italian population

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Background: More than 8000 people are waiting for organ transplantation in Italy. Even though most of the population has a positive attitude towards organ donation, the percentage of consent to donation remains low (only 68.2% of the expressions in 2021). Exploring different points of view and variables that might play a role in this process is very important to foster a culture of organ donation and specific policy implementation.

Methods: A mixed-method study was conducted in 2021 in collaboration with the National Centre for Transplantation and involved 353 participants (healthcare professionals, citizens, opinion leaders, registry office employees) that completed a questionnaire to assess their attitudes towards organ donation and will expression before and after participating to a focus group on the topic. Statistical analyses were conducted with SPSS.

Findings: Results showed that 93.8% of participants reported a positive attitude towards donation, which significantly increased participating in the focus group (p<.001). Only 50.4% of the sample expressed their will at the time of the study. Significant correlations were found between a positive attitude and being a woman (p <.045), higher education (p<.004), familiarity with donation (p<.001); and between having expressed one’s will and familiarity with donation (p <.024) and being registered to donation associations (p<.001).

Discussion: Differences in attitude and will expression in each group (especially opinion leaders and registry office employees) underline the need to implement targeted interventions and policies to foster the creation of a culture of donation and to support citizens in expressing their will consciously.
14:00 - 15:30 | B1410

The Queen takes Ivermectin? Combatting health-related misinformation in times of crisis

14:00 - 14:15

A Systematic Review of the Association of Belief in Conspiracy Theories and Vaccination Intention

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Background: Vaccine hesitancy has been identified as one of the top ten global health threats by the World Health Organization (WHO). Conspiracy theories are frequently mentioned as a major cause of vaccine hesitancy. In this systematic review we summarize and critically evaluate studies to assess the i) prevalence of vaccine-related conspiracy theories, ii) the relationship between belief in conspiracy theories and vaccine intention, and iii) interventions that reduce the impact of conspiracy belief on vaccine intention.

Methods: In July 2022, a systematic literature search was conducted using three databases in the fields of Medicine, Psychology, and Public Health. 243 articles were chosen and analyzed using the PRISMA approach.

Findings: The majority of studies were conducted in Europe and North America. The most identified studies were published in 2021 and 2022, and the most investigated vaccine was the COVID-19 vaccine. The prevalence of beliefs in vaccine-related conspiracy theories ranged from 2.1% to 55%. Furthermore, studies that included social media content analysis revealed that vaccine-related conspiracy theories are a common theme. Almost all studies that looked into the relationship between conspiracy beliefs and vaccination intentions found a significant negative relation between the two concepts.

Discussion: The review revealed that vaccine-related conspiracy theories are a common obstacle when it comes to vaccination intentions. However, the current state of research has some limitations. More experiments are needed to investigate the causal relationship between conspiracy beliefs and vaccination willingness. Furthermore, more experimental tests of interventions that can reduce the impact of conspiracy beliefs are required.
Beliefs in and sharing of health-related misinformation on social media: Two scoping reviews

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Background: Health-related misinformation poses a key challenge to effective and timely public health responses. Social media platforms have played an increasingly critical role in spreading and amplifying such content. Consequently, the World Health Organization (WHO) has called for action to counter the spread of misinformation on social media and mitigate the resulting harms. Both cognitive and behavioral approaches are needed to understand reasons for and mitigate sharing of misinformation.

Methods: In late 2022 and early 2023, we conducted two pre-registered scoping reviews (PRISMA-ScR approach) to evaluate 1) the determinants of believing in misleading health-related content and 2) the determinants of sharing such content. We searched PubMed, PsycInfo, IEEE, and Scopus for applicable research and classified the findings according to current frameworks.

Findings: We find that people's beliefs in and sharing of misleading information are influenced by person-level characteristics and processes, information-level as well as contextual factors. At the person level, different cognitive drivers (such as knowledge) influenced both beliefs and sharing. On a contextual level, various social, affective, and source-related cues influenced users' beliefs. These contextual factors were even more critical for users' sharing behavior.

Discussion: The evidence synthesized across both reviews highlights the multi-determined nature of beliefs in and sharing of misinformation and the need to recognize person-level and contextual factors when designing and evaluating interventions, particularly with respect to users' sharing. However, more externally valid experimental research is necessary, and potential interaction effects of different determinants should also be considered.
Enhancing the tacit knowledge behind true and fake news discrimination

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Our survey research suggests that true and fake news discrimination involves tacit knowledge (information that participants have difficulty articulating or might not even be aware of) rather than explicit knowledge (information that participants are aware of and can easily articulate). To improve the tacit knowledge we use in everyday life (e.g., languages, music, and motor skills), we typically engage in repetitive practice. This could be applied to true and fake news discrimination through inductive learning, which involves learning to distinguish between different categories by repeatedly classifying exemplars from those categories. For effective inductive learning, several factors must be considered, two of which are the presentation (successive vs. simultaneous) and sequencing (interleaved vs. blocked) of exemplars. Since inductive learning has scarcely been applied to misinformation research, the most effective presentation and sequencing methods have not yet been determined. Therefore, we tested all possible combinations of the two presentation methods and the two sequencing methods to determine which were most effective in improving true and fake news discrimination. We randomly assigned 192 US participants to one of four conditions: blocked successive, blocked simultaneous, interleaved successive, or interleaved simultaneous. With receiver operating characteristic (ROC) analysis, we found that interleaved sequencing and simultaneous presentation only improved discrimination between true and fake news headlines in very right-wing participants. Overall, interventions should consider the nature of the knowledge they are designed to enhance. Nevertheless, it is not guaranteed that their effects will generalise to everyone, and instead may only be successful for certain groups of individuals.
Bridging evidence and policy: EC’s behavioural science support for COVID-19 vaccination communication

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The COVID-19 pandemic has highlighted the importance of effective communication and evidence-based policy making in promoting public health, particularly in the context of vaccination. The European Commission (EC) has played a key role in supporting vaccination efforts and countering misinformation by using behavioural sciences research to support vaccination communication campaigns. The presentation will focus on the results of two studies: first, we collected data from nearly 6000 respondents from seven EU Member States in May 2022 to investigate beliefs and perceptions of EU citizens on the progression of the COVID-19 pandemic. The survey found that unvaccinated respondents believed the pandemic was over and were unlikely to get vaccinated in the future. Vaccinated individuals were undecided about getting a booster if they believed a future wave was unlikely. Second, in February 2022 we conducted a survey on ~240 parents from across the EU regarding their vaccination status, their beliefs and worries about COVID-19 vaccination, as well as their trust in various institutions and sources of information. Parents were concerned about the safety and testing of vaccines, long term side effects, as well as the necessity of vaccinating their children. We discuss how insights from these studies were used to inform communication regarding vaccination campaigns, with particular attention to their implication for countering misinformation.
Self-regulation in chronic disease

14:00 - 14:15

Promoting self-regulation in chronic disease: A systematic review and meta-analysis of behaviour change interventions

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Background: Patients with chronic kidney disease are advised to self-regulate their diet to avoid potassium and phosphates, regulate fluid intake and adhere to medication to delay disease progression, extend life and ensure preparedness for transplant surgery. Interventions to support patients are important priorities for health psychology. A meta-analysis of intervention studies was conducted to evaluate (i) effectiveness of interventions in changing psychological, behavioural self-management and physiological outcomes (ii) behaviour change techniques derived from the behaviour change taxonomy (BCT) that are associated with change in psychological, behavioural and physiological outcomes.

Methods: Forty-six randomised controlled trials of psychological interventions targeting behavioural and physiological outcomes were identified via database searches (n = 4257).

Findings: The meta-analysis obtained moderate effect sizes for behavioural change (hedge’s g = 0.50 to 0.65) and physiological health outcomes (hedge’s g = -0.32 to -0.57). Fewer studies assessed psychological intervention targets, but large effects were obtained for knowledge change and quality of life (hedge’s g = 0.65 & 1.17, respectively). BCT contents of the interventions were coded by 3 coders. Meta-regression showed that psychological outcomes were enhanced by interventions that included the BCT categories: shaping knowledge b = -0.73; social support; b = 0.54 and therapy b = 0.62. Physiological outcomes were enhanced by interventions that included the BCT categories social support- therapy (b = 0.47).

Discussion. Behaviour change interventions are effective with moderate effect sizes, few studies to date identify psychological targets that underpin these effects. Physiological changes were enhanced by interventions that included supportive therapeutic elements.
The perennial puzzle of fatigue: testing explanations following acute cardiac events in men and women

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Background
Two prominent theoretical explanations of fatigue are: resource depletion and motivation to cease or control current activity/state. Investigations of nurse work fatigue only showed support for the latter, as perceived control over activities predicted fatigue.

Fatigue is a common experience following acute cardiac events (ACSs) and women typically have poorer outcomes than men. We aimed to examine depletion and control as well as gender differences in explaining fatigue.

Methods
Fatigue, perceived control over the condition, and depletion of resources as indicated by illness representations of consequences and timeline were assessed weekly (up to 30 weeks) in 184 patients (146 men) following ACSs. Depletion was also assessed as clinical SEMI status on discharge from hospital. Data were analysed using multilevel modelling testing direct and mediating effects of perceived control and depletion on fatigue in men and women, and change in fatigue over time.

Findings
Fatigue was greater in women but declined equally over time for men and women. Fatigue was not related to STEMI status. Neither perceived control nor any of the three indicators of depletion mediated the effect of gender on fatigue, nor the decrease over time: Instead, gender, time, perceived control and perceived consequences all independently related to fatigue (z ratios 3.5 – 9.1, p<.001).

Conclusions
Neither theory of fatigue explained gender differences in fatigue nor change over time. There was support for main effects of perceived control as found previously in nurses, and additionally limited support for a depletion model. However, striking features of fatigue remain unexplained.
Trajectories of illness perceptions in patients receiving dialysis: a longitudinal study

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Background: Illness perceptions play an important role in outcomes for patients with kidney disease. This prospective longitudinal study examined how illness perceptions, depression, and dialysis symptoms adjust over time and their inter-relations amongst patients in the pre-dialysis and dialysis phase. Methods: Patients were recruited from four dialysis centres in Northern Cyprus between 2020-2021. Data were collected from 181 patients (124 patients receiving dialysis [91.1% haemodialysis] and 57 patients in pre-dialysis phase) at baseline (Time 1). Both patient groups were followed at six months (Time 2) and at 12 months (Time 3 = one year). Self-reported measures used included Brief Illness Perceptions Questionnaire, Patient Health Questionnaire-9, and Dialysis Symptom Index. Findings: A series of linear latent growth models were used to understand trajectories of study variables. Overall, patients’ perceptions of consequences and emotional response were found to decrease over a one-year period. Depression and dialysis symptoms were found to be relatively stable over a one-year period. Patients who reported higher levels of illness perceptions of consequences and emotional response at baseline were more likely to report greater depression symptoms. Similarly, those patients receiving dialysis who reported greater emotional response and lower levels of personal control at baseline were more likely to report dialysis symptoms. Discussion: The findings lend support to the importance of illness perceptions as a framework through which to identify patients who may be in need of support. Interventions may enhance patient experience amongst those receiving dialysis, though such interventions have yet to be widely applied in this context.
Seeking help for stigmatised urogynaecological symptoms: a mixed methods systematic literature review.

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Background: Women’s health is a globally important subject, included in several global and United Kingdom health policies. All emphasise the importance of improving information and access to urogynaecological services. Consequences of urogynaecological symptoms are intimate, personal, and varied, often causing embarrassment and shame, and affecting women’s quality of life and wellbeing.

Aim: to understand the experience of seeking help for stigmatised urogynaecological symptoms by synthesising all types of primary research to identify potential behavioural targets for intervention.

Methods: Systematic search of MEDLINE, CINAHL, PsycINFO, SocINDEX, PubMed, CDSR and CENTRAL registers, from inception to February 2022 for all types of research capturing women’s views and experiences of help-seeking with stigmatised urogynaecological symptoms. Results based convergent synthesis approach integrated quantitative and qualitative data. Themes were mapped to the Self-Regulation model and Candidacy framework. The Mixed Methods Appraisal Tool was used for critical appraisal and GRADE-CERQual for assessing certainty of review findings.

Findings: 75 studies representing over 20,000 participants from eighteen high income countries were included. There was high confidence that barriers to help seeking were similar across all study types: stigma, participants’ lack of knowledge, feeling clinicians dismissed their symptoms, and associated normalising and deprioritising of symptoms. Facilitators included increased knowledge, and supportive clinicians.

Discussion: Women with stigmatised urogynaecological symptoms face difficulties identifying their ‘candidacy’ for healthcare, compounded by women’s perceptions that clinicians don’t take their symptoms seriously. Addressing these issues through behavioural change interventions, for women and clinicians, will help achieve universal access to sexual and reproductive healthcare services (UNSDG 3.7).
The common sense model applied to Urinary incontinence: a qualitative analysis (PURIPRO, Portuguese Urinary Incontinence Project)

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Only 25% of women suffering from Urinary Incontinence seek care. One of the reasons for this is their UI-related representations. Understanding them is crucial to enhance access to treatment. The Common-Sense Model of self-regulation (CSM) explains illness representations/health-related behaviours. This is the first qualitative study driven by the aforementioned model to understand women’s cognitive representations regarding UI during menopause.

Cross-sectional. The sample consisted of 33 women (40-65 years old), who self-reported having urine loss occasionally/frequently (suffering from Urgency/Stress/Mixed UI and experiencing low/mild/severe symptoms). Qualitative research was conducted and framed by the CSM. The in-depth interview content was analysed based on Directed Qualitative Content Analysis using MAXQDA. The emergent themes were grouped according to the dimensions of illness representations based on CSM.

The main dimensions of the CSM Model were confirmed (e.g., concerning identity, three main themes emerged: Urine loss associated with Physical Activity/Urine loss associated with urgency/both. Regarding Cause, four themes emerged: Vaginal Delivery/Menopause/Age/Overweight.

These women were able to make a distinction between loss of urine during physical activity and associated with an urge to urinate. These meet the main types of UI, showing that these participants display knowledge regarding UI Identity. Cause dimension: Women were also able to mention what may have caused their UI: 1) the number of vaginal births, 2) the appearance of urinary symptoms when entering menopause, 3) and the fact that excess weight in the abdominal area puts pressure on the bladder, which may cause UI. Future studies should explore if the capacity to identify a disease and knowing its causes may incentivise women to seek medical treatment.
The neglected source of self-efficacy: Investigating physiological arousal during a self-efficacy intervention using the FaceReader

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Bandura specifies four sources of self-efficacy: performance accomplishments; vicarious experience; verbal persuasion; and emotional arousal (physiological arousal and its cognitive appraisal). Although self-efficacy is important for health behavior, the source of emotional arousal has received relatively little attention in previous research, partly due to difficulty of measurement. The FaceReader is a validated software to automatically recognize arousal in facial expression but has not been used in health behavior research. This study investigated whether arousal during a health behavior intervention changes self-efficacy, intention and target behavior, and whether self-efficacy mediates the effect of arousal on intention and behavior.

173 Nepali women were filmed while practicing lifting loads in a health-protective way as part of a self-efficacy intervention. Their facial arousal was evaluated by the FaceReader. Linear regressions tested whether arousal relates to change in self-efficacy, intention and behavior towards health-protective lifting pre-post intervention. Mediation by self-efficacy was tested using PROCESS.

Higher arousal during the intervention lead to a decrease in self-efficacy ($r = -.39; p = .003$) and decrease in behavioral intention ($r = -.41; p = .003$) but was not related to protective lifting ($p = .384$). Self-efficacy mediated the relationship between arousal and behavioral intention ($ab = -.22, 95\%-CI [-.36, -.09]$).

Our results corroborate Bandura’s assumption of arousal as a source of self-efficacy. They highlight the importance of considering arousal in health behavior change interventions, given that arousal may undermine people’s self-efficacy. The FaceReader proved a helpful tool, which allows to passively, and at scale assess arousal during a health behavior change intervention.
How does stress relate to eating behavior? Insights from studies in daily life

14:00 - 14:15

Day-Level and Within-Day Level Stress and the Intention-Behavior Relation in Dietary Behavior

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Background: Stress has been identified as a risk factor for overeating. However, in many studies, food intake has not been related to participants’ current intentions to eat, leaving open the question to what degree current stress hinders the implementation of intentions and/or increases eating regardless of current intentions.

Methods: 65 participants with a goal to reduce intake of certain foods completed five daily questionnaires in 3-hour intervals for 10 weekdays in which they reported goal congruency of their eating behavior and stress for the past three hours as well as intentions to act according to their dietary goal in the next three hours. Evening prompts further included three different items related to goal-related behavior for the current day (amount of intake, goal congruency of intake, satisfaction with intake) and intentions for the next day. Separate multilevel models predicted within-day goal congruency and the three facets of daily goal-related behavior with lagged momentary intentions, stress, and their interaction with random intercepts (participants) and slopes (intentions).

Findings: Stress did neither predict behavioral goal congruency nor intention-behavior relationships on a signal level. On a day level, stress did significantly predict goal congruency and satisfaction with eating but did not interact with intentions. Within-day intention and behavior values were high overall.

Discussion: Day-level stress increases the risk for goal-incongruent eating behavior, independently of day-level intentions to engage in goal pursuit. This pattern does not replicate in three-hour intervals, potentially because days are inherently meaningful units for structuring goal pursuit.
The dynamic relationship of physiological stress and snacking in healthy adults

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Background: Stress has been associated with unhealthy snacking, which can lead to negative health outcomes. For individuals with eating disorders, it has been shown that heart rate variability (HRV) decreases leading up to an eating episode, indicating increasing physiological stress. However, it is unclear if these dynamics apply to healthy populations. Drawing from previous research, we hypothesized that in healthy adults likewise, there is a decline in HRV in the 30 minutes leading up to an unhealthy snacking episode.

Methods: In this 4-day ambulatory assessment study, 67 students wore an ecgMove 4 sensor that recorded accelerometry and electrocardiogram data. Participants also completed bi-hourly short e-diaries reporting their consumption of unhealthy snacks since the last diary. In line with recommendations, the HRV data were aggregated in 5-minute segments. We used mixed effects modelling with a linear time trend in the 30 minutes before the snacking episode as the independent variable, and HRV as the dependent variable, adjusting for important covariates (physical activity, caffeine consumption).

Results: In line with our hypothesis, we found a significant linear HRV decrease at 5-minute intervals in the 30 minutes before a 2-hour time window when an unhealthy snacking episode occurred (B = -0.25, p = 0.028).

Discussion: Our findings contribute to a better understanding of the temporal dynamics between physiological stress and unhealthy snacking in daily life. Understanding this relationship between HRV as an unobtrusive and continuous physiological stress indicator and unhealthy snacking episodes in daily life can inform future ecological momentary interventions targeting snacking behavior.
Interindividual differences in emotional eating: a multi-method approach

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\textsuperscript{2}University of Vienna, Austria

Background: Emotional eating (EE) refers to eating in response to emotions instead of hunger. Popular in lay psychology, the evidence base for the validity of this concept is surprisingly mixed: some meta-analyses find EE only in eating disordered patients, others only in restrained eaters, which suggest that only certain subgroups show EE. Some of this divergence might be further be due to different measurements of interindividual differences related to EE.

Methods: Three EE measures were obtained from 102 non-eating disordered participants with a wide BMI-range. First, psychometric questionnaires were completed. Second, image-stimulated food craving ratings after negative vs. neutral emotion induction was measured. Third, ecological momentary assessment (EMA) probed the relationship between momentary negative emotions and momentary food cravings across 10 days.

Findings: Confirmatory factor analysis fitted one latent factor to the shared variance among these three measures. This latent EE factors correlated positively with subclinical eating disorder symptoms and BMI but not with restrained eating.

Discussion: The one factor solution hints at the existence of a single common EE construct behind three different measurements. Individual differences in EE are supported by the data and are related to eating and weight (psycho)pathology but not restrained eating. EE differs between individuals and is relevant to mental and physical health.
Effects of Trait Stress Eating and Momentary Stress on the Consumption of Different Food Categories

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Introduction: Stress may lead to an increased uptake of highly caloric, unhealthy foods and a decrease of low caloric, healthy foods. However, it is unclear whether individuals can accurately self-identify as trait stress eaters and whether stress eating responses vary across different food categories. We hypothesized that trait stress overeating translates to overeating on unhealthy and undereating on healthy food during stress in everyday life.

Methods: We used Ecological Momentary Assessment (EMA) and the Salzburg Stress Eating Scale (SSES) trait questionnaires to measure the momentary and trait-like effects of stress on eating behavior respectively in a sample of 97 normal weight to obese individuals. Participants reported momentary stress, in a signal-based EMA protocol (6 times a day for eight days). They reported eating episodes and how much they ate from six food categories (vegetables, fruit, carbohydrates, fatty food, salty snacks, and sweets) event based. Six separate multilevel models were fit for the amount eaten from each of the 6 food categories, predicted by trait stress eating (level2), momentary stress (level1), their multilevel interaction, random intercepts (participants) and random slopes (momentary stress).

Results: Considering the multilevel interactions (trait stress eating * momentary stress), individuals with higher trait stress eating reported to consume more salty snacks, fewer vegetables but also more fruits when experiencing higher momentary stress.

Discussion: Our findings indicate that self-identified trait stress overeaters may be especially vulnerable to stress-induced unhealthy eating behavior, in that they consume more salty snacks and fruit, and fewer vegetables.
Which type of stressor increases unhealthy snacking? Insights from an everyday life study

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Background: Stress can have a negative impact on eating behavior. In particular, daily hassles may lead to increased unhealthy snacking. However, it is unclear whether the type of stressor influences this relationship. This study investigates the association between experienced stress and unhealthy snacking in everyday life. Furthermore, moderation effects of the type of stressor are tested. Methods: Students at the University of Bern, Switzerland (N = 66) took part in an intensive longitudinal study over a 4-day period. The number of unhealthy snacks consumed and perceived stress were assessed eight times a day (2'310 observations analyzed). Generalized estimating equations were used for the data analysis. Findings: No overall association was found between experienced stress and unhealthy snacking. However, a moderation effect was observed for work-related stressors. At moments when work-related stressors, as opposed to other stressors, were reported, fewer unhealthy snacks were consumed in the following 2-hour interval (B = -0.51, SE = 0.24, p = .037). In addition, individuals who experienced more stress on average, consumed more unhealthy snacks when experiencing more interpersonal stressors compared to other stressors. Discussion: The current study demonstrates that considering the type of stressor is important for understanding the association between stress and unhealthy snacking. While work-related stressors appear to be more relevant to current eating decisions, interpersonal stressors may have a negative impact on unhealthy eating among individuals who experience stress frequently. Interventions matched to the type of stressor might be promising to help reduce the negative effects of stress on nutrition.
Purpose: Health psychology did and still does bring positive contributions to the (mental) health and well-being of individuals who are lesbian, gay, bisexual, transgender, and/or queer (LGBTQ+) – explicitly including individuals with interacting identities or health vulnerabilities. One such striking example is the fight against the human immunodeficiency virus (HIV). Health Psychology contributed to the understanding of the impact of the virus on affected communities and the development of prevention intervention strategies for the different segments of the LGBTQ+ communities. However, these topics seem to receive relatively little attention within the wider scope of health psychology and specifically within the EHPS. In addition, this subfield faces new challenges as structures within society and subcultures change and new emerging community-specific outbreaks occur (e.g., mpox) and new prevention intervention strategies (e.g., injectable pre-exposure prophylaxis) emerge with their related cognitive and behavioral challenges.

Objectives: This roundtable has 3 objectives: (1) to briefly present various projects as examples of how health psychology has and can make a positive contribution to LGBTQ+ health, (2) to map out why LGBTQ+ issues receive relatively less attention within health psychology and what other areas can learn from decades of work focusing on LGBTQ+ health, (3) to generate new broad research goals to give new impetus to LGBTQ+ focused research within health psychology.

Rationale: A significant portion of the world’s population identifies with at least part of the LGTBQ+ umbrella, so health psychology as a field and the EHPS in particular should play a role in providing solutions to help them maintain optimal health and well-being.

Summary: Thomas Gültzow will open the roundtable. Udi Davidovich will present a historical perspective on how health psychology helped shape the response to the HIV epidemic from its emergence in the early 80’s until today. Neil Coulson will present research which has examined the role of online peer support among HIV+ individuals. Chantal den Daas will present some findings from two large population surveys amongst men who have sex with men and bi+ populations, their benefits, and limitations. Chris Noone will present on the discourses that clinical psychologists draw on when discussing mental health in the LGBT+ community. Siobhán D. Thomas will present review results that highlight significant gaps in health psychology research addressing avoidance and delay of healthcare in the trans community. We close the round table with an interactive discussion.
Exploring teachers’ perceptions of stress and wellbeing following laughter breaks in the classroom

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The present study aimed to explore teachers’ perceptions of stress and wellbeing before and after the introduction of laughter breaks in the classroom. Teaching is an emotionally demanding career, with teachers experiencing continuous challenges and being expected to always maintain professional competence. As a result, teachers experience high levels of stress which may negatively impact the quality of teaching and learning. Incorporating laughter in the classroom has been shown to have positive effects on psychological wellbeing. Twelve international primary school teachers (six from the UK, two from USA, two from China, one each from New Zealand and Ireland) participated in this qualitative study. Nine participants were female and three were male (The average age of participants was 31.58 years, SD= 5.16). Participation involved taking part in a two-week intervention involving laughter breaks and attending two online semi-structured interviews (pre-intervention and post-intervention). Data were analysed using reflexive thematic analysis (RTA). Three main themes were established, including: (a) the effect of children’s behaviour on teacher wellbeing, (b) teachers’ perceptions of the main sources of work-related stress and how this changed following the laughter intervention, and (c) the importance of effective stress management tools in the school environment. Participants reported that laughter reduced their stress in the classroom and enhanced the overall classroom environment. Whilst additional research would enhance the validity of these findings, this study has provided a foundation for suggesting it would be beneficial for some teachers to incorporate laughter into the classroom.
Preparation of a collegial support program at the Austrian Hietzing Clinic

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Background. The Second Victim Phenomenon (SVP) is a worldwide problem in health care and impacts many health care workers’ psychological health negatively. A Second Victim (SV) is any health care worker involved in and traumatized by an unanticipated adverse patient event, health care error or patient injury. Hietzing Clinic (KHI) in Vienna, Austria, implemented a collegial support program to offer SV emotional support from specially trained colleagues, called KoHi. We conducted a first study (KoHi I) to collect information on SVP at KHI.

Methods. KoHi I is a cross-sectional, descriptive study using the SeViD-questionnaire conducted from April to May of 2020, before implementation of the KoHi-program at KHI. The analysis was carried out at RheinMain UAS.

Findings. 43% of the participants of KoHi I have suffered SVP, most received support from their colleagues (74,9%). The support measures rated most helpful after SVP were access to legal consultation after severe events as well as access to professional counseling or psychological/psychiatric consultations.

Discussion. KoHi I’s findings emphasize the need of and legitimate implementing a systematic collegial support program at KHI. The KoHi-program contains the training of approximately 150 voluntary “Collegial Helpers” from all occupational groups to offer emotional support to those in need. Supervision will be offered to collegial helpers. Further studies will be conducted in the future to validate the importance and effectiveness of the program. A follow-up study of KoHi I will be analyzed to show the development of SVP at KHI.
What drives MOOCs success in Healthcare? Organizational Learning Culture and Training Transfer among Physicians

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Background: The literature suggests that investing in workplace training represents a functional strategy to improve organizational performance. In this regard, scholars have demonstrated that the adoption of massive open online courses (MOOC) could be useful to achieve this goal in various organizational fields, including healthcare. However, consistent with the training transfer literature, effective training is shaped by several factors related to the individual (e.g., attitude), training design (e.g., the reputation of course developers) and organizational levels (e.g., organizational learning culture). The current study aimed to integrate the above-mentioned variables into a Theory of Planned Behaviour model and test its effectiveness in predicting training transfer intention about MOOC content among physicians.

Methods: A total of 163 Italian physicians (aged 26-64) completed an online self-reported questionnaire assessing the investigated variables.

Findings: SEM analysis partially confirmed the hypothesized model and showed a good fit (CFI = .91, TLI = .90, RMSEA = .08, SRMR = .07). The organizational learning culture was a distal predictor of training transfer intention by affecting attitude towards MOOC, subjective norms, and perceived control about the transfer. Attitude, perceived control about the transfer, perceived usefulness and MOOC reputation emerged as proximal predictors of intention. Finally, perceived usefulness was positively predicted by the perceived ease of MOOC use.

Discussion: These findings support the pivotal role of learning culture in influencing training transfer intention and could inform about key variables to target for improving MOOC effectiveness among physicians.
PEAK mood, mind and marks: developing an exercise intervention for university students

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Background: Physical activity is a promising solution to tackle the growing mental health crisis among university students. Interventions attempting to increase students’ physical activity often fail to consult key stakeholders in intervention co-design, and lack theoretical grounding, leading to low rates of engagement, and limited effectiveness and scalability. The aim of this study was to develop PEAK, the first intervention theoretically informed by the Behaviour Change Wheel (BCW) to engage university students in exercise for their mental and cognitive health.

Methods: Focus groups with 25 university students, and individual interviews with 10 university leadership staff were conducted to understand barriers and facilitators to intervention engagement and implementation. Template analysis was used to code interviews to the Capability, Opportunity and Motivation (COM-B) model of behaviour. The BCW, a guide to intervention development, was subsequently used to map identified barriers and facilitators to the most appropriate behaviour change techniques (BCTs) using the BCT-Taxonomy.

Findings: BCTs targeting core components of Capability (e.g. lacking knowledge about the mental and cognitive health benefits of exercise.), Opportunity (e.g. needing a range of accessible exercise options), and Motivation (e.g. deprioritising exercise) were identified and addressed in the intervention design.

Discussion: The COM-B model and BCW can be applied successfully to design an exercise intervention for university students. The intervention was developed in collaboration with key stakeholders (i.e. university students and leadership staff) to optimise participant engagement, intervention effectiveness and scalability. PEAK has recently been evaluated using a mixed-methods design.
Engaging university students in an exercise intervention to PEAK their mood, mind and marks

C. Brown¹, R. Segrave¹, K. Richardson¹, B. Pizzirani¹, L. Atkins², S. Hughes¹

¹Monash University, Australia
²UCL Centre for Behaviour Change, New Zealand

Background: Physical activity has the potential to improve university students’ mental and cognitive health, yet many are not exercising enough. Many interventions have attempted to increase students’ physical activity, however the lack of theoretical underpinnings to select behaviour change techniques has led to low rates of engagement, limiting effectiveness, and scalability. This study evaluated PEAK, the first intervention theoretically informed by the Behaviour Change Wheel to engage university students in exercise for the benefit of their mental and cognitive health.

Methods: The study used a cohort pilot study design to assess the effectiveness of PEAK. PEAK was a 12-week online and in-person program designed to increase students capability, opportunity and motivation to engage in exercise. 115 students participated in the PEAK pilot. Mental health, cognitive health and physical activity was measured pre- and post-intervention. Paired t-tests were used to analyse questionnaire data.

Findings: Non-exercisers increased their activity levels by 71%. Significant improvements in students perceived mental health were reported across mood (10.3%), wellbeing (6.2%) and resilience (5.4%). Significant improvements in perceived cognitive health were reported across concentration (29.3%) and memory (22%).

Discussion: An exercise intervention informed by the Behaviour Change Wheel improved students’ mental and cognitive health. Large-scale, randomized-controlled trials that examine the effectiveness of theoretically rigorous exercise interventions to enhance university students’ mental health and cognitive health are needed.
The role of individual factors in occupational health

What makes people craft? An exploratory study using ecological momentary assessments

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Background:
Today’s flexible work style blurs the boundary between work and personal life. To ameliorate the mental health of office workers, researchers have been studying crafting (i.e., workers’ proactive and self-initiated changes in their lives targeting psychological needs satisfaction) for the six dimensions of the DRAMMA model: Detachment, Relaxation, Autonomy, Mastery, Meaning, and Affiliation. However, what makes people craft remains unknown. This longitudinal field study explored what factors predict people’s needs-based crafting.

Methods:
We employed Ecological Momentary Assessments (EMA), where 110 participants completed questionnaires every two hours for four days. We collected variables such as (1) location (i.e., outdoors/indoors, home/office), (2) social company (e.g., with closer/non-closer persons or alone), (3) demands, and (4) needs-based crafting for each of the six DRAMMA dimensions. We analyzed the data based on the Linear Mixed-Effects models, regarding (1)-(3) as IVs and (4) as DVs.

Findings:
The analysis showed that participants crafted more: (i) for detachment, mastery, and meaning when outdoors; (ii) for detachment, relaxation, and autonomy when at home; (iii) for detachment, relaxation, and affiliation when with closer persons; (iv) for relaxation and affiliation when with non-closer persons; (v) for detachment and relaxation when having low demands. However, they crafted less: (vi) for mastery when having low demands and (vii) for detachment, relaxation, and autonomy when having high demands.

Discussion:
This research implies that the social and natural environment affect people’s behavior. Therefore, business enterprises could use these findings to stimulate crafting and remove barriers to crafting.
The change in workers’ eating styles: a qualitative-quantitative survey in the post-pandemic period

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Background: The working environment represents an important context where it is possible to invest in well-being and workers’ health. In many situations, the pandemic has led to a profound change in habits and lifestyles in people's daily lives. Companies have had to adapt and readapt by adopting new strategies and ways of working and living together, also reorganizing the spaces and conviviality moments, such as mealtimes. This contribution aims to investigate whether and how the eating habits and practices related to workers’ dining at meals have changed during the Covid-19, within a Bergamo company. A second general objective concerns investigating the influence of psychological, social and contextual factors on employees’ adoption of healthy eating behaviors.

Methods: Mixed Method case study involved 22 workers (mean age=42) in the qualitative phase and 101 (mean age=42.4) in the quantitative phase. The interviews and focus groups were analyzed using Interpretive Phenomenological Analysis (IPA). Cluster analysis with eating style and social support for healthy eating was applied.

Findings: Commensality has been deeply impacted by the pandemic, above all due to the changes related to the canteen environment. The cluster analysis identified four different profiles resulting from the combination of eating style and social support for healthy eating: emotional-controlled, influenced-by-others, autonomous, and encouraged. The emotional-controlled have higher stress levels, while the influenced are overweight.

Discussion: Identifying combined eating style and social support profiles in relation to psychological well-being and lifestyle are important to better identify and clarify protective factors on which to intervene through tailored programs.
Does better mental, physical, and occupational well-being predict later intended retirement age in 61-year-old Finns?

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Background: Previous studies have identified predictors of early retirement, but less is known about the factors that explain the wish to work until or over the nationally mandated retirement age. This explorative study aimed to investigate whether higher mental, physical, and occupational well-being predicts later intended retirement age in 61-year-old Finns.

Methods: The data (n=191) were drawn from the Jyväskylä Longitudinal Study of Personality and Social Development and included information collected with questionnaires from 61-year-old participants (born mostly in 1959). The intended retirement age was dichotomized to “Later” (wish to retire at the general minimum retirement age, which was 64 for the present age cohort, or later) and “Earlier” (wish to retire before age 64). Well-being variables included mental (positive affectivity, psychological and social well-being), physical (self-rated health, psychosomatic symptoms), and occupational (work engagement, occupational satisfaction) well-being. Univariate and multivariable binary logistic regression models were used in the analyses.

Findings: The univariate results suggested that higher positive affectivity (OR=2.0, p=0.015), psychological (OR=3.4, p=0.020), and social well-being (OR=2.9, p=0.021), better health (OR=1.8, p=0.003), lower psychosomatic symptoms (OR=0.2, p=0.001), and higher job engagement (OR=2.1, p=0.002) and occupational satisfaction (OR=2.1, p=0.002) predicted later intended retirement age. Higher occupational satisfaction (OR=2.1, p=0.021) remained a statistically significant predictor of later intended retirement age in the multivariable analyses.

Discussion: Mental, physical, and occupational well-being are related to the intended retirement age. Especially occupational well-being could be a relevant factor in extending work careers at the stage when people plan and make decisions concerning their retirement age.
Motivational differences of work addiction and workaholism

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Background: In previous studies (Morkevičiūtė & Endriulaitienė, 2022) differences between work addiction and workaholism were noted. Workaholism was found to include a wider range of theoretical underpinnings, whereas work addiction was theoretically rooted in addiction literature. Keeping in mind the proposed differences, each of these phenomena should be predicted by different motivational aspects. However, conclusions about different motivational origins of workaholism and work addiction are currently impossible, as the existing studies do not differentiate the correlates of these phenomena. Therefore, the aim of the study was to examine the differences in motivational factors predicting workaholism and work addiction.

Methods: A total of 964 Lithuanian employees participated in a cross-sectional study. Workaholism was measured using a short version of the scale proposed by Schaufeli et al. (2009) (DUWAS-10). Work addiction was assessed with the help of Bergen work addiction scale (Andreassen et al., 2012; BWAS). Work motivation was measured using work extrinsic and intrinsic motivation scale (Tremblay et al., 2009; WEIMS).

Findings: It was found that intrinsic work motivation, as well as one regulatory type of extrinsic work motivation (introjected regulation), were the factors predicting workaholism. Three regulatory types of extrinsic work motivation (external, introjected, integrated regulations) were the factors predicting work addiction. Intrinsic work motivation was not a significant factor predicting work addiction.

Discussion: The results correspond to the idea that the etiologic pathway to work addiction may differ from that leading to workaholism and provide some support for viewing these constructs as separate ones.
Lifestyle and quality of work life of seafarers onboard

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Background
Seafarers' work is subject to many demands of work stress, but few studies analyse the quality of work life (QoL-W). Our research, using an online questionnaire, analyses the differences in QoL-W and in some job demands as a function of lifestyle habits (more on board, same way/no use, more on land) in a sample of Italian seafarers.

Methods
A cross-sectional study was conducted using a tailored online questionnaire. The data refer to 224 participants. The questionnaire collected: QoL-W (work and physical strain, burnout, sleep deprivation, job satisfaction); job demands (cognitive demands, work routine, negative work environment); lifestyle habits (cigarette smoking alcohol consumption, use of psychotropic drugs, working out, healthy diet, social contact maintenance, personal hobbies, city visits, and gambling). One-way ANOVAs were performed to compare the effect of the three categories (more on board, same way/no use, more on land) of lifestyle habits on QoL-W and job demands.

Expected results:
The initial results of the study show that QoL-W are lower among those who have a less protective lifestyle on board. In addition, perceptions of job demands are higher among those with less protective on-boarding lifestyles.

Current stage of work:
Data collection is in progress.

Discussion:
The results of our study have important implications for future research and implementation of policies that could affect the quality of life of seafarers on board. Indeed, life on board appears to pose a greater risk to seafarers’ occupational health than life on land.
Psychosocial work factors associated with mental and somatic health in a general adult population

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Background: Documented impact of mental distress on health symptoms evokes the present question as to what extent various psychosocial work factors are associated with various aspects of mental and somatic health in a general working population.

Methods: Cross-sectional data were used from the population-based Österbotten Environmental Health Study in Finland. The sample consisted of 819 participants in occupation, aged 18 to 69 years (mean age 45.4 years, 58.6% women). The psychosocial work factors included effort and reward, work overcommitment, covert and open coping in dealing in conflicts with coworkers and superiors, worry at work, atmosphere at work, and availability of attachment, which were assessed with validated questions instruments. Regarding mental and somatic health, sleep quality was assessed with the Sleep Quality subscale of the Karolinska Sleep Questionnaire, anxiety and depression with the Hospital Anxiety and Depression Scale, and somatic symptoms with the 15-item Patient Health Questionnaire. Hierarchical regression analyses were conducted to statistically predict the health outcomes based on the psychosocial work factors.

Findings: When controlling for confounding variables, the psychosocial work factors combined explained 9.9, 20.7, 19.2, and 10.7% of the variance in sleep quality, anxiety, depression and somatic symptoms, respectively. Work overcommitment and worry at work played large roles in this context.

Discussion: The results provide support for the importance of improving the psychosocial work environment for better well-being and health, in particular regarding work overcommitment and worry at work. Future research may address the causal direction between these work factors and health.
Development of the Japanese version of ME-Work modular meaning of work inventory

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The meaning of work is a topic of great social concern, useful for stress management, and important for quality of life. The purpose of this study was to develop a Japanese version of the recently developed ME-Work (Schnell & Hoffman, 2020), which consists of three modules: the first module assesses four aspects of meaningful work, i.e. coherence, significance, purpose, and belonging; module 2 assesses the perception of work as meaningful or meaningless, and module 3 evaluates work as a source of meaning. An internet survey was conducted by a research firm (Rakuten Insight), and the information to develop Japanese version was provided by NEC Solution Innovator, Inc. A sample of the employed individuals (20s to 60s) of 564 participants, 283 males and 281 females, were included in the study. The measurement scales used were the Japanese version of ME-Work, and work-related engagement, sense of mission, moral values, and wellbeing. The results showed that both internal consistency and factor structure were consistent with the original study. Multiple regression analysis by gender also indicated that Module 1 subscale scores contributed to both meaningful work and work as source of meaning, and the retests after 15 weeks showed stability of the scales. Except for meaningless aspect of work, ME-Work scores showed moderate to strong correlations with engagement and sense of mission in all cases. These results indicate that the Japanese version of the ME-Work has internal consistency, factorial validity, retest reliability, and convergent validity as good as the original measure.
The relationship between perceived stress and alpha-amylase/lysozyme among staff members of a heart catheterization lab

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Background: Salivary alpha-amylase reflects the sympathetic system activity, and salivary lysozyme takes part in the immunity defense; both markers are sensitive for stress-related changes within body. We aim to research the relationship between perceived stress and salivary alpha-amylase and lysozyme levels of a stress-prone working sample.

Methods: Nine employees from a heart catheterization lab in Potsdam (Germany) were classified into low and moderate stress groups according to the Perceived Stress Scale. Saliva was tested for alpha-amylase/lysozyme levels using ELISA. Mann-Whitney U test (SPSS) was used to detect differences in alpha-amylase/lysozyme levels between stress-level groups at five time points (immediately/30 minutes/45 minutes after waking up, before lunch/dinner) by using the mean value of two working days.

Findings: Although there were no significant differences (\(P>0.05\)) in alpha-amylase/lysozyme levels, the moderate stress group tend to a higher alpha-amylase level 45 minutes after awakening and showed a lower lysozyme level tendency over the whole working day comparing to the lower stress group.

Discussion: The results show that catheterization staff working under moderate stress tend to higher activation of the sympathetic nervous system and a blunted immune system comparing to less stressful working conditions. Whether the long-term effects of this trend will affect their work has yet to be discovered. The absence of staff members with high perceived stress is a limitation that might cause these insignificant results. A larger sample size is needed to prove this tendency further. However, results are important regarding health prevention for surgical staff in the stressful work environment.
Opening up? How to support staff' & students' decisions to disclose mental health issues.

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Background: Decisions about disclosing mental health issues can be difficult in the university setting. Therefore, staff and students might benefit from decision support, e.g., through a decision aid. Yet, little is known about (1) how such decisions are made and (2) what such disclosure decision aids should look like.

Methods: Twenty semi-structured interviews were conducted with staff (n=10) and students (n=10) who decided (not) to disclose. First, the participants were asked to complete a short questionnaire including the SURE-scale. Subsequently, they were interviewed about the decision to disclose and their needs regarding a disclosure decision aid. Data from the SURE-scale was analyzed based on descriptive statistics, data from the interviews are analyzed using the Framework–method.

Findings: Most students (n=9) decided to not disclose, while most staff (n=8) did. That said, even among staff, 40% indicated not to know what the best choice for them was, compared to 50% of students. Also, staff indicated that the decision was difficult for them. A recurring theme among students was that they failed to link disclosure to perceived actionable outcomes, and often did not know where/how to disclose. Employees also sometimes choose not to disclose because they have already received help or did not see the added value, but they also reported disclosing to receive support.

Discussion: Both staff and students find it difficult to decide on mental health disclosure. A decision aid can act as a resource to help employees make an informed decision and prepare them for potential disclosure conversations.
Poor health behaviors among nurses: the role of work stress

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Background:
Given the shortage of skilled nursing staff and the increasing demand for nursing care, nurses’ health is paramount. Nurses show significantly worse health behavior and higher absenteeism due to sick leave than other occupational groups. On the other hand, nurses are primary role models for their patients’ health behaviors. This study examines factors associated with nurses’ physical activity within the framework of the Theory of Planned Behavior (TPB) and work stress.

Methods:
This cross-sectional mixed methods study comprises a quantitative survey among 100 nurses consisting of the Physical Activity, Exercise, and Sport Questionnaire (BSA), the Perceived Stress Scale (PSS-10), and TPB variables elicited through a pretest. The qualitative part included seven semi-structured in-depth interviews combined with qualitative diaries for 7 days each, which were recorded, transcribed with MAXQDA, and analysed using thematic analysis.

Findings:
Survey participants were 82% female nurses with a mean age of 28.64 years (SD=10.25) and have worked on average 6 years as a nurse. TPB variables were significant factors explaining nurses’ physical activity behavior (R² = .25). Work stress was only related to physical activity among individuals who stated that the reported physical activity had been a habit for the last 6 months. The qualitative interviews and diaries underlined the findings by pointing out the main barriers to how work stress hinders physical activity. The participants reflected on solutions for making healthier habits possible despite a challenging workplace.

Discussion:
Results are discussed on the role of habit strength in buffering workplace stress.
A test of job demands-resource model among university students: the role of stress mindset

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Background. The construct of Stress mindset refers to the extent to which one holds the belief that stress has enhancing consequences for various strain-related outcomes such as performance and productivity, health and wellbeing, learning, and growth. Adopting the Job Demands-Resources (JD-R) model as a theoretical framework, the present study examined the role of stress mindset.

Methods. Questionnaire data from 979 university students (80% female, with a mean age of 33.3 years, SD=12.4) were analysed. Participants completed the following measures: JCQ-Studium Questionnaire, the Stress Control Mindset Measure, the Maslach Burnout Inventory (student version), the Utrecht Work Engagement Scale (Student version), and the Need for Recovery Scale. A cross-sectional study design was applied. Hierarchical multiple regression analyses were conducted.

Findings: Results showed consistent support both for the health impairment process (.01 < p > .001) and for the motivational process (.05 < p > .005). Our findings indicated that high demands, low job control, and low social support additively predicted the distress/well-being outcomes (emotional exhaustion, cynicism, need for recovery, professional efficacy, and engagement). Stress mindset accounted for an additional 1-2% of the variance on all outcome variables except for cynicism. Beyond the main effects, a significant interactive effect between demands and stress mindset on personal efficacy (Beta = .07; p < .005) was found.

Discussion: Our results suggest expanding the JD-R model incorporating individual characteristics such as stress beliefs, for predicting psychological distress and well-being. The theoretical and practical implications of these findings for the JD-R model are discussed.
Social support when facing job insecurity: Effects on energy and daily recovery of healthcare professionals

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Background: Job insecurity is an emerging psychosocial occupational risk in the modern world. This risk worries workers and drains their energy resources. The aim of this study was to test whether coworkers, supervisors and organizational support can buffer this effect on a daily level among healthcare professionals. The JD-R and COR theories provided the framework for this research. Methods: This is a multilevel study with a diary methodology. 94 Spanish nurses from various hospitals and primary care participated in this study. They completed daily questionnaires two times a day (in the afternoon after work and at night before going to bed) for five consecutive workdays (N = 94*5 = 470). The analyses were performed with Mlwin 2.25. Findings: Multilevel analyses showed that in high job insecurity contexts, coworker support is a key resource to explain a high level of vigor (B = 0.111, SE = 0.044, t = 2.52) and vitality at the daily level (B = 0.139, SE = 0.049, t = 2.83). Organizational support also buffered the effect of job insecurity on psychological detachment from work at the daily level (B = 0.172, SE = 0.069, t = 2.49). Discussion: Supporting workers within organizations is a relevant resource to foster their energy levels and recovery in contexts of threat and potential loss of resources, such as the perception of high job insecurity due to job loss. Managers, leaders, supervisors, and workers must build this important social resource within their organizations to achieve states of well-being.
Parental health behaviours

15:30 - 17:00

Analyzing health literate access to health information by fathers of infants using the HLSEU-Q47

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Background: Access to valid health information is fundamental for health literate decisions and behavior. The HLSEU-Q47 assesses health literate Access to information by 12 items in the domains health care, health promotion and disease prevention. We aimed to analyze and compare fathers of infants’ health literacy regarding general health (GH) and COVID-19-infection.

Methods: The contents of the 12 original HLSEU-Q47 Access items were adapted with regard to COVID-19. N = 127 father answered both the original GH and the COVID-19-adapted items, within the DFG research group HELICAP [FOR 2959; AP 235/3-1].

Findings: Using confirmatory factor analysis for ordinal data the three-dimensional structure in which the three domains are distinguished outperformed the unidimensional model assumption: 3-DIM/1-DIM, GH: CFI: .925/.833, SRMR: .074/.085; COVID-19: CFI: .983/.875; SRMR: .055/061. For GH, however, it must be noted that the factors Disease Prevention and Health Promotion are not separable (latent correlation = 1.00). After fusion of these two factors, a virtual identical model fit results (CFI: .926, SRMR = .075). For 10 of the 12 items, significantly easier access to COVID-19 information is reported compared to GH. This is especially true for specific disease-related content (symptoms, emergency, disease risks; Hedges g: 1.056, 0.587. 0.591).

Discussion: The responses to the 12 access items of HLSEU-Q47 change significantly in some cases when they refer to COVID-19. In addition to individual search ability, the HLSEU items also measure characteristics of the information available (especially media presence ) and individual information needs.
Determinants of exclusive breast-feeding intention: A cross-sectional study among pre-labor women

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Background: Breast-feeding is an essential mean for babies’ growth and health. According to the World Health Organization recommendation, during the first six months of their life babies feeding should be based on mother’s milk solely. Previous knowledge regarding breast-feeding, along with social-cognitive determinants may explain women’s intention to adopt exclusive breast-feeding. The aim of this study was to explore factors that associate with exclusive breast-feeding intention of pre-labor women, based on the Theory of Planned Behavior.

Methods: A cross-sectional study among convenience sample of pre-labor women (N=104) was conducted. A self-reported online questionnaire was distributed and included sociodemographic characteristics and previous breast-feeding duration; knowledge regarding breast-feeding advantages; and social-cognitive factors of attitudes, subjective norms, self-efficacy and intention. Data analysis included Spearman’s correlations followed by linear regression to identify predictors of exclusive breast-feeding intention.

Findings: A univariate analysis revealed positive associations between intention and previous knowledge regarding breast-feeding advantages (r=0.34, p<0.01), attitudes (r=0.50, p<0.01), and subjective norms (r=0.22; p<0.05). In a linear regression, only attitudes (β=0.39, p<0.01) and previous breast-feeding duration (β=0.38, p<0.01) predicted exclusive breast-feeding intention. The model explains 38% of the intention variance.

Discussion: Positive attitudes towards exclusive breast-feeding along with previous breast-feeding success are important factors in the decision of pre-labor women regarding their baby’s feeding, and may be the basis for future interventions in this population to encourage breast-feeding adoption. Further research is needed in order to reveal the factors that contribute to the maintenance of exclusive breast-feeding as recommended, among post-labor women.
A Survey on Drinking Alcohol for Parents of Infants and Pregnant Mothers in Japan

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Background
The parental lifestyle such as drinking alcohol at home is concerned to affect their young children’s future lifestyle. The purpose of this study was to investigate parental drinking behavior among young families, which was with pregnant or infant children, and to consider the influences on future drinking habits for their children.

Methods
Three hundred mothers (150 pregnant women and 150 mothers with three to four-months-old babies), and three hundred fathers (150 pregnant women’s husband and 150 fathers with three to four-months-old babies) in Japan completed an online survey, which was containing the Alcohol Use Disorders Identification Test (AUDIT) and questions about experiences that they were required to drink alcohol by their parent(s) in their childhood or that they required their children to drink alcohol to their children.

Findings
74(24.7%), 14(4.7%), 7(2.3%) mothers were classified as "Low-Risk Drinkers", "High-Risk Drinkers", "Probable Alcohol Dependence" respectively from AUDIT. 76(25.3%) were required alcohol by their parent(s) in their childhood, and 18(6.0%) required alcohol to their children. 177(59.0%), 43(14.3%), 8(2.7%) fathers were classified as "Low-Risk Drinkers", "High-Risk Drinkers", "Probable Alcohol Dependence" respectively. 83(27.7%) were required alcohol by their parent(s) in their childhood, and 34(11.3%) required alcohol to their children.

Discussion
Childhood drinking experiences have a certain influence on drinking behavior when they become parents among young families. Appropriate education programs about alcohol-related knowledge for young parents are necessary for the future health of children.
A meta-analysis to identify effective elements in preventive interventions on parenting behaviour

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Background: Parenting has a large influence on early childhood and there is evidence that parenting interventions can prevent adverse parenting and child outcomes, although it is unclear what intervention elements are most effective. This meta-analysis aims to investigate the effect of preventive parenting interventions and which behaviour change techniques (BCTs) are effective for preventing adverse parenting behaviour and child development outcomes.

Methods: A three-level meta-analysis was conducted on randomised controlled trials that reported post-intervention assessments of parenting outcomes for a preventive parenting intervention for parents expecting a child or with a child aged 0 to 4.

Findings: Based on 60 studies reporting 66 interventions, a moderate positive effect was found both for parenting (N=66, g=0.32, 95% CI [0.26-0.38]) and child outcomes (N=44, g=0.31, 95% CI [0.23-0.40]). Effect sizes were significantly larger for interventions targeting parents with lower socioeconomic status. Some BCTs were frequently applied simultaneously (goal setting and planning, feedback and monitoring, shaping knowledge, comparison of behaviour, and repetition and substitution) with moderate effect sizes for parenting and child outcomes. The BCT on decreasing negative parental emotions was not commonly used but led to better child outcomes when applied. Providing information on consequences of behaviour however had a smaller effect size for child outcomes. Interventions aimed at improving positive parenting and parental involvement had a moderate positive effect on child outcomes.

Discussion and conclusion: We found that preventive parenting interventions often use similar combinations of BCTs, resulting in a moderate positive effect on parenting and child development.
Caregivers' views about receiving behaviour change conversations in childcare settings to promote children's oral health

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Background: Recently, the Department of Education in England has included oral health as a mandatory component to early years settings' (EYS) framework. Therefore, our aim is to explore caregivers' views about the role of early years' staff in promoting oral health and behaviour change conversations.

Methods: Semi-structured interviews were conducted in person and online for 14 parents (11 mothers, 3 fathers) who had at least one child aged less than 5 years enrolled in any EYS (nurseries, preschools, Sure Start centres) in England. Data were analysed using an inductive and latent thematic analysis.

Results:
We developed four themes from the data. 1. Awareness of oral health in EYS curriculum 2. Who is responsible for oral health? 3. Appropriateness of EYS to involve oral health activities 4. Families' views on having oral health discussions with EYS staff. Participants reported limited awareness of oral health activities in the EYS curriculum; only two participants reported knowledge of their children brushing their teeth at EYS. Although parents believe that children's oral health is their responsibility, they accept that EYS staff can influence children to adopt behaviours that support good oral health. Parents reported limits to the acceptability of oral health-related conversations from EYS professionals due to lack of perceived dental training.

Discussion:
Parents do not find EYS an acceptable context for oral health behaviour change conversations and prefer to refer to dentists for any oral health-related issues. The challenge remains to reach young children in suitable settings outside the dental practice.
Intergenerational impacts on health

15:30 - 17:00

“Strong Siblings!” - Are support programs for healthy siblings of chronically ill children effective?

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Siblings of children with a chronic illness are confronted with changes in their own living environments as well as new burdens, challenges and opportunities for development. To support healthy siblings, prevention programs were developed and will be regularly evaluated for their effectiveness. Aim of this work is an interim evaluation of the project "Strong Siblings!".

88 healthy siblings (11 ±2 years, 67% female) participated in two prevention programs; n=66 were in the intervention group, n=22 in the control group. The effectiveness was tested using a two-factor analysis of variance with repeated measurements (baseline and two months after participation). Furthermore, the predictive power of the variables resources, stress management, mental stress and behavioural problems on quality of life was checked by using multiple linear regression analyses.

Two-way analysis of variance with repeated measures showed no significant interaction; the main effect of time showed significant effects: reduction of behavioural problems (ηp²=.37) which also improved the overall problem value (ηp²=.27), reduction in resignation (ηp²=.20) and increased integration into the peer group (ηp²=.14). When examining predictors of quality of life, self-esteem was identified as the variable with the strongest predictive power.

The results of the interim evaluation correspond to findings from the literature. Due to the small sample, no interaction effect was discernible. In the future, larger samples should be used for the evaluation. Furthermore, the self-esteem of the siblings should play a central role in the further development of prevention programs, since it has a significant influence on the quality of life.
The mental health of HIV-affected young mothers: qualitative insights from South Africa

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The mental health of young women experiencing the syndemic of HIV and pregnancy remains an understudied topic. This study explored the mental health experiences of young mothers affected by HIV in South Africa using in-depth qualitative research methods.

We conducted 17 qualitative interviews focusing on pregnancy, motherhood, HIV and mental health among 18-24 year old young mothers in the Eastern Cape, 12 of whom were living with HIV.

Preliminary results show that early motherhood disrupts young women's education because many of them must drop out of school to take care of their children. During this period, participants reported experiencing social isolation, loneliness and stigma. Consequently, their mental health becomes affected, as they struggle to adjust to their new realities. The majority of these young women shared symptoms of poor mental health—such as feelings of guilt, self-doubt, stress and hopelessness, even after birth. In this context, motherhood becomes stressful due to having a child while young, struggling financially and having unfulfilled educational aspirations. Furthermore, our findings show that young women living with HIV are morally judged because of their HIV status. These are not experienced as isolated events, rather as intersecting factors which negatively impact the mental health of young mothers, particularly those living with HIV.

Our findings emphasize the need to explore the mental health of young women exposed to multiple stressors in the South African context. Considering lived experiences and intersecting factors is important for youth mental health research.
Adolescents’ experiences of parental multiple sclerosis using photo images: A South African based study

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The impact of parental multiple sclerosis (MS) on adolescents is an under researched topic in South Africa, and while there are few studies which have been published on MS, those have mostly focused on the patient experiences, and not on the experiences of the family or children who are often impacted by the illness as well. This research forms part of a broader study aimed to address the research gap in MS by exploring the experiences of adolescents who have a parent diagnosed with MS, using a qualitative multi method approach. The broader qualitative study made use of semi-structured interviews and a follow up photo elicitation interview with 10 adolescent participants aged 12-25, as well as an individual interview with the diagnosed parent. Participants were recruited via purposive sampling with the help of an online SA Facebook group for individuals diagnosed with MS. Participants were included based on a list of inclusion and exclusion criteria. Thematic and content analysis was used to analyze the verbal data and photo images. This presentation will offer findings on the photo elicitation interviews where initial themes of loss and loneliness, caregiving, deterioration, medical care, and care and health were central. Furthermore, it will highlight the experiences of adolescents from their perspective using both verbal data and photo images. The study is in line with global efforts toward early intervention and health promotion amongst vulnerable and at-risk groups. It further aims to contribute to the body of knowledge in South Africa on MS.
Chronic stress of working parents and the impact on families and their children's health

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Background: Empirical data suggest that parental stress has an impact on the well-being of children in addition to other variables related to work such as quality of working conditions, social support or socio-economic status. Potential spill-over or cross-over effects should be elucidated referring to the described relationship in this study. Potential resources in stress regulation that might be related to interoceptive abilities were also examined.

Methods: Questionnaire data as well as psychophysiological data both from parents and children were assessed in 42 families in addition to data referring to interoceptive abilities during a three-month time period. Main findings were that good interoceptive abilities in the parents interacted with the relationship between perceived work-related stress and stress perceived in the family. No clear effects could be observed when referring to long-term stress as assessed by hair-cortisol measures.

Discussion: Experienced stress related to work interacts with stress levels as measured by questionnaire in families. Resources related both to social support and interoceptive abilities might buffer this effect with psychophysiological measures adding more insight in this examined relationship.
Child and adolescent experience and health outcomes

15:30 - 17:00

Influence of types of play during the Covid-19 pandemic on Japanese nursery school children

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Background:
Playing is a free and spontaneous activity essential for children, reducing stress and facilitating their development. The COVID-19 pandemic forced children to limit their play activities, and they did not have sufficient opportunities to play. We designed this study to clarify the impact of COVID-19 on preschool children's play activities.

Methods:
We conducted an open-ended questionnaire survey with 16 nursery teachers in Japan. We asked the respondents to freely write about the most frequent play they conducted with children and the types of play they stopped due to the COVID-19 pandemic. We classified the participants' responses using content analysis.

Findings:
The results indicated that the most frequent types of play included solitary play, such as coloring, blocks, and puzzles; non-contact play, such as playing in the garden, sandbox, looking for bugs, and walking; and non-verbal play, including gesturing games. In contrast, teachers stopped play activities involving contact with body fluids, such as messaging games, singing, blowing soap bubbles, birthday parties, and contact play, including holding hands and walking near hospitals.

Discussion:
These results suggested that nursery teachers avoided play activities that included communicating, touching, and talking with other children to prevent infections, whereas they increased solitary play. Playing helps children develop social skills and reduced anxiety and stress. During the pandemic, preschool children had difficulty playing with other children because of restrictions. As a result, future research must focus on children's health psychology and develop methods of providing social and active play.
Health anxiety in adolescents: the roles of online health information seeking and parental health anxiety

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Health anxiety can negatively affect psychological well-being through rumination and safety measures. For adolescents, parental health anxiety presents a known social factor of health anxiety. Online health information seeking serves as another risk factor, but this has never been tested for adolescents. Our aim was to study both factors and their relationship with adolescent health anxiety in a single model. Furthermore, we included eHealth literacy as a moderator between health information seeking and health anxiety.

Using SEM, we analysed a cross-sectional sample of 1,530 adolescents, 50% girls, aged 13-18 (M=15.4, SD=1.7) and their caregivers, 68% women, aged 29-75 (M=45, SD=6.4). The participants represented Czech households with children in terms of income, municipality size and region.

Parental and adolescent health anxiety were positively related (β=.40, p<.001). Seeking for disease information was also positively related to adolescent health anxiety (β=.23, p<.001), while the effect of fitness information seeking was only marginal (β=.08, p=.02). eHealth literacy did not moderate either disease (b=-0.06, p=.14) or fitness information seeking (b=-0.08, p=.06). Our data fitted the model adequately, CFI=.94, TLI=.93, RMSEA=.06, SRMR=.05.

Our findings underline the relationship between parental and adolescent health anxiety and suggest that we must acknowledge the state of caregivers to successfully address adolescent health anxiety. We newly show that disease information seeking presents another factor related to adolescent health anxiety and that this is regardless of the level of eHealth literacy. Future research could focus on the potential interplay of the role of parents and online seeking in adolescent health anxiety.
Exposure to victimization by peers predicting stress in students

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Being exposed to victimization from peers and not being accepted is very detrimental to adolescent health and mental health. The aim of the study was to explore the relationship between the exposure to different types of peer violence such as: physical, psychological, instrumental, digital violence and property damage with experience of stress. The convenient sample of 1089 primary and secondary school students (57% female and 43% male) were included in the study being from 11th and 18th years of age in North Macedonia, conducted in the period May to October 2022. The ethical approval for the study was attained by the Ethical Board at UACS. Paper and pen based interviewed questionnaires were used for gathering data, using DASS-21 for measuring stress, Peer Violence Victimization Scale and socio-demographic data. The results showed statistically significant correlation between exposure to physical, psychological, instrumental and digital peer victimization and stress in students. The multiple regression model for variable stress was statistically significant ($R^2=0.242; F(5; 952)=60.947, p<.01$) and reviled that exposure to psychological, instrumental, digital violence and property damage were the significant predictors for stress in student from primary and secondary schools. Acceptance by peers is crucial task for student’s development and wellbeing. Consequently, tailored intervention that address the main risk factors would be of great importance.
Digital peer violence as predictor for depression and suicidal behaviors in students

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The rapid and frequent change of technology and environment is increasing the need for students to adjust and accommodate to the emerging changes. The development of the technology and time spent on social media is increasing the risk of youth to be exposed to the digital peer violence, impacting their mental health. The aim of the study was to explore how digital peer victimization is associated with depression and suicidal behaviours: ideas, thoughts and suicidal attempts in students. The sample included 1089 primary and secondary school students (57% female and 43% male) from North Macedonia. The ethical approval for the study was attained by the Ethical Board at UACS. The instruments used were: DASS -21 for measuring depression, Centre for Disease Control in Atlanta measurement of suicidality, Digital Victimization Scale and socio-demographic questionnaire. The results showed statistically significant correlation between exposure to digital victimization with depression and suicidal thoughts, plans and suicidal attempts in students. Digital victimization significantly predicted depression scores (β=.348, p<.01) and explained a significant proportion of variance in depression (R²=.121; F(1; 1013)= 139.809, p<.01). Additionally, digital victimization significantly predicted suicidal behaviors scores (β =.317, p<.01), and explain significant proportion of variance in suicidal ideas, thoughts and suicidal attempts (R²=.100; F(1; 1043)=116.528, p<.01). The rapid and frequent change of technology should be followed by increased preventive mechanisms developed by professionals to fill the gap and reduce the harm of the negative effects of the technology, by providing solutions for the wellbeing of the youngsters and their mental health.
Parents and young people’s communications about sex and sexuality: meaning-making and affect

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Parents and caregivers have an influential role in conveying norms, values, and information around sex and sexuality to their children. Parent-child sex communication (PCSC) is often understood as a one-way transmission of information about the risks and negative outcomes of sexual activity which is reflected in the research. This project proposes an expanded conceptualization of PCSC as quotidian reciprocal exchanges between parents and young people which include the positive aspects of sexuality such as relationships, intimacy, consent, desire and sexual subjectivity.

Using social-constructionism and affect theory, this research used video diaries and semi-structured interviews to investigate how parents and young people (aged 11-15) describe everyday instances of PCSC to reveal the affective dimensions of these experiences and how they serve in the construction of meaning around sex and sexuality, broadly defined. Data was collected from a total of 16 participants (7 pre/teens; 9 parents of pre/teens).

Participants described discussions of puberty, romantic interest, flirting, intimate and romantic relationships, sexual activity, consent, sexual behavior of friends, pornography, sexting, sexual identity, abortion, unintended pregnancy, contraception, and representation of sex and intimacy in media such as television shows and movies. Thematic analysis from the video diaries and interviews included open communication, feelings of dis/comfort, influence of non/judgement, prompts from shared media, and role of social media.

The content and affective experience described in the video diaries frequently defy assumptions about how PCSC is experienced. The open discussions of participants can offer insight for other parents, health care providers and psychologists.
Biopsychosocial interactions in childhood health

15:30 - 17:00

Predictors of body dissatisfaction among children with intellectual disabilities: parents feeding practise and child-specific factors

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Compared to non-clinical sample, children with intellectual disabilities may have more difficulty maintaining pro-health behaviours. The aim of the study was to verify selected parent’s and child’s predictors of body dissatisfaction in children with intellectual disabilities. Our study involved 503 parents of children with mild and moderate intellectual disabilities. They completed: the Contour Drawing Rating Scale, the Child Feeding Questionnaire (perceived responsibility, concern about child weight, restriction, pressure to eat, monitoring) and a socio-demographic survey (with question about child’s willingness to engage in physical activity). Correlation and regression analysis were performed. Correlation analysis shows that child’s body dissatisfaction is associated with: (1) child’s BMI (r = 0.16, p < 0.001), (2) child’s willingness to engage in physical activity (r = -0.29, p < 0.001), (3) perceived responsibility (r = -0.16, p < 0.001), (4) concern about child weight (r = 0.23, p < 0.001), restriction (r = 0.10, p < 0.05). Moreover, significant predictors of child’s body dissatisfaction were, F(7, 495) = 9.88, p < 0.001, R ² square = 0.11: (1) willingness to engage in physical activity (B = -0.23, p < 0.001), (2) perceived responsibility (B = -0.13, p < 0.01), (3) concern about child weight (B = 0.14, p < 0.05).

Our results may indicate that in the prevention of body dissatisfaction among children with intellectual disabilities, it is worth taking into account both impacts aimed directly at children (effective encouragement of physical activity), as well as taking measures related to the development of appropriate parental nutrition practices.
Weight stigmatization and eating self-regulation: Prospective interplay and effects on middle childhoods weight, eating behavior

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Children’s weight is a common reason for stigmatization. Weight stigma (WS) is recognized to contribute to the development and maintenance of weight and eating behavior. Additionally, self-regulation (SR) is associated with obesity and overweight. However, little is known about the interplay of WS and SR. Furthermore, possible effects on health outcomes in the sensible phase of middle childhood need further exploration. Therefore, our prospective study examined the associations between eating SR and WS and their prediction of weight and eating behavior in middle childhood. Drawing from three measurement time points of the PIER study, 1654 children (52.2% female) aged 6-11 (T1, 2012), 7-11 (T2, 2013), and 9-13 years (T3, 2015) were included. At T1, 8.9% and 5.8% were classified as overweight and obese, respectively. We assessed self-reported weight stigmatization, parent-reported eating SR facets like emotional over- and undereating, as well as weight and eating behavior (e.g., snacking). First results indicated measurement invariance over time for eating SR. WS showed positive associations with the SR facet emotional overeating ($r = .07, p = .006$) and negative associations with satiety responsiveness ($r = -.11, p < .001$). No associations were found for emotional undereating and WS ($r = -.007, p = .798$). We will further evaluate concurrent and predictive associations between stigma and eating SR using structural equation modeling. Furthermore, the effects of WS and eating SR on weight and eating behavior will be reported. Results will help to elucidate the interplay of stigma and SR and its impact on eating-related health outcomes.
In the eyes of the beholder: Child-physician rapport at a neurodevelopmental clinic

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Background
Worldwide, Person-Centered Care has become a major health policy principle and goal alongside a growing emphasis on the importance of effective communication for individuals’ cooperation and adherence to recommended interventions. Yet little is known about children’s experience during neurological/developmental assessments. The current study aimed to examine children’s perceptions of rapport establishment in a medical context and compare it to their parents’ and physicians’ evaluations of the children’s experience in a clinical setting.

Methods
102 children and adolescents (aged 6.05–16.86 years, M±SD=9.63±2.42; 71.6% males) with neurological and/or developmental diagnoses completed the CHARM-C Questionnaire and Cooperation Scale immediately after neurological and/or developmental assessments at an HMO’s Child Development Center. In parallel, the children’s parents and pediatricians completed the CHARM-A Questionnaire regarding the children’s experience of rapport (a total of 306 questionnaires). The pediatricians and children rated the children’s level of cooperation.

Results
On average, children rated the rapport above average (M±SD=3.12±0.50, Range 1–4), yet lower than parents’ (3.49±0.36) and physicians’ (3.44±0.36) evaluations of the children’s sense of rapport in a clinical setting. The correlation between the three types of raters was low (ICC=0.38). The children’s and physicians’ evaluations of rapport (but not the parents’) were positively associated with the children’s cooperation during the examination (p < 0.01).

Discussion
The evaluations of children with neurological and/or developmental disabilities of their experiences in medical encounters are valuable and cannot be replaced by parents’ or physicians’ evaluations. Consideration should be given to understanding children’s experiences and facilitating their input in medical encounters.
Self-Control Fluctuates in Parallel to Life Satisfaction in Young Adults’ Everyday Lives

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The psychological trait of self-control has been linked to interindividual differences in life satisfaction: Individuals with higher self-control report higher life satisfaction. However, less is known about daily fluctuations in self-control and how these are related to life satisfaction. This intensive longitudinal study describes the extent and reliability of fluctuations in self-control from day to day and investigates whether and how these fluctuations are related to daily life satisfaction. To this end, young adults rated their self-control and life satisfaction every evening across three 9-day measurement bursts over six months (N = 65 individuals, 97% female, with 1480 valid assessments of 1755 possible assessments, 84.3%). Self-control fluctuated substantially within individuals from day to day with less than 40% of the variability in daily self-control being attributable to interindividual differences in self-control. Furthermore, on days with higher self-control than usual, participants reported more life satisfaction than on days with lower self-control. The finding that self-control shows substantial daily variability suggests that researchers need to go beyond current assessment practices and theories treating self-control as a stable trait, calling also for dynamic assessment and health prevention interventions.
Well-being of children with special educational needs: Thematic analysis of interviews with professionals

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Children with special educational needs (SEN) are considered potentially vulnerable groups at all levels of education due to their learning difficulties, mental health, and the risk of stigma or exclusion. Children and adolescents with SEN often show difficulties in social interaction, autonomy, following social rules, or behavioural and emotional self-regulation. Subjective well-being is associated with social support and personal factors such as self-esteem and positive self-image (Hilgenkamp et al., 2011). Therefore, appropriate interventions in both the school and counselling systems should promote well-being, and social and personal skills in children and adolescents with SEN (Gaspar et al., 2016). Our research questions are how the well-being of these children is perceived by professionals in the school counselling system in Slovakia, what direct and indirect interventions are provided to these children, and what barriers are encountered in this area by professionals. Our data will be collected from 5 semi-structured in-depth interviews with the staff of the centre of educational and psychological counselling and prevention. Based on a thematic analysis (Braun & Clarke, 2006) of the interviews, we aim to identify categories describing the mental well-being of children with SEN as perceived by professionals working in the counselling centres and the categories of interventions provided to these children. Some recent findings suggest that universal school-based interventions aimed at promoting emotional or mental well-being or preventing mental health difficulties in children with SEN have neutral to small effects (Mackenzie & Williams, 2018). We will contrast these results with our findings.
Mental health in youth: The role of mindfulness, basic psychological needs, and sport practice

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It has been proposed that mindfulness, psychological needs for autonomy, competence, and relatedness as well as sport practice may act as protective factors for youngsters’ mental health. Despite some evidence supporting links between pairs of these variables, the mediation path from mindfulness to mental health via psychological needs is yet to be established. Moreover, little is known about the moderating role of sport in this path, which may be stronger among practitioners of martial arts, given their inclusion of mindfulness-related training. Stemming from this, we conducted a 3-wave longitudinal study to test the mediation role of psychological needs and the moderation role of sport in the mindfulness-mental health link. In each wave, 481 Portuguese 7-to-17-year-olds (M = 12.71, DP = 2.46) completed one self-report scale measuring each construct: wave 1 - mindfulness (already collected), wave 2 - psychological needs (to be collected in March), wave 3 - mental health (to be collected in May). Participants were divided into martial arts practitioners (N = 108), other practitioners (N = 146), and non-practitioners (N = 227). Preliminary analyses showed between-group differences on mindfulness levels (F = 3.66, p = .03, η² = 0.02), with martial artists (M = 3.58, DP = 0.61) displaying higher mindfulness than non-practitioners (M = 3.35, DP = 0.75). We expect these differences to influence the relations between mindfulness, psychological needs, and mental health, to be explored once data collection is finished. Findings will be relevant to understand the factors underlying the link between mindfulness and mental health.
Associations among quality of life and specific psychosocial impairment in Spanish adolescents with eating disorders

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Background: Eating disorders may lead to physical, social and mental impairment and have an impact on quality of life.
Objective: This study aimed to evaluate clinical impairment features in a sample of Spanish adolescent with eating disorder in relation with the perception of health-related quality of life
Methods: 86 young women with eating disorders completed the following questionnaires Clinical Impairment Assessment (CIA), Short Form-12 items Health Survey (SF-12) and Eating Disorder-Specific Heath-Related Quality of Life (EDQOL). Descriptive and regression analyses were applied to identify associations between variables. In the regression model were introduced as independent variables the three domains of CIA, and as dependent variables physical and mental health and quality of life related to eating disorders.
Results: The mean age of the women was 15.01 years (SD: 1.6). Higher scores on the three domains of CIA (Psychological, social and cognitive) were associated with a greater impairment on mental (F(3,85)=57.05, p<.001; R²=.676) and physical (F(3,85)=13.42, p<.001; R²=.329) health. Moreover, CIA domains were related to worse quality of life related to eating disorders (F(3,85)=57.051, p<.001; R²=.676).
Conclusion: Adolescent with eating disorder have a poor quality of life. Moreover, findings suggest that clinical features of impairment may serve as severity indicators of EDQOL and physical and mental health.
Institutional identification and well-being: towards a healthier environment in higher education

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Research suggests that the Covid-19 pandemic has led to deteriorating well-being among young people and reduced identification with institutions, especially the schools they attend. Our planned dissertation project aims to explore the relationship between these phenomena, focusing on students' perceptions of identity and well-being at Comenius University Bratislava.

In the first part, we plan to conduct a questionnaire survey using the EPOCH instrument, along with direct questions, on a sample of all students at the university. We estimate that with a 10% return rate, this sample will include 2,600 students. We will use correlation analysis for statistics.

In the second part, we will use the focus group method to ask approximately 136 students from all 13 faculties of Comenius University, divided into 26 focus groups, about their subjective perceptions of identification and well-being. We will analyze the data by thematic analysis.

The third part will be an experiment with a real-life intervention, where we aim to find out whether participation in the university-wide environmental project ECOmenius will increase identification with the university. We plan to involve 150 CU students in this experiment.

The outcome of our dissertation will be a comprehensive evaluation of the relationships between the level of identification with the university or field of study, and students’ well-being.
Relations between Self-Compassion and Psychological Help-seeking Stigma in Young Adults

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Psychological help-seeking stigma is one of the main barriers that stops young adults from seeking professional psychological help. However, self-compassion may be an important factor that helps overcome the fear, guilt, and shame of seeking psychological help. The aim of this study was to determine the relationship between self-compassion and psychological help-seeking stigma in 18–35-year-old adults. Young adult self-compassion was measured with the Self-Compassion Scale (Cronbach’s α .91); psychological help-seeking stigma was measured by the Self-Stigma of Seeking Help Scale (Cronbach’s α .68) and Stigma Scale for Receiving Psychological Help (Cronbach’s α .73). Social desirability responding was evaluated using the Balanced Inventory of Desirable Responding (Cronbach’s α .68). The participants were also asked questions about their previous experiences seeking psychological help. 174 young adults participated in this cross-sectional study. Participants’ age varied from 18 to 35 years (M=24.14, SD=4.403). 60.3% of them were females, 33.9% males, 5.2% non-binary and 0.6% did not want to disclose their gender. By controlling social desirability it was found a weak negative correlation (r=-.15) between self-compassion and self-stigma of seeking psychological help. However, there were no significant results found between self-compassion and public help-seeking stigma when controlling social desirability. A stronger significant correlation (r=-.36) between self-compassion and self-stigma of seeking psychological help was found in males, while there were no significant correlations in females. Furthermore, the study found weak correlations between separate components of self-compassion, public and self-stigma of psychological help-seeking. Thus, self-compassion may be an important buffer for men against self-stigma of psychological help-seeking.
Loneliness in childhood and adolescence. On the prevalence of a risk factor for mental health

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Background: Loneliness is an increasingly present topic in both public and health psychology scientific discourse. There is research on the prevalence and health-related correlates of loneliness in adults. However, there are only a few findings on loneliness in childhood and adolescence in Germany. Therefore, this study aims to present findings on the prevalence of loneliness among 11- to 15-year-old German schoolchildren and examines associations with socio-demographic characteristics.

Methods: The Health Behaviour in School-aged Children study is a research collaboration under the auspices of the World Health Organization. In the German federal state of Brandenburg, the study used a cross-sectional design to collect data from 3,819 students at general education schools in grades 5, 7, and 9 (Mage = 13.5, SD = 1.6). Loneliness was assessed using the University of California Los Angeles Scale. Bivariate correlations were tested using a cross-tabulation and Chi2 test. Logistic regression was used for multivariate validation of the correlations.

Findings: 10.8 % of the respondents stated that they felt lonely. Loneliness was more prevalent among girls and non-binary (χ² [2] = 72.72, p < .001), among older adolescents (χ² [2] = 35.21, p < .001), and students with lower socioeconomic status (χ² [2] = 16.94, p < .001).

Discussion: The findings indicate that loneliness is widespread among children and adolescents. The fact that girls, non-binary, older pupils, and students with lower family wealth are more likely to report being lonely provides starting points for planning prevention efforts. Further research is needed on health-related correlates of loneliness.
The capacity to love and well-being: A comparative study between emerging and middle-aged adults

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²HEI-Lab: Digital Human-Environment Interaction Lab, Portugal

Love is a complex construct of undeniable importance for human beings and an area of research that has progressed over the past decades. The capacity to love, specifically, refers to the capacity for involvement, investment, and maintenance of a committed romantic relationship, resulting from complex developmental processes that begin in childhood and continue to be shaped throughout development. Since this is a recent construct, there is little evidence regarding the relationships between the capacity to love and indicators of positive functioning. The present study explores the associations between the capacity to love and emotional, psychological, and social well-being. It also aims to analyze the differences in the capacity to love according to the life cycle stage (emerging adulthood and midlife) and gender. A total of 535 participants participated in this study, 282 (52.7%) emerging adults aged 18 to 25 years (M = 21.88, SD = 1.80), 240 (85.1%) women, and 253 (47.3%) middle-aged adults aged 45 to 65 years (M = 52.24, SD = 5.39), of which 196 (77.5%) were women. Multivariate difference analyses indicate emerging adults demonstrate a greater capacity to love in all dimensions except acceptance of loss, grief, and jealousy. Concerning gender, there were no significant differences. Prediction models indicate that age and acceptance of loss and grief are significant and positive predictors of all types of well-being, and basic trust is a significant and positive predictor of emotional well-being. Implications of these results for intervention are discussed.
Satisfaction and quality in romantic relationships: The role of capacity to love, gender and age

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Capacity to love (CTL) is a relatively recent concept. However, there is some evidence that it is a fundamental dimension in understanding some psychopathological conditions. Furthermore, love relationships and their quality are strongly associated with individuals’ well-being and mental health. However, the mechanisms involved in these relationships are still poorly understood, and the individual CTL’s role is in the quality of these relationships. In this way, the present study aims to assess the differences in the CTL as a function of gender, analyze the relationships between the CTL and the quality of romantic relationships, and explore the main predictors of satisfaction with the relationship, as well as relationship conflict, support, and depth.

Six hundred forty-three individuals between 18 and 74 years who were in a romantic relationship participated in this study. Results indicated that gender does not significantly affect the CTL. However, age, the number of children, length of the relationship, and relationship satisfaction were significantly associated with the quality of romantic relationships.

Age seems to predict lower relationship satisfaction, higher levels of conflict, and the perception of greater depth in the relationship. Being male, higher levels of basic trust and searching for an ideal self predict relationship satisfaction. Basic trust is a positive predictor of relationship support and a negative predictor of conflict. On the other hand, the permanence of passion indicates lower levels of relational conflict.

Finally, we discuss and highlight the relational and individual aspects that better explain the satisfaction and quality of romantic relationships.
Emotion profiles and compassion fatigue among Poles helping Ukrainian citizens

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The polls revealed that above 70% of Poles have become involved in helping Ukrainians. Excessive and prolonged emotional stress often leading to compassion fatigue (defined as a combination of secondary traumatic stress and burnout) in helper working with traumatized survivors.

Thus, we aimed to investigate distinct multidimensional emotion profiles (including positive and negative affect) among participants, who directly and indirectly helped Ukrainians, as well as profile covariates (demographic variables) and outcomes (secondary traumatic stress, compassion burnout).

Participants (N=395; 56.7% of women; mean age=43.06; SD=13.57) completed measures of positive (PA) and negative affect (NA) (12-item scale), and secondary traumatic stress (STS) and compassion burnout (CB; ProQOL). Unconditional and conditional latent profile analyses were applied.

Three latent well-being profiles were identified, characterized by high PA (87.3%), high NA (6.6%, high NA) and high both PA and NA (6%). Group with high PA and NA endorsed younger age, knowing someone who was killed/wounded in Ukraine, direct help and higher STS to other groups. High PA group were the oldest and experienced the lowest CB then other groups.

The findings highlight the diverse nature of emotional well-being in those helping Ukrainians.
Experiential Avoidance moderates the relationship between Attachment Anxiety and Material Values

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Individuals with higher levels of attachment anxiety suffer from hypervigilance and preoccupation with relationships. They have a strong need for emotional closeness, reassurance, and comfort which they cannot fulfill, hence they may use materialistic values behaviors as compensation. However, not all anxiously attached individuals are materialistic. Attachment dimension, experiential avoidance, and materialism may be sensitive to cultural differences. In this study, at first, we tested whether experiential avoidance, that is an attempt or desire to suppress unwanted internal experiences, moderates the relationship between adult attachment orientations and materialistic values. Our second aim was to investigate the effect of culture on attachment dimensions, experiential avoidance, and materialism. 282 Turkish participants and 139 Russian participants with a mean age of 26 fulfilled the Experience in Close Relationship (ECR-R), Experiential Avoidance (AAQ-II), and Material Values (MVS-18) scale. The analysis revealed that attachment anxiety (B=0.23, SE=0.08, t=2.75, p =.006) but not attachment avoidance (B=-0.07, SE=0.01, t=-0.11, p=0.43) was related to materialism. Moreover, attachment anxiety interacted with experiential avoidance, F (1,416) =11.56, p<.001, such that attachment anxiety was associated with materialism for people scoring low and average on the EA scale, but not for those scoring high on this scale. Moreover, we found that culture moderated the relationship between insecure attachment styles and experiential avoidance. Turkish people had a higher level of insecure attachment styles and experiential avoidance than Russian participants but not in materialism. Our findings support the potential effectiveness of acceptance and action therapy to reduce the adverse effect of attachment anxiety on materialism.
Health without Borders: Lessons Learned from a Cancer Prevention Program for Ethnic Minorities

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Background. Disease prevention in transcultural can be challenging due to differences in beliefs, values, and practices regarding health and healthcare. Using the case study offered by the “Health without Borders” program promoted by LILT APS (Italian League against Cancer—Milano, Monza and Brianza - Social Promotion Association), this study was generally aimed at summarizing the lessons learned from that experience and providing implications that are relevant for future culturally competent disease prevention programs, especially devoted to enhancing cancer prevention.

Methods. This exploratory study used in-depth interviews, focus groups, and document analysis as primary methodological tools to gather data. A qualitative approach was chosen as the theoretical basis to analyse this case study because it has the potential to explore in-depth the main characteristics (values, operational domains, and action strategies) behind the culturally-competent disease prevention program under investigation.

Findings. According to the obtained results, the LILT transcultural disease prevention program features four main intertwined core values. In turn, these values are expressed in ten main operational domains that orient specific strategies of action. This program is based on a tailor-made principle for activities design and delivery: this allows intervention providers to flexibly incorporate the values of the target populations in the delivering of disease prevention activities.

Discussion. Therefore, the value of this case study lies in the design of adjustable initiatives that fit the "program-as-designed" with the cultural characteristics of the ethnic minorities involved in the intervention.
Health behaviours and wellbeing

Interrelations between depression symptoms, physical activity, and sedentary behavior

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Background: Although the associations between physical activity and depression symptoms and relationships between sedentary behaviors and depression symptoms were studied, the interrelations between the three variables and the order in which they may operate is less clear. This longitudinal study investigated the circular associations between the three types of variables over a period of 8 months.

Methods: A sample from the general population (N = 603; aged 11-86 years; M = 33.8; SD = 16.8; 34.8% men, 65.2% women) was enrolled. Adolescents, adults, and older participants provided their data at 6 time points. Participants were naïve regarding sedentary behaviors and their consequences. A sedentary behavior education intervention was provided between Time 1 and Time 3. Age, gender, education, and economic situation were controlled in the analyses.

Findings: More time spent on sedentary behavior assessed after the education intervention (Time 4 and 5) predicted higher levels of depressive symptoms at Time 6 (6 months later).

Discussion: Results of the study suggest that regardless of the level of physical activity, more time spent on sedentary behaviors may be associated with an increase in depressive symptoms in non-clinical samples.
Health behaviors of Colombian first-semester university students and influencing factors

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Background: In Colombia, many first-year university students consume unhealthy food, are physically inactive, and drink regularly, which can be associated with the behavior of social ties, living with social ties, and time with peers. The present cross-sectional study assessed the association between health behaviors of first-semester students and these factors.

Methods: N = 189 (Mage = 18.79; SD = 1.07; female = 68.8%) first-semester students in Colombia completed an online questionnaire investigating current and expected health behaviors as well as influencing factors.

Findings: Expected food consumption (stronger among participants who live with parents) as well as current and expected heavy drinking and binge drinking (stronger among participants who do not live with parents) were significantly correlated to the respective parental behavior. Current and expected drinking was significantly correlated to the partner’s drinking. Expected physical activity was correlated with peers’ physical activity. The partner’s attempts to encourage drinking moderated the association between participants’ current and expected drinking with the partner’s drinking. Time spent with peers was related to heavy drinking and engaging in more physical activity.

Discussion: Parents play a significant role in student’s food consumption and drinking. Partner’s drinking and time spent with peers are strongly related to heavy drinking.
The well-being of Italians: the role of physical activity during and after the Coronavirus lockdown

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Background. Numerous studies have been conducted to investigate the relationship between physical activity and well-being. These investigations have shown that people who engage in physical exercise are primarily driven by the desire to see their hedonic needs satisfied (Kraut 1979; Waterman et al. 2008), resulting in an increase in positive emotions and a decrease in negative ones. Thus, physical activity is not only useful in the treatment and prevention of psychological distress, it has been recognised as one of the most influential factors in improving psychological well-being. The aim of this contribution will be to investigate, from a social psychology of health perspective, the role of physical activity as a predictor of well-being during lockdown and two years later.

Methods. Two studies were conducted: the first was conducted in May 2020 involving 1061 subjects (Mage: 37.30 years; SD = 14.13; female: 76.2%); the second was conducted in late 2022 involving 562 subjects (Mage: 33.17 years; SD = 15.00; female: 71.0%). A self-report questionnaire was administered comprising several measures, including Mental Health Continuum - SF, sports habits, use of social media and sociodemographic data. In addition to the analysis of variance and correlations, a structural equations model will be presented to verify the relationship between the investigated variables.

Findings. The analyses revealed the protective role of moderate physical activity on emotional well-being in both studies (RMSEA=.08; SRMR=0.06).

Discussion. Finally, the relevance of these findings for designing strategies to promote healthy behaviours during the emergency period and beyond will be discussed.
Health behavior and well-being in students with hearing impairment in the context of the pandemic

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Background. Reviews showed a decrease in well-being during school closings. Regarding health behaviors, children and adolescents ate more overall, more unhealthy food, fewer fruits and vegetables. For physical activity, the results vary. Children and adolescents with hearing impairment can be a particularly vulnerable group whereby research about health behaviors and well-being is lacking. In the present study, we want to gain insights into health behaviors, well-being, and self-efficacy among students with hearing impairment as well as the associations and changes.

Method. Students from a special needs school for deaf and hard-of-hearing children in Germany (n = 73, 40% girls; mean age: 14.59 years, SD = 2.05) completed questionnaires. Well-being (KIDSCREEN) and self-efficacy were measured twice (May 2021 schools closed, July 2022), physical activity (KiGGS) and eating behaviour (HBSC) once in July 2022.

Results: Low well-being was reported from 55% in 2021 and from 38% in 2022. Self-efficacy did not change significantly (p = .15). About 40% of participants ate fruits and vegetables daily. Equally 40% ate breakfast before school every day. Only 19% were active for 60 minutes a day. Correlations between well-being and health behaviors were negligible; except for having breakfast (r = .24, p < .05). However, self-efficacy was associated with higher well-being and physical activity one year later (rs = .26, p < .05).

Discussion: Our data on well-being, healthy eating, and physical activity among students with hearing impairment are comparable to national surveys with predominantly peers without impairment. Self-efficacy was confirmed as a resource over time.

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Subjective well-being maintenance is crucial during the coronavirus spread as many studies have confirmed that positive functioning and well-being have strong influence on health and predicted fast recovery from stress and illness. Current study was aimed at revealing the significance of Covid-related adaptive behaviors for subjective well-being during the Covid-19 pandemic. We share the findings from two cross-sectional studies (N(sample1) =237, 64.1% Female, M=29.75, SD=10.693, age range: 18-58) and N(sample2) =784, (66.8% Female, M=24.93, SD=9.311, age range: 18-64) conducted in Armenia during the first wave of the Pandemic in 2020 and the third wave in 2022. Participants were recruited individually using snowball sampling. Data collected through an online questionnaire. The measures of “Mental Health Continuum-SF” and 10-items scale for types of behavior related to the pandemic (preventive, hoarding and helping) were used. Two hierarchical regression models were conducted for each cross-sectional study. Age (B=0.165, p=0.038), hoarding (B=0.190, p=0.024) and helping behavior (B=0.231, p=0.002) found to be significant predictors for well-being based on the first wave data. Study 2 revealed the significant predictive role of age (B=0.091, p=0.027), sex (B=0.092, p=0.026), employment status (B=0.111, p=0.007), economic state (B=0.236, p<0.0001), helping behavior (B=0.144, p=0.002) and prevention (B=0.125, p=0.024) for subjective well-being.

Based on the results of two studies helping behavior is revealed as a significant predictor for subjective well-being. Apart that preventive types of interventions are very important during the coronavirus outbreak, the results suggest that helping behavior is also essential in the overcoming of crisis situations like Covid-19.
Applying the COM-B model to help-seeking behaviours for Mental Health in Higher Education Students

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Introduction: In recent years, the number of university students with a serious mental illness has risen significantly. Since the Covid-19 pandemic, there has also been an increase in students seeking help for their mental health, which is presenting a huge crisis in mental health across University establishments. The aim of the current project was to apply the COM-B model and develop an intervention aimed at improving the wellbeing and help-seeking behaviours of University students.

Method: A total of 404 students at a U.K. University completed an online survey, comprising a 6-item COM-B measure adapted from Keyworth et al. (2020), as well as measures for mental health literacy, self-reliance, stigma, goal conflict, emotions, motivation, self-identity, self-efficacy, and psychological wellbeing. Participants also reported where and who they go to about their mental health.

Results: Participants reported that they would most frequently speak to friends (58%) or family (44%) about their mental health. Only 12% reported that they would seek help from the University Wellbeing service. Six multiple regression analyses predicting factors of wellbeing found that mental health self-efficacy was a consistent predictor of wellbeing. Other predictors (e.g. stigma, emotions, health literacy, self reliance) varied for each wellbeing factor.

Discussion: Participants indicated that the people they would seek help from were their friends and family. Although seeking support from those groups is appropriate, they are not trained health professionals, and so implications for ensuring students feel comfortable attending appropriate mental health and wellbeing services is needed.
Death-thought accessibility and spiritual transcendence just after the outbreak of war in Ukraine

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Background: The aim of this study was to investigate the terror management theory’s previous findings under natural conditions during the first three months of the war in Ukraine. Specifically, the study aimed to examine whether exposure to high mortality salience increased the accessibility of death-related thoughts (DTA) among the Polish population and how this was associated with a spiritual transcendence (ST).

Method: A longitudinal study was conducted between March and May 2022, involving 352 adults. DTA and ST were measured online three times at monthly intervals.

Findings: The ANOVA results indicated no change in DTA, but the latent class analysis revealed significant between-person differences in DTA change. Two latent classes were identified with significant quadratic time trends: Class 1, with higher and increasing DTA, and Class 2, with lower and decreasing DTA. However, only in Class 1 the increase in DTA was accompanied by a significant increase in ST. The cross-lagged panel model results showed that higher DTA in the second measurement predicted higher ST in the third measurement in Class 1, whereas in Class 2, none of the cross-lagged relations were significant.

Discussion: The findings suggest that ST didn’t act as a buffer against DTA; however, it was shown that higher DTA could lead to higher ST, but only in the group with generally higher DTA. Thus, the level of DTA was a moderator of the relationship between DTA and ST. Interestingly, these relationships were present in some delay from the event itself, suggesting dynamics in the adaptation process.
Associations between well-being, quality of life, illness perception, and life orientation among hematology patients

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Background: Having a chronic disease has many challenges for patients' well-being and quality of life. Psychological factors, e.g., illness perception, life orientation, or self-efficacy can greatly influence it. Additionally, chronic patients often seek online information on their illness and they turn to complementary and alternative medicine (CAM) which may also have an impact on their well-being. Therefore, this cross-sectional study aimed to examine associations between patient well-being and illness perception, stigmatization, life orientation, self-efficacy, online health literacy and beliefs about CAM in a clinical sample.

Methods: Participants were 96 hematology patients recruited at the Department of Hematology, University of Szeged, Hungary (N=96, Mage=56.5 years; SD=15.5). Besides the short version of the WHO well-being scale, we applied the following scales: EORTC Quality of Life Questionnaire, Brief Illness Perception Questionnaire, Stigma Scale for Chronic Illness-8, Revised Life Orientation Test, General Self-Efficacy Scale, Holistic CAM Questionnaire, and eHealth Literacy Scale.

Findings: Well-being was significantly associated with most variables except health literacy, stigmatization and the use of CAM. It was significantly correlated with self-efficacy (r=0.39, p<0.01), optimism (r=0.33, p<0.01), and illness perception (r=-0.39, p<0.05). Among the subscales of quality of life, well-being was most strongly related to emotional functioning and appetite loss (r = -0.44, p<0.001 in each case).

Discussion: Our data support previous findings that optimism, self-efficacy and a feeling of control over illness lead to greater well-being. Besides, there is a close connection between well-being and quality of life. Despite our prior hypothesis, online health literacy is not a contributor to well-being.
Coping and health-related quality of life – Prospective within-person bidirectional effects in children and adolescents

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Coping is an important predictor of child and adolescent health. However, bidirectional prospective studies are rare and are not yet analyzed in a within-person design. Therefore, we calculated one random-intercept cross-lagged panel model (RI-CLPM) to analyze the prospective associations of different coping strategies (social support seeking [SOC], problem solving [PRO], avoidant coping [AVO], palliative emotion regulation [PER], anger-related emotion regulation [AER]) and health-related quality of life (HRQoL). Data were assessed in children and adolescents in four waves, each 6 months apart, by self-report (at T1: N = 678; M = 10.30 years, range: 8 to 14 years; SD = 1.35) and each between-person effect was controlled for gender and age at T1. The RI-CLPM revealed negative cross-lagged effects of HRQoL on AVO (γ = −0.032, p = .026, standard estimates [STES] = −0.104 to −0.113), of AVO on HRQoL (γ = −0.361, p = .019, STES = −0.111 to −0.117), of PRO on AVO (γ = −0.105, p = .008, STES = −0.134 to −0.145), and of AVO on PRO (γ = −0.153, p = .010, STES = −0.110 to −0.119). Positive cross-lagged effects were found of HRQoL on PRO (γ = 0.045, p = .015, STES = 0.105 to 0.115), and of PRO on SOC (γ = 0.110, p = .015, STES = 0.119 to 0.129). Results on prospective bidirectional associations demonstrate both upward and downward spirals between AVO and HRQoL and a positive effect of HRQoL on PRO. Moreover, coping strategies themselves show time-lagged associations.
Psychological adjustment of patients with lung cancer: a systematic review.

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Background: The incidence of lung cancer increases every year. This disease has many psychological impacts on patients. The objective of this systematic review is to explore these consequences and how patients adjust to the disease from a psychological, relational and sexual perspective.

Methods: PubMed, PsycINFO and CAIRN databases are being queried in English and French in order to collect all the articles on the subject since 2010.

Preliminary findings: Of 11,093 articles from three databases, 442 were explored. Preliminary results show lung cancer has many psychological, social and sexual impacts. The literature generally shows a strong psychological distress of this population, defined by different meanings. High rates of anxiety [7.5%-49%] and depression [11%-55.6%] are found in this population and is linked to a strong stigma. This stigma impacts the patient’s relationship with others, the social support he receives and perceives, and the communication with health professionals. A few studies show the impact of lung cancer on patients’ sexual health, manifested in physiological or desire indicators, which seems to be related to its quality of life. Finally, some studies investigate the links between psychological adjustment and the disease’s representations.

Discussion: Although several articles are available on our subject, all the impacts perceived by the patients have not been studied. Interactions between different psychological co-variants and social support have not been studied. Empirical data on these topics should be gathered in order to provide a better understanding of this specific experience to improve the psychological support for patients with lung cancer.
Individualism-collectivism, attitude towards money and well-being of IT-professionals: before and during Russia’s invasion of Ukraine

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Cultural orientations of individualism-collectivism and belief in the power of money were studied in relation to well-being, acknowledging the organizational structure of an IT company - flat (F) or hierarchical (I), and the social context. It was hypothesized that depending on the type of organizational structure, well-being would be supported by different cultural orientations - towards vertical relationships and collectivism in (I), and horizontal relationships and individualism in (F). Were considered possible shifts in attitudes towards money, as well as their relationships for well-being, as a result of the dramatic socio-economic changes in Ukraine.

The study involved 177 participants (86 males, 71 females) employed in the IT sector: 80 in September 2021, 77 in November 2022; 102 (I)-employees and 55 (F)-employees.

Methods: Test of Fundamental Motivation (Shumskiy, Osin, Ukolova, 2017) for existential fulfillment (EF) measurement, Satisfaction with Life Scale (Diener et al., 1985) and Scale of Subjective Wellbeing (Perrudet-Badoux et al., 1988) for cognitive (SWL) and emotional (SSW) parameters of subjective well-being, the Individualism-Collectivism Scale (Germani et al., 2021; Triandis&Gelfand, 1998) for measuring four dimensions of individualism/collectivism, Scale of Belief in the Power of Money (Kryazh).

Findings: Using MANOVA, it was found that during wartime, HI and EF significantly decreases, SWL and SSW decrease at a trend level (p<0.06). Regardless of type of organization and social situation, PoM is a negative predictor for well-being. Significant differences are identified in the relationships between cultural orientations and well-being depending on the type of organization and social situation.
Improving wellbeing

15:30 - 17:00

Music as an equity and inclusiveness tool: a case study of Community Music in Sardinia

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The aim of this primary empiric research is to investigate if Community Music can be implemented as a public health promoter agent. Till today there is no explicit theory to explain the relationship between CM and well-being or social cohesion. The conceptual frame of Agenda2030 suggests the possibility to implement Quality Education, Good Health and Wellbeing, Reduced inequality and Partnerships to achieve sustainable development goals (SDGs 3, 4, 10), according to the Glocal perspective: “Think Global, Act Local”.

In order to evaluate if musical participation can connect people and institutions towards community well-being, this study investigated three years of practices of a CM in Sardinia, based on workshops and educational activities, cultural events in the province. Through the collection of statistical primary data about 120 members and 5 training activities, the CM is described with a systemic structural point of view. The number of members and activities have steadily increased. Management costs are the main limitation, in addition to the lack of space for the logistics of growing businesses.

The Community music activities will be sustainable over time if policy makers and institutional stakeholders intervene in supporting C.M. interventions, measured by monitoring and evaluating them in the context. Further studies will be needed to demonstrate the potential for change, to promote wellbeing and transformative good practices in a region affected by economic crises, high risk of disease and population aging. Would be relevant to continue the research to investigate the possibility to reproduce and transfer the model to other contexts.
The Implementation of Meaningful Activities to enhance Mental Health

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Background: Performing meaningful activities (MA) is recommended for people to enhance their mental health. The purpose of this study was to clarify the following: 1) whether people who recognize themselves as performing MA (Performer) have better mental health compared to others (Non-performer), 2) the kinds of MA performed and types of psychological benefits experienced, 3) the kinds of barriers encountered and coping methods that Performers used.

Methods: We recruited Japanese men and women for this survey through an Internet Research company. The Behavioral Activation for Depression Scale-Short Form (BADS-SF), and K6 survey were administered for all participants. The Performers were instructed in an open-ended item to describe the kinds of MA that they perform, the psychological benefits, barriers, and their coping methods.

Findings: Six hundred and seventy-seven Performers and 407 Non-Performers participated in this survey. Performers showed significantly higher Activation scores and lower Avoidance scores on the BADS-SF compared to Non-Performers. There was also a significant difference in Activation scores between age groups for Performers but not for Non-Performers. Performers had significantly lower K6 scores than Non-Performers. From a qualitative viewpoint, 12 kinds of MA, 11 psychological benefits, 8 barriers, and 6 coping methods were identified through expert consensus.

Discussion: This study presents useful insights for future MA studies, as it not only clarified the characteristics of MA, but also highlighted information on behavior change. We can recommend different kinds of MA, corresponding to their preferences to help people enhance their mental health.
Can imagery effect the performance and level of self-criticism of athletes?

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The aim of our research was to expand knowledge on imagery scripts as a tool for increasing performance and reducing self-criticism in athletes. We hypothesized that the physical practice group and the imagery group would significantly increase their performance, compared to the control group and that imagery would significantly reduce the level of inadequate self and hated self and increase the level of reassured self in athletes.

The research group consisted of 78 recreational CrossFit athletes who regularly participate in group trainings. The participants were divided into three groups – physical practice group that trained two series of pushups, imagery group that visualized pushups and the control group that stretched before training. The intervention lasted 4 weeks. Various statistical tests were used, including paired t-test and Wilcoxon test for intra-object comparisons, and ANOVA for between-groups comparisons.

The results showed that imagery is an effective tool for increasing performance of athletes (28.8%, p = 0.03) and in combination with regular exercise can result in additional performance gains. While there were a few significant shifts in some subscales of self-criticism and self-reassurance, they were generally negligible and require further research.

Imagery offers a way for all types of athletes to replace part of their training so the athlete can continue to train fully without putting their body at risk. This can also be applied in the rehabilitation process after an injury when the patient is not yet able to exercise, while at the same time regulating self-criticism and self-reassurance of the individual.
Control matters: Recovery experiences, gift-giving activities and well-being of employees before Christmas

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Background: The weeks before Christmas offer cheerful leisure opportunities as well as seasonal demands (e.g. shopping for gifts), both affecting employee well-being (Kasser & Sheldon, 2002; Syrek et al., 2018). The present study investigates the relationship between recovery experiences (detachment, relaxation, mastery, control; Sonnentag & Fritz, 2007) and seasonal gift-giving activities with employee stress and well-being in the pre-Christmas period.

Method: Survey data from in total 1019 employees was collected in the two weeks before Christmas in the years 2019-2022. Pre-christmas well-being (PCWB) was measured with an aggregate measure including stress, satisfaction, positive and negative affect (adapted from Kasser & Sheldon, 2002).

Results: Multiple regression analyses were conducted controlling for age, gender, year, seasonal overtime and emotional exhaustion. Control and mastery were the most relevant recovery experiences for predicting PCWB, control and relaxation were most relevant for predicting stress. PCWB was lower when gift-buying activities were especially salient and higher when gift-buying started subjectively early.

Discussion: Control appears to be the most relevant recovery experience with regard to both employee well-being and stress before Christmas. This might be due to its enabling effect to gain more resources (Hobfoll, 1998), such that employees with more control are better able to balance seasonal offerings and demands. Regarding gift-related activities as a potential seasonal stressor, results confirm earlier evidence (Kasser & Sheldon, 2002) that PCWB is lower when they predominate other seasonal activities. Theoretical and practical implications, e.g. boosting recovery competences in employees, will be discussed.
Reciprocal associations between body image flexibility and body appreciation during COVID-19: A prospective, cross-lagged study

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The COVID-19 pandemic was associated with detrimental consequences for embodied well-being and health. However, factors that counteracted these adverse effects and helped develop a positive body image are poorly understood. Previous studies pointed to the importance of body image flexibility (i.e., the ability non-judgmentally embrace the present bodily experiences without acting on them or trying to avoid them) in predicting body appreciation (i.e., accepting, holding favourable attitudes towards, and respecting the body). However, given these studies’ cross-sectional design, evidence of the relationship’s directionality still needs to be provided. As such, this longitudinal study tested the reciprocal association between body image flexibility and body appreciation during the COVID-19 pandemic in Germany. We evaluated data from 1436 women who participated in an online survey and were invited to complete assessments (Body Appreciation Scale-2, Body Image Acceptance and Action Questionaire-5) at three measurement points; each spaced roughly six months apart. The latent cross-lagged panel model yielded an excellent fit to the data (CFI = .975; RMSEA = .027, 90% CI [.025, .029]; SRMR = .037). While greater body appreciation predicted increased body image flexibility over both measurement intervals (βT1-T2 = .09; βT2-T3 = .08), greater T2 body image flexibility predicted increased T3 body appreciation (βT2-T3 = .09). Our findings suggest that interventions efforts designed to enhance body image flexibility may also lead to improvements in body appreciation, which subsequently enhance the chance to cope with future body image threats adaptively. Future directions include replication of our findings in more diverse demographic groups.
Prognoses of Burnout, Insomnia and their comorbidity over a six-year period

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Background: Burnout and insomnia are comorbid health issues with high prevalence. However, these conditions are often based on studies in occupational groups and longitudinal studies show mixed results regarding prevalence and prognoses. The purpose was to study long-term prognoses of burnout and insomnia caseness and their comorbidity over six years in a general adult population.

Methods: A longitudinal and prospective design was used, including population-based data from 1,837 participants in Västerbotten, Sweden, from three time points over a six-year period. The Shirom-Melamed Burnout Questionnaire (SMBQ) and the Karolinska Sleep Questionnaire (KSQ) were used to assess burnout and insomnia, respectively. Cut-off scores were used to determine prevalence rates of caseness.

Findings: Prevalence rates at baseline were 9.5% for burnout cases, 16.6% for insomnia cases, and 8.9% for comorbidity cases. At three-year follow up 41.1% of the burnout cases and 44.3% of the insomnia cases had recovered (having neither burnout nor insomnia), whereas 20.0% of the cases with comorbidity recovered. At six-year follow up, corresponding rates were 44.4%, 46.5%, and 23.6%, respectively.

Discussion: The fact that more than half of the participants with burnout and insomnia at baseline suffered from one or both health problems at three- and six-year follow-up, indicates that these problems tend to be persistent or reoccurring. Participants with comorbidity had an even poorer recovery prognosis than those with only burnout or insomnia. From a clinical perspective it is important to identify early signs of burnout, insomnia and especially comorbidity, in order to reduce the risk of long-term ill-health.
Travel habits of women in menopause

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Background: While the importance of travel and tourism in active aging and its health implications in physical and mental terms have been recognised (Qiao, et al., 2022), as well as the transformational experience of travelling for women, in particular (Laing, & Frost, 2017), there is a lack of research into the travel habits of women in menopause. This study aims to analyse travel-related factors among women in different stages of menopause.

Methods: This is a cross-sectional design study, with 124 female climacteric participants. The instruments to be used were the sociodemographic questionnaire, the Menopause Representations Questionnaire, the Depression Anxiety Stress Scales, the Body Shape Questionnaire and the Marital Life Areas Satisfaction Evaluation Scale. Multivariate analysis of ANOVA and Post-Hoc (Gabriel) tests were performed on sociodemographic and tourism-related variables in order to identify differences between women in different stages of menopause.

Findings: The results reveal that most menopausal women (53.2%) travel at least twice a year (M = 2, SD = 1.02); more than half of women in menopause (55.6%) do not spend weekends out of routine; summer is the season that most women prefer to go on vacation (74.2%); pre and post menopausal women show statistically significant differences in the travel variable (F = 6.75, p = .002).

Discussion: The results of the present study suggest the importance of guiding women to engage in various activities during the climacteric, like increasing the weekends outside of the routine, which can positively affect marital satisfaction and improve the wellbeing of menopausal women.
Health (behaviors) in midlife and old age

Does your first job predict your last job? Evidence from China

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Using data of individuals approaching retirement age from the China Health and Retirement Longitudinal Study (CHARLS), this article explores factors associated with informal employment at older age in China. We found that males, individuals with good health, more education, or urban residency have a lower chance of being in the informal employment at older age. We further examined career path dependency by investigating the link between the first job and informal status of employment at later stage of life. Our findings show that older workers whose first job were in the state sector were the least likely to work informally at an older age. In contrast, individuals whose first job was self-employed had 21.97% higher chance ending with an informal employment at older age than those who started in State sector. Results indicate that employment opportunities among older workers are segmented by and depend on institutional arrangements at the time of labour market entry. The difficulties in breaking up the structural barriers in employment suggests that disadvantages at early stage of life are likely to exacerbate at older age with a significant proportion of population in a highly precarious situation. This raises serious challenge for the policy makers as how to ensure those who have been in precarious employment to have access to basic social security after their retirement.
Experiences and perceptions of ebiking/pedelecs among older adults: a qualitative study

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Background. Electric bicycles/pedelecs (ebikes) offer an opportunity for sustained physical activity in older adulthood. Assistance from the electric motor enables users to travel further and cycle for longer, while simultaneously achieving moderate to vigorous activity levels. This study aimed to understand experiences and perceptions of ebiking among older adults who currently use an ebike for transport and/or for leisure.

Methods. Semi-structured interviews were conducted with thirteen participants aged 60 years or older. Interviews were conducted online and guided by a semi-structured schedule of questions. Data were analysed qualitatively using thematic analysis.

Findings. Two themes were generated, relating to the opportunities and challenges presented to older adults by ebikes. Reported opportunities included staying active in older age, facilitating social contact with friends and family, and overcoming hilly terrains and long routes by bike. Challenges included handling the weight of the ebike, maintaining the ebike and related servicing costs, and concerns associated with road safety and cycling infrastructure.

Discussion. Results highlight the potential for ebikes to support active and sustainable mobility among older adults. Potential barriers to ebiking in this cohort, linked to both the bike and built environment, may preclude inclusive uptake and should be considered when promoting ebiking to older adults. Policies and grants aimed at supporting individuals to chose active, sustainable transport modes such as ebiking should include older adults, given the potential health, social, and environmental benefits.
Physical resilience in hip fracture patients: associations between functional status and grip work (pilot study).

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Background: Hip fractures are a common health stressor in older persons, from which not all individuals can fully recover. A person’s ability to withstand or recover from health stressors is called resilience. Resilience is essential for a fast and successful recovery of older persons with a hip fracture. However, there is no easy and adequate tool available that measures resilience. Therefore, this study explored if grip work (GW) has this potential, by investigating its association with functional status in older hip fracture patients.

Methods: Twenty-six patients surgically treated for a hip fracture at Ziekenhuisgroep Twente performed a GW measurement during hospital admission with Eforto®, a rubber bulb that is wirelessly connected to a smartphone-based application. GW (=area under the strength-time curve) corresponds to the work delivered by the forearm muscles until grip strength decreased to 50% of its maximum during sustained maximal effort. Using univariate analyses (Mann-Whitney-U tests, Spearman’s correlations), the associations between GW and functional status at hospital discharge were explored.

Findings: Higher GW was significantly associated with lower age (r=-.54, p=.004), male sex (p=.005) and living independently (p=.002). Furthermore, higher GW was significantly associated with better mobility at hospital discharge (Fracture Mobility Score: r=.53, p=.007; Functional Ambulatory Category: r=.56, p=.004).

Discussion: This exploratory study showed that GW is a marker for functional status at hospital discharge in patients recovering from a hip fracture surgery. GW is a promising parameter to explore resilience, with future applications such as personalized care for the older patient with a hip fracture.
How does adaptive goal-setting change older adults’ self-determination and physical activity? A mixed-methods intervention study

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Physical activity is an important health behavior especially for older adults. Postulated by the self-determination theory, one way to foster motivation to be physically active is by providing autonomy-supportive interventions, such as adaptive goals. However, this has not been investigated for older adults. We will examine whether older adults’ self-determination and physical activity changes during an adaptive goal intervention. Further, we will investigate what role self-determination plays when older adults talk about their physical activity, and how the intervention changes these perceptions. In a mixed-methods, within-person intervention study with intensive-longitudinal assessment (35 days) using diaries and accelerometry, participants (targeted N = 20) formulate a physical activity goal and corresponding implementation intentions. During the intervention period, participants will additionally get an autonomy-supportive intervention consisting of being provided with the opportunity to review and alter their goals and implementation intentions on a weekly basis. Before and after the intervention, a subsample of participants will be interviewed regarding their self-determination and physical activity. We expect that participants will improve their intrinsic motivation, intention to be active and their physical activity over time. The data collection is ongoing. We plan to analyze the quantitative data using multilevel modelling and the qualitative data by using combined thematic and interpretative phenomenological analysis. The study will firstly add an in-depth understanding about the role self-determination plays for older adults’ physical activity, how an intervention that is conceived to be autonomy-supportive is perceived and if this intervention can foster intrinsic motivation, intention and physical activity.
Motivators, facilitators and barriers pursuing a lifestyle change around retirement age

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\textsuperscript{2}Hospital Universitario Ramón y Cajal (IRYCIS), Spain

Background. Retirement is a period of lifestyle changes, which is an opportunity to acquire healthy habits. This study aims to identify motivators, facilitators, and barriers to the adoption of healthy habits during this age gap. Methods. Four focus groups were carried out with 19 participants between 50 and 70 years old. Thematic areas like the definition of a healthy lifestyle, motivators, facilitators, and barriers to healthy habits were addressed. Preliminary analyses with Atlas.ti were conducted. Findings. Healthy lifestyle received a holistic definition in the four groups. The most discussed areas were diet, physical activity, and emotional aspects (like social connectedness or emotional well-being). To a lesser extent, being mentally active was discussed, as well as alcohol and tobacco use as unhealthy habits. In regard to motivators, the most prevalent one was enjoyment, followed by health (either for prevention or after being diagnosed with a disease), relief of stress, autonomy, self-satisfaction, and avoiding guilt (whenever a healthy habit was not achieved). Other motivators, such as feeling fit and agile, as well as physical appearance, were briefly mentioned. Regarding facilitators, the most prevalent one was social support, and a second factor was the location (living in cities vs nature environments). Focusing on barriers, several were specified like lack of time (in pre-retired participants), easy access to snacking, and mental health issues. Discussion. Several relevant factors were found, such as mental health, social support, and intrinsic sources of motivation such as enjoyment. These should be considered in the design of lifestyle interventions.
Loneliness and cognitive function in older adults: longitudinal analysis in 15 countries

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Background. Loneliness has been associated with worse cognitive health in older adults. However, questions remain regarding the directionality of the association between loneliness and cognitive performance. The objective of this longitudinal study is to determine this directionality, accounting for confounding factors.

Methods. Data were from 56,049 adults older than 50 years who participated in waves 5–8 of the Survey of Health, Ageing and Retirement in Europe (SHARE). Loneliness was assessed with the Three-Item Loneliness Scale (TILS) and with a one-item direct question. Cognitive performance was assessed with four measures: verbal fluency, numeracy, immediate recall, and delayed recall. Age, sex, geographical area, educational attainment, partner in the household, depressive symptoms, and previous chronic diseases at the baseline were used as covariates. We analyzed the associations with three-wave random intercept cross-lagged panel models (RI-CLPM) and conducted age-stratified analysis among those younger vs. older than 65 years. Full information maximum likelihood estimators were used to handle missing values in waves 6–8 in the main analyses. Findings. Among those aged 50–64 years, loneliness and cognitive performance were not associated with each other in the main time-lagged analysis (p > 0.05). Among those aged 65–97 years, loneliness was associated with lower cognitive performance in the next wave in all four cognitive domains. Moreover, lower verbal fluency predicted higher loneliness in the next waves among this age group.

Conclusions. Loneliness is a psychosocial risk factor for cognitive decline among older adults (> 64 years), with some evidence for a bidirectional association.
Interpersonal variables and caregiving partners' burden in cardiac illness: a longitudinal study

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Background: The literature on coping with illness has for many years viewed only the patients as the focal point of attention and support, and only recently have the needs of patients' caregivers been acknowledged as well. In addition, studies that have focused on factors contributing to caregiving partners' burden in the context of chronic illness have assessed mostly intrapersonal variables of either the patient or the partner, thus overlooking the dyadic and interpersonal nature of caregiving.

In the current longitudinal study, we examined the contribution of interpersonal factors, such as patients' and partners' relationship satisfaction and social support perceptions, to caregiving partners' burden in the context of cardiac illness.

Method: Couples comprising male patients and female caregiving partners (N = 131) completed measures of relationship satisfaction, provided support, and received support upon patients' admission to a cardiac rehabilitation program after an acute cardiac event (Time 1), and three months later, upon program completion (Time 2). Caregiving partners also completed a measure of caregivers' burden at both measurement times.

Findings: Path analyses revealed that partners' relationship satisfaction, provided support, and received support, were all associated with lower levels of different dimensions of burden at both timepoints, as well as over time. Patients' contribution to their partners' burden was salient cross-sectionally but not over time.

Discussion: These findings shed light on the substantial role played by interpersonal factors in the caregiving process. Our findings suggest that both patients and partners should be regarded as caregivers and care receivers to each other.
Contribution of interpersonal variables on burden and depression among caregivers in the context of ACS

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Background: The burden perceived by caregivers of patients with cardiac illness is an essential aspect of the disease and might even lead to severe consequences as depression. While most studies examining caregivers’ burden have mainly accounted for intrapersonal variables, the current longitudinal study’s objective is to examine whether interpersonal variables, such as marital satisfaction and perceived partner responsiveness (PPR), moderate the association between caregivers’ burden and depressive symptoms in the context of cardiac illness.

Methods: To examine these dynamics over time, caregiving partners of cardiac patients (N = 131) completed measures of marital satisfaction, PPR, and burden at the patient’s admission to a cardiac rehabilitation program after an acute cardiac event (Time 1). In addition, participants completed a measure of depression both at Time 1 and three months later (Time 2), at the completion of the cardiac rehabilitation program.

Findings: Path analysis revealed that the positive correlation between developmental burden (the feelings of being out of sync with personal development when compared to caregivers’ peers of the same age and feelings of failure regarding caregivers’ hopes and expectations) as measured at Time 1 and depression as measured at Time 2, diminished as higher values of interpersonal factors were reported.

Discussion: The results shed light on the contribution of marital satisfaction and PPR to caregiver’s experience in the context of cardiac illness. Our findings suggest that perceiving the relationship as satisfactory and perceiving the partner as someone who sees and appreciates the caregiver’s support efforts may alleviate caregiver’s distress.
Health and psychosocial factors associated with negative outcomes of informal care in working carers.

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Background: Working carers (WKCs) are informal carers in paid work, and their support needs differ from other informal carers due to this combination of care and work roles. To develop appropriate and effective support, this study examined health and psychosocial factors associated with experiencing caregiving as demanding and a reduced ability to work in WKCs.

Method: The Swedish National Carer Survey was a cross-sectional, questionnaire-based study of a stratified random sample (N=30,009) of the adult population. Of 11,168 respondents, 818 (7.32\%) met the study criteria for WKCs. The questionnaire contained items on WKCs' health and psychosocial characteristics, their caregiving situation and whether it affected their ability to work, and support received.

Findings: Almost half of WKCs sometimes to always experienced caregiving as demanding and 40.4\% had a reduced ability to work, while experiencing caregiving as demanding and a reduced ability to work were strongly associated ($r=\text{.45}$). Ordinal logistic regression models were developed with experiencing caregiving as demanding and ability to work as dependent variables. While some variables were significant in only one model, psychological stress and financial problems increased the odds of both experiencing caregiving as demanding and a reduced ability to work, while finding caregiving satisfying decreased the odds of both.

Discussion: Policy for WKCs should focus on developing support that effectively reduces the psychological stress of caregiving, mitigates financial problems, and enhances caregiving satisfaction, since such factors are associated with both care and work situations. Improving WKCs' care situation could indirectly benefit their work situation, and vice versa.
The impact of a significant health event in informal caregivers: findings from a systematic review

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Background: Across Europe, 80% of care is provided by informal caregivers. The psychosocial impact of caregiving is well evidenced; however, little is known about what happens when caregivers are ill or injured themselves. It is important to understand this scenario better, so that improved assessments, interventions and services can be initiated.

Methods: This review investigated the impact of a significant physical health event in informal caregivers over the age of 16 years. We included peer-reviewed journal articles and grey literature in the English language, published from 1966 onwards. Gough’s ‘Weight of Evidence’ framework was used to assess quality. High heterogeneity meant the data was not suitable for meta-analysis; a narrative synthesis (Popay et al, 2006), was conducted.

Findings: 6/16,066 studies met inclusion criteria (195 were taken to full text screen). The significant health event in informal caregivers included lower back pain, breast cancer, and injury. The impact of the significant health event while being a caregiver included requiring additional help, inability to work or having to work less meaning a financial implication, quality of life reduction, depression, stress and a decline in ability to undertake caregiving role and duties.

Discussion: This systematic review has shown that a significant health event, including cancer, in informal caregivers can have a significant impact on both caregivers and care recipients and the care dyad.
Investigating the impact of a cancer diagnosis in an informal caregiver: a qualitative study

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Work In Progress Poster:

Background: There is an important knowledge gap about the impact of a cancer diagnosis in informal caregivers. This study aims to address that gap by undertaking a qualitative study to investigate the impact of a cancer diagnosis in the informal caregiving population.

Methods: 30 interviews will be conducted: 15 with caregivers with a cancer diagnosis, and 15 with care recipients whose caregiver has had a cancer diagnosis. Focus groups with health and social care professionals who work with this cohort of cancer patients are also underway. Thematic analysis (Braun and Clarke) will be used to analyse the results.

Expected results: We will describe how a cancer diagnosis has impacted the psychosocial dimensions of the caregivers' lives, especially emotional and psychological health, health-related quality of life. Impacts on the well-being of both the caregiver and the care recipient are expected.

Current stage of work: The study is currently at the recruitment stage. Ethical approval has been granted and a process for recruitment has been decided upon.

Discussion: The outcomes of this study will contribute to our understanding about illness in a caregiver and the care dyad. Outcomes will show what the impact of a cancer diagnosis is, and what support might be needed for this vulnerable population of caregivers.
Perceived Sabotage and Negative Social Norms Regarding Weight Loss: Scale development and Exploratory Factor Analysis

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Background
Weight loss is often not successful on the long term. The social environment plays a role in lapses and relapse. Perceived social norms promoting unhealthy eating and drinking behaviors and sabotaging weight loss behaviors by the social environment are potential factors, yet underlit constructs. The aim of this study was to develop a scale to measure these constructs.

Methods
A cross-sectional study with an online survey was conducted (n=368). Questions were constructed based on answers to an open question about sabotage in a previous study. An exploratory factor analysis (EFA) was performed and internal consistency was determined.

Findings
Three subscales were identified: Normative and Verbal Pressure to Eat or Drink, Seductive Behaviors of Others, and Doubting the Need for Weight Loss. Cronbach’s alpha varied from .84 - .89 for the subscales and was .92 for the overall scale.

Discussion
The present study provides a scale to measure perceived social norms promoting unhealthy eating and drinking behaviors and sabotaging behaviors.
Association of relationship satisfaction and blood pressure in rural Burkina Faso’s elderly population.

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Background:
With population growth and aging in Sub-Saharan Africa (SSA), the associated increase in non-communicable diseases is expected to become a major public health challenge, with cardiovascular diseases (CVDs) a significant contributor. We aim to address the research gap on relationship satisfaction (RS) as a protective factor on cardiovascular health in low-income SSA. By examining whether RS predicts blood pressure (BP), the direct causal factor for CVD, and whether any association is moderated by gender, we are adding to the growing body of literature on psychological factors influencing physical health in developing countries.

Methods:
Analyses were conducted using cross-sectional data collected in 2018 via a household survey using questionnaires and physical measurements of N = 3,026 older adults (≥ 40 years) in northwestern Burkina Faso. RS was measured using the Couple Satisfaction Index (CSI-4). Multiple linear regression models were calculated for systolic (SBP) and diastolic (DBP) BP and adjusted for age, gender, and demographic/socioeconomic and additional health-related variables. Gender moderation was tested using interaction terms in multivariable analyses.

Findings:
A significant positive association existed between RS and SBP (B = 0.23, p = .03) when controlling for demographic/socioeconomic variables only. There was no significant association of RS and DBP and no evidence of gender moderation.

Discussion:
We find a small but significant positive association between RS and SBP, above and beyond established BP drivers – following a direction contrary to most Western findings. Our results add to the evidence regarding the contextual nature of the association between RS and health.
Providing Social Support and Health: Conditions and Temporal Dynamics – Pilot RCT on healthy helping

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Background: Recent studies show that helping others can elicit physiological benefits in support providers, but these findings remain descriptive and incoherent due to the lack of an overarching theory on the conditions for healthy support provision. Based on self-determination theory, we propose that support positively affects providers’ health under three conditions: if it is freely chosen, builds competence and relatedness. The PROSPECT program aims to define, operationalize and manipulate these conditions for providing support to analyze their effects on psychological and physiological health.

Methods: Peer-dyads and romantic dyads will be invited to a controlled laboratory experiment. Autonomy, competence and relatedness will be manipulated in their support interactions to test immediate effects on physiological, affective and self-evaluative health outcomes (e.g., cortisol, alpha-amylase, heart rate variability, mood, self-efficacy).

Expected results: This work in progress poster differentiates the causal conditions under which support giving is beneficial for the provider from possible confounding variables, such as differences in resources at baseline (stress level, time, task knowledge, mood, health) and from possible reversed effects (those in better health provide more support).

Current stage of work: Early 2023, the pilot study is being conducted in the laboratory and the results of the first 20 dyads can be presented.

Discussion: Unravelling the conditions for healthy and harmful support provision is essential to develop guidelines for healthy support provision in informal and formal contexts (e.g. volunteering, care-giving, professional support) and to suggest solutions for the “visibility dilemma” between recipients’ needs for subtle support and providers’ need for feedback.
Coping with LVAD Implantation: Post-Traumatic Stress Disorder among Patients and Their Partners

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Introduction. A left ventricular assist device (LVAD) is a mechanical device that is surgically implanted in patients with advanced heart failure. Having this device make patients constantly aware of the fact that they are dependent on an extracorporeal device for one’s survival. Indeed, it was found that patients show high prevalence of depression, anxiety and adjustment disorders. Despite the fact that being exposed to one’s partner constant mortal danger, along with serving as the patient’s primary caregiver and lifeguard, might make patients’ partner susceptible for developing post-traumatic stress disorder (PTSD), there is a paucity of data on LVAD transplantation- related PTSD among patients’ partners. The current study main aim was therefore to assess the prevalence of cardiac disease induced PTSD among LVAD patients and especially their caregiving partners.

Method. Data were collected from all eligible patients and partners who are currently treated in one of the two operating LVAD implantation units in Israel who agreed to participate (39 patients and 23 caregiving partners). The PC-PTSD-5 screening questionnaire was applied.

Findings. Six patients (15.4%) and six partners (26%) reached the required cutoff point for the identification of a probable PTSD diagnosis. This high prevalence is similar to the prevalence found among patients coping with Acute Myocardial Infarction and their partners.

Discussion. Our study is the first to demonstrate the existence of PTSD among partners of patients coping with LVAD. The current findings highlight the urgent need to develop adequate and efficacious interventions for patient and caregiving partners’ PTSD in this context.
An Evaluation of Singing Support Services for People Living with Dementia and their Carers

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Background: For people living with dementia, singing interventions can improve mood, quality of life and relieve stress. Previous evaluations of singing interventions have focused on the benefits for people with dementia and not their carers with the majority only including care home residents. This research aims to evaluate the benefits of dementia singing groups for both people living with dementia and their carers within the community and to examine barriers that prevent access.

Methods: We aim to recruit n=150 people with dementia and n=150 carers attending singing services. We will examine the impact of two different singing services, one which combines singing alongside physically engaging dance and one which includes a sociable lunch. Using a mixed methods approach, we will quantitatively assess the impact of the services on mood, cognition, quality of life, neuropsychiatric symptoms, social isolation and carer burden using standardised questionnaires. In addition, semi-structured interviews will be conducted evaluating the accessibility and acceptability of the interventions focusing on barriers preventing access and whether these barriers are increased in people from lower socioeconomic backgrounds.

Expected results: We expect participants will show reduced neuropsychiatric and depressive symptoms, social isolation, carer burden and increased quality of life. We expect that people from lower socioeconomic backgrounds may experience more barriers to accessing singing interventions.

Current stage of work: We anticipate starting data collection in April 2023.

Discussion: Understanding the benefits of singing interventions and potential access barriers is important and will aid in making these services more easily and widely accessible.
Severe and critical COVID-19 survivors’ experiences of social support during acute disease and post-COVID period

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Background: Social support has been found to positively impact physical and psychological health outcomes and to facilitate coping with a disease and the recovery process. Little is known about the sources, types, and experiences of social support in severe or critical COVID-19 disease. The study aims to qualitatively explore severe and critical COVID-19 survivors’ experiences of social support during acute disease and in the post-acute period.

Methods: Participants included ten Bulgarian severe and critical COVID-19 adult survivors (6 severe/4 critical, 5 male/5 female) who had been hospitalized. Data were collected through in-depth semi-structured interviews, audio-taped and transcribed verbatim. Data were analyzed through thematic analysis.

Findings: COVID-19 survivors experienced high levels of perceived social support by partner/family and friends throughout the period from infection to post COVID condition and recovery, with a focus on caregiving and emotional support. Health professionals and fellow patients provided social support during hospitalization in terms of informational, emotional, and social network support. All sources and types of social support were experienced in the post-COVID period when social support by supervisors and co-workers was added. COVID-19 survivors’ emotions ranged from being a burden to their loved ones to being grateful for their lives being saved.

Discussion: The findings add to scientific knowledge of social support experiences and effects in COVID-19 severe and critical disease and have important implications for practice through informing healthcare practice in primary care, hospitals, and rehabilitation services, as well as informal caregiving and provision of psychological support for COVID-19 survivors.
Identifying factors influencing health-promoting lifestyle-behaviours in midlife women to inform the design of a DHI

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Background:
Abundant evidence indicates that improving diet and physical activity behaviours is associated with increased health-related quality of life in people. However, little is known about the behavioural determinants that can lead to successful digital interventions tailored to midlife women.

Objective:
The aim of the study is to explore factors influencing healthy eating and regular physical activity in midlife women (aged 40 – 65 years) using focus groups. The behavioural influences are to be used as an input in the design of a digital BCI tailored to this population.

Methods:
Seven semi-structured focus group discussions with midlife women in the UK (n = 33) explored healthy eating and regular physical activity barriers and enablers, the influence of menopause symptoms on lifestyle behaviours, and the use of digital health technologies. Both, inductive thematic analysis and deductive qualitative analysis were performed across the dataset where the TDF/COM-B were used as coding frameworks and BCTTv1 to code BCTs.

Results:
In total 43 unique themes and 39 BCTs were identified and mapped into 14 TDF domains. Identified were barriers (e.g., feeling tired, family responsibilities, lack of time, lack of planning, gym intimidation, low mood, low motivation) and enablers (e.g., self-monitoring steps walked, setting small achievable goals, attending group exercise classes, tracking meals consumed, social support from friends and family, engaging in exercise challenges, kudos and rewards).

Conclusion:
This qualitative study underpinned by COM-B/TDF framework applied to healthy eating and physical activity in midlife women provides a new set of targets for BCI development.
Problem solutions for physical activity plans: first steps based on existing classification systems

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Introduction: To create personalized interventions, one needs to understand what kind of plans are relevant for whom. In a first step, we aimed to classify the content of the plans. The present study focuses on solutions created in the context of problem solving for physical activity plans, investigating (1) how many and which solutions are not covered by existing categorization systems and (2) which adaptations to those systems would capture the solutions not previously covered.

Method: 360 students created daily plans for physical activity for eight days, resulting in 4843 coping plans. We iteratively developed a codebook based on the compendium of self-enactable techniques to code the solutions, and each solution was coded. 680 solutions (7.12%) were double coded in order to calculate interrater reliability.

Findings: While 61.5% of the solutions were covered by techniques from the compendium of self-enactable techniques, 27.6% of solutions were covered by solutions that were added by the research team. The added solutions were "Plan Adaptation" for the activity type, moment, location, company or duration of the activity, "Do it together", "Time Management" and "Manage negative physical states". Interrater reliability was moderate for the coded solutions.

Discussion: A majority of added classes concerned specifications of the "problem solving" technique, and predominantly aimed to solve external barriers. This study is an important first step in classifying the content of problem solving solutions for physical activity. Future work should expand upon this by defining attributes and relationships to barriers for each solution. This could be done using ontologies.
Substituting an old commuting habit with a more active and sustainable commuting habit

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Background: ‘Habit substitution’ refers to the replacement of an old, unwanted cue-response link (e.g., taking the car to work in the morning) with a new, alternative cue-response link (e.g., cycling to work in the morning). Whether an old habit persists or degrades while habit substitution remains unknown. We aimed to explore such habit substitution processes in the context of replacing an old with a new, more active and sustainable commuting behavior to work.

Methods: We report preliminary results of an ongoing smartphone-based ecological momentary study. After creating an action plan for a more active and sustainable commuting behavior, n=24 participants (62.5% female, 18–59 years) reported their daily automaticity levels for old and new commuting behaviors and theory-based, psychological determinants, such as self-efficacy, experienced reward, and affect during six burst weeks of daily workday assessment (i.e., 30 measurement days) spanning 14 weeks. Multilevel models were fit.

Results: Enactment of the new commuting behavior increased over time (p=.040). Whereas automaticity of the old commuting behavior decreased (p=.031), automaticity of the new commuting behavior increased (p=.007) over time. We found no significant links between proposed determinants and automaticity levels.

Current stage of work: We are in the data collection phase aiming to reach a sample size of N=60 participants.

Discussion: Habit formation of the new commuting behavior seemed to be successful. Preliminary results suggest that automaticity of an old commuting habit degrades when replacing it with a new commuting habit. Future studies should explore determinants for successful substitution of unwanted habits.
Bidirectional associations between planning and self-efficacy predict sedentary behaviour among dyads

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Background: According to the health action process approach, self-efficacy and planning are prominent modifiable psychosocial determinants of health behaviours. The study examined bidirectional associations between self-efficacy and planning in predicting sedentary behaviour, testing both enabling (planning may enable the formation of self-efficacy) and cultivation (self-efficacy may establish planning) hypotheses.

Methods: Longitudinal data were collected from 320 dyads at four time points: T1, T2 (1 week later), T3 (2 months after T1), and T4 (8 months after T1). Sedentary behaviour was assessed with accelerometers, self-efficacy and planning were measured through a self-report. Self-efficacy and planning were assessed as constructs referring to the reduction of sedentary behaviour. Each dyad included a focus person (reporting low levels of physical activity, high levels of sedentary behaviour and intending to engage in behaviour change) and their partner. Path analyses were conducted with maximum likelihood estimation method.

Findings: A higher level of partners' self-efficacy at T2 was related to the focus person's more frequent planning at T3 (B = 0.157; SE = 0.067; p < .05), which, in turn, predicted lower sedentary time among partners at T4 (B = -11.918; SE = 5.993; p < .05).

Discussion: The study provides novel evidence for dyadic associations between partners' self-efficacy beliefs and their reduction of sedentary time, assessed objectively eight months later. Future research should include additional predictors (e.g., representing non-conscious processes), which might better explain sedentary time reduction in focus persons who spent more time sitting.
Do motivational profiles moderate the relationship between physical activity and habits?

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Background
Physical activity habits are strengthened by intrinsic rewards (pleasure, satisfaction), though less is known about motivational profiles and physical activity habits.

Methods
417 participants (Female=341) completed a survey on motivational regulations, habits and physical activity levels. Latent profile analysis was conducted using LatentGOLD to establish motivational profiles. Moderation analysis in PROCESSv3.5 (model 1) were performed to assess if motivational profiles moderate the relationship between physical activity and habits.

Findings
Four motivational profiles were detected: MP1 (low external, moderate introjected and integrated, high identified and intrinsic, N=162), MP2 (low external, moderate introjected, identified, intrinsic and low integrated, N=138), MP3 (low external, high introjected, identified, integrated and intrinsic, N=63), MP4 (low on all regulations, N=52). Physical activity level was a significant predictor of habit (p<0.0006). When compared to MP1, MP2 (β=-0.4603, p<.0000) and MP4 (β=-0.9770, p<.0000) had significantly lower habit strength, whereas MP3 had significantly higher habit strength (β=0.8122, p<.0001). Regarding moderation analysis, there was a significant negative impact of physical activity level on habits in MP2 compared to MP1 (β=-0.0008, p=.0485). Impact of physical activity on habit in MP2 (β =-0.0005, p=.0738) and MP4 (β=-0.0004, p=.4726) compared to MP1 was not significant.

Discussion
People motivated for autonomous reasons had stronger physical activity habits, whereas profiles with low overall motivation had weaker physical activity habits. MP2 negatively moderated the relationship between physical activity and habits, but the relationship was weak. Intervention designing should engage individuals by fostering all types of autonomous motivation and drawing on motivational profiles as guidance to strengthen physical activity habits.
Health implications of body posture in motion

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Background:
Slouched posture is typically perceived as being associated with low attractiveness, low self-esteem, and low dominance. Previous research has suggested that poor posture is associated with musculoskeletal pain and depression. Posture is also thought to affect body movements, including gait. This study aims to determine 1) whether gait influences perceptions of a person’s self-esteem, attractiveness, and dominance and 2) whether these perceptions are predictive of the target’s self-reported self-esteem and dominance.

Methods:
Participants (N = 45) completed a self-report questionnaire measuring self-esteem and dominance and their natural gait which was recorded with motion capture technology. A second group of participants (N = 200) will observe the recorded footage and rate each participant on the same traits as the original participants: self-esteem and dominance.

Expected results:
We predict that self-reported self-esteem and dominance will correlate with others’ perceptions of self-esteem and dominance. We also predict that this relationship will be mediated by gait, indicating that gait acts as a valid cue to aspects of underlying psychological traits.

Current stage of work:
Self-report data and gait stimuli have been collected. Perceptual data collection will begin in the coming weeks.

Discussion:
These results will illuminate the relationship between posture, gait, self-esteem and dominance, and observers’ perceptions of these traits. This may have future implications for the prevention of musculoskeletal pain and other health consequences of poor posture such as low self-esteem and/or depression.
Spatial separation promotes healthier food and drink choices from online fast-food menus

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Background: Accumulating evidence suggests that subtle changes to the presentation context of healthy and unhealthy food and beverages can nudge consumers toward healthier choices. The present study investigated the effect of spatially separating healthy and unhealthy food and drink options on consumer choices from an online fast-food menu.

Methods: A sample of 210 women (17-70 years; MBMI=24.10 kg/m²) perused one of three versions of a pictorial menu in which healthy and unhealthy food and drink options were presented as either mixed, grouped, or separately. Participants then selected one item from each of three menu categories (a main, drink and dessert). They also completed a measure of dietary restraint.

Findings: There was no main effect of menu condition on healthy choices. However, there was a significant condition × dietary restraint interaction whereby, contrary to prediction, unrestrained eaters (but not restrained eaters) chose significantly more healthy options in the grouped and separate conditions than in the mixed condition. This was particularly the case for the more discretionary choices of desserts, and to a lesser extent drinks.

Discussion: The findings have important implications for the design of fast-food menus to bring about small but cumulative changes toward healthier consumption at a population level. In so doing, food businesses can help to combat poor eating habits and associated negative health outcomes, with substantial consequent public health benefit.
Exploring relationships of shame and guilt between mindfulness-based constructs and eating behaviours among queer men.

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Background: Exploration of mindfulness and related constructs have not been investigated extensively in gay and bisexual men although evidence shows that this is a population who are also at higher risk of developing eating and body-related issues. The development of interventions which consider the specific experiences of different populations increases the efficacy of such interventions, hence the need for increased knowledge of experiences among gay and bisexual men. This study aimed to explore the relationships between eating behaviours, weight- and body-related shame and guilt to mindfulness, self-compassion and mindful eating among gay and bisexual men.

Methods: Measures assess levels of problematic eating (emotional, restrained and external) weight- and body-related shame and guilt and mindfulness-based constructs (mindfulness, self-compassion and mindful eating). A sample of self-identified gay and bisexual men (n = 159) completed all measures included in the self-report questionnaire.

Findings: Positive associations of problematic eating behaviours to shame and guilt were observed. Problematic eating behaviours and weight and body-related shame and guilt negatively related to mindfulness-based constructs. Further mediation analysis indicated the nuanced role of shame and guilt when explaining the relationships of mindfulness and related constructs to problematic eating.

Discussion: Findings highlight the importance of shame and guilt when exploring the potential effectiveness of mindfulness and/or compassion-based interventions to attenuate problematic eating among sexual minority men.
Focusing on sensory or context experiences of eating is associated with consumption intentions and behaviour

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As human eating behaviour affects physical and planetary health, understanding its underlying cognitive processes could support the transition to healthier and more sustainable diets. Here, we applied the grounded cognition theory of desire to examine whether focusing on particular aspects of savoury dishes influences motivation and predicts consumption behaviour. Participants (N = 897, pre-registered) were randomly allocated to one of four conditions where they listed either the sensory (e.g., “crunchy”), context (e.g., “pub”), health (e.g., “low-fat”) or typical features (without specific instructions) of 20 savoury dishes, before rating their intention to consume each dish over the next four weeks. During the follow-up study, participants indicated how often they had actually consumed each dish, as well as how often they could have consumed each dish, taken as a measure of accessibility. Results showed the effect of the sensory and context conditions on consumption intentions was fully mediated by the proportion of consumption and reward features listed (i.e., features referencing rewarding eating experiences). This implies that focusing on the sensory or context features of a dish triggers a mental simulation (i.e., re-experience) of consuming it, which increases consumption intentions. Furthermore, intentions partially mediated the effect of consumption and reward features on consumption behaviour, but only if accessibility was high. In line with the grounded cognition theory of desire, these results imply that altering the way a food is mentally represented may be a promising strategy for increasing the consumption of healthier and more sustainable products, if these are indeed available to consumers.
Food preference and choice across eating and weight disorders

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Background. Food choice is at the core of several eating-related pathologies and has high relevance for body weight. The aim of this study was to compare individuals with the eating disorders Anorexia Nervosa (AN), Bulimia Nervosa (BN) and Binge-eating disorder (BED) and the weight disorders overweight (HC-OW) and obesity (HC-OB) to healthy controls with normal weight (HC-NW) regarding food preferences and choice.

Methods. Individuals with the restrictive (AN-res, n=31) and binge-purge type (AN-bp, n=9) of AN, BN (n=29), BED (n=24) as well as controls without eating disorders with normal weight (HC-NW, n=57), overweight (HC-OW, n=18) and obesity (HC-OB, n=21) made 153 binary food choices and rated foods on liking and calorie content. The number of chosen calories and the relationship between calorie content and liking ratings were analysed. HC-NW served a reference group in the analyses.

Findings. AN-res and AN-bp differed from HC-NW in the number of chosen calories and calorie-liking relationship: They chose less calories and disliked them more. Given the similarity of all other groups, we followed up with an exploratory analysis: food choice was analysed dimensionally with BMI, eating styles and eating psychopathology as predictors of chosen calories. External eating resulted as significant positive predictor.

Discussion. The study confirmed AN as clearly differing in food preferences and choices. Further, results cast doubt on the separability of BN, BED and obesity from healthy normal weight participants in food choice. External eating showed promise as transdiagnostic dimension in food choice.
Latent Change Score Model investigating the association of Alcohol consumption and mental health over time

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Objective: The longitudinal relationship of mental health, alcohol consumption, and their direction of effect are not well understood, and findings are mostly heterogeneous. The study investigates the mutual effects of mental health and alcohol consumption over time in a general population sample.

Methods: Self-report data of n=816 (57.5 % female) were used. Participants were proactively recruited at registry offices and provided data at 4 measure points (baseline, 3, 6, and 12 months). Mental health was assessed using the 5-Item Mental Health Inventory, a self-report. Alcohol consumption was measured in the number of drinks in the last 30 days using a quantity-frequency index. Bivariate latent change score models with different assumptions were estimated in four models: 1) alcohol consumption and mental health trajectories did not influence each other, 2) alcohol consumption influenced changes in mental health, 3) vice versa, and (4) a reciprocal model in which both influenced changes in each other.

Results: The third unidirectional coupling model provided an acceptable model fit (Chi-square(24) = 107.78, p < .01, CFI = .96 RMSEA=.06, SRMR=.03). Monthly alcohol consumption increased over time. Better mental health at earlier assessments was associated with lower increases in subsequent monthly alcohol consumption, but not vice versa.

Discussion: The results suggest that better mental health may act as a moderating factor in the increase in monthly alcohol consumption. The models with other assumptions did not improve as much as the selected model. Limitation: This was a sample with low alcohol consumption possibly influencing the decision of model fitting.
The Value of the Value Based Choice Model for Behavioral Prediction and Intervention Design

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Background: Many existing health models (e.g., HBM, TPB) provide insight into factors that determine people’s health behaviour. Traditional health models, however, do not place much emphasis on the process by which different factors interact to determine healthy choices in the moment. The value-based choice model (Berkman, 2018), describes how different options in a choice set accumulate value by integrating various gains (e.g., status, approval, health) and costs (e.g., effort, price). We will discuss how the value-based choice model was applied to predict choices for a) alcoholic vs. non-alcoholic drinks and b) sugar-sweetened vs. sugar-free drinks in the context of sports clubs.

Methods: Two survey studies were conducted among amateur sports players (N = 214; N = 306). Questionnaires were based on existing literature on determinants of the behaviours studied and the value-based choice model.

Results: Preliminary analyses indicate that different value attributes might be relevant for different behaviours in a choice-set and that value attributes of one behaviour can relate to the other behaviour in a choice set. For instance, whereas alcohol consumption was positively related to whether this gives someone a good feeling (r = .33, p<.001), getting a good feeling from non-alcoholic drinks did not relate to non-alcoholic drinks consumption (r = .10, p=.138), but did negatively relate to alcohol consumption (r = -.16, p=.022). Analyses on both datasets will be ready to be presented at the conference.

Discussion: Challenges and opportunities of applying this model in practice for behavioural prediction and intervention development will be discussed.
Effects of a two-month vegetarian diet intervention on (neuro-)endocrine functioning in men

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Background: Observational studies have shown a protective effect of the vegetarian diet against metabolic diseases. It is largely unclear whether the neuroendocrine system is also affected by diet. The aim of this study was to determine the effects of a two-month, ovo-lacto-vegetarian dietary intervention on glucose metabolism and neuroendocrine stress responses in healthy men.

Methods: Men were randomized into either the intervention (ovo-lacto-vegetarian diet for two months, N=36) or the control group (maintain dietary habits, N=25). To assess diet-related changes in glucose metabolism and neuroendocrine stress reactivity, an oral glucose tolerance test (OGTT) and, on a separate day, an acute stress paradigm (Trier Social Stress Test, TSST) were conducted before and after the intervention. During the OGTT, concentrations of plasma glucose, insulin, and c-peptide were measured at -1, +60, +90, and +120 minutes. During the TSST, salivary cortisol levels were measured at -30, -1, +1, +10, +25, +40, +55, +70, and +100 minutes. Individual measurements and incremental area under the curve values were analyzed using mixed design Analysis of Variance.

Results: The dietary intervention did neither lead to significant changes in plasma glucose, insulin, and c-peptide concentrations during oral glucose tolerance testing nor was there an effect of group allocation on stress-related salivary cortisol levels.

Conclusion: A two-months ad libitum vegetarian dietary intervention did not lead to significant changes in glucose metabolism and neuroendocrine stress responses in healthy men. Not consuming meat and fish for a short period of time does not influence (neuro-)endocrine functioning of healthy men.
Using goal stocktaking to promote health behaviour change

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Background: Self-efficacy Theory posits that acknowledging past successes can bolster self-efficacy beliefs that, in turn, support health behaviour change. We propose that “goal stocktaking”, taking stock of successful steps on the path to one’s goal, might strengthen efficacy beliefs about achieving goals. We further propose that stocktaking is a behaviour change strategy that people use to support their health goals. We tested these propositions by examining goal stocktaking amongst individuals pursuing health behaviour goals (HBGs).

Methods: Community-based adults (N = 119; Mage = 33.7; 73.6% female) working on HBGs completed a survey (mail-in or online). Participants listed up to 3 HBGs they were working on and rated their perceived progress and likelihood of success for each using a personal projects framework. They also completed a measure of the frequency of health-promoting behaviours, and two questions about their use of goal stocktaking while pursuing their goals.

Findings: Most HBGs focused on healthy eating and physical activity, with 68.1% of participants indicating that they had used goal stocktaking, and 40.5% doing so often/very often. Regression analyses controlling for age and current health status revealed that use of stocktaking was associated with more frequent health-promoting behaviours (β = .17), and stronger perceptions of HBG success (β = .28), and HBG progress (β = .24).

Discussion: The findings suggest that people use goal stocktaking without being prompted and that doing so promotes efficacy beliefs and heightens awareness of goal progress while pursuing HBGs. This suggests that increasing HBG stocktaking may be an effective, low resource strategy for behaviour change.
Classes of health-related behaviors: a longitudinal study among middle-aged adults

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Health-related behaviors (HRBs) in middle adulthood are predictive of health in later life. This study aimed to 1) identify distinct classes of adults with particular patterns of HRBs, 2) examine probabilities of either staying in the class or transferring between classes across middle adulthood, and 3) investigate the role of sociodemographic factors in these.

The study was based on the Jyväskylä Longitudinal Study of Personality and Social Development that has followed a representative age cohort born in 1959 since 1968 (N=369). Data on smoking, alcohol consumption and leisure-time physical activity were collected by questionnaires at ages 42 (2001), 50 (2009) and 61 (2020–2021) (N=206–302). Statistical analyses included latent class and transition analyses (noninvariance) and logistic regression (Mplus-software).

Four classes of HRBs were identified at ages 42, 50 and 61. Class 1 (C1) included individuals with the lowest alcohol consumption and highest physical activity. C4 included individuals with the highest alcohol consumption and lowest physical activity. The intermediate classes regarding alcohol consumption and physical activity were C2 with most nonsmokers and C3 with most smokers. Class memberships were relatively stable (especially C1, C2), whilst some transitions emerged (especially C3→C2, C4, C4→C2, C3). Women and those who were married and held at least a vocational school degree at age 42 had higher odds of belonging continuously to C1 or C2 compared to a stable membership of C4.

HRBs among middle-aged adults were described by four patterns and relatively stable class memberships. Aforementioned sociodemographic factors may be resources that prevent accumulation of several unhealthy behaviors.
Protection behavior (PB) and subjective well-being (SWB)

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Background: It is known from protection motivation theory (PMT) that protection motivation and thus behavior (PB) are influenced by threat and coping appraisals. However, no one has yet looked at how subjective well-being (SWB) affects PB – such an effect is prompted by the broaden-and-build-theory, according to which experiences of positive emotions are favored by thought tendencies, which leads to an expansion of scope of thoughts and actions. Therefore, it was hypothesized that SWB simultaneously expands action and self-efficacy, and thus, according to PMT, PB. In addition, factors influencing SWB were investigated based on previous studies, especially self-concept of general problem solving (SAP), and personality.

Main research questions were: What influences PB? Is it influenced by SWB? Does SAP show relevance for SWB?

Methods: The cross-sectional study was conducted nationwide (N=350; Mean age=26.71, SD=11.78, range=18-84years). Predictors were measured using NEO-FFI, HSWBS, FSAP and self-developed, pretested questionnaires. Hypotheses were tested via multiple linear regression.

Main results: PB (corrected $R^2$=.196) was predicted by coping appraisal ($B=.474^{***}$), conscientiousness ($B=.174^{**}$), openness ($B=.181^{***}$), and extraversion ($B=-.180^{**}$). SWB had no significant effect.

For SWB (corrected $R^2$=.532), neuroticism ($B=-.434^{***}$), extraversion ($B=.301^{***}$), openness ($B=-.301^{***}$), agreeableness ($B=.271^{***}$), conscientiousness ($B=-.180^{**}$), and SAP ($B=.379^{***}$) were significant.

Discussion: As expected, PB is influenced by coping appraisals, but surprisingly threat appraisals had no impact. Possibly, this could be due to the variable’s low dispersion, which may be due to the particular situation during the Covid19-pandemic, where protection of both self and others was at stake and threat assessment was less relevant to PB.
You do read food labels, don’t you? Exploring psycho-social factors influencing mothers’ choices

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Background: Mothers’ purchasing choices play a crucial role in shaping the quality of their children’s food intake. Specifically, several studies have shown that reading food labels can help mothers to make healthier, safer and more informed choices. The present study, relying on an extended version of the Theory of Planned Behavior (TPB), aimed to identify the psycho-social factors predicting mothers’ intention and use of food labels before buying food for their children. Methods: 311 Italian mothers (Mage = 38.7, SD = 6) completed an online self-report questionnaire measuring their information-seeking behaviour with a projective technique (i.e., simulating a supermarket environment where mothers could choose which products to buy and whether to read food labels), traditional TPB variables, anticipated regret and healthy-eater identity. Findings: Results from a Multiple Correspondence Analysis highlighted that mothers’ information-seeking behaviour mainly reflected the choice between two alternatives: buying conventional or prepackaged foods vs deciding to read the food label before purchasing. In addition, the results from a Partial Least Squares Structural Equation Modeling analysis showed a positive and significant effect of attitude, subjective norms, perceived behavioural control, anticipated regret, and healthy-eater identity on intention to check in detail how the food is made before buying. In turn, intention and healthy-eater identity positively affected mothers’ information-seeking behaviour. Discussion: Findings suggest that enhancing mothers’ attitudes towards responsible purchasing behaviour, leveraging anticipated emotions and building a healthy-eater identity can represent promising strategies to incorporate into future interventions aimed at promoting food labels use among mothers.
Targeting identity in digital smoking cessation and physical activity promotion interventions

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Background: According to theory and empirical research, identity – how one views oneself – is a promising ingredient to use in interventions aiming to achieve smoking cessation and increased physical activity (PA). Prior work shows that individuals who identify with quitting smoking or nonsmoking are more likely to quit successfully. Likewise, individuals who view themselves as physically active engage in more frequent and longer bouts of PA. In an era where digital interventions are increasingly popular, we are investigating the construct of ‘identity’ in smoking cessation and PA, in order to develop tools for its integration in digital interventions that enhance smoking cessation and PA.

Methods: Mixed-methods are applied. For example, an online longitudinal experimental study (N = 233) assessed the effect of envisioning your future as (non)smoker (future-self intervention) on smoking-related identity and behavior. A scoping review of the literature, and a mixed methods study (N = 700) are ongoing to better understand the role of identity in smoking and PA and to find effective digital operationalization of identity-related intervention components.

Findings: Identity-related interventions aiming to achieve smoking cessation and increased PA should focus on strengthening identification with nonsmoking and PA. Future-self exercises show promise in influencing smoking and PA-behaviors but would benefit from being tailored and offered recurrently. Smokers and/or insufficiently active individuals should be involved in the process of developing effective and valid identity-related interventions.

Discussion: Provided tools are expected to guide both research and practice in developing effective digital identity-based smoking cessation and PA-promoting interventions.
Lessons learnt in developing a virtual coach for smoking cessation and physical activity promotion.

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Background: Smoking and physical inactivity are two key preventable risk factors of cardiovascular disease. Yet, as with most health behaviors, they are difficult to change. In the interdisciplinary Perfect Fit project, scientists from different fields join forces to develop an evidence-based virtual coach that supports smokers in quitting smoking and increasing their physical activity. Intervention content, design and implementation as well as lessons learnt are presented in the hopes of guiding other research groups working on similar projects.

Methods: Numerous approaches were used and combined to support the development of the Perfect Fit virtual coach. Approaches include literature reviews, empirical studies, collaboration with end-users, content and technical development sprints, interdisciplinary collaboration and iterative proof-of-concept implementation.

Findings: The Perfect Fit intervention integrates evidence-based behavioral change techniques as well as new techniques focused on identity change, big data science, sensor technology and personalized real-time coaching. Intervention content of the virtual coaching matches communication preferences and individual needs of end users. Lessons learnt include ways to optimally implement and tailor interactions from the virtual coach (e.g., ‘explain why user is asked for input’, ‘tailor timing and frequency of intervention components’). With regards to the development process, lessons learnt include strategies for effective interdisciplinary collaboration and technical development (e.g., ‘Find a good balance between wishes of end-users and legal possibilities’).

Discussion: The Perfect Fit development process was interactive, iterative and challenging at times. We hope that our experiences and lessons learnt can inspire and benefit others.
Sleep is also important: Development and validation of a German measure of sleep priority

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Background: Prioritizing goals is an essential aspect of self-regulation. However, sleep priority is rarely considered when investigating sleep behavior. The aim of this research was to validate the German version of the sleep priority scale.

Methods: The original 10 items were translated and pretested. In a first study (n=793; 612f), factor structure was established applying EFA and CFA on independent subsamples. The structure of the adjusted 9-item scale was confirmed in a second study (n=717; 565f). Internal consistency and external validity were tested with correlations, regressions and group comparisons.

Findings: The adjusted questionnaire consisted of the subscales “relative importance of sleep”, “importance for daily functioning” and “sleep as a health goal” \( [X^2(24)=75.05, p<0.001, CFI=.98, RMSEA=.05, SRMR=.03] \). The overall scale was associated with bedtime intentions, sleep hygiene, sleep duration, sleep quality, sleep habits and dysfunctional beliefs about sleep (all ps<.001).

Discussion: The German version of the sleep priority scale is a useful measure of sleep priority. It can contribute to understanding why people engage in healthy sleep behavior and identify starting points for interventions.
Predictors and mediators of foot self-care behaviors among primary care patients with diabetic foot ulcer

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Background:
Understanding the factors affecting optimal foot self-care is crucial to inform effective interventions for preventing or delaying diabetic foot ulcers (DFU). This study examined the predictors and mediators of foot self-care behaviours among primary care patients with DFU.

Methods:
A cross-sectional sample of N=186 patients (73.7% male) with DFU were recruited from primary care clinics and assessed with Brief Illness Perception Questionnaire, Diabetes Distress Scale, Foot Care Confidence Scale and Diabetes Foot Self-Care Behaviour Scale. Multiple regression analyses were conducted to identify factors associated with foot self-care behaviours with additional mediation models to explore the indirect effects of psychological parameters.

Findings:
Toe ulcers made up 57.5% of the sample. Up to 72.6% of participants had HbA1c > 7%. Most DFUs were older than three months (68.8%), recurrent (50%), neuropathic (48.4%) and neuroischaemic (36%). The median wound size was 1.6 cm² (0.2-19). Nearly 40% of the participants have never performed routine foot self-care behaviours. Up to 64.5% reported “strongly not confident” in performing daily foot self-care. Diabetes distress and foot care confidence were associated with foot self-care behaviours in both bivariate and multivariable models after controlling for sociodemographics and clinical factors. Other significant predictors were age and gender. There were no significant direct associations between illness perceptions and foot self-care behaviours but mediation analyses indicated that diabetes distress and foot care confidence mediated the relationship between them.

Discussion:
The findings could guide effective interventions for foot self-care behaviour improvement. Future studies should adopt longitudinal designs to confirm the current findings.
Factors that influence oral health behaviour in women with gestational diabetes: a qualitative study.

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Background: Oral health is a pertinent aspect of gestational diabetes management to ensure positive health outcomes for the mother/baby. No literature currently exists on oral health needs among women with gestational diabetes, and no oral health interventions are presently available for these women. The aim of this study was to address the lack of literature and to inform a targeted oral health intervention for women with gestational diabetes by exploring the COM-B Model factors that influence the women’s oral health behaviours.

Methods: This study was a cross-sectional qualitative study with women with gestational diabetes. The participants were recruited from the Gestational Diabetes UK Facebook group. Participants were given a £15 Amazon voucher as an incentive for participating. The data was collected using a semi-structured interview based on the Theoretical Domains Framework to understand influential factors in oral health behaviour. Inductive Framework Analysis was used to analyse the data, which was followed by deductive analysis mapping the themes onto the COM-B Model.

Findings: 17 women with gestational diabetes were interviewed. The sample was ethnically diverse. The following themes: ‘social support’, ‘concerns about the baby’s health’, ‘beliefs about oral health in pregnancy/gestational diabetes’, and ‘oral health experiences during pregnancy’ were identified as influential themes in understanding oral health behaviour in women with gestational diabetes.

Conclusions: This study was the first to understand the influential factors in oral health behaviour among women with gestational diabetes. The findings will be used to inform a targeted oral health intervention for these women.
Identification of psychosocial factors associated with treatment adherence for glaucoma

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Background: Glaucoma accounts for 28% of vision impairment in Japan. Uncorrectable vision impairment is increasing, and early detection and adherence to glaucoma treatment are key to prevention. Although healthcare providers address the threat of glaucoma, individuals do not necessarily follow the treatment regimen. Reasons for dropouts involved adverse side effects related to appearance changes, that is, darkening of the eyelashes or the eyelid skin, as well as work and daily chores. Effective treatments require better understanding of psychosocial factors explaining treatment adherence. This study examined psychosocial processes related to glaucoma treatment adherence. Given that women were more likely to drop out, particular focus was on gender differences.

Methods: A cross-sectional online survey was conducted with 2,400 individuals diagnosed as early through moderate stages of glaucoma. The Integrated Behavioral Model (IBM) was employed as a theoretical framework and its components were measured: attitude, perceived norm, perceived control, knowledge and skill, environmental constraints, intention, and treatment behavior. In addition, the treatment-induced changes and appearance-related side effects were measured.

Findings: A total of 42% of participants have undergone treatment for between one and five years, 46% experienced at least five years of treatment. Women were more likely to report concerns on appearance-related side effects than men e.g. darkening of the eyelashes (men: M = 1.96, SD = 1.14; women: M = 2.22, SD = 1.30; t = 5.29, < 0.01). Interestingly, women scored higher on treatment adherence than men, e.g. regular use of eye drops.
Psychosocial and behavioural predictors of Premenstrual Dysphoric Disorder symptom severity: a systematic review and meta-analysis

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Background: Premenstrual dysphoric disorder (PMDD), a severe form of premenstrual syndrome (PMS), affects about 5% of reproductive-age women. PMDD affects women's cognitive, emotional and physical well-being for up to three weeks of their menstrual cycle, including symptoms such as despair, fatigue and changes in appetite. To date, no systematic review has been conducted to investigate the relationship between psychosocial risk factors and PMDD symptom severity.

The present review aims to address the following question: which psychosocial and behavioural factors are associated with PMS and PMDD symptom severity?

Methods: The study design is a systematic review of quantitative observational research. The databases Pubmed/Medline, Web of Science, Embase, CINAHL and PsychINFO will be searched for studies investigating the impact of any psychosocial or behavioural risk factor on PMS or PMDD symptoms. The primary outcome will be PMS and PMDD symptom severity. The review protocol will be published in Prospero in March 2023.

Expected results: The results of the data extraction will be synthesised into a narrative summary. If there is low heterogeneity across studies (e.g., similar psychosocial risk factors examined, methodologies, outcome measures), a meta-analysis will be conducted.

Current stage of work: Initial searches are anticipated to begin by mid-March. We expect the review to be completed in August 2023.

Discussion: The psychosocial and behavioural factors' impact on PMDD symptom severity has yet to be studied in a systematic review. Therefore this study will provide valuable information about which health behaviours and risk factors should be targeted in future research.
Psychological interventions for acute pain management – A scoping review of randomized controlled trials

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Background: Pain contributes to the primary symptom of general practitioner visits and medical care seeking. Although psychological interventions have gained increasing attention for pain management, few studies have investigated these interventions in acute setting. This study aimed to examine the existing literature addressing acute pain using psychological therapies.

Method: A scoping review was conducted to screen and access randomized controlled trials (RCTs) in PubMed, Scopus, Web of Science, Cochrane library, and Embase via the University of Pecs and the Queensland University of Technology access. Inclusion criteria covered RCTs published in 2013-2022 on patients receiving psychological intervention to reduce acute pain. This review excluded studies conducted in home-care settings, conducted in paediatrics and presented in languages other than English.

Results: From 2061 articles identified, nine eligible studies applied psychological interventions in reducing acute pain, including psychoeducation, positive verbal suggestion, hypnotherapy, counselling, music therapy, hypnotherapy, cognitive behaviour therapy (CBT), mindfulness, and psychodynamic therapy. There were varying respondents and tool pain assessment characteristics, especially in pain level instruments and pain outcome indicators across studies. Through Cochrane risk of bias assessment, most risks of bias stemmed from deviation of intended interventions and missing outcome data concerning lost-to-follow-up (4/9). Despite the lack of statistically significant pain reduction results in some studies, most studies showed a decrease in mean pain scores.

Conclusion: The appropriate application of psychological interventions might help reduce acute pain in clinical settings. Further investigation of specified interventions applied in specified disease is needed.
Psychological factors associated with medication non-adherence in kidney transplant patients

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Adherence to immunosuppression medication plays an important role in kidney transplant outcomes and graft survival, however non-adherence rates of 36-55% are commonly reported. This study explored associations between patient perceptions of their graft, beliefs about medication and non-adherence.

A cross-sectional analysis was conducted from a cohort of long-term (>2 years post-transplant) kidney transplant recipients attending the Annual Review Clinic in 2019. Patients completed questionnaires including (i) Medication Adherence Report Scale (MARS), (ii) Brief Illness Perception Questionnaire (BIPQ) and (iii) Beliefs about Medicines Questionnaire (BMQ). Univariate analyses and a hierarchical binary logistic regression were conducted to explore predictors of non-adherence.

Of N=220 patients, 139 (63.2%) were male and 81 (36.8%) were female with a mean age of 53.24 (range 20-79 years, SD=12.84). N=125 (56.8%) were classed as non-adherent (MARS score ≤29). Non-adherent patients were significantly younger (p=0.038), had lower perceived treatment control (p=0.006), poorer understanding of risk of graft failure (p<0.001) and greater concerns about medication (p=0.007). A regression analysis found understanding of risk of graft failure was a significant predictor of adherence. A one score increase in understanding reduced the odds of being non-adherent by a factor of 0.79 (p=0.002, CI 0.68, 0.92).

The findings highlight the importance of improving patient understanding of risk of graft failure. This could be easily addressed in an intervention using psychoeducation and behaviour change techniques. Treatment control and concerns surrounding medication could also be beneficial intervention targets. Ultimately, improved adherence could improve graft survival and quality of life.
Immunosuppression non-adherence in kidney transplant patients

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Immunosuppression medication non-adherence rates are high amongst kidney transplant recipients, with rates estimated between 36-55%. Importantly, non-adherence is a major risk factor for poor patient and graft outcomes. This study explored unintentional and intentional non-adherence in kidney transplant patients.

Patients (0-44 years post-transplant) completed electronic questionnaires in kidney clinic. Adherence was measured using (i) Medication Adherence Rating Scale (MARS) and (ii) Intentional Non-adherence Scale (INAS). Each INAS item was ranked by the percentage of patients agreeing (agree, strongly agree) with each statement.

Of N=108 patients, 63 (58.3%) were male and 45 (41.7%) were female with a mean age of 49.36 (range 18-77, SD 14.39). N=63 (58.3%) of patients were non-adherent (MARS ≤29), N=58 (53.7%) as unintentionally non-adherent (unintentional subscale ≤4) and N=22 (20.4%) as intentionally non-adherent (intentional subscale ≤24). The mean overall MARS score was 28.56 (SD=2.60). In terms of the INAS, the most common reasons for intentional non-adherence at 7.4% were “I want to think of myself as a healthy person”, “it reminds me I have an illness”, “I don’t like the side effects” and “I think the drug might become less effective over time”.

This study is ongoing; further data collection and analysis will allow exploration of psychosocial predictors of intentional and unintentional non-adherence, underpinned by the Common Sense Model of Self-Regulation.

The high rates of unintentional non-adherence suggest potential for interventions targeting forgetfulness. Addressing drug-specific concerns and resisting illness motivations could be targets for improving intentional non-adherence.
Sociodemographic and psychological variables of Latvians who choose not to get vaccinated

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Background. Despite the availability of Covid-19 vaccines, many people are still hesitant to receive the vaccine, are less likely to have a booster shot, or are even less likely to get the vaccine. The aim of this study was to examine differences in socio-demographic and psychological variables between three groups.

Methods. Specific scales or statements were used for variables. A sample of unvaccinated respondents (age 18 – 75 (M = 38.33, SD = 14.83) residents of Latvia, men 50.07%, were used in this study (N = 539) – 1st group 13% of them plan to get vaccine, 2nd group 34% of them do not plan to get vaccine (refusals), and for the 3rd group 6% hesitate to get vaccine. Chi square and One-way ANOVA Bonferroni Post hoc test were used in this study. Data were gathered in September 2021 and collected by the research centre.

Findings. There are no statistically significant differences in sociodemographic variables between groups. The intention of Latvian residents to be not vaccinated is affected by psychological variables: negative attitude towards vaccination; lack of knowledge about vaccines; no experience with Covid-19; no fear of contracting Covid-19; fears of Covid-19 vaccination; subjective norms; supporting conspiracy theories; distrust of media.

Discussion. The data indicate that socio-demographic variables do not play a role in Latvian residents’ intention of getting vaccine. Health care professionals should educate population (who hesitate or refuse) more widely about the benefits of the vaccine, possible side effects, which could change people’s attitude towards the Covid-19 vaccination.
Why did you do it? Reasons for vaccination and non-vaccination among young adults in Serbia

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Background: We explored the reasons young people in Serbia give for getting or not getting vaccinated and whether these reasons correspond to the selfish-rational and social norms models of vaccination choices.

Methods: 229 participants aged 18-35 (71% women) completed an online survey. In a fictitious disease scenario, n=89 ‘vaccinators’ reported they would definitely/probably get vaccinated, while n=140 ‘non-vaccinators’ would definitely/probably not. They rated a list of reasons for (non-)vaccination (‘completely/somewhat describes my reasons’ indicated endorsement); an open-ended question elicited reasons outside of the two models. Findings: While vaccinators reported not relying on others for protection (46%), non-vaccinators rarely endorsed free-riding (‘many people got vaccinated so I don’t have to’; 19%). What the majority was doing (descriptive norm) was relevant for vaccinators (47%) and they trusted the ‘wisdom of the common man’ (43%); others’ behavior was less important for non-vaccinators (25% and 33%, respectively). Weighing personal benefits against risks of vaccination was a common reason for both vaccinators (85%) and non-vaccinators (73%). Vaccinators viewed vaccination as necessary to protect oneself (99%) and others (90%) and as a collective effort to stop the disease (91%). Non-vaccinators believed they did not need vaccination to protect their health (62%). A part of the survey about COVID-19 (n=213) replicated this pattern of results. Discussion: While the reasons stemming from the two theoretical models were less endorsed by non-vaccinators (perhaps due to distrust in vaccine effectiveness), the analysis of open-ended responses revealed new reasons (e.g. conspiratorial beliefs). Overall, this study can inform more targeted communication interventions.
Using the COM-B to qualitatively explore barriers and facilitators to COVID-19 vaccine uptake during pregnancy

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Background: COVID-19 vaccine acceptance among pregnant people is lower than non-pregnant people of childbearing age. This study is the first to explore barriers and facilitators to COVID-19 vaccine uptake in Northern Ireland, using the COM-B as a guiding framework.

Methods: The investigation involved eight 1:1 in-depth interviews with new/expectant individuals who chose not to receive any COVID-19 vaccine during pregnancy in 2021, and a focus group of individuals who received at least one COVID-19 vaccine dose during pregnancy in 2021. Thematic Analysis was used to analyse each cohort. Data was coded inductively and the COM-B was used to categorise codes. Subthemes were developed within each COM-B construct.

Findings: Within Psychological Capability, subthemes captured the need for consistent and reliable COVID-19 vaccine information and access to balanced and jargon-free, risk-benefit information that is tailored to the pregnant individual. The behaviour/opinions of family, friends, and local healthcare providers had a powerful influence on COVID-19 vaccine decisions (Social Opportunity). Integrating the COVID-19 vaccine as part of routine antenatal pathways was believed to support access and sense of familiarity (Physical Opportunity).

Participants valued health autonomy, however experienced internal conflict driven by concerns about long-term side effects for their baby (Reflective Motivation). Feelings of fear, lack of empathy from healthcare providers, and anticipated guilt commonly underpinned indecision as to whether or not to get the vaccine (Automatic Motivation).

Discussion: These findings offer suggestions as to how public health professionals can help people who are pregnant make healthy, informed decisions related to the COVID-19 vaccine.
Coping with a pandemic – the impact of defense styles and religiousness

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Background: COVID-19 had a widespread impact on people’s wellbeing. Future preventive measures would benefit from identifying moderating factors. This study addresses the role of defense mechanisms and religiousness/spirituality as they allow coping with daily strains in a more or less adaptive way.

Methods: The online study was completed by 57 university students and included questionnaires addressing mental wellbeing (BSZ), strains of the pandemic (FACP), religiousness/spirituality (FRS) and defense styles (DSQ). Subjects were instructed to assess their state of mind and behavior for two retrospective periods of time (before the pandemic; during lockdown) and currently (pandemic without lockdown). General linear models were used to determine the effects of the pandemic on mental wellbeing and the impact of defense styles and religiousness as moderating factors.

Findings: During lockdown overall mental wellbeing was rated lower (p < .001). Adaptive defense mechanisms were applied less frequently during lockdown (p = .028) while maladaptive defense mechanisms were reduced after lockdown (p = .003). A three-way interaction of time, religious practices and strain indicated a compensating effect of religious practices on the decrease of wellbeing exclusively for subjects with low strain due to the pandemic (p = .047).

Discussion: Adaptive defense mechanisms are less accessible when coping with strains of a pandemic, likely due to specific changes of the personal environment. To which extent this effect contributes to the decrease in wellbeing and how we can counter it with specific interventions are important questions for further research.
Predicting QR code check-in compliance behaviors during COVID-19 using an integrated social cognition model

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Background Mandated QR code check-in when entering venues was a strategy implemented by the Australian government to help minimize the spread of COVID-19 infections. This was a novel strategy that no other country globally had implemented on a national level. Thus, to inform future behavioral interventions and pandemic preparedness, this study aimed to identify the determinants of QR code check-in compliance behavior. Moral norm, anticipated regret, and habit were integrated with the theory of planned behavior to predict QR code check-in compliance behavior during the COVID-19 pandemic.

Methods Australian residents from Victoria (n=181) and Queensland (n=162) recruited from a panel company completed online measures of theory of planned behavior constructs, moral norm, anticipated regret, and habit with respect to QR code check-in compliance behavior, with prospective measures of habit and behavior recorded two weeks later. Data were analyzed as a PLS-SEM model.

Findings In both samples, habit and intention predicted behavior, while perceived behavioral control did not. Intention was predicted by baseline habit, attitude, subjective norm, and moral norm in the Victorian sample, while only baseline habit and moral norm predicted intention in the Queensland sample. Perceived behavioral control and anticipated regret did not predict intention in either sample.

Conclusions This study provides a first test of the determinants of QR code check-in compliance behavior, indicating strong effects of norms and habit, but also highlighting potential differences in effects as a potential result of the varied experiences with the COVID-19 pandemic in each of the two Australian states.
Visual cues and primes for nudging consumption-related behaviours: A meta-analysis and systematic review

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Background: Healthy diets are crucial for maintaining overall well-being and reducing chronic disease risk. Visual cues and primes are becoming popular implicit nudging techniques for promoting healthier consumption habits. The present review aimed to evaluate the effectiveness of these cues and primes for nudging consumption-related behaviours.

Methods: A comprehensive search was conducted in six electronic databases for experimental studies on the use of non-marketing-based visual cues/primes on food/beverage consumption. 61 studies from 47 articles were included, resulting in 150 comparisons which were categorized into four groups for separate meta-analyses.

Findings: Overall, nudges effectively influence consumption-related behaviours. Healthy nudges were found to increase healthy consumption in comparison to control conditions (for priming but not cueing nudges, and adult not child samples) and unhealthy nudges. Unhealthy nudges led to increased unhealthy consumption compared to control conditions (for overweight and mixed but not normal-weight samples). Nudges not inherently related to health also impacted food choice, but not food or beverage intake, with significant differences between healthy-intended and control or unhealthy-intended nudges, and when unhealthy or mixed-health foods were involved. The effectiveness of these nudges was explained by several underlying mechanisms, including goal activation, as well as changes in desire and appetite, and food preferences.

Conclusion: The present review supports the efficacy of visual cues and primes in eliciting changes in consumption-related behaviours. The results indicate that different forms of nudges may be more appropriate in different samples. Further research is needed to thoroughly comprehend the underlying mechanisms of these nudging techniques.
The role of transparency and motivation for the acceptability of nudging vegetarian lunch options

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Background:
Nudges are generally seen as acceptable, but little is known about factors that impact acceptability and evidence is limited to very uncontroversial behaviors. We investigated acceptability of a nudge stimulating vegetarian lunch choices, a behavior for which motivation varies across the population. We specifically focused on the role of transparency of the nudge and motivation of the individual.

Methods:
We conducted an online experimental vignette study (n = 193) and manipulated transparency between-subjects (no transparency vs. transparency about the presence of the nudge vs. transparency of the purpose). Autonomous and controlled motivation for eating less meat were measured with an adapted version of the Treatment Self-Regulation Questionnaire (range: 1-7). Acceptability was measured with three items (range: 0%-100%).

Findings:
Participants consumed meat on 4.74 days a week. Autonomous motivation varied around the midpoint of the scale (M = 4.00, SD = 1.48). Controlled motivation was relatively low (M = 1.91, SD = .88). The nudge received favorable acceptability scores (M = 78.12, SD = 21.75). Motivation was positively associated with acceptability (autonomous motivation: β = .52, p < .001; controlled motivation: β = .23, p = .001). However, transparency did not affect acceptability (ps > .233).

Discussion:
The current study revealed a positive relationship between motivation and acceptability of a nudge. Associations between motivation and acceptability thus also hold for less uncontroversial behavior with more variation in motivation. Contrary to the suggestion that transparent nudges are more ethical, transparent nudges did not receive higher acceptability scores.
Can self-enactable techniques affect behavioral determinants from self-determination theory? An expert opinion study

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Self-Determination Theory (SDT) proposes that the fulfilment of three basic psychological needs (autonomy, competence, relatedness) underpins autonomous forms of motivation for behaviour, which in turn result in behavioral performance, maintenance and improved psychological well-being. While a large body of SDT research has identified characteristics of social environments that support optimal motivational states and psychological need satisfaction, research has scarcely considered what people might themselves do to optimize motivation or achieve need satisfaction. Using the compendium of self-enactable techniques, this expert opinion study aimed to identify conceptual linkages between 123 self-enactable techniques and nine core SDT constructs. International scholars (n=67) judged a block-randomized subset of 30-40 self-enactable techniques for their likely impacts on SDT constructs. Theoretically plausible linkages between self-enactable techniques and SDT constructs are visualized as a network. The techniques Brainstorm options, Goal integration, Support others, Find meaning in target behavior, Associate identity with changed behavior, Valued self-identity, and Emphasize autonomy were adjudged as having potential beneficial impacts on five or more SDT constructs. Interventions requiring participant engagement, for example self-management or lifestyle counseling, will benefit from a better understanding of motivation self-management.
Effects of VAT changes on policy acceptance and food consumption in Germany: An online experiment

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Dietary changes can increase public health and curb climate change. In Germany, value-added tax (VAT) changes that aim to reduce consumption of animal products and increase consumption of plant-based foods have been discussed recently. We conducted a preregistered online experiment with N = 993 participants (quota-representative for age (18-74) gender and federal state) to investigate the support for different VAT changes and their potential for promoting plant-based diets. In a 2x2 between-participant design, individuals were presented with different policies affecting animal-based foods (VAT increase vs. no change) and plant-based foods (VAT decrease vs. no change). Policy acceptance was related to average VAT level, i.e., negative effects of a VAT increase for animal-based food was curbed when VAT for plant-based products decreased at the same time. The intention to consume plant-based foods mostly depended on the VAT for plant-based foods; decreasing the VAT for plant-based foods increased consumption intentions while increasing the VAT for animal-based foods had no such effect. The results indicate that tax measures can be an effective lever for promoting healthy diets.
“Clients are problem owners”: qualitative study of smoking cessation care for smokers with mental illness

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Background: Many people with mental illness smoke. We explored perceptions, needs and preferences regarding smoking cessation counseling (SCC) in mental healthcare settings, of both mental healthcare providers and clients.

Methods: Cross-sectional study. Individual semi-structured interviews with 18 Dutch mental healthcare providers (MHCPs) and 16 people with a DSM 5 diagnosis who smoked. Qualitative analysis followed the framework approach.

Findings: Both MHCPs and clients seemed to believe that successful smoking cessation would benefit client’s health, but is also difficult to achieve. However, MHCPs and clients do not seem to have the same views on responsibility for SCC. Clients do not often initiate or bring up smoking cessation, although they often want to quit smoking in order to improve overall (mental) health in the long term. Most clients stressed the need for support in quitting smoking, provided by an active and experienced MHCP who takes the initiative. MHCPs however rarely initiate SCC, because they believe that clients should indicate the focus of treatment, and that addressing smoking cessation may harm the therapeutic relationship. MHCPs perceived clients as carrying the ultimate responsibility for smoking cessation.

Discussion: Results suggest that MHCPs and clients agree that SCC should be tailored to the client’s needs and possibilities. However, as both clients and MHCPs wait for the other party to initiate a discussion of smoking cessation, the issue often remains unaddressed despite many clients being motivated to quit smoking. To increase chances of successful smoking cessation, clearly defined responsibilities regarding initiation and provision of SCC seem necessary.
A digital platform showcasing trustworthy health and wellbeing apps: Lessons learned from a national experiment

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Background: While the potential benefits of health apps for promoting health are widely acknowledged, individuals encounter barriers in finding suitable and reliable apps, including an overwhelming amount of health apps available. A national experiment aimed to address such barriers by providing individuals a €100 digital budget to purchase pre-selected, trustworthy health apps, empowering them to work on their health through a health app platform. The apps provided were aligned with the concept of ‘Positive Health,’ emphasizing people’s resilience in dealing with physical, emotional, and social challenges rather than illness.

Methods: A mixed-methods study assessed the platform’s feasibility and acceptability. Data was collected through surveys, usage data, and focus groups over an 8-month period. Qualitative data was thematically analysed using the Framework Method. The study had 1650 participants.

Findings: 41\% of participants used their budget to purchase \( \geq 1 \) applications. In general, participants evaluated the platform as user-friendly and acceptable, who appreciated that it removed financial barriers and only showcased pre-selected trustworthy applications. Participants were satisfied with the ease of the payment system, budget provided, and look and feel of the platform. However, they were less satisfied with the amount and diversity of apps on the platform. They desired more life-style related apps (e.g., physical exercise, diet) and indicated a need for a more personalized and flexible platform to increase its impact on health empowerment and health outcomes.

Conclusions: A health app platform shows promise in improving public health, but should be personalized and customizable to meet the specific needs of individuals.
Comparative efficacy of app-based interventions for stress: a Bayesian network meta-analysis

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Background To assess the comparative efficacy of application-based interventions for stress using data from randomized controlled trials (RCTs).

Methods A Bayesian network meta-analysis was conducted after a systematic search of the PubMed, PsycINFO, Web of Science, MEDLINE, Embase, CINAHL, Scopus and PsycARTICLES databases. Studies that included patients with mental disorders were excluded. Subgroup analyses and risk of bias tests were performed.

Findings We identified 51 RCTs, including 12 intervention conditions and 4 control conditions, with a total of 12053 participants. Most studies were self-help interventions, including the theoretical basis of mindfulness, cognitive behavior therapy (CBT), stress interaction and positive psychology, social cognitive therapy, and planned behavior treatment; minorities comprised clinician-guided treatment and psychoeducation. The most effective psychological intervention was problem-solving treatment (MD=−4.0, CrI:−6.2,−1.8, SUCRA=80.52%), followed by clinician-guided treatment (MD=−3.7, CrI:−7.5,−0.03, SUCRA=72.21%), and mindfulness and meditation treatment (MD=−3.3, CrI:−4.7,−2.1, SUCRA=70.65%). Social cognitive therapies, planned behavior treatments, and stress management programs demonstrated less effectiveness than attention or psychological placebo (MD=−2.0, CrI:−3.6,−0.36, SUCRA=39.25%). Subgroup analyses revealed that interventions were more likely to be successful if they included mindfulness and meditation, CBT, psychoeducation, and problem-solving therapy and were tailored to specific populations. The risk of bias was low in the randomization process, deviations from intended interventions, missing outcome data, measurement of the outcome, and selection of the reported result, albeit with some concerns in overall bias.

Conclusion Problem-solving treatments with app-based self-help interventions can be a promising and cost-effective way to reduce the negative effect of stress in the future.
momenTUM research platform: an open-source, reproducible research infrastructure for digital health

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Background: In the digital age, we need a platform for researchers from different health-related fields to deliver smartphone-enabled interventions and collect research data from participants. However, many existing solutions are commercial and not open-source, making them less accessible to researchers and raising data security concerns.

Methods: To fill this gap, we developed the momenTUM Research Platform (https://www.momentumresearch.eu/). momenTUM consists of an iOS/Android app and server software to configure trials, accept data, and register it in a REDCap or other database server. The app uses JSON files to specify the timing, order, and properties of interventions and questionnaires sent to participants, specified in an intuitive web-based interface. The development of momenTUM was inspired by open and reproducible science principles and based on the existing schema-app. The code is available on GitHub under GPL-3 (https://github.com/momenTUM-research-platform/).

Findings: The momenTUM platform provides an integrated solution for researchers to design versatile trials with different elements, such as survey questions, images, and videos. The platform’s open-source nature allows for the growth of a community around it and makes scientific work more sustainable through flexible reuse of trial elements.

Discussion: momenTUM addresses challenges such as the institutional machinery of intellectual property and the lack of encouragement for open science in academia. It could become the one-stop shop for running studies with smartphone-enabled interventions including data collection, making it a valuable tool for scientists. Future enhancements will include a communication tool with participants and easy data upload options for participants.
Feasibility and effectiveness of digital interventions for behaviour change in people with schizophrenia: Systematic review

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Background: Severe mental illnesses such as schizophrenia are associated with increased prevalence of chronic diseases and deficits in social functioning. The expansion of digital technology such as smartphones has the potential to improve health outcomes and quality of life in this at-risk group. This systematic review aimed to: 1) assess the feasibility and acceptability of digital interventions for behaviour change in people with schizophrenia; and 2) examine the impact of such interventions on health behaviour (e.g., physical activity, nutrition) and clinical symptoms (e.g., psychosis symptoms, cognition).

Methods: A search of PubMed, CINAHL, EMBASE, Scopus and Cochrane databases was conducted to January 4, 2023. Studies that reported outcomes of interventions delivered remotely using mobile, online, or other devices in people with schizophrenia (or related psychotic disorders) were included.

Findings: Our search produced 10,444 results from which 72 eligible articles were identified. Forty-three were randomised controlled trials and 31 quasi experimental studies. Interventions were grouped into: 1) health behaviour change; 2) medication adherence; 3) symptom improvement; 4) functioning and wellbeing. The interventions were found to be feasible, with low recruitment but high retention rates. The effects of interventions on outcomes were variable and offered insight into potential mediating factors impacting the effectiveness of remotely delivered interventions.

Discussion: This systematic review provides strong evidence on the feasibility of digital interventions for health behaviour change in people experiencing mental ill health and supports the potential for clinical effectiveness of such approaches in improving physical and mental health in this population.
Exploring the Unintended Consequences of Popular Health Apps Through Social Listening: Evidence from Twitter

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Background: In absence of empirical studies evaluating health apps, social media might offer a valuable source of insight from the experience of thousands providing feedback on health apps, with the potential to uncover important usability, safety and efficacy concerns. We focused on evaluating top-ranked apps in three health domains: fitness, meditation and menstruation apps using Twitter.

Methods: A sample of the 5 top-grossing apps was obtained through Statista on February 7, 2023. The tweets were identified using search queries including different variations of the app name and the words “app” or “application”. To analyse the content of the tweets we applied machine-assisted topic analysis (MATA; Bondaronek et al., 2022), a method integrating machine learning and human qualitative thematic analysis.

Findings: The number of tweets that fulfil the inclusion criteria was: 58880 for fitness, 79705 for meditation, and 20543 for menstruation apps. The MATA analysis showed multiple concerns with the apps as expressed by the users, including: usability issues with the features of the apps, concerns about self-tracking and feedback, e.g., inaccurate estimation of healthy calorie intake, and negative psychological effect of not adhering to goals set by the apps.

Discussion: This social listening exercise using social media shed light on the most important issues experienced by users of publicly available health apps that are downloaded in billions. In addition, this novel method combining text analytics and qualitative analysis creates novel opportunities in Health Psychology to explore health experiences through the analysis of large volumes of qualitative feedback.
Coproducting a digital App for lay health workers to support delivery of mental health intervention.

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Background:
Whilst digital technologies to foster mental healthcare worldwide hold the potential to close treatment gap, there is a need to develop them in consideration of context and infrastructure with an interdisciplinary and participatory approach to increase impact and acceptance. This study aimed to adapt WHO’s Problem Management Plus (PM+) into a technology-assisted PM+ (TA-PM+) App to support delivery by lay health workers (LHWs) in Pakistan.

Methodology:
Three-stage framework of coproducing and prototyping public health interventions was used. Stage one, evidence-review and consultation, included three focus group discussions with LHWs and six key stakeholder in-depth interviews deductively analyzed using the Capability Opportunity, Motivation-Behaviour (COM-B) model. An interdisciplinary intervention development group co-produced the App in Stage two. Stage three, prototyping, included two rounds of usability testing with six LHWs using a 15-item usability scale for mHealth Apps used by healthcare providers (possible range 0-7).

Findings:
Qualitative analysis indicated user guidance, informative videos, and automated interface were perceived to enhance the capability for TA-PM+ use. Training, professional support, and offline functionality were perceived to increase opportunities for TA-PM+ use. The flexibility of use, incentives, and deepening credibility among communities were believed to enhance LHWs’ motivation. Informed by stage one, the TA-PM+ was coproduced with features like easy and automated interface, personal dashboard, guidance videos, and connected supervisory panel. Usability was high (X=5.62; SD=1.40) and improved after incorporating feedback for round one (X=5.84; SD=0.62).

Discussion:
Co-production and digital adaptation of TA-PM+ intervention balanced context and evidence. Three-stage iterative development resulted in high usability.
Nutrition education across educational settings to promote healthy and sustainable diets along the life course

9:30 - 9:45

I’VE GROWN: Effects of school gardening on children’s eating behaviour and development, a scoping review.

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Background: School gardening programs to enhance children’s fruit and vegetable (F&V) consumption vary in their set-up, implementation and context. Studies assessing the effects of these programs use different designs and measurement methods, and the mechanisms of change have not yet been studied extensively. This study reviews the evidence (a) on the effects of school gardening on children’s F&V consumption, (b) on their personal and social development, and aims (c) to identify proposed mechanisms of change.

Methods: The scoping review focused on primary school children (±4-12 years) going through the process from sowing to harvesting in the school garden during school-time. Community and home-based gardens were excluded. Scientific and grey literature was collected from August-2022 to February-2023, using SCOPUS, PubMed, CAB Direct, Web of Science, Google Scholar, and Groene Kennis. We included 50 articles, from 750 unique articles found.

Findings: Of the included articles, most were conducted in the US and 50% was quantitative in design, 25% qualitative, and 15% mixed-methods. Most studies focussed on children aged 6-13 years. The most frequent outcome measures assessing the effects of school gardening were dietary intake, F&V knowledge and attitude, children’s experiences with the program, and nutrition knowledge. None of the studies investigated the underlying mechanisms of change.

Discussion: School gardening mainly affected children’s self-perception, and their F&V knowledge and preference. This study highlights the need for research into how school gardening, children’s personal and social development and F&V consumption are related – crucial to develop effective school garden interventions.
Integrating health and sustainability in Dutch school food programmes within the secondary school context

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Background – Whereas secondary schools are promising places to stimulate healthy and sustainable diets among a broad range of adolescents, it is currently unclear whether and how Dutch school food programmes integrate aspects of health and sustainability using the entire school context. This study therefore aims to explore how aspects of health and sustainability are incorporated in Dutch school food programmes, and explore the implementation of these programmes within the school context, using the Whole School Approach (WSA) as analytical framework.

Methods - Online semi-structured interviews (N=15) were conducted between November 2021 and January 2022 with representatives of included programmes, supplemented by a documentary analysis of scientific and grey literature (e.g. evaluation reports). Transcripts and literature were analysed thematically by two researchers through inductive and deductive coding strategies.

Findings - Programmes focused either on healthy and sustainable diets (N=4), healthy diets (N=4) or sustainable diets (N=6). Themes as dietary guidelines, consumption of food groups (e.g. more plant-based), and food production and origin (e.g. minimally processed foods) were most included in descriptions of healthy and sustainable dietary behaviours. Programmes were implemented using multiple components of the WSA (e.g. the element ‘vision’ by stimulating schools to implement a food policy, and ‘environment’ through the involvement of family through assignments), but few connected different components.

Discussion - Our results indicate room for a more integral approach to healthy and sustainable dietary behaviour within current programmes, along with a stronger connection between WSA components to further integrate this theme in the secondary school context.
Analysing Food Practices Embedded in School Life Spaces: Meanings around Sustainable Diets.

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Background. There is growing awareness of the inextricable links between human health and the health of our planet. In some Western countries, food systems are progressively being transformed to reduce agricultural production’s impacts, accounting for 19–29\% of global anthropogenic greenhouse gas emissions. In Switzerland, policies on sustainable diets are often implemented in schools, based on the premise that eating habits developed during adolescence are likely to be maintained throughout adulthood. However, little attention has been given to ways in which main actors/actresses involved in Swiss school contexts relate to food practices and sustainability. The present qualitative study aims to analyse meanings around food practices among adolescents aged between 11 and 17 years old and to explore the perspectives of adults working (in)directly with a school catering service responsible for implementing sustainable food offers.

Methods. Thirty-four adolescents participated in 7 focus groups and 8 adults participated in individual semi-structured interviews. The transcribed material was analysed using a reflexive thematic analysis.

Findings. Not all adolescents associate food practices with environmental issues. However, precarity and social origin seem to play a role in how participants constructed such associations (or not) through their accounts. Concerning the adults’ perspective, knowledge about sustainable food is also uneven. Their accounts convey expectations towards families that draw upon broader Western discourses on parenthood (i.e. Parental involvement in food choices through dialogue with the child).

Discussion. Our analyses show that – to be effective – sustainable food policies shall consider meanings and practices embedded in specific sociocultural contexts.
Promising intervention elements to support healthy and sustainable eating among young adults

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Background: Young adulthood is an important transition period which is often accompanied with changes in dietary habits and weight gain. At the same time, this period may provide opportunities to support young adults in applying healthy and sustainable eating habits. The aim of this study was to obtain an overview of existing interventions in the educational setting to stimulate healthy and sustainable eating among 18-24-year-olds and to identify promising intervention elements.

Methods: Three main research activities were executed: a literature study, an inventory and analysis of Dutch practice interventions, and focus group discussions with professionals, teachers and students (N=36).

Findings: Twenty-one scientific interventions were included, of which 33% used a person-oriented and 67% an environmental approach. The majority of these interventions were executed in the USA, among university students, and targeted healthy eating. Most interventions were effective in changing nutritional behaviour outcomes. Twenty-four Dutch practice interventions were identified, of which 40% used a person-oriented and 60% an environmental approach. About 50% targeted healthy eating, whereas the other 50% targeted sustainable (and healthy) eating. The focus group discussions revealed five important factors for intervention success: paying attention to 1) (involvement of) the target group, 2) feasibility, 3) barriers in the physical environment, 4) cultural context, and 5) having support at organizational level.

Discussion: Important intervention elements for effectiveness and successful implementation have been identified and this contributes to further optimization and implementation of nutrition interventions for young adults.
Factors associated with dietary behaviour change support in patients and educational needs of community nurses.

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Aim: To explore which factors influenced dietary behaviour change support among patients by Dutch community nurses (CNs).

Background: CNs have an important role in counselling patients towards healthier dietary behaviour to prevent or delay long-term complications from chronic lifestyle-related diseases. Most CNs do not incorporate dietary behaviour change support in their routines to the fullest potential.

Design: A qualitative in-depth interview study.

Methods: Data were collected in the Netherlands in 2018-2019 via semi-structured face-to-face interviews with 18 CNs. Interview guide themes were informed by the Measurement Instrument for Determinants of Innovations. Data were recorded, transcribed and analysed using thematic analysis.

Results: Factors that either enabled or hindered dietary behaviour change support were linked to 1) the CN (role identity, dietary knowledge, and competences such as methodical approach, behaviour change techniques, and communication techniques), 2) interaction between CN and patient (patient-centred care, involving supporting patient autonomy, building a relationship with a patient, and tailoring the approach to the individual patient; and discussing sensitive topics such as diet), 3) the patient, and 4) cooperation and organizational context.

Conclusion: It is of utmost importance to pay attention to CNs’ role identity regarding dietary behaviour change support, as this underlies professional behaviour. This should be accompanied by improving competences on dietary behaviour change support.

Impact: These valuable insights into factors associated with dietary behaviour change support could contribute to well-fitted training offers for CNs. Eventually, it will lead to improved professional practice of CNs, leading to healthier dietary behaviour of patients.
A randomized controlled trial of the PrevOP-Psychological Adherence Program to reduce symptoms of osteoarthritis

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Background: We evaluated a Health Action Process Approach (HAPA)-based psychological adherence program (“PrevOP-PAP”), designed to support patients with osteoarthritis of the knee (OAK) to engage in regular Moderate-to-Vigorous Physical Activity (MVPA) to reduce OAK symptoms. The PrevOP-PAP Intervention (PrevOP-PAP-I) targeted HAPA-proposed volitional precursors of behavior change, including network formation. We hypothesized an indirect effect of the PrevOP-PAP-I on lowered OAK symptoms (at 24 months) via increased MVPA (at 12 months).

Methods: Participants with moderate OAK (N=241; 62.7% female; 44-80 years) were randomly assigned (1:1) to the PrevOP-PAP-I, a 12-month intervention with boosters program, or an active control group (PrevOP-PAP-CTRL). Outcomes were OAK symptoms (at 24 months, primary outcome); accelerometer-assessed MVPA (at 12 months, key secondary outcome); and action- and coping planning, maintenance- and recovery self-efficacy, action control, and collaborative implementation intentions (at 24 months; manipulation checks). Intent-to-treat analyses used multiple regression and manifest path models.

Findings: Manipulation checks indicated higher action planning (24 months) in PrevOP-PAP-I than in PrevOP-PAP-CTRL. MVPA (12 months) did not mediate PrevOP-PAP-I effects on OAK symptoms (24 months). Lowered overall OAK symptoms (24 months) in PrevOP-PAP-I participants did not remain significantly different from PrevOP-PAP-CTRL in robustness checks (p=.071). However, exploratory follow-up analyses showed significant group differences in reduced OAK-pain symptoms (24 months).

Discussion: The PrevOP-PAP sustainably increased levels of action planning only. As primary analyses yielded no effects on MVPA and limited effects on OAK symptoms, future studies should refine the intervention by using m-health applications to digitally support long-term self-efficacy, action control, and network formation.
A systematic review of multiple health behaviour change interventions for patients with chronic conditions

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Background: Interventions targeting more than one health behaviour have the potential to be more synergistically effective. This review aimed to identify and summarise the components of multiple health behaviour change (MHBC) interventions in patients living with chronic conditions, and to assess their effectiveness.

Methods: We identified MHBC interventions within five electronic databases. Only randomized trial designs were included. We extracted trial data (e.g. behaviours targeted, type of intervention) and used existing ontologies and taxonomies (e.g. Mode of Delivery ontology) to code intervention components. Quality was critically appraised using the Risk of Bias 2 tool. We descriptively synthesised studies and conducted meta-analysis to assess the pooled effect of multiple behaviour change interventions.

Findings: Fifty-nine studies were included, targeting cardiovascular diseases (k=25), type 2 diabetes (k=15), hypertension (k=9), cancer (k=7) and multiple conditions (k=3). Most interventions aimed to change behaviours simultaneously, targeted physical activity, diet and smoking, were not theory informed, and used goal setting (behaviour), problem solving and self-monitoring (behaviour). In the meta-analysis, 16 analyses were conducted for outcomes measured at the end of intervention. Analyses for continuous data showed small to substantial positive effects for all behaviours (d=.08 to 2.00), except for smoking (d=-.019). For dichotomous data, all analyses showed positive effects (RR=1.03 to 2.00).

Discussion: By leveraging existing classification systems, results of this review provide an in-depth overview of key components and effectiveness of existing MHBC interventions directed at individuals with chronic conditions and highlight the importance of further understanding the interplay between multiple behaviours in behaviour change interventions.
A psychological adherence program to enhance physical activity in patients with knee osteoarthritis

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Background: Regular moderate-to-vigorous physical activity (MVPA) is key in the treatment of knee osteoarthritis (OAK) and is targeted by the PrevOP-psychological adherence program (PrevOP-PAP) based on the health action process approach (HAPA). We examined PrevOP-PAP effects on volitional HAPA constructs and MVPA and tested indirect effects.

Methods: Secondary analyses of a randomized controlled trial with N = 241 patients with moderate OAK (62.7% female; 44-80 years) were conducted. Patients were randomly assigned to the intervention condition (IC) receiving the PrevOP-PAP with boosters over 12 months or an active control condition (CC). MVPA was measured via accelerometer at baseline, 12 months, and 24 months. Self-reported HAPA constructs were additionally assessed at 6 months and 18 months. Multilevel models and path models were applied.

Findings: In both conditions alike, a linear decrease of MVPA across 24 months emerged. For action planning, coping planning, and action control, quadratic time trends (i.e., initial improvement followed by later decrease) were found. Between-condition differences emerged for maintenance and recovery self-efficacy, as IC participants showed stable levels, whereas those from CC decreased. Path models indicated increased action planning in the IC (vs. CC) at 12 months, which was related to increased MVPA at 24 months. However, a bootstrapping procedure revealed a non-significant indirect effect. No other mediation occurred.

Discussion: The HAPA-based PrevOP-PAP was successful in stabilizing or increasing volitional HAPA constructs, but not in enhancing OAK patients’ MVPA. To more continuously support behavior change, future refinement could include delivery of PrevOP-PAP components as an m-health application.
RCT of an SMS and animated video intervention to increase breast cancer screening uptake

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Background:
Breast cancer screening uptake in the UK has fallen, and London has the lowest uptake nationally. This study aimed to test the impact on uptake of a behavioural science-informed reminder SMS, and an animated video intervention, co-designed using the Behaviour Change Wheel.

Methods:
A three-armed RCT in London: (1) usual care reminder SMS (control); (2) behavioural science informed SMS reminder addressing ‘reducing negative emotions’ and ‘information on health consequences’ (behavSMS); (3) behavioural science SMS plus link to animated video (behavSMS+video).

Following COVID-19, invitation processes to screening in London were changed. Therefore, randomisation was conducted separately for those receiving either a timed appointment (N=9027), and those receiving an open invitation to book (N=25,020). Group differences (separately per invitation process) in attendance (and booking for open invites) were assessed using Chi squared, and a logistic regression controlling for age, ethnicity, deprivation, first appointment invitation.

Findings:
There were no attendance differences for timed-appointments: control=71.9%; behavSMS=69.9%; behavSMS+video=71.7% (χ²(2)=3.47, p=0.176), including when controlling for covariates. For open invitations, combined intervention participants were more likely to book an appointment (χ²(1)=4.13, p=0.042), but there were no group differences in attendance (χ²(2)=1.14, p=0.564), control=50.9%, behavSMS=51.7%, behavSMS+video=51.9%, including when controlling for covariates.

Discussion:
The SMS or SMS+video interventions did not increase breast screening attendance compared to the usual SMS reminder. While stakeholder and participant (N=25) feedback on the video was positive, only 5.8% participants followed the link. Links within SMS are unlikely to be an effective mode of delivery for video content, and alternative options are being explored.
'DEVIL IN THE CORNER': LINGUISTIC AND PSYCHOLOGICAL METHODS TO UNDERSTAND HEALTH COGNITIONS IN CHRONIC PAIN

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Background: There is no objective measure of pain; people with pain must rely on linguistic tools like metaphor to describe pain and its physical/psychological impacts. We combine linguistic and psychological methods of qualitative data analysis to understand the ways that people discuss their pain and how this represents pain cognitions and management. Examples of these metaphors will be shared, with a spotlight on endometriosis, spinal cord injury, arthritis, fibromyalgia, and complex regional pain syndrome.

Methods: This talk will present research on spinal cord injury pain (semi-structured interviews with 16 pps), endometriosis (semi-structured interviews with 21 pps), and a mixed-methods survey with 69 people with a range of pain conditions. Measures in the mixed-methods survey included: pain intensity and interference (Brief Pain Inventory), depression and anxiety (DASS) and pain catastrophising (Pain Catastrophising Scale). Data were analysed using conceptual metaphor theory and interpretative phenomenological analysis as well as inferential statistics.

Findings: Common themes demonstrate that metaphor is useful for conveying psychological states such as feelings of vulnerability, helplessness, pain being incomprehensible, and desires to manage and conceal pain simultaneously. These descriptors are significantly associated with important clinical outcomes such as pain interference and may assist in the diagnosis of certain pain conditions such as neuropathic pain.

Discussion: Appreciation of pain metaphors has potential to facilitate communication and enhance understanding in interactions between clinicians and people with chronic pain. Further, descriptions used may be associated with greater distress in some groups, and warrant exploration and rescripting through interventions such as cognitive behaviour therapy.
Background: Albeit well-intentioned, others’ supportive responses may hinder chronic pain adjustment. Social support for life disengagement (e.g., solicitousness, promotion of functional dependence) is consistently correlated with worse physical functioning, pain severity and disability. Whether such supportive responses lead to worse pain adjustment (operant model of pain) or the latter leads to more support for life disengagement (pain communication model) is unknown, given the lack of (cross-lagged) panel studies. Furthermore, the role of physical activity patterns in such relationships is entirely unclear. This study aimed to bridge these gaps.

Methods: Three-month prospective study with 3 waves of data collection (6-week lag in-between); it included 130 older adults (71% women; Mage=78.26) with musculoskeletal chronic pain attending day-care centers. At every time point, participants filled out self-report measures of staff social support for functional dependence, patterns of activity, physical functioning, pain severity and disability. All alphas > .90 at every time point. Cross-lagged panel analyses with mediation were conducted using structural equation modelling.

Findings: Parsimonious models showed the best fit ($\chi^2$/df<2.23; CFI>.97; GFI>.94; RMSEA<.10). Pain adjustment outcomes more consistently predicted social support than vice-versa. Higher pain severity/disability and lower physical functioning (T1), predicted higher received support for functional dependence (T2), ultimately leading to less overdoing/more avoidance (T3).

Discussion: Findings strongly support pain communication models (vs. operant models of pain). As social support for functional dependence mediates the effects of pain-related outcomes on activity patterns over time, the relevance of developing training modules on pain-related social support will be discussed.
Measurement Reactivity in Ambulatory Assessment Behavioral Research

9:30 - 9:45

Measurement reactivity in dietary Ecological Momentary Assessment: Does familiarity with tracking make a difference?

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Background: Smartphone-based Ecological Momentary Assessment (EMA) is frequently used to assess and study (health-related) behaviours and their determinants in real-time and real-life environments. However, EMA studies might be prone to measurement reactivity i.e., changes in people’s behaviours, emotions or cognitions due to being measured as part of a research project, which may lead to distorted study findings. Since the majority of studies on reactivity are focused on physical activity behaviours, this study focuses on dietary EMA. Specifically, the study tested whether the number of snacks reported changed over the study period. Furthermore, the study tested whether familiarity with tracking apps influences the extent of measurement reactivity.

Methods: In a pre-registered study, 39 participants (85% female, 15% male; mean age M=24.5; 69% were not familiar with tracking apps) took part in an 8-days event-based EMA study where they were asked to record all foods and snacks they consumed.

Findings: A mixed ANOVA yielded no significant main effect of day in the study, F(7,266)=1.65, p= .122, partial ƞ²=0.04. Nevertheless, planned pairwise comparison between days indicated significant differences between day 1-7 (p=.005), day 2-7 (p=.003), day 5-7 (p=.006) and day 6-7 (p=.020). The interaction effect between the days in the study period and the familiarity with tracking apps did not reach statistical significance, F(7,259)=1.14, p= .336, partial ƞ²=0.03.

Discussion: Participants consumed fewer snacks in the beginning of the 8-days study period compared to the end of the study which indicates that dietary EMA may be prone to measurement reactivity.
Measurement reactivity in objective physical activity assessment: Does researcher observation play a role?

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Background: Prior research indicates that participants change their physical activity (PA) behavior in the first days of a study, which is referred to as measurement reactivity. To date it is unclear as to whether measurement reactivity occurs because of the novelty of measurement, the awareness of being observed, or both. The present study aimed to disentangle the effects by recruiting adults with prior experience of tracking PA.

Methods: Participants (N=131) completed 2 online questionnaires approximately 2 weeks apart. In both questionnaires, participants indicated the number of daily steps recorded with their PA monitor in the past 14 days. Step counts reported in the first questionnaire were recorded before enrolling in the study and thus served as a baseline, while step counts reported in the second questionnaire were tracked after participants enrolled and so represent behavior under researcher observation.

Findings: Step counts increased after the introduction of researcher observation by approximately 400 steps per day (MDays1-14=7900.72, MDays15-28=8393.81, change in steps p=0.007). Interestingly, step counts were not different between the first (or first and second) day of enrolling compared to all other days (ps >0.50); steps per day were higher toward the end of the observation period, as participants approached completion of the second questionnaire.

Discussion: Measurement reactivity is present even when participants are familiar with a wearable PA monitor, potentially because of the knowledge that their behavior is observed. Additional work is needed to further disentangle the impact of novelty and awareness of observation to identify how best to mitigate reactivity.
Physical Activity Measurement Reactivity: An Ecological Momentary Assessment Study among Women with Elevated CVD Risk

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Background: Women in midlife (ages 40-60) experience unique risk for cardiovascular disease (CVD) and also decrease physical activity (PA), at a time when it may be especially beneficial. As physicians regularly encourage PA for these women, tension between recommended and actual behavior may result in measurement reactivity in observational studies of PA. However, reactivity is rarely studied in this at-risk population.

Methods: Women in midlife with >1 risk factors for CVD (e.g., hypertension; N=75, MAge=52, MBMI=34 kg/m²) completed a 10-day EMA protocol, including 4 surveys per day to assess PA motivation and intentions, and wore ActiGraph GT3X accelerometers to assess PA behavior.

Results: Multilevel models showed that women’s PA motivation was highest on Day 1 and they were most likely to set PA intentions at the start of the day (ps<0.001), which did not change during the study. PA behavior in the 2-hour windows following EMA prompts decreased within each day (p<0.001), but this pattern did not change during the study. Associations between PA motivation and behavior in the following 2 hours also did not change during the study (ps>0.50). Although the association between time intended for PA and PA behavior in the following 2 hours did fluctuate during the study (p=0.02, sr=0.18), the association did not show meaningful change after the initial days of observation, which would indicate measurement reactivity.

Conclusions: With respect to PA determinants and behavior, measurement reactivity may not present meaningful confounds in EMA studies with women in midlife who have elevated CVD risk.
Investigating Measurement Reactivity in an Ecological Momentary Assessment Study of Movement-Related Behaviors in Older Adults

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Background: This study investigates whether movement-related behaviors, social cognitive determinants, and the associations between those constructs captured through Ecological Momentary Assessment (EMA) show evidence of measurement reactivity in older adults. Methods: Older adults (N=195, 69% female, 43% White) completed an EMA protocol with six random prompts/day and wore an activPAL monitor for 8-10 days. EMA questionnaires assessed intentions and self-efficacy to stand or move and to limit sitting time over the next two hours. ActivPAL measured time spent upright and time spent sitting in the two hours after the EMA prompt. Multilevel linear regressions tested possible measurement reactivity after prompts 1 or 2 compared to all prompts, and days 1, 2, or 3 compared to all study days. Findings: Behavior and social cognitive determinants were higher on the first 2 and 3 days of the study compared to remaining study days (ps<0.01). Associations between intentions and self-efficacy to limit sitting and time spent sitting differed across study prompts and day (ps<0.01), with associations becoming more negative as time went on. Associations between intentions and self-efficacy to stand or move and time spent upright were less positive at the first prompt compared to all other prompts (ps<0.01). Discussion: Measurement reactivity may be present when assessing movement-related behaviors and their determinants in older adults; however, reactivity likely differs by constructs assessed. The fact that determinant-behavior associations were weaker at the beginning of the study suggests broader participation influences may also be at play.
Self-reported measurement reactivity and compliance in EMA assessment of movement-related behaviours in adults

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Introduction. Measurement reactivity can occur when change is caused by the measurements themselves, via increased awareness of affect or increasing/avoiding certain activities. EMA may be especially prone to measurement reactivity. We hypothesised that reactivity affects compliance, either increasing compliance by higher perceived usefulness or decreasing compliance by higher perceived burden.

Methods. A random sample of adults (age 22-55y) was drawn from the civil registry in Ghent. For 2 weeks, participants wore a Fitbit, completed EMA (3x/day), and a morning and evening diary on movement-related behaviours. Process evaluation data were collected after study completion and reduced in PCA to three dimensions (personal relevance, technical ease of use, measurement burden). Measurement reactivity on how EMA affected mood or activities was self-reported in the evening diary and averaged across 14 days. Data were analysed at person-level. Regression analysis examined reactivity, personal relevance, and measurement burden as predictors of compliance, as well as their interaction effects. Compliance included number of EMA prompts answered and completed, and latency time between prompts and responses.

Results. Eighty-six adults participated (M age=37.4±9.1, 56% female). Only mood reactivity was included due to high correlations between both reactivity items (r=.86). Personal relevance (ps<.01) and the interaction between reactivity and personal relevance (ps<.01) significantly predicted number of prompts answered and completed, and latency time. Interaction between reactivity and perceived measurement burden only predicted latency time (p=.03)

Discussion. Reactivity seems to influence compliance when accounting for personal relevance, suggesting a need to consider how EMA studies are framed to participants’ personal goals.
Critical Perspectives on Health Psycholog

Exploring the intervention potential of Critical Health Psychology

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This paper sets out to explore the intervention potential of using a Critical Health Psychology (CHP) perspective. CHP emerged as a sub-field of Health Psychology in the past few decades, arising as an alternative to a mainstream health psychology that was considered, by some, as individualistic and lacking important contextual elements. In contrast, CHP sets out to deconstruct dominant theories, models, and methods to raise awareness around the sociocultural, embodied, and material character of health behaviours in context. Further, CHP points out socio-political and structural inequalities in health and aims to address these through alternative ways of constructing knowledge, often by conducting in-depth qualitative research. Moreover, CHP is interested in integrating researchers’ positionalities in such processes. However, CHP is far from homogenous and has an eclectic mix of approaches, including those from other disciplines, such as cultural studies, sociology, and public health. While CHP does offer a critical deconstruction of mainstream health psychology, such as unpicking unsuccessful interventions in health psychology, there is not always a clear focus on how to design success interventions for behavioural changes from a CHP perspective. This proposal explores the intervention potential of CHP based on examples from research that we have been involved in, including parenting advice and health and self-care practices. The paper concludes with a discussion of how a critical, and contextualised, Health Psychology can be best utilised in behaviour change interventions.
The cultural right to include traditional healing alongside Western medicine for health treatment

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Background: Rongoā Māori (traditional Māori healing) is an important part of the cultural heritage for Māori in Aotearoa/New Zealand. However, due to misconceptions about what Rongoā Māori encompasses, further study was needed to understand traditional healing concepts, which included perceptions of Rongoā in the health treatment system. This qualitative study sought to illustrate the potential of Rongoā Māori to create wellbeing benefits for participants.

Methods:
58 Rongoā practitioners and patients participated in semi-structured interviews and focus groups held throughout Aotearoa/New Zealand. The Rourou Framework, which draws on mātauranga Maori (Maori Knowledge) was employed to analyse the data. Using the well known Maori proverb "Ka ora ai te iwi" (through our joint efforts the people will be fed), each individual interview was analysed separately and all the cases were analysed together by the research team.

Findings: We found that participants were dissatisfied with taking medical pills and prescriptions, preferring to take natural remedies; there was a misunderstanding, and discrimination against, people with culturally spiritual gifts; and yet, despite knowing there might be difficulties, participants still believed that collaboration between the Rongoā and Western medicine was possible.

Discussion: Māori and Indigenous peoples have the right to be able to access traditional cultural healing methods to support overall wellbeing. Cultural aspects of health must be included in health treatment to reduce cultural inequities and misunderstanding, and improve the health of the people. Greater awareness, understanding and inclusion of Indigenous health and healing practices and values in public health treatment systems is critical.
Horizontal individualism for mass vaccination: a qualitative study of COVID-19 vaccination in Serbia

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Cultural orientation variables, particularly collectivism, have been shown to be related to COVID-19 pandemic protective behavior, including vaccination. The influence of collectivism might be particularly interesting in the Serbian context, considering the society has been transitioning from socialism to neoliberal capitalism. This study aimed to explore the argumentation young collectivists used in construing their vaccination attitudes, which might inform us on potentially more efficient communication strategies for promoting vaccination. Sixteen purposely sampled self-declared collectivists (aged 20-34, M = 27.71, 25% female) were asked to write about their thoughts on vaccination and arguments for (not) taking the vaccine.

Two-phased analysis was conducted. In the first step, we applied thematic analysis resulting in 12 semantic (5 collectivistic and 7 individualistic) and two latent themes (Janičić et al., in review). The most prominent finding was the frequent use of (horizontal) individualistic argumentation among self-declared collectivists while discussing the COVID-19 vaccination. This combination of collectivistic and individualistic argumentation was further explored through narrative analysis, which confirmed such inconsistencies in their narrations. Moreover, the analysis of emotional tone revealed anger toward those hesitant to vaccinate, as well as the practice of shaming them, which were interpreted as closely related to vertical collectivism but potentially harmful in promoting mass vaccination. On the contrary, understanding those who oppose vaccination was seen as an expression of horizontal individualism, possibly more beneficial for questioning opposing attitudes. Our findings challenge the superiority of collectivistic argumentation in the context of mass vaccination, which might be optimistic for predominantly individualistic, neoliberal societies.
Drinking practices and views about alcohol-related health risks in adults at midlife

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Background: Adults at midlife (40-65 years) have relatively high levels of hazardous drinking but are rarely the focus of research or intervention. This project drew on social practices theory to examine drinking practices among midlife adults and their views on health-related harms linked to alcohol consumption.

Methods: An online survey was completed by 555 respondents (aged 40-65, M=50.3; 70% female) who provided information about their drinking practices (including the AUDIT-C), motivations for alcohol use, and perceptions of health outcomes related to drinking. Follow-up individual interviews were conducted with a subset of 36 adults to explore views and experiences of drinking practices in more depth.

Findings: 76% of survey respondents reported drinking alcohol at least 2-3 times per week. Most participants (96%) noted there were health risks related to drinking alcohol, but 20% did not think about these risks often. Participants highlighted positive aspects of alcohol within everyday life, including its taste, managing stress, coping with busy lives, and being integrated with social relationships. They discussed reducing their drinking primarily because of short-term consequences related to alcohol, including effects on appearance and weight, sleep quality, and ability to function well the next day.

Discussion: These findings provide insight into potential points of disruption within routine drinking practices that may help adults at midlife reduce their consumption and improve longer-term health outcomes. Recommendations are provided for ways in which the findings could be communicated in creative ways to adults at midlife and policy-makers and health promotion organisations.
Spillover beliefs within and between health and pro-environmental behaviors: associations and correlates

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Background. Positive and negative spillover occur when a first behavior promotes or hinders the adoption of a second one. Research on spillover has been commonly performed within the domains of either health behavior or pro-environmental behavior (PEB). Health and PEB, however, are closely related and conceptualized together as Planetary Health. This study assessed (1) whether individuals believe spillover occurs between their health and PEB, (2) how spillover beliefs from different domains correlate with each other, and (3) the correlates for spillover beliefs within and between health and PEB.

Methods. 311 participants (M age=29.24 +- 9.81; 50% female) from Western Europe were recruited. Spillover beliefs were assessed using existing and original scales. For the predictors of spillover beliefs, we measured self-reported values, health/green identity, self-efficacy, guilt, and pride related to behaviors.

Findings. Results showed that spillover beliefs between health and PEB occurred (M pos=2.97 +- .80; M neg=2.1 +- .71). Health, pro-environmental, and planetary health spillover beliefs were positively correlated with each other (rHealth/PEB=.330; rHealth/PH=.414; rPEB/PH=.527). Values and health/green identity significantly predicted the different types of spillover. Self-efficacy was related to most, but not all forms of spillover. Pride predicted all positive spillover beliefs while guilt was only associated to health spillover.

Discussion. In sum, spillover beliefs between health and PEB occurs. When spillover beliefs are higher within health and PEB, they are also higher between health and PEB. To improve planetary health, interventions promoting spillover beliefs within and between health and PEB could focus on values, identity, self-efficacy, pride, and guilt.
InterMob: First results of a 24-month intervention to reduce car use among regular car users

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Regular car use is a health and environmental issue due to air pollution, greenhouse gas emissions and physical inactivity. This study aims to evaluate the effectiveness of an intervention combining free transport and behavioural techniques (habit formation, goal setting) in car use reduction and assess the levers and barriers to mobility change.

Regular car drivers (300) living in Grenoble (France) are being recruited and allocated in an experimental (free transport and behavioural techniques) or an active control arm (air pollution awareness-raising). During 8 weeks spread out over 24 months, participants carry GPS, accelerometer and pollution sensor and fill up online surveys and mobility logs (Teran-Escobar et al., 2022). Descriptive statistics of the participant’s profile (socio-spatial and motivational) will be developed.

At the moment, 137 participants have started the study (recruitment started in September 2021). The participants (Age mean=48) are mostly women (61.3%), with executive or employee status (>70%), living or working in densely populated municipalities, having no children (44%), commuting by car at least three days per week (>99%), possessing a bike (85%) and not possessing a transport pass (>87%). Participants are already in “action stage”, i.e. already started to reduce car use (60%) or “preparation stage”, i.e. thinking about some shift possibilities (40%).

Our first results corroborate common problems identified in behavioural interventions: most of the participants are women with a high socioeconomic status (Glasgow et al., 2019). Our current recruitment efforts focus on a greater spatial diversity in participants to be able to compare socio-spatial barriers to mobility change.
Associations between beverage consumption, hydration status and carbon footprint

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Background: Adequate hydration prevents disease and maintains cognitive functioning. Yet, more than 50% of people do not hydrate adequately and sugar-sweetened beverage (SSB) consumption is high, in particular among those with low education levels. This cross-sectional survey examined associations between beverage consumption and hydration status. In addition, it explored how the healthy drinking patterns relate to sustainable beverage consumption.

Methods: UK participants (N = 1117) across education levels were asked to report fluid intake and hydration status (urine colour and void frequency). They were asked to recall all the drinks that they consumed on the previous day, and to specify the drink type, the container they used, and the quantify of the container that they consumed for each drink. We calculated the exact amount (ml) consumed, as well as the carbon footprint associated with each drink type (CO2 emissions based on container type).

Findings: Of the average total fluid intake, 40% consisted of water and 10% consisted of SSBs. More than 50% of the sample was inadequately hydrated. Drinking water was positively associated with adequate hydration, b = 0.58, p < .001, while drinking SSBs was not associated with hydration, b = 0.03, p = .649. There was no association between educational level and hydration status.

Discussion: A large proportion of people living in the UK are inadequately hydrated, and increased water intake was associated with better hydration status across education levels. Interventions aimed at improving hydration may focus on increasing water intake rather than reducing SSB intake.
Eating Together For The Planet: How Do Generations Differ In Advocating Sustainable Family Meals?

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Background:
A significant proportion of adolescents in Germany is eating fewer animal products, often for sustainability reasons. Do adolescents also try to reduce their family’s consumption of animal products at shared meals? We investigate how adolescents differ from their parents’ generation in their consumption of animal products, their importance of sustainability motives for food choice, and how they advocate making family meals more sustainable.

Methods:
In an online questionnaire, 500 adolescents (Mage = 17.9, range=15-20) and 500 adults of their parents’ generation (Mage = 52.2, range=45-60) reported diet motives, their own and their family’s diet style, whether they advocate eating more sustainably at family meals (e.g., less meat, more legumes), and how much they influence different steps in family meal planning (e.g., grocery shopping).

Findings:
Adolescents report 3 times as often to never eat meat than their parents’ generation. They also advocate eating substitutes of meat and dairy at shared family meals significantly more often (d=.27, p< .001). Further, adolescents are more likely to advocate for eating more sustainably at shared meals the more important sustainability motives are for them (r=.53, p<.001), the less meat (r=.35, p<.001), and the less other animal-based products they eat (r=.11, p=.015).

Discussion:
Adolescents have the potential to influence their parents towards a more sustainable diet in a reverse socialization process. This has important theoretical implications (usually, parents are theorized to influence their children, not vice-versa) and practical relevance, because adolescents could be one piece of a puzzle for better family and planetary health.
(M)eating like your friends: Meat consumption similarity, social selection, and social influence in friendship networks

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Background. Considering the social contexts of eating could help to accelerate social change towards more sustainable diets, but underlying moderators and mechanisms are not well understood. Based on the Social Contagion Theory, we examine the similarity of friends in their meat consumption (RQ1) and potential underlying processes that explain such similarity (RQ2). Building on and extending the Dyadic Health Influence Model we explore psychosocial mechanisms of social influence and the role of social interactions in meat consumption.

Methods. We conducted a longitudinal sociocentric social network study in a cohort of 100 first-year students. Measures include friendship ties, meat consumption, and various explorative variables. Analyses included multilevel ordinal regression analyses (RQ1) and stochastic actor-oriented models (RQ2).

Findings. Our three preregistered hypotheses are supported: Average meat consumption of friends positively predicts individual meat consumption (RQ1; b=2.06, p<.001). Both social selection (p=.044) and social influence (p=.049) processes explain this similarity in meat consumption. Explorative analyses show that the more often friends share meals, the more they attempt to actively influence each other’s meat consumption. Further, participants with friends who eat meat less often have higher self-efficacy to reduce their own meat consumption, more positive attitudes towards meatless diets, and their perceived norms are that others consume less meat.

Discussion. Students eat similar amounts of meat as their friends, which results from both social selection and social influence processes. Explorative findings provide insights regarding potential mechanisms and social interactions. This study underlines the importance of considering social contexts in eating behavior theories and interventions.
Acceptance of sustainability measures for environmental health protection

9:30 - 11:00  |  HS 2010

Acceptance of Carbon Capture and Storage: The role of core values, ambivalence, and information selection

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Carbon Capture and Storage (CCS) is a group of technologies that is increasingly considered as an option to fight climate change. However, CCS is controversial, because it has not only the benefit of reduced CO2 emissions but also potential negative implications for the environment and nature, including a delayed phase-out of fossil fuels and the risk of CO2-leakages. Because CCS has both potential positive and negative implications for the environment and nature, it could cause attitudinal ambivalence, especially in people with stronger biospheric values. We investigated the role of core values, attitudinal ambivalence and information selection for the acceptance of CCS in the Netherlands. We collected data (N=123) online among inhabitants of the Netherlands. We assessed participants’ core values before providing basic information on CCS and measuring initial attitudinal ambivalence towards CCS. Thereafter, participants were invited to select and read additional arguments in favour or against CCS, after which we measured again attitudinal ambivalence towards CCS and its acceptance. Data were analysed with regression and mediation analyses and mean comparisons. Unexpectedly, not only stronger biospheric values but also stronger egoistic values were associated with stronger attitudinal ambivalence towards CCS. Attitudinal ambivalence, in turn, was associated with information selection: the stronger participants’ ambivalence, the more arguments against CCS they selected. Partly mediated by the valence of selected arguments, initial attitudinal ambivalence explained the final acceptance of CCS. Moreover, attitudinal ambivalence decreased after reading the additional arguments about CCS. We discuss the implications of our findings for risk communication and value research.
Perceived distributive fairness and acceptance of mandated on-site wastewater treatment in Bengaluru, India

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In Bengaluru, as in many places worldwide, rapid urban population growth and increasing water scarcity raise the need for reducing potable water consumption and for complementing the prevalent centralised wastewater treatment systems with alternative systems. One solution are on-site systems that treat wastewater for non-potable reuse near its source of generation. To increase the use of on-site systems, the local government of Bengaluru issued a policy mandating their adoption for part of the population, while the rest of the population continues using the centralised system. This might affect the distributive fairness of the policy and of water services, i.e. the fair distribution of their costs, risks, and benefits. This potential lack of distributive fairness might affect public acceptance of the policy and consequently the chances of a successful implementation. To test this assumption, we conducted an online survey with residents of Bengaluru who are covered by the policy and residents who are not covered (N=352). We assessed the perceived distribution of the policy’s costs, risks, and benefits among different groups of society as well as perceived fairness and acceptance of the policy. Regression analyses show that for people covered by the policy, better outcomes for the self, the environment, and future generations explain higher perceived fairness. For people not covered by the policy, better perceived outcomes for residents who are covered by the policy explain higher perceived fairness. Moreover, in both samples, higher perceived fairness explains policy acceptance. We discuss implications of our findings for the design of environmental policies.
Behaviour change interventions on individual and community level improve caretaking and use of safe-water infrastructure

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To mitigate adverse health effects from water-borne disease, ensuring safe water for all is one of the greatest challenges of our time. Water safety relies on the functionality of shared infrastructure, good management by communities and use by individuals. However, infrastructure often fails or is not used long term, in part because community and individual level behaviour change is insufficiently tackled. Preliminary evidence indicates that, on community level, psychological ownership (i.e. the feeling that this is my infrastructure), and on individual level, habit interventions might promote behaviour change. For the first time, we test the effectiveness of these interventions and their combination.

In this cluster-randomized controlled trial in rural India, 64 communities (N=1969), were randomly assigned to community (psychological ownership), individual (habit) or a combined behaviour change intervention alongside the installation of new safe water infrastructure. Preregistered outcomes included attitudes towards caretaking, use and functionality of safe water infrastructure as well as mediating factors. In exploratory analyses, we additionally researched moderators of the intervention (e.g. socio-economic status, social identity).

Generalized estimating equations showed best outcomes for the combined community and individual level intervention: use of safe water infrastructure increased, stewardship attitudes were fostered, and greater optimism was expressed about the future functionality of the infrastructure. None of the interventions improved drinking water quality. Psychological ownership mediated the intervention effects. We identified relevant moderating factors.

These results suggest that behaviour change interventions to facilitate sustainable shared water infrastructure should target both communities and individuals jointly to achieve maximum effectiveness.
Acceptability and effects of a school-based program for climate change education in Germany

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Background: School-based programmes targeting climate change education may support behavioural and psychological processes required to address climate change and improve students’ well-being. However, there is lack of evidence of its acceptability and effectiveness. The ‘Public Climate School’ (PCS) is an annual school programme conducted as a project week in selected schools in Germany. This pilot study aims at examining the acceptability and effects of the PCS.

Methods: We recruited 158 students from 11 classes and 5 schools in Germany (grades 7 to 13) for a cluster-controlled pilot study. While 4 classes were allocated to the waitlist control arm, 7 classes from the intervention arm attended the PCS between 22-26 November 2021. PCS included live lessons on YouTube, daily challenges, workshops, and peer exchanges. We assessed theory-based behavioural and psychological outcomes with online surveys at both baseline and follow up. In addition, we conducted qualitative interviews with three students and two teachers.

Findings: 125 students (dropout rate: 21%) completed our surveys. Multilevel models revealed non-significant between-group differences for most outcomes, except for behaviours to enlarge one’s ecological handprint (e.g., post on social media; p=.040) and perceptions on environmental norms (p=.001) with superior levels in the PCS group, respectively. The qualitative interviews revealed a high acceptability, but also suggested that school members should be involved more intensively in the development of future PCS programmes.

Discussion: This study showed that the PCS was well accepted by students and teachers. Effect sizes can be used to determine the sample size for future studies.
Effects of a university-wide climate challenge program: A one-arm pilot study

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In 2019, the Freie Universität Berlin (FUB) declared the “climate emergency”, leading to the objective of empowering ca. 40,000 university members to improve their ecological footprint and handprint. This pilot study aimed to examine feasibility, acceptability, and effects of a university-wide climate challenge program to foster nutrition- and mobility-related behaviour. In a one-arm intervention study, FUB members completed daily nutrition and mobility challenges (e.g., eat vegan for a day; sign a petition for mobility transition) across one week and answered questionnaires on daily behaviours contributing to footprint and handprint before, during, and after the intervention week. A total of 207 FUB members (77% female; Mage: 35 years) consisting of students (38%) and employees (62%) participated and mostly gave positive feedback on the program. Carbon footprint equivalents of nutrition and mobility behaviours did not change significantly over time. Post-hoc analyses showed that car driving significantly decreased between the weeks before (M=7.2 km per day) and after (M=4.4 km per day) the intervention (d=0.20). Behaviours contributing to handprint occurred rarely in the baseline week (nutrition: M=0.55; Mobility: M=0.40 days per week) and did not change significantly over time. This pilot study showed that a university-wide climate challenge program is well accepted among university members, however, recruitment strategies can be refined to enrol a bigger (representative) sample. Some evidence for effects on behaviours contributing to footprint was found, which was not the case for handprint. University-level measures should be implemented to provide more opportunities to execute behaviours contributing to handprint.
Theories about making health services more inclusive


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Background:
Uptake of the COVID-19 booster vaccine among ethnic minority individuals (EMIs) has been lower than in the UK general population. However, little research has investigated psychosocial factors contributing to COVID-19 booster vaccine hesitancy in this population. We examined COVID-19 booster vaccination intention in EMIs in North East England, using Protection Motivation Theory (PMT) and COVID-19 conspiracy beliefs.

Methods:
We used a mixed-methods approach, employing an online survey and semi-structured interviews. PMT constructs, conspiracy beliefs and demographic factors were assessed in 64 EMIs (33 females, 31 males; m = 31.06, SD = 8.36). 42.2% had received the booster, 57.6% had not. 16 survey respondents were interviewed online to further explore factors affecting booster vaccine acceptance. Multiple regression and thematic analysis were employed.

Findings:
Perceived susceptibility to COVID-19 predicted booster vaccination intention, with higher perceived susceptibility being associated with higher intention to get the booster. Additionally, higher conspiracy beliefs were associated with lower intention to get the booster dose. The interviews showed that barriers to booster vaccination included time constraints and a perceived lack of practical support when experiencing side effects. There was limited vaccine confidence, with individuals seeing it as lacking sufficient research. Participants also spoke of medical mistrust due to historical events involving medical experimentation on EMIs.

Discussion:
PMT and conspiracy beliefs predicted COVID-19 booster vaccination in EMIs. To help increase vaccine uptake and thereby address health inequalities, community leaders need to be involved in addressing people’s concerns, misassumptions, and lack of confidence in COVID-19 vaccination.
Stigma Accumulation Among People Living With HIV: A Role of General and Relative Minority Status

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Background: HIV/AIDS is a disease associated with strong stigma, which negatively impacts the quality of life of people living with HIV (PLWH) and poses a barrier to effectively addressing the HIV epidemic globally. Minority stress theory suggests that stigma accumulation is more likely to occur among specific groups. This study aimed to verify this hypothesis in relation to selected sociodemographic factors that define potential minority status, including sexual orientation, gender, and AIDS diagnosis.

Method: The participants were 663 adults with medically confirmed HIV infection, whose level of HIV/AIDS stigma was assessed using the Berger HIV Stigma Scale, and sociodemographic and clinical data were obtained through a self-report survey.

Findings: The main effect was revealed only for sexual orientation and total stigma; those with heterosexual orientation declared higher levels of total stigma than those with other sexual orientations. For the subscale of disclosure concerns, the interaction of gender and sexual orientation was observed: the highest level of stigma was reported by heterosexual women, while there was no such relationship for men. This result was modified when AIDS diagnosis was added to the interaction.

Discussion: There is a cumulative effect of minority statuses, rather than main effects of each status separately. Moreover, each status should be analyzed from at least two perspectives: general (compared to the general population) and relative (compared to the population in question). The results suggest that the individual combination of minority statuses is important for understanding HIV/AIDS stigma and should be considered when designing interventions to reduce it.
Willingness of people with HIV to engage with HIV cure research: Perceived necessity and concerns

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Background: As the developments of HIV cure are gaining prominence, engagement of people with HIV (PWHIV) with HIV cure becomes crucial, providing PWHIV the opportunity to shape research priorities and processes. This study aims to better understand willingness of PWHIV to engage with HIV cure research and how this is related to awareness, importance and meaning of HIV cure.

Methods: We conducted semi-structured interviews with 30 PWHIV from diverse backgrounds. Participants were recruited through the Dutch HIV Association, HIV specialist nurses, and snowball sampling. Thematic data analysis was undertaken.

Findings: We found that willingness to engage was driven by PWHIVs perceived necessity and concerns regarding an HIV cure. For most PWHIV HIV cure was not a necessity. The perceived necessity was primarily shaped by experiences of living with HIV. Participants who experienced more HIV-related symptoms, adverse impacts, or had lower perceived control of their HIV-infection expressed a stronger need for a cure. Perceived concerns were predominantly influenced by HIV-treatment experiences, general beliefs about medicines, and HIV cure knowledge. Participants with positive HIV-treatment experiences, including care providers, and clinical trial participation, were more willing to engage. Knowledge of potential HIV cure strategies was limited for most participants, making it difficult to imagine engagement with HIV cure research.

Discussion: Most PWHIV did not prioritize HIV cure. This was strongly influenced by their perceived necessities and concerns, including HIV cure knowledge. More communication about HIV cure strategies is recommended so that we can better understand PWHIV’s willingness to engage with HIV cure research.
Stakeholder perspectives on implementation of e-mental health interventions for caregivers of adults with kidney conditions

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Background: E-mental health interventions for caregivers can be effective, but challenges often arise when trying to implement into real-world practice. To understand these challenges, this study aimed to explore stakeholders’ views on the implementation and design of e-mental health interventions for caregivers of adults with kidney conditions.

Methods: Semi-structured interviews with 18 professional stakeholders working with caregivers and/or people with kidney conditions in healthcare and community settings in the United Kingdom were conducted. Interviews explored topics including the implementation setting, barriers and facilitators to implementation, and intervention design. Interview transcripts were analysed using content analysis with deductive coding using the Consolidated Framework for Implementation Research, and inductive coding.

Findings: Stakeholders acknowledged the importance of providing mental health support to caregivers. However, at a societal level caregivers tended to be undervalued and are a low priority. Stakeholders expressed equity and safeguarding concerns regarding e-mental health interventions, desiring an intervention accessible to people with different health and digital literacy levels at no cost. Building awareness and knowledge about the intervention among many professionals and having simple intervention referral pathways were important implementation facilitators.

Discussion: Provision of e-mental health interventions for caregivers is endorsed by stakeholders. However involving stakeholders in implementation beyond promoting and referral of caregivers to the intervention would be challenging without additional resources. Factors important for intervention design and implementation identified by stakeholders (e.g. safeguarding) must be considered during intervention development to design e-mental health interventions optimized for implementation into real-world practice.
Commissioners’ views of implementing virtual wards in England: a qualitative exploration of benefits and challenges

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Background: Avoidable hospital admissions and prolonged in-patient stays cause patients distress, limit hospital bed capacity, and are costly to the NHS. Virtual wards are being introduced in England as a new way of delivering care to patients who would otherwise be hospitalised. Using digital technologies, patients can receive acute care, remote monitoring, and treatment in their own homes. This research aimed to explore the acceptability and feasibility of implementing virtual wards in England from commissioners’ perspectives.

Methods: Semi-structured interviews were conducted with 20 commissioners employed by the NHS in various geographic regions of England. Thematic analysis was conducted, structured using the Framework approach and informed by the Consolidated Framework for Implementation Research.

Findings: Preliminary findings indicate high levels of enthusiasm for virtual wards, driven by a strong desire for patient-centred care. Anticipated benefits included both patient-level (e.g. improving patient experience) and system level (e.g. reducing unmet demand) outcomes. Successful implementation was considered contingent on having motivated and passionate clinical leads. Key challenges to implementation included: recruitment difficulties; liability concerns; lack of interoperability of tech and time-consuming procurement procedures; unrealistic timescales to evidence effectiveness; and restrictive parameters of success. There was further discussion around suitability of patients and the risk of worsening health inequalities.

Discussion: Virtual wards have the potential to reform patient-centred care though whole systems change and digital transformation. However, for the model to work, commissioners need more time to evidence impact, more specifications around tech procurement, and more focus on patient-centred measures of success.
Factors affecting patient uptake and engagement with a multibehavioural digital prehabilitation intervention.

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Background

Digital prehabilitation can engage patients unsuited to face-to-face support. Understanding behavioural needs regarding Capability, Opportunity and Motivation facilitates programme designs likely to achieve better uptake, adherence and preoperative change. We undertook a mixed-method systematic development process to co-design a digital multibehavioural prehabilitation programme (iPREPWELL) using the Behaviour Change Wheel (BCW).

Methods

Following full ethical approval, a purposive sample of perioperative patients were recruited at 2 NHS centres. Participants completed COM-B questionnaires informing a semi-structured interview to identify behavioural needs. This encompassed: Physical activity, smoking, alcohol, nutrition, sleep and psychological wellbeing. Thematic analysis using the theoretical domains framework (TDF) informed a series of co-design workshops concerning: Information delivery, goal setting, progress tracking and feedback mechanisms linked to the behaviour change taxonomy.

Findings

24 participants were recruited reflecting UK major surgical cohorts. Key capability themes included: Emphasis of the benefits of preoperative behaviour change and how to attain them, presented audiovisually, by perioperative health care professionals (HCPs). Opportunity themes emerged around social support including HCP-patient interaction and peer-support mechanisms. Regarding motivation, participants desired to retain autonomy with continual feedback on progress. Maintaining compassion and a non-judgemental approach was emphasised.

Discussion

We undertook a novel theory and evidence informed co-design process and original application of the BCW in the prehabilitation context. The data collected were incorporated with the clinical evidence-base into the iPREPWELL programme design. The covid-19 pandemic has focussed the need for digital prehabilitation interventions. iPREPWELL is approaching feasibility testing at in line with the MRC framework.
Can the local food environment be changed to promote plant-based consumption? Interviews with food outlets.

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Background: The current western diet, which contains relatively high numbers of animal-based products compared to plant-based products, negatively impacts human health and sustainability. The food environment is an important lever to stimulate more plant-based diets. This study explores what local food outlets (e.g. supermarkets, restaurants, canteens) are able and willing to do to stimulate plant-based choices and what they perceive as barriers and facilitators.

Methods: Twelve semi-structured interviews with managers of various food outlets in a medium-sized Dutch city were executed. Interviewees were asked about their actual and desired practices around the 4Ps (product, price, promotion and position) and portion size of animal versus vegetarian and vegan options, including underlying factors. A multi-stage thematic analysis was employed, using combined deductive and inductive coding.

Findings: Most interviewees indicated that the taste of plant-based options is a barrier to offering plant-based choice options, even when they have no to little experience with tasting these options. Interestingly, most outlets had not thought of natural plant-protein sources (e.g. nuts and legumes) as animal protein replacements. Further, most outlets were held back by a perceived absence of demand for plant-based options, by the fear of patronizing consumers and by a limited sphere of influence to realize changes. Still, most see the need for more plant-based consumption.

Discussion: The findings elucidate the numerous barriers that food outlets encounter in making environmental changes towards more plant-based dietary options. Although food outlets currently perceive mostly barriers, the findings also suggest opportunities for feasible change that deserve further exploration.
European food-based dietary guidelines for children and adolescents – Scoping Review on recommendations and methodology

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Background: Food-based dietary guidelines (FBDGs) are essential to promote a healthy and sustainable diet at the population level and to direct policy measures (e.g., to define standards for institutionally served meals, for example in child care). Country-specific FBDGs can vary in their recommendations and derivation methods. However, European FBDGs for children and adolescents have not been analyzed and compared thoroughly.

Methods: We systematically searched the FAO FBDG-repository, scientific databases, and websites of health ministries and nutrition societies to identify FBDGs for children and adolescents (ages 1-18) in 51 countries. After screening 4884 scientific articles and 167 additionally identified documents, 109 documents were included in the scoping review based on predefined selection criteria.

Findings: Of the countries included, 82% (42/51) provide some form of FBDG for children and adolescents. About 67% (28/42) of those include age-specific recommendations. 45% (19/42) issued a scientific report, and only 17% (7/42) published the content or developmental process in peer-reviewed journals. FBDGs substantially differed in the clustering of food groups, provision of visual food guides, and the precision of quantification (e.g., recommending grams, cups, or palms).

Discussion: Many European countries provide insufficient information regarding the developmental process of FBDGs for children and adolescents. There are substantial differences in terms of recommendations and methodology. Further analyses will offer insights into the inclusion of sustainability considerations (e.g., recommendations of plant-based diets and communicated health effects). As unbalanced or restricted diets (e.g., vegan diets) can induce health risks for children, it is essential that FBDGs provide evidence-based information.
Perspectives on healthy eating of adult populations in high-income countries: A qualitative synthesis

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Background: An extensive understanding of how individuals currently perceive healthy eating is essential for developing food policies and dietary recommendations that improve the health and well-being of populations. The purpose of this qualitative evidence synthesis was to systematically map the views and understandings of healthy eating and a healthy diet, focusing on how foods are classified as healthy and unhealthy by the general adult population in high-income countries.

Methods: A systematic search of four electronic databases was conducted and yielded 24 relevant primary qualitative studies of generally healthy, community-dwelling adults.

Findings: Thematic synthesis of the included studies identified three analytic themes: constructions of healthy and unhealthy eating, considerations on dietary recommendations and meanings attached to food and eating. Study participants generally had a good understanding of what constitutes a healthy and unhealthy diet according to dietary recommendations, but those of lower socioeconomic status demonstrated gaps in nutrition knowledge. Participants expressed diverse opinions on dietary recommendations, including scepticism and a lack of trust. Food and eating were associated with various meanings, including pleasure, guilt, and using food as a means to cope with stressful situations. Moral, health, and cultural considerations also played a role in dietary behaviours.

Discussion: The findings suggest that improving population diet requires considering how dietary recommendations are phrased and communicated to ensure that healthy eating is associated with pleasure and immediate well-being. This review provides novel insights for developing consumer-oriented, practicable, and acceptable food policies and dietary recommendations that effectively improve population health and well-being.
The effect of conspiracy mentality on the level and stability of subjective well-being

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Background: Past research found conspiracy beliefs and mentality to be associated with psychological well-being. This study investigated the prospective effects of individual differences in conspiracy mentality (CM) on the level and intraindividual stability of subjective well-being (SWB). Following Beck’s cognitive theory, we hypothesized that CM negatively affects the level of SWB.

Methods: A total of 1731 participants (born 1919-1996; 52% female) of the German Socio-Economic Panel completed the Conspiracy Mentality Questionnaire in 2013 and rated one item measuring cognitive well-being as well as four items measuring affective well-being annually from 2009 to 2019. Level and stability of SWB were estimated using latent growth modeling.

Findings: Adjusting for the concurrent level and past stability of SWB, we found a significant negative effect of CM on both the level of affective (β = -1.42, p = .004) and cognitive well-being (β = -1.23, p = .014), confirming the hypotheses. Notably, the concurrent level of SWB was positively associated with CM (affective well-being: β = 1.51, p < .001; cognitive well-being: β = 0.54, p < .001). We did not find a significant effect of CM on the stability of SWB but significant positive effects of the past stability of SWB on CM (affective well-being: β = 3.44, p = .006; cognitive well-being: β = 1.32, p = .033).

Discussion: This study reveals detrimental prospective effects of CM on SWB. The found effect of intraindividual stability of SWB on CM suggests that individual trajectories of SWB may affect the individual level of CM.
Insecure Rivalries: Attachment, Competition and the Risk to Mental Health

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Perceiving oneself to be performing poorly in a competitive environment heightens the risk of mental health difficulties, including social anxiety, depression, self-harm and suicidal ideation (Aderka et al., 2009; Wetherall et al., 2019). It is therefore important to understand what makes some individuals particularly sensitive to relative social standing. In this research, we explore whether attachment-theoretic working models (Bowlby, 1969) can help explain this tendency, which we operationalise as the frequency of social comparisons and the magnitude of their impact on self-esteem. People higher in attachment anxiety are more likely to feel inferior to others (Irons & Gilbert, 2005), and to believe that they must achieve and compete to be accepted (Gilbert et al., 2009). In a cross-sectional study, participants (n=163, 82% female) answered online self-report questionnaires. Using hierarchical multiple regression, we found that attachment anxiety positively predicted social comparison orientation ($r^2 = .11$), when controlling for attachment avoidance and self-certainty. In our second, experimental study, undergraduates at British universities (n=338, gender-balanced) completed baseline measures, then were randomly assigned to an upward comparison or a control condition, and reported on their resultant state self-esteem. Contrary to our hypothesis, attachment anxiety did not moderate the effect of this comparison on self-esteem. While attachment anxiety predicts more social comparisons, it does not seem to increase the impact of upward comparisons, at least in this online experimental setting. We are currently conducting an experience sampling study to determine whether this moderation effect will be observed in real-world settings, especially when around close others.
Did health fare better than the economy? Comparing individual and national optimism during COVID-19

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Background:

The COVID-19 pandemic affects both the economy and health, leading to fierce debates about the necessity of protective measures. We compare the perceived severity of impacts on (a) health and the economy (domain-effect) between (b) different targets (i.e., oneself, one’s own country, the world) to investigate individual and national optimism (target-effect). Additionally, we examine effects for (c) different countries and time periods.

Methods:

Between April 2020 and January 2022, we collected 26 samples as part of the “EUCLID” project (https://euclid.dbvis.de). In total, 78,498 participants (Mage=46.5±15.9; 51.1% women) from the US, UK and Germany answered an online questionnaire. Multilevel models were used for analyses.

Results:

Overall, the pandemic impact was perceived as severe (M=3.6±1.1, range:1-5). Yet, compared to their national population, 55.6% and 66.0% of the respondents believed that their health and economic situation was less affected (bself-country=1.13, t(313172.75)=311.60, p<.001). Individual optimism was even greater when comparing personal with global impacts (health: 66.0%; economy: 67.5%; bself-world=1.18, t(313264.63)=325.67, p<.001; pseudo-R²=0.44). Conversely, national optimism was less common (i.e., country-world; health: 33.5%, economy: 15.9%), and importantly, national and global economic impacts were rated as comparable (M=0.1±0.6). Similar patterns emerged for the US, UK and Germany and across time periods.

Conclusions:

While most participants were individually optimistic, especially regarding the pandemics’ economic impact, they viewed the impact for their nations’ much more pessimistically. Despite the US, UK and Germany being among the largest economies in the world, most participants believed their national economies to be as severely or more affected than the global average.
Digital interventions for depression in Arabic language: implementation for public use and into routine care

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Migrants face many barriers towards mental health care. On top of language difficulties, pathways to care and cultural concepts of distress may differ from their homecountry. Digital mental health interventions are effective, scalable, and can bridge linguistic barriers. However, their implementation into routine care is in its infancy. This contribution reflects upon three years of implementation of two digital interventions for depression in Arabic language in Germany, comparing acceptability, adoption, and penetration of the target population to the German versions.

An effectiveness-implementation type-3 hybrid design was utilized to evaluate the implementation of two previously established digital interventions. Usage and log data (pageviews, time on page, conversion rate from invitation to completed registration, usage behaviour) of the Arabic and German language versions were analysed (Mann-Whitney U-test, chi-squared test), including over 600K unique page visits per year and over 20K invited users.

The acceptability (time on page, usage behavior) of two digital interventions for depression in Germany was comparable between German- and Arabic-speaking users. The penetration of the target populations by the iFightDepression® website, providing information about depression to the public, was nine times lower among Arab migrants in Germany than native Germans (89 vs. 834 unique pageviews/ 100.000). The adoption of the iFightDepression® tool, offering guided self-management for depression, was lower among Arab than German users (conversion rate from invitation to completed registration: 30.8% vs. 59.0%, p<.001).

Our results show that uptake of digital interventions in migrant populations needs to be facilitated.
An implementation plan for delivering mental health screening and digital CBT in inflammatory bowel disease

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Background: Demand for psychological support for patients living with inflammatory bowel disease (IBD) is increasing, but provision to deliver this within services is limited. There is a need to 1) identify patients with IBD experiencing psychological distress and 2) readily provide scalable psychological support within existing service resources. As part of an implementation and feasibility study, we aimed to develop an implementation plan for delivering mental health screening and a digital cognitive behavioural therapy (CBT) programme (COMPASS-IBD) for psychological distress in routine gastroenterology care.

Methods: A mixed-methods approach informed the implementation plan, including reviewing existing literature, stakeholder engagement, clinical observations, and a preliminary staff implementation questionnaire utilising the Normalization MeAsure Development (NoMAD) and Non-adoption, Abandonment, and challenges to Scale-up, Spread, and Sustainability framework (NASSS-CAT) tools. Implementation targets were mapped to Normalization Process Theory (NPT). Relevant implementation strategies were selected using the Expert Recommendations for Implementing Change (ERIC) tool.

Findings: Three key implementation plan objectives were identified: 1) understanding key contextual barriers and facilitators, 2) utilising theory and implementation strategies to address these, and 3) iterative implementation, assessment, and adaptation. The most commonly utilised ERIC strategies were building a coalition, assessing readiness, and conducting educational meetings. Selected ERIC strategies mapped to all four NPT constructs, with the most common sub-constructs being contextual integration, skill set workability, and reconfiguration.

Discussion: Effective implementation is an iterative process requiring a range of evidence and theoretical underpinning to target contextual barriers. This implementation plan is being continuously adapted and assessed in the ongoing COMPASS-IBD study.
Mental health interventions using non-specialists and digital technology in low-middle income countries: Preliminary results of a systematic review

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Introduction: This systematic review investigates the effectiveness of combining non-specialist approaches with digital technology in reducing the mental healthcare gap (MHC) in low- and middle-income countries (LMIC).

Methods: Literature searches were conducted in four databases, three trial registries, and using forward and backward citation searches. Primary studies on mental health interventions delivered by non-specialists, including any form of digital technology and conducted in LMICs, were eligible for inclusion. The outcomes were: (1) the mental health of intervention receivers and (2) the competencies of non-specialists to deliver mental health interventions. Data were expressed as standardized effect sizes (Cohen’s d) and narratively synthesized. Risk-of-bias assessments were conducted using the Cochrane risk-of-bias tools.

Results: Of the 19 studies included in the review, digital technology was mainly used in interventions where the non-specialist was the primary deliverer of treatment for common mental disorders. Competencies of non-specialists were improved with any digital training (small effect sizes: d<0.5, n= 4 studies, 398 participants), while not enough evidence was found on digital supervision. The mental health of receivers improved if interventions were delivered by non-specialists supported by any digital technology (medium to large effect sizes: d>0.5, n=6, 1813) or digitally with non-specialist involvement (small to medium effect sizes: d<0.8, n=8, 1929). However, the certainty of the evidence was mostly poor.

Conclusion: In conclusion, while digital technology holds promise in training and supporting non-specialists, further research is needed to fully assess its clinical relevance and determine its various clinical roles in reducing the MHC gap in LMICs.
Digital behaviour change interventions - From individual-level change to population-level impact

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Digital behaviour change interventions can improve population health because of reach and the potential to deliver evidence-based individualised behaviour change content. On an individual level, digital behaviour change interventions can be as efficacious as face-to-face interventions. However, there are substantial individual and group-based differences in reach, engagement, retention, and the effectiveness of intervention components as well as specific behaviour change techniques. It has also become evident how such tools can increase health inequities—for example, limited access to digital infrastructure, lack of high-quality data that would allow developing targeted measures for minorities, or insufficient involvement of the addressed population in the development could all decrease the reach of and the engagement with digital interventions. In order for digital behaviour change interventions to not only benefit some – usually better-off - individuals but also work equally for all, there is a need to look beyond individual-level indicators of intervention effectiveness and to consider digital determinants of health inequities before and during developing and when evaluating digital behaviour change interventions.

This state-of-the-art talk will present an overview of digital determinants of health inequities using an adapted version of the socioecological rainbow model (Dahlgren & Whitehead). We will further highlight the potential and pitfalls in utilizing digital health behaviour interventions to support the WHO’s Essential Public Health Operations (EPHO). We will present a novel Digital Public Health Intervention Framework outlining relevant development and evaluation dimensions based on a comprehensive scoping review of existing frameworks and using an adaptation of the Health Technology Assessment (HTA) framework. This framework can be a useful tool in the development of efficacious and sustainable population-based digital behaviour change interventions and the specification of appropriate evaluation dimensions. We will highlight the usability of the framework with use cases from our recent work in the Leibniz ScienceCampus Digital Public Health Bremen.
Background. WHO defined antimicrobial resistance (AMR) as one of the top global health challenges. One of the main causes of AMR is the inappropriate use of antibiotics: this phenomenon is often linked to factors of a different nature - not just pharmacological - that affect the prescribing process. Thus, the aim of this study is to synthesize qualitative evidence regarding non-pharmacological factors that influence antibiotic prescribing.

Methods. Therefore, a meta-synthesis was conducted - according to the approach of Sandelowski and Barroso (2006) - on the following databases: Scopus, Web of Science, PubMed, Embase, Cinhal, and ProQuest. The quality of the studies was assessed using the Critical Appraisal Skills Program.

Findings. Thematic analysis of the 72 included articles identified impacting factors at different levels: (1) individual factors (physician's emotional state and fear of the consequences of not prescribing, experience and knowledge of guidelines; lifestyle, expectations, level of self-care, and emotional state of the patient/caregiver); (2) communicative-relational factors (patient-centered vs disease-centered approach); (3) organizational factors (organizational culture, professional hierarchies, hidden curriculum); and (4) socio-cultural factors (level of awareness about AMR, guidelines, and national antibiotic stewardship plans). These factors and levels are interdependent and influence - depending on their articulation - the prescribing trajectory.

Discussion. These findings confirm the crucial role of psychosocial aspects in the antibiotic prescribing experience, with particular emphasis on communicative-relational dimensions. Moreover, these findings could help design antibiotic stewardship strategies that also consider non-pharmacological factors and conceive of the AMR phenomenon "beyond the microscope".
Women and alcohol consumption at midlife: Social meanings and life circumstances.

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Background: Over the previous four decades, women in Western countries have experienced increased economic and social freedoms alongside increasingly deregulated alcohol environments. Currently, women at midlife are drinking at levels that pose acute and long-term risks. Evidence shows that even in low amounts alcohol is a risk factor for poor health outcomes, including cancer and heart disease. However, women also note the pleasures and benefits from alcohol consumption. We need to understand the roles and meanings alcohol has in women’s lives, considering their social, cultural and economic environments.

Methods: 17 interviews and 8 focus groups (n=50) were undertaken with women aged between 35-60-years old in Aotearoa New Zealand who self-identified as past or present drinkers. Information on their life circumstances and drinking behaviours were also collected. Transcripts were analysed using critical realist discourse analysis.

Findings: The women utilised three main discourses in accounting for their alcohol use: ‘alcohol as enhancer’, ‘alcohol as enabler’, and ‘knowledge and awareness’. These referenced wider social and cultural meanings around idealised femininities, individual responsibility for health and wellbeing, and appropriate alcohol consumption. Feelings and sensations such as stress, pleasure, and remorse prior to, because of, and after drinking also co-produced drinking meanings and experiences.

Discussion: The findings provide insight into the realities of women’s everyday lives and how these shape alcohol-related behaviours, experiences and views. The research also developed theoretical understanding that can be used in future alcohol research and policy to reduce consumption and improve health outcomes in diverse groups of women.
Weight scarring: The psychological impact and mortality outcomes associated with past obesity

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Background: This study tested 1) a new “weight scarring hypothesis” of obesity suggesting that past obesity may be associated with long-lasting psychological impacts that persist even after weight loss, and 2) that this psychological scarring may in part explain why obesity is associated with premature mortality.

Methods: Data were from the National Health and Nutrition Examination Survey (NHANES) (n=29,047) and the Health and Retirement Study (HRS) (n=11,998). Past obesity was defined based on maximum lifetime weight in NHANES and the highest weight from past study waves in the HRS. Across both studies, current depressive symptoms were analysed. In addition, 10 psychological measures were combined into an index of impaired psychological well-being in the HRS. Linear regression, Cox-proportional hazard regression, and causal mediation models were used.

Findings: Past obesity predicted greater depressive symptoms after controlling for current weight status and in analyses limited to those who were no longer classified as having obesity in both NHANES (β = 0.17; 95%CI: 0.13, 0.22) and HRS (β = 0.20; 95%CI: 0.08, 0.31). In the HRS, past obesity was associated with a combined index of impaired psychological well-being (β = 0.16; 95%CI: 0.05, 0.27). Past obesity increased the risk of early mortality by around 30% in both studies, irrespective of current weight status. Depressive symptoms and impaired psychological well-being partly mediated the association between past obesity and the risk of premature mortality.

Discussion: Past obesity may be psychologically ‘scarring’ and the psychological effects associated with past obesity may increase risk of premature mortality.
Dilemmas of Well-Being in Neoliberal Working Life

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Workplace wellness is a cultural site that is heavily influenced by neoliberal understanding of health that links together well-being and productivity as well as shifts the responsibility of health to individuals themselves. Research about the psychological dimensions of neoliberalism has concentrated on the construction of neoliberal subjects characterised by entrepreneurialism and individualism.

However, neoliberalism is not a cultural monolith but instead a complex assemblage of practices and discursive resources negotiated in local contexts. Neoliberalism, especially in its current crisis-prone state, is characterised by contradiction, transformation, and conflict. In the ongoing research, I inquire how the fragmented and mutating nature of neoliberalism is reflected in discourses of workplace well-being. How do workplace well-being professionals negotiate the ideological dilemmas around health and well-being in neoliberal working life?

The analysis is based on 19 interviews where workplace well-being professionals talk about their field. I used discourse analysis and discursive psychology to analyse the data, drawing from the perspective of ideological dilemmas. Workplace well-being professionals critique many features of neoliberal understanding of health while also contributing to the construction of entrepreneurial neoliberal subjectivity. Negotiation of individual versus collective responsibility of health forms a key ideological dilemma in their reflections. The preliminary results highlight the dilemmatic nature of the current form of neoliberalism, where the entrepreneurial subject is confronted with the immense demands of precarious working conditions.
Self-isolation and psychological wellbeing in the context of infectious disease

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Background: Isolation is the short-term separation of those who are infectious from those who are not. During the COVID-19 pandemic, self-isolation was one of the public health measures used to prevent the spread of infection. It is likely that this measure will be used in future outbreaks, as it was for mpox in 2022. Isolation can have an impact on psychological wellbeing, but the specific impact (direction and magnitude) is unclear.

Methods: We searched Medline, PsychINFO, Web of Science, pre-print servers, and grey literature for studies reporting primary data investigating the impact of self-isolation on psychological wellbeing. Studies published between January 2020 and December 2022 were included. Results were synthesised in a systematic literature review following PRISMA guidelines.

Findings: We found 23,626 articles and included 167 in the review. Using the Cochrane recommended Risk of Bias tools, the literature showed considerable heterogeneity across studies. Self-isolation was associated with negative, and some positive, impacts on wellbeing, which varied depending on the psychological and sociodemographic characteristics of the sample. Those with inadequate access to support reported a greater impact on their wellbeing. Interventions targeting the impact of self-isolation on psychological wellbeing were rare.

Discussion: Due to the scarcity of data on wellbeing interventions, future research should prioritise translating existing knowledge of interventions for people isolating over extended periods to the short-term self-isolation context. When implementing self-isolation directives in the future, public health officials should prioritise those with pre-existing mental health needs and others with reduced access to the resources they need.
Identifying stress-, commitment-, and motivation-related predictors of change in athlete burnout symptoms over time

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Athlete burnout is characterised by physical/emotional exhaustion (PEE), reduced accomplishment (RSA) and sport devaluation (SD). Research provides support for stress-, commitment-, and motivation-based theories of burnout, but empirical efforts to integrate these approaches are lacking. This longitudinal study aimed to identify the factors that predict changes in burnout when these perspectives are considered alongside each other.

Participants completed the Athlete Burnout Questionnaire, Sport Motivation Scale-II, Perceived Motivational Climate in Sport Questionnaire-2, Perceived Stress Scale-10, and sport/demographic questions at 6 timepoints over 21-months. 207 athletes responded to 2 timepoints and were included in the analysis. Variables were integrated as predictors of change in burnout symptoms using latent growth modelling. Backwards elimination was employed to achieve parsimonious models.

Change in PEE was predicted by training demands ($\beta = .37$, $p < .01$), amotivated regulation ($\beta = .27$, $p < .05$), external regulation ($\beta = -.27$, $p < .05$), personal investment ($\beta = -.26$, $p < .05$) and elite participation ($\beta = -.29$, $p < .05$). Change in RSA was predicted by elite participation ($\beta = -.32$, $p < .05$) and constrained commitment ($\beta = -.57$, $p < .01$). Changes in SD was predicted by number of teams represented ($\beta = .25$, $p < .05$).

Findings point to key risk and protective factors for burnout from across theoretical perspectives. As such, this study provides novel empirical support for an integrated approach to the study of burnout, and suggest this can provide more comprehensive insight into the development of this complex, multidimensional syndrome.
The use of behavioural science within public health: A cross-sectional survey of UK local authority

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Background: In the UK, local authorities are responsible for public health and are expected to utilise behavioural science disciplines, including health psychology, to understand and support health behaviour change. A previous qualitative study undertaken by the authors indicates that behavioural science use by local authorities may be limited and impacted by a range of psychosocial factors. This study aims to build upon these findings by assessing behavioural science use and its determinants nationally across UK local authorities.

Methods: A quantitative cross-sectional survey design will be adopted. An adapted version of the Determinants of Implementation Behaviour Questionnaire will be completed by 410 local authority public health practitioners, recruited via purposive sampling. Following descriptive statistics, hierarchical multiple regressions will assess the relationship between behavioural science use and its determinants within this population.

Expected results: It is anticipated that the overall use of behavioural science will be low across UK local authorities. It is further expected that the successful use of behavioural science will be strongly predicted by organisational influences as well as having the knowledge and skills in how to apply behavioural science.

Current stage of work: Data collection to start imminently pending anticipated confirmation of ethical approval.

Discussion: This study will enable a more comprehensive understanding of UK local authorities' use of behavioural science within public health. This knowledge will facilitate the development of targeted interventions aimed at building capacity within local authority public health teams to successfully apply behavioural science and behaviour change frameworks to support population-level behaviour change.
ISCycle: Examining the effect of an ebike loan intervention on transport behaviour in Ireland

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Background. Active travel is a co-beneficial health behaviour, with direct impacts relating to physical activity and indirect impacts relating to the environment and climate. Electric bicycles (ebikes) present a novel opportunity for active travel in situations where conventional cycling may not be feasible. The Inclusive Sustainable Cycling (ISCycle) behaviour change intervention aims to promote active travel by offering an ebike loan and various habit-promoting behaviour change techniques. The study will examine the effectiveness of the intervention in terms of distance and frequency of trips per transport mode, physical activity, and transport mode habit strength.

Methods. Adults living in the community who currently use a private motor vehicle and who are interested in using an ebike as a mode of transport are being recruited via workplace settings in an urban area in Ireland. A randomised controlled trial is being conducted, with individuals randomised to an intervention group or waitlist control group. Measurements include self-report questionnaires to assess physical activity and habit strength, as well as GPS logging of transport mode use using a mobile application. In addition to baseline and post-intervention measures, participants will be followed-up at 12- and 24-months to assess long-term impacts. Interim analyses will also be conducted at each study site.

Conclusions. Understanding if and how ebike loans influence transport behaviours will guide future strategies to promote sustainable travel modes in urban areas. Results from the ISCycle intervention will be relevant across policy sectors including health, environment, transport and climate, with implications for inclusive and active mobility.
A pesticide risk prevention intervention using farmers adapted educational methods and based on psychosocial theories

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Background. Pesticide use is a health concern for farmers. Top-down information delivery is the primary educational tool used, but has not proven effective in changing farmer behavior. French farmers are informed of pesticide risks through certification, but no study has demonstrated its effectiveness on behaviour. We will implement a pesticide risk prevention intervention using more appropriate training tools and relying on psychological methods that directly impact behavior.

Methods. About 400 pesticide applicators enrolled in recertification trainings in Normandy (France) will be assigned, through cluster randomization, to the usual training (control group) or one of four intervention arms: peer trainers delivering information (1), practical demonstration of prevention measures (2), commitment with the signature of a contract (3) and social norms providing group decision (4). The intervention effectiveness will be compared to usual recertification through knowledge, protection practices, exposure levels measures.

Expected results. We expect the intervention, based on information delivery by a peer or through practical demonstrations, or on behaviour change methods – intention implementation and group norm changes – enable farmers to adopt protective practices to reduce their exposure.

Current stage of work. Questionnaires were tested in five usual recertification groups. We are working with the Regional Chamber of Agriculture of Normandy on the pilot phase (two groups per arm).

Discussion. This study will evaluate the effectiveness of several educational methods or psychological methods for behaviour change among farmers. We will discuss the results of this study to show the value of using behaviour change methods in health intervention research.
Effectiveness of picture narratives for lung cancer screening information provision: a randomised controlled trial

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Background: Lung cancer screening (LCS) can reduce mortality through early detection of lung cancer and is recommended in the UK. To achieve high rates of informed and equitable uptake LCS information provision needs to be accessible, engaging, and informative. Picture narrative format (e.g. comics), often used in health communication efforts, is believed to support accessible and engaging information provision. This study tested whether picture narrative format can improve LCS information provision compared to text and pictures used separately.

Methods: This was a questionnaire study of parallel three-arm RCT design, completed by post or online. Participants (n=311) were randomised to receive a LCS information booklet in one of the following formats; picture narrative, text-with-pictures, text-only. The pictures and picture narratives used were developed following design principles and with target population involvement. The questionnaire measured LCS knowledge acquisition, LCS eligibility self-assessment accuracy, LCS attitudes, and design appeal.

Findings: Participants in the picture narrative condition had lower LCS knowledge (M=14.7) and worse LCS eligibility self-assessment (23% correct), compared to the text-with-pictures and text-only conditions (M=15.6 & 15.3; 39% & 35%). Most participants had positive LCS attitudes, independent of condition. A significant interaction effect was found between socioeconomic deprivation and condition (p=.027), with only the text-only format producing significant disparity in LCS knowledge across socioeconomic deprivation (p<.001).

Discussion: The text-with-pictures format was found to be more supportive than using picture narratives and more equitable than using text alone. This finding reaffirms the importance of using well-designed pictures for successful LCS information provision.
The impact of pictorial information about atherosclerosis on risk perception and lifestyle modification - gender perspectives

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Background: Cardiovascular disease (CVD) has a long asymptomatic period, and self-rated health status, if good, constitutes a barrier for accurate risk perception and preventive measures. The purpose was to study potential gender differences in CVD risk perception, whether pictorial presentation of subclinical atherosclerosis affects accuracy in risk perception, and whether this is associated to lifestyle modification.

Methods: In the VIPVIZA trial (n=3532), accuracy of risk perception was assessed by comparing self-rated CVD risk with Framingham risk score. Participants were characterized as underestimating, estimating accurately or overestimating their CVD risk, and lifestyle modification (diet, physical activity, smoking, alcohol) over three years was assessed in a subsample (n=1765). Independent t-test was applied to compare the intervention and control group, within each risk estimation group, regarding lifestyle modification.

Findings: Among men/women, 33/4% had high CVD risk and 51/39% had atherosclerotic plaque. At baseline, among men/women, 55/11% underestimated their risk, 32/50% were accurate and 13/39% overestimated their risk. At 3-year follow-up, among men, a small improvement in accuracy were seen in the intervention group, whereas in the control group, underestimation increased to 58%. Among women, overestimation increased to 43% in the control group and 55% in the intervention group. In the intervention group, men initially underestimating or accurate undertook more lifestyle modifications compared to corresponding groups in the control group. Similar, although not statistically significant results, were seen among women.

Discussion: Pictorial presentation of atherosclerosis affected risk estimation. When communicating CVD risk, taking risk estimation bias as well as gender into account is important.
A qualitative exploration of the self-regulation strategies aiding unassisted smoking cessation in Scotland

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Background: The majority of ex-smokers who quit smoking long-term do so without pharmacological or professional support (i.e., unassisted smoking cessation). Despite its wide uptake and greater long-term effectiveness, little is known about the psychological mechanisms underlying successful unassisted cessation. Literature to date has cited willpower as a predictor. However, willpower is often defined tautologically. The present research addressed this issue by adopting a theory-based approach (i.e., process model of self-control and BCT taxonomy) to explore the self-regulation strategies individuals utilised to quit successfully.

Methods: In-depth semi-structured interviews were conducted over Zoom, with an average duration of 1 hour. Participants were 32 self-quitters across Scotland. Data were analysed using content analysis and qualitative thematic analysis (both inductive and deductive).

Findings: Several categories of strategies were identified using existing taxonomies. During their self-quitting journey, participants reported avoiding and modifying high-risk situations, as well as shifting, reappraising and suppressing thoughts about smoking. Notably, participants used more than one strategy during a single craving episode and drew from a wide breadth of strategies during their journey.

Discussion: The current findings demonstrate not only that the strategies used by self-quitters can be organised using existing frameworks, but also that strategies are not used strictly in isolation, a concept known as polyregulation. Polyregulation entails the flexible use of strategies and tactics across (sequential) and within single episodes of craving to smoke (concurrent). Therefore, self-quitters’ strategies for achieving smoking cessation unassisted are complex and sophisticated, extending beyond the concept of willpower often discussed in relevant literature.
Digital interventions to promote health

How Are Digital Health Resources Assisting People with the Prioritisation of Health-Related Change Goals?

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Background: People have access to an abundance of digital resources that aim to facilitate better self-management of health behaviours and medical conditions. However, most resources do not support people in effectively completing the engagement stage of behaviour change by identifying and prioritising a manageable set of health-related change goals (e.g., improve physical activity levels, improve adherence to medication, etc.) whilst bearing in mind competing goals. Setting such priorities prior to accessing resources that support attainment of any specific goals significantly improves the odds of successful goal implementation and maintenance. As such, we set out to conduct a scoping review on digital resources that do support people in identifying and/or prioritising health goals.

Methods: We followed the PRISMA-ScR, and, in September 2022, searched Web of Science (Core Collection), Scopus, Ovid (Embase, MEDLINE, PsycINFO, Global Health) and EBSCOHOST (Academic Search Complete, CINAHL Complete), resulting in 1326 unique references. Synthesis of included studies will focus on target populations, scope of resources in terms of potential (health) goals, characteristics of prioritization support mechanisms, and methods used in development and evaluation.

Expected Results: Screening of titles and abstracts resulted in 96 references being screened in for full text examination. Based on the current inclusion rate, we expect to include ~44 papers for data extraction.

Discussion: This review will pinpoint peer-reviewed digital resources that may assist people in identifying and prioritising health-related change goals, as well as identify gaps that need to be addressed to further optimise people’s successful engagement in health-related change goals.
Determinants of uptake and engagement with smartphone- & wearable-based activity trackers

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Background:
Smartphones and wearable devices with activity-tracking functions offer great opportunities to support health behavior change. However, there is a dearth of epidemiological research on consumer uptake, usage patterns, and engagement in the real world. We aim to investigate the distribution, patterns, and determinants of uptake and engagement with activity trackers in Germany.

Methods:
A web-based survey assessing the experience of and attitudes toward activity trackers was developed for a sub-study embedded in the German National Cohort Study (NAKO). The questionnaire addresses ownership, types of devices, usage patterns of activity trackers, and determinants of usage based on the Capability, Opportunity, Motivation, Behavior (COM-B) model. Each study center will sequentially distribute the questionnaire via email to at least 2000 participants per study center.

Expected results:
This study will present: 1) the prevalence of owning and using consumer activity trackers and their distribution in the German National Cohort study; 2) the degree of engagement and usage patterns and their population characteristics; 3) the individual-level behavioral constructs of activity tracker users vs. non-users and long-term engaged users vs. discontinued users.

Current stage of work:
The project is ongoing in the data collection process. The official questionnaire distribution to NAKO participants is planned for April 2023.

Discussion:
The study results will provide insights into the user characteristics, usage patterns, and determinants of uptake and engagement with activity trackers. Moreover, they have significant implications for understanding how to increase long-term engagement with activity trackers using modifiable factors like capability, opportunity, and motivation.
Development of a decision support tool for the assessment of VR Exergames in psychological research

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Background: Physical activity (PA) levels in elderly persons are generally low, which contributes to multimorbidity. Virtual Reality Exergames (VRE) present a promising option to improve PA by providing a motivating way to exercise. For researchers in health psychology these standardized situations provide the option to examine multifactorial correlations between risk perception, psychological states and PA characteristics in the elderly while exercising. However, there is currently no tool available to differentiate between different VREs and their potentials to address and manipulate aspects of PA such as intensity and type of movement. We develop a VR-based decision support tool for the description and selection of VREs for research on psychological states and symptom perception in the elderly during PA (SEPARE-VR).

Methods: A sample of 16 VREs of four different genres (e.g., rhythm, sports) will be assessed by two independent raters with experience in playing VREs. The SEPARE-VR measures the presence and scalability of VRE features related to PA and movements across four dimensions: mode, intensity, frequency, and duration of PA.

Expected Results: The final SEPARE-VR will have high interrater-reliability (Cohen’s Kappa, ICC) on all dimensions. It will provide a useful distinction between VREs related to specific research questions.

Current stage of work: A first prototype of the SEPARE-VR has been implemented in VR and is currently being tested for functionality.

Discussion: The present study will provide an objective and reliable tool for describing and assessing VREs in terms of their potential to standardize and manipulate PA in health-related research to promote PA.
Healthcare professionals’ views on multimorbidity management, goal setting and the role of digital health solutions

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Background: Understanding how healthcare professionals (HCPs) effectively address multiple patient goals is challenging, as these compete for limited resources. Digital health solutions could play a significant role in this context by considering the dynamic process of prioritisation of multiple goals. This study aims to examine HCPs views of how they interact with patients with multimorbidity to 1) achieve professional clinical goals and 2) support patients to achieve personal health and well-being goals, including through the use of digital health solutions.

Methods: Thirty-two individual, online, semi-structured interviews are being conducted in Ireland and Portugal with a purposive sample of HCPs (n=8 medical doctors and n=8 nurses in each country) managing patients with multimorbidity. A reflexive thematic analysis will be conducted using NVivo software to achieve the study aims.

Expected results: Preliminary findings from interviews conducted in Portugal highlight limited HCPs consultation time and patient characteristics (e.g. lack of motivation to change health-related behaviours) as the main barriers to the provision of care. Digital health solutions are perceived as useful for aggregating relevant patient information, facilitating the organisation of consultations and definition of clinical goals. Still, most HCPs suggested that these solutions could be improved by providing more tailoring options and simplifying user interfaces.

Current stage of work: Interviews have been conducted in Portugal, and recruitment is ongoing in Ireland and will be completed by the spring of 2023.

Discussion: Findings from this study may contribute to the development of digital behaviour change interventions targeting barriers and enablers to providing behaviour change advice.
Atitudes towards a combined nurse and digitally delivered intervention to improve adherence to hypertension medication.

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Background

The Programme on Adherence to Medication (PAM) is a behavioural intervention combining a nurse-delivered very brief intervention (VBI) with a tailored digital intervention to support adherence in patients prescribed hypertension medication in primary care. The novelty of the trial is using tailored messages (delivered by a text-messaging system or an app) to address adherence beliefs. The current qualitative study will explore the patients’ perspectives on medication adherence, experiences of using the PAM intervention, and participating in the trial.

Methods

We will undertake 25 semi-structured interviews with trial participants. Interviews will last up to 45 minutes and be conducted remotely. Interview topics for discussion include: attitudes to the PAM intervention, participation in the trial, and beliefs about medication adherence. Qualitative thematic analysis will be undertaken to identify key themes.

Expected results

We expect to obtain a clear understanding of user preferences for the digital technology and experience of collecting remote trial measurements. We also expect to identify challenges whilst obtaining recommendations on future implementation of the PAM intervention. Further themes will be identified until data analysis is completed.

Current stage of work

Participant recruitment is ongoing. Data analysis will be undertaken concurrently with data collection and is expected to be completed by August 2023.

Discussion

This research provides important insights into patient perspectives around participating in the PAM trial, using a novel intervention to provide digital tailored support for adherence to hypertension medication. It will also shed light on the patients’ experiences to improve remote delivery of behaviour change interventions.
Empowering cardiac patients with low SEP through eHealth: Preparing for rehabilitation during their waiting period

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Health disparities between socio-economic classes are growing. While eHealth has been proposed as a potential solution, it often disproportionately benefits people with a higher socio-economic position (SEP) thereby exacerbating health disparities. We aimed to develop an eHealth intervention that supports specifically people with a low SEP during their waiting period between hospital referral and start of cardiac rehabilitation (CR).

We followed a participatory design process in which we used a variety of participatory and inclusive design tools and techniques to identify needs of the target group and develop the intervention. 15 cardiac patients with a low SEP participated in the development (n = 8) and evaluation (n = 7) of the intervention.

We found that patients with a low SEP require certainty and guidance during their waiting period. To address this, healthcare providers guide them through this transitional phase using multimedia resources in the eHealth intervention. This includes introductions of the healthcare providers and information about their roles, peer experiences, practical tips and daily updates on the remaining waiting time. The evaluation yielded high scores on usability (4.4 out of 5), experience (4.1 out of 5) and perceived effect on certainty and guidance (4.0 out of 5).

This study explored how eHealth can bridge gaps between hospitals and CR and between high and low SEP. It emphasizes the significance of utilizing participatory and inclusive approaches to develop feasible and acceptable eHealth interventions for those with low SEP. Currently, follow-up evaluative research is conducted to determine the proof-of-principle of the intervention.
Assessing decision fatigue in general practitioners’ prescribing decisions using the BEACH dataset

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Background: General practitioners (GPs) make numerous care decisions throughout their workdays. Periods of effortful decision making can result in decision fatigue: a gradual shift towards decisions that are less effortful. This study examines whether observed patterns in prescribing decisions are consistent with the decision fatigue phenomenon. We hypothesised that the likelihood of prescribing frequently overprescribed drugs (antibiotics, benzodiazepines, and opioids) will increase, and the likelihood of prescribing frequently under-prescribed drugs (statins, osteoporosis drugs) will decrease over the workday.

Methods: This retrospective cohort study used nationally representative primary care data on GP-patient encounters from the Bettering the Evaluation and Care of Health (BEACH) program from Australia. The association between prescribing decisions and order of encounters over a GP’s workday was assessed with generalised linear mixed models accounting for clustering of encounters within GPs and adjusting for patient, provider, and encounter characteristics.

Findings: Among 226,817 patient encounters with 2,834 GPs, the likelihood of antibiotics prescriptions increased significantly (OR=1.006; CI=1.004-1.007), and the likelihood of statin prescriptions decreased significantly (OR=0.988; CI=0.985-0.991) with every additional patient encounter in a workday. No significant effects were observed for benzodiazepine, opioid, or osteoporosis drugs.

Conclusions: GPs were increasingly likely to prescribe antibiotics and were less likely to prescribe statins as the workday wore on; consistent with decision fatigue. No significant effects were observed for less frequently prescribed drugs. These findings establish decision fatigue as a promising actionable target for optimising prescribing behaviour and allude to potential measurement limitations regarding decision fatigue effects in infrequent decisions.
A thematic analysis about the influences on health professionals’ responses to patient complaints

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Background:
By learning from healthcare complaints, patient safety can be improved. Health professionals’ responses to complaints are key for such learning to occur. We aimed to explore the influences on healthcare professionals’ responses to patient complaints using the Theoretical Domains Framework (TDF).

Methods:
We conducted a qualitative study using interviews structured around the TDF domains. Participants included 11 healthcare professionals (HCPs) with experience of responding to complaints in secondary and tertiary healthcare settings, and 8 patients and/or carers who previously complained in similar settings. Transcripts were analysed using inductive thematic analysis. Generated themes were subsequently mapped deductively to TDF domains.

Findings:
Key generated themes from both the HCP and patient interviews fell within six TDF domains: “Social influences” (e.g., organisational openness regarding complaints), “Environmental context and resources” (e.g., accessible electronic patient records), “Knowledge” (e.g., of complaints procedures), “Skills” (e.g., communication skills), “Belief about consequences” (e.g., belief that complaints are feedback), “Emotions” (e.g., negative emotions regarding complaints). Two additional themes from health professional interviews mapped onto “Social/professional role and identity” (e.g., duty of candour regarding complaints).

Discussion:
HCPs’ responses to complaints are driven by individual and organisational openness to feedback, resources to engage with complaints, communication skills and emotions regarding complaints. Strategies to address these influences and improve complaint responses include: creating platforms for HCPs to share complaints and/or learnings from complaints with others; creating/restructuring electronic databases to provide comprehensive overviews of complaints; providing HCPs and patients with structured social support; and training HCPs to communicate empathetically with patients.
Characterising processes and outcomes of tailoring implementation strategies in healthcare: A scoping review

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Background: Tailoring strategies to target salient barriers to and enablers of implementation is key to support successful delivery of evidence-based healthcare interventions. However, there is no consensus on the definition of tailoring and how it has been conducted in practice remains unclear. This scoping review aims to describe how tailoring has been conceptualised, operationalised, and evaluated within healthcare, and to identify research gaps.

Method: The review is being conducted in line with best practice guidelines and will be reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-analysis extension for scoping reviews (PRISMA-ScR). MEDLINE, Embase, Web of Science and Scopus have been searched from 2005 to present. Grey literature will be searched on Google Scholar. Reference lists of included articles will be searched. Screening and data extraction is being conducted by the research team with discrepancies resolved through discussion. Analysis will be quantitative (descriptive numerical summary of study characteristics and the tailoring process) and qualitative (content analysis in line with the research questions).

Expected results: A total of 5936 articles were identified through database searches with 956 articles included for full text screening. It is anticipated that the conceptualisation, operationalisation, and evaluation of tailoring varies extensively across the literature.

Current stage of work: Full text screening is currently ongoing. Screening and data extraction is expected to be complete by August 2023.

Discussion: Findings will be useful for health implementation researchers and practitioners to guide future research and facilitate systematic, transparent, and replicable development of tailored implementation strategies.
Implementing health psychology counseling into primary care practice in Switzerland – a pilot study

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Background: Health psychology counseling, including exploring illness perceptions of patients, health behavior change, and fostering health-related resources, is essential for primary care medicine; however, it has yet to be implemented in Switzerland. The research question is: Do primary care physicians see a need to implement health psychology counseling into their practice, and if yes, how can this be implemented?

Methods: Three interviews using a semi-structured interview guide were conducted with three primary care physicians after convenience sampling to pilot the interview guide. Interviews were analyzed using summative content analysis. Further, these pilot interviews informed the adaption of the interview guide to conduct a purposively sampled interview study with 12-16 physicians.

Expected results: Preliminary results of the three interviews show that physicians acknowledge the importance of exploring, health behavior change, and strengthening health resources in patients, but this needs to be strengthened in their work. They would welcome health psychology counseling into their practice, mainly for chronically ill and unmotivated patients. More interviews could generate more information on how health psychology counseling can be integrated in Switzerland.

Current stage of work: The pilot interviews are completed and analysed. These results informed the adaption of the interview guide. Currently, a purposive sampling strategy is elaborated to conduct the study.

Discussion: Health psychology counseling can support primary care patients and their health. Implementation from research into practice is, therefore, essential. The final study will contribute to the possibilities of the implementation of health psychology counseling into primary care practice in Switzerland.
Development of clinician training to effectively promote physical activity to patients with heart failure (BeActive-HF)

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Background: People with heart failure (HF) are typically a low-active population. Physical activity (PA) can improve HF symptoms and quality of life. Yet the promotion of habitual PA by clinicians, and referral and uptake rates for cardiac rehabilitation are suboptimal. We co-designed a theory- and evidence-informed training intervention for clinicians to facilitate PA promotion to adults with HF.

Methods: Informed by findings from a systematic review that identified candidate behaviour change techniques for clinician training, a two-stage intervention development process was undertaken with reference to the Behaviour Change Wheel. Theoretical Domain Framework-informed semi-structured interviews identified barriers and facilitators to PA promotion; and co-design workshops with clinicians established preferences on intervention format and content.

Findings: Eighteen clinicians participated in an interview. A further eighteen participated in a co-design workshop. Barriers included low confidence to refer to cardiac rehabilitation and promoting PA due to safety concerns, a lack of skills/confidence to tailor the promotion of PA to patients with complex clinical needs and supporting those who demonstrate ambivalence towards engaging in PA. Adopting a multidisciplinary team approach to provide consistent information to patients was a facilitator. Preference for the mode of delivery was cross-trust, group-based sessions on salient content involving credible facilitators and a demonstration of patient intervention delivery. Findings highlight the need for evidence-informed skills-based training to promote uptake of cardiac rehabilitation and PA.

Conclusion: The BeActive-HF training intervention has been systematically and iteratively developed. A future planned feasibility study will establish feasibility, acceptability, and fidelity of the intervention.
Examining the effectiveness of training dietitians in behaviour change techniques

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Background: Provision of education alone for changing behaviour has limited effectiveness, particularly in health interventions. Behaviour change training enhances health professionals’ capability to motivate and prompt behaviour change in clients. To date, dietitians have received limited training in this area. The aim of the study is to develop and evaluate the effectiveness of two 2-hour behaviour change workshops on dietitians’ use of behaviour change techniques in practice and their capability, opportunity, and motivation towards delivering these techniques.

Methods: A randomised controlled trial will be conducted. Dietitians (N=126) will be randomised into either the intervention or waitlist-control condition. Participants will complete measures of capability, opportunity, motivation and behaviour at baseline, post workshop and at 3-month follow-up. A series of repeated measure ANOVAs will be conducted to assess the effectiveness of the intervention over 3-months compared to the waitlist control condition at baseline.

Expected results: It is anticipated that (1) dietitians will demonstrate an increase in their use of behaviour change techniques in practice and (2) dietitians will show an increase in their capability, opportunity, and motivation to delivering behaviour change techniques over the three months, compared to the waitlist control condition (at baseline).

Current stage of work: Recruitment for this project will commence in March. Delivery of workshops and data collection will take place over the next 12 months.

Discussion: Results of this study will guide future training of dietitians in behaviour change techniques and optimise healthcare practice beyond education to improve client health outcomes.
Ensuring Inclusiveness in Managing Diseases

12:25 - 12:32

Exploring treatment burden measurement: a discriminant content validation (DCV) study.

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Treatment burden is the workload and impact of managing long-term conditions, for example, adhering to medications or making behavioural changes. Individuals who experience treatment burden may disengage from treatments, leading to poorer health outcomes. Valid patient-reported measures are crucial for identifying, quantifying, and tackling treatment burden. This study aims to investigate the content validity and discriminant content validity (whether measurement items assess other related constructs) of patient-reported measures of treatment burden.

This study will use discriminant content validation (DCV), a quantitative, systematic method of assessing content validity, and qualitative think-aloud interviews. Experts in health sciences research and individuals with long-term conditions (n=60-100) will complete an online questionnaire which asks them to judge which theoretical constructs are being assessed by different treatment burden items. In interviews, participants will 'think-aloud' as they complete this questionnaire. Wilcoxon signed rank tests will be used to evaluate the content validity of each item for each construct. Interviews will be analysed using content and thematic analysis.

Results will demonstrate the treatment burden items with content validity and discriminant content validity. Think-aloud interviews will provide insights into the reasoning for participants' content validity judgements. Ethical approval has been received, and data collection will shortly commence.

This study will provide insights into what is being assessed by patient-reported measures of treatment burden and whether these align with existing theoretical models of treatment burden. The results will determine which, if any, items and measures of treatment burden are most suitable for use in clinical practice and research.
What are the challenges faced by individuals with ME/CFS? Preliminary results of a cross-sectional study.

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Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) is a multi-system disease with a complex pathophysiology and lack of curative treatment. Patients (PwME) often describe a lack of recognition and understanding by others; this study sought to examine the challenges faced by PwME as perceived by the Irish public.

Method: 319 participants responded to a cross-sectional survey examining knowledge and understanding of ME/CFS; the majority were female (n=256) aged between 19-74 years (M=46.9) and reported having one or more poorly understood chronic illness (n=211). Respondents aware of ME/CFS (n=238) answered Likert-scale type questions about their beliefs and knowledge of the condition and were asked to identify challenges faced by PwME in an open-ended question. A descriptive thematic analysis was conducted on responses.

Results: Preliminary results of the thematic analysis indicate an awareness of the multifaceted challenges faced by PwME. These included, primarily, (i) The burden of symptoms; (ii) Challenges related to healthcare, and (iii) Disbelief and poor understanding of ME/CFS among others. Comparisons of themes will be made between PwME, individuals with other chronic illness, and those without. It is expected that owing to personal experience, participants with chronic illness will identify more challenges specific to healthcare, while those without chronic illness will focus primarily on the burden of symptoms.

Current stage of work: Thematic analysis is ongoing.

Discussion. Results indicate that healthcare-related challenges are perceived as a dominant issue in the illness experiences of PwME. While biomedical research continues makes headway, there is a need to identify ways to support PwME in their oftentimes suboptimal healthcare journeys.
Bedtime story; nocturnal caregiving for juveniles living with Type 1 Diabetes – a systematic review

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Background: Caring for children with type 1 diabetes (T1D) requires round-the-clock care but little attention has been given to the impact that nocturnal caregiving has on families. In this systematic review, we aimed to establish the extent of nocturnal caregiving practice (NCP) and explore the lived experience to understand impacts for caregivers, potential solutions and perceived value of technology for relieving this burden.

Methods: Databases were searched with terms relating to NCP for juveniles with T1D but no concomitant conditions and all psychosocial outcomes, utilising any research design. Results were screened by two independent reviewers. Quantitative data were synthesised and qualitative data were analysed thematically.

Findings: 30 studies met the inclusion criteria, comprising 3,533 caregivers. 88% of caregivers engaged in NCP, with 19-80% failing to get adequate sleep and 54% reporting poor sleep quality. Powerful qualitative testimony detailed various adverse impacts of NCP on daily life; exhaustion, difficulty making illness-management decisions, mood, physical health, with results indicating benefits from technological developments are equivocal. 82% of authors recommended that sleep be routinely addressed in clinic, which is not current practice.

Discussion: This review provides clear evidence that NCP in juvenile T1D is pervasive with significant negative impacts on caregivers, with findings having wider implications for other caregiver cohorts. These impacts need to be acknowledged so that psychosocial supports can be developed and introduced in bio-medical treatment environments.
Lessons learned from conducting an online longitudinal study of romantic dyads' COVID-19 and cancer-related behaviors

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Background: The Relationships, Risk Perceptions, and Cancer-related Behaviors During COVID-19 (R2C2) Study was designed to examine ways in which romantic partners influence each other's health behaviors and the effects of the COVID-19 pandemic on these associations, aiming to be inclusive with respect to racial/ethnic background and sexual orientation.

Methods: We enrolled a cohort of cohabiting romantic partners who were both Prolific users (n=194 dyads; 78% UK-based and 22% US-based) from October 2021—July 2022. Two survey assessments were completed 5.43 weeks apart on average (SD=2.43). Health behaviors assessed included alcohol use, cigarette smoking, physical activity, eating, sleep, and COVID-19 vaccination, masking, and social distancing. R2C2 also measured social/behavioral correlates including relationship perceptions, emotion regulation, and household chaos.

What went wrong: Data collection posed several challenges. The attrition rate from screening was 51% due to the complexity of enrolling dyads from two separate Prolific profiles; the platform requires this separation to prevent repeated participation from a single IP address. Two recruitment goals were unmet: to enroll 201 dyads and a representative sample of Hispanic/Latino populations.

Possible solutions: Possible solutions include extra time for data collection, including piloting, increased incentives, and surplus screening to offset attrition. More diverse dyads may be recruited from other online research panels.

Conclusions: Dyadic health behavior data collection is complex but manageable with multi-researcher teams. Prolific.co includes the infrastructure to recruit romantic couples for dyadic research, but this must be done thoughtfully. Lessons learned from the R2C2 study can guide much-needed future research on relationships and health.
Cervical cancer screening in young women and people with a cervix: A qualitative study.

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Background. Cervical cancer, which is caused by the human papillomavirus (HPV), results in around 3,000 new cancer cases yearly in the UK. As the majority of women now reaching the screening age (24.5 years old) will be HPV vaccinated, it is important to explore their current viewpoints and stances on screening in order to inform effective interventions to increase screening uptake. Moreover, these viewpoints are likely to differ between attendees and non-attendees.

Methods. Twenty-four online semi-structured interviews were conducted with women aged 24-30 years old who had received their first invitation to attend cervical screening. Participants included attendees (n=12) and non-attendees (n=12). Audio recordings were transcribed and analysed using thematic analysis.

Expected results. Most participants who had attended screening saw screening as “important”, citing a small range of reasons for attendance (e.g. reassurance and a family/friends history of cancer). In contrast, non-attendees expressed a broader range of views (e.g. lack of awareness, embarrassment and fear of the result). Both groups reported that the HPV vaccination did not impact their decision to screen. Increased awareness and education of screening was suggested the most for improving screening uptake.

Current stage of work. Conducting thematic analysis.

Discussion. HPV vaccination was not found to directly influence participants’ decisions to attend screening or not. Nonetheless, interventions could utilise the effectiveness of the vaccine to highlight the likely reassurance of being screened, whilst also addressing other barriers (such as embarrassment).
Health screening, testing, and health prevention behaviours

Increasing uptake of colorectal screening: a trial testing a suggested deadline and a planning tool

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Background: Participation rates in colorectal cancer (CRC) screening remain suboptimal. The objective was to evaluate the impact of: a suggested deadline for return of faecal immunochemical tests (FITs); a planning tool; and the combination of a deadline and planning tool on return of FITs for CRC screening.

Methods: A randomised controlled trial of 40,000 adults aged 50-74 mailed FITs in the Scottish Bowel Screening Programme. Participants were randomised to one of eight groups: 1) no intervention; 2) suggested deadline (1-week); 3) suggested deadline (2-weeks); 4) suggested deadline (4-weeks); 5) planning tool; 6) planning tool plus suggested deadline (1-week); 7) planning tool plus suggested deadline (2-weeks); 8) planning tool plus suggested deadline (4-weeks). The primary outcome was FIT return at three months. Results were analysed using logistic regression.

Findings: Any suggested deadline increased the odds of a FIT being returned at three months (OR: 1.13 [1.08, 1.19]). The planning tool on its own had no impact on FIT return (OR: 0.98 [0.94, 1.02]). There was a significant interaction between the interventions (p=0.0041) such that the effect of the deadline on FIT return was enhanced by the addition of a planning tool (OR: 1.21 [1.13, 1.30]), while the effect of the planning tool was detrimental to FIT return in the absence of a deadline (OR: 0.88 [0.81, 0.96]).

Conclusions: A suggested deadline for kit return and a FIT planning tool are highly cost-effective interventions that could be easily implemented, through adding a sentence to the invitation letter and including a sheet of paper, respectively.
Exploring the acceptability of Artificial Intelligence in breast screening: a qualitative focus group study.

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Background: Preliminary studies of Artificial Intelligence (AI) tools developed to augment the breast screening process show reduced radiologist burden and improved cancer detection accuracy which could lead to improved breast cancer outcomes. The aim of the current project was to explore views and concerns held by the breast screening eligible population in England to better understand acceptability for this key stakeholder group.

Method: Twelve 90-minute focus groups were run with women eligible (50 to 70 years), or reaching eligibility (45 to 49 years), for breast screening and living in England (n=64; 5 to 7 per group). Four of these groups were conducted in-person, the remaining by video-call. The groups were audio-recorded, transcribed, and analysed using a reflexive approach to thematic analysis.

Findings: A predominant concern across groups was of the AI tool ‘going wrong’. This was tied to a perception that breast screening is a context where it is particularly important for things to ‘go right’, due to the personal nature of the procedure and the significance of missing a cancer. Participants associated AI with technological progress and were optimistic about, its use and, the potential benefits for breast screening. However, this association was also tied to participants feeling things were out of their control, being left behind and left in the dark. This related to wider anxieties associated with ‘keeping up with’ social and technological changes.

Discussion: These findings will help inform decisions around deploying AI in the NHS Breast Screening Programme as well as effective future communication strategies.
Factors Influencing Cervical Cancer Screening Intention and Preferences in Romanian Women

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Background: Cervical cancer is one of the leading causes of mortality worldwide. This study investigated the intention, preferences and reasons that can positively or negatively influence undergoing cervical cancer screening and anticipated regret about the Human Papilloma Virus (HPV) infection.

Methods: An online cross-sectional survey was conducted among Romanian women.

Results: One hundred twenty-four women responded to the survey. Most respondents stated that they have experienced fear of being diagnosed with cancer. Most participants believe that the HPV infection is severe and that they have a high susceptibility to being infected. More than 50% of the participants stated that they do everything to protect themselves. The main concerns related to anticipated regret associated with HPV infection were: fear of being diagnosed, high perceived chances of getting infected, the guilt of infecting their partner, less confidence regarding their sexuality and reduced sexual desire for intercourse and worrying for the future. The main reasons for declining cervical cancer screening were lack of money, lack of symptoms and knowledge, time, fear, feeling uncomfortable, shame, and embarrassment related to gynecologic follow-ups. Reasons that could encourage cervical cancer screening were: prevention, fear, knowledge, the desire to be healthy, and a positive family history. When assessing the preferred method of screening, most participants responded they trust a gynaecologist more than self-sampling.

Discussion: This study highlights the concerns related to sexual relationships and emotions associated with being infected with HPV. Further studies should focus on intervention and assess those needs and concerns.
Improving COVID-19 testing in care home staff: A behaviour change wheel analysis of published literature

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Background: The COVID-19 pandemic severely impacted the care sector. Rigorous testing was implemented to protect residents and staff. To assist with intervention development for a UK clinical trial (“VIVALDI-CT”) we sought to: 1) understand reported barriers and facilitators to staff testing in care homes, and: 2) specify what can be done to improve future testing.

Methods: Rapid systematic review identified 14 international papers published between 2020 and 2022. These highlighted multi-levelled factors shaping staff testing. Subsequently a Behaviour Change Wheel (BCW) analysis, incorporating the theoretical domains framework (TDF), suggested theory-driven recommendations which were operationalised through stakeholder input (e.g., care home staff and experts).

Findings: 26 barriers and 21 facilitators to testing were categorised across themes: ‘Communication & Education’; ‘Logistics & Planning’; ‘Training’; ‘Professional Pride & Identity’; and ‘Financial Incentives’. Analysis highlighted important TDF domains: ‘Knowledge’; ‘Environmental Context & Resources’; ‘Physical Skills’. The BCW analysis suggested important intervention functions: ‘education’, ‘environmental restructuring’ and ‘persuasion’. These functions were specified further into several behaviour change techniques (BCTs) to create intervention strategies. After stakeholder input the final recommendations included: the production of well-placed social marketing materials to address barriers to testing (e.g., ‘Test to care’ posters and videos); links to existing top-up training, establishing regular ‘open forums’ within homes to develop local solutions to emerging problems.

Discussion: We reflect on the process of delivering detailed recommendations via an auditable, theoretically informed, behavioural science approach. We also discuss the ways in which stakeholder engagement informed the final development of intervention content for VIVALDI-CT.
Association between physical activity motivation and physical activity among chronic musculoskeletal disorders patients: a meta-analysis

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Background: The aims of this systematic review and meta-analysis were (i) to assess the association between physical activity (PA) motivation and PA behaviour in patients with chronic musculoskeletal disorders (MDs) and (ii) to identify potential moderators of this association.

Methods: The systematic review was registered at PROSPERO. We used the following electronic databases: PubMed, PsychINFO, MEDLINE, EMBASE and Web of Science. Searches used terms referring to “PA”, “motivation” and “chronic MDs”. Participants had to be adults aged 18 years and over, with chronic MDs (> 3 months). Pearson’s r was used as effect size. Fisher’s z were converted back to Pearson’s r for reporting the average correlation and confidence interval (CI).

Findings: A total of 21 independent studies, and 41 effect sizes, were included. Overall, this meta-analysis involved 4,054 patients with a mean age of 51.99 (± 8.8) years. There was a small, significant, correlation between motivation towards PA and PA behaviour (r = .18; 95% CI [0.14; 0.23]; p<.01; k = 41). There was a significant moderating effect of type of motivation. The association was higher in absolute value for self-efficacy, (r = .31; 95% CI [0.21; 0.40]; p<0.01; k = 9) than for fear of movement (r = -.12; 95% CI [-0.19; -0.04]; p <0.01; k = 13).

Discussion: The review indicates a major focus of past literature on fear of movement. Motivation towards PA should be targeted to promote behavioural changes among patients with chronic musculoskeletal disorders. Notably, structured practice of PA could enhance self-efficacy.
Having fun in prevention? Process evaluation of Food Game, a gamified school-based health promotion intervention

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Background. Gamification refers to the introduction of game elements to non-gaming contexts to induce engaging, positive psychological experiences to foster intrinsic motivation to participate and ultimately behaviour change. This approach has been employed in various contexts, though its application in health promotion is still an emerging trend.

Food Game is a gamified intervention to promote healthy eating, physical activity, and responsible consumption. The programme is run by the Milan health agency in the Lombardy region, Italy. High school students work in teams and compete with other schools and teams to complete health challenges (e.g., organising a fruit-day at school).

Methods. A mixed methods process evaluation with interview and focus groups collected from programme staff, teachers, and 42 students, and quantitative data collected at three time points from students (N = 199) on relevant health behaviours and psychosocial factors (e.g., gamification experience) was conducted.

Findings. Students reported to have enjoyed the project’s game approach, the possibility to engage in practical activities and groupwork, and to have learnt new things both in terms of health behaviours and transferable skills (e.g., conflict resolution). Results of multilevel analyses on survey data indicated statistically significant increases in positive attitudes towards healthy eating and perceived peer approval, as well as in the proportion of students active towards environmental causes.

Discussion. This study offers insight on the potential of – and barriers to – the use of gamification in health promotion outside of e-health interventions where this approach is more common.
Challenges in designing (personalized) digital “just-in-time” nudges for healthy food choice: Two pilot studies

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Background – In two pilot studies, we explored challenges associated with the effective design of (personalized) digital nudges for healthy food choice. We employed a novel nudge delivery mechanism (i.e. “just-in-time” [JIT] digital nudges) within an online grocery shopping context, in which a “pop-up” nudge highlighting a healthier alternative is presented at the moment that an unhealthy product is chosen.

Methods – Study 1 (N=191; between-subjects) assessed whether the visibility of a digital JIT nudge (Low [25% of screen] vs Medium [50% of screen] vs High [75% of screen]) influenced autonomy perceptions.

Study 2 (N=231; between-subjects) investigated whether personalizing digital JIT nudge type (i.e. evaluative nutritional label nudges for visual cognitive style and descriptive nutritional labels nudges for verbal cognitive style) increased the perceived personal relevance of the nudged alternative.

Findings – Autonomy scores were consistently and equally high across levels of JIT nudge visibility (Autonomy in making food choices: Low: 3.60 vs Medium: 3.77 vs High: 3.68; Autonomy with respect to technology: Low: 3.62 vs Medium: 3.59 vs High: 3.47; Threat to freedom: Low: 2.41 vs Medium: 2.35 vs High: 2.42 – all on a 5-point scale).

Personalizing JIT nudge type on visual/verbal cognitive style was not found to influence perceived personal relevance (3.54 vs 3.44).

Discussion – The JIT nudge delivery mechanism is not expected to harm autonomous food decision making within digital shopping contexts. Null personalization findings highlight the importance of a finer-grained measure of an individual’s visual/verbal cognitive style, to circumvent floor effects on nudge effectiveness.
#vegan – Instagram as an Informational Environment and Its Associations with Eating Behavior

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Background: The social network Instagram constitutes an increasingly important yet understudied environment for eating behaviors generally and veganism in particular. In four studies, we explore this informational environment and investigate how engaging with it relates to offline eating intentions via psychological mechanisms.

Methods: In Studies 1 and 2, we scraped datasets of Instagram posts using #vegan and employed network analysis with hashtags (Study 1) and image analysis (Study 2) to explore the contents of Instagram posts related to veganism. Studies 3 (N = 117) and 4 (N = 247) used online surveys to investigate associations between people’s online behaviors on Instagram related to veganism, several psychological constructs, and offline eating intentions.

Findings: Posts about veganism were frequently related to food, cosmetics, lifestyle, and fitness. The primary motives for following a vegan diet (i.e., health, environment, animal-welfare) were partially reflected in the hashtags. Images most often depicted food, shopping items, people, and text. Being exposed to (r = .16) and interacting with (r = .23) Instagram content about veganism showed the strongest associations with eating intentions. Attitude, perceived behavioral control, and self-identity seemed to be important mechanisms behind these effects.

Discussion: Food is the most prominent topic of Instagram posts about veganism, and hashtags used in this context partially relate to motives for following a vegan diet. Engaging with this informational environment might influence offline eating decisions via psychological mechanisms like attitudes and identity. Given their high usage and behavioral relevance, social media should receive increasing attention in Health Psychology.
Optimising the STAND-VR intervention: a mini-focus group interview study

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Background: Evidence suggests that prolonged sedentary behaviour independently predicts numerous negative health outcomes. Immersive virtual reality (IVR) can be defined as fully computer-generated environments that are displayed through a head-mounted display. IVR offers opportunities for retired and non-working adults to take part in meaningful non-sedentary activities that may not be available to them in their natural environment due to various physical and social barriers. Following the behaviour change wheel process, intervention content was developed and integrated into an IVR environment as a means for this cohort to take part in meaningful non-sedentary activities. This study aimed to explore retired and non-working adults’ experiences and perceptions of this intervention prototype.

Methods: Ethical approval was granted for the study. Semi-structured mini-focus group interviews were conducted with five groups of 2-3 retired and non-working adults over the age of 55 years. Each group explored the intervention prototype together and discussed their experiences afterwards. A rapid analysis (RA) was conducted after each session and a reflexive thematic analysis (RTA) was later conducted on all of the data.

Findings: The RA generated a number of feasible design changes including, offering more instructions and practice time, minimising invasions of personal space, and a range of minor improvements to the functionality and appearance of the prototype. The RTA generated themes relating to participants’ thoughts on IVR as an experience as well as how IVR compares to reality and in what contexts they would use IVR.

Discussion: These findings will inform a final iteration of the intervention prototype.
Confront your cravings: a mixed-methods approach to designing VR scenarios for virtual cue-exposure interventions

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Background: Over the years, immersive virtual reality has made its way into cue-exposure therapy for smoking cessation. The main issue with this type of interventions is that it often omitted how the virtual environments and scenarios were created, leading new researchers in the field to start from scratch to build relevant cue-exposure scenarios (i.e., situations aimed at eliciting smoking cravings). Our aim was to design a database of smoking scenarios usable in VR to elicit cravings and share best practices on how to create them. We aimed at creating relevant and modulable scenarios that elicit smoking cravings in a diverse range of smokers.

Methods: We conducted a mixed-method study composed of (1) a cross-sectional descriptive survey, in which 182 participants fulfilled a questionnaire about the frequency of smoking in various situations and (2) focus groups with 18 smokers extending the findings of the survey and deepening the understanding of what triggers smoking cravings in various situations using a thematic analysis.

Findings: Analysis from the descriptive survey indicates which places and situations elicit smoking (e.g., parties, timeout) and the qualitative analysis explained why and how these cues lead to smoking. The combination of results from both studies led to the creation of 28 short, combinable, and modulable scenarios, each one including one or several triggers from smoker experience.

Discussion: Even though VR scenarios still need to be tested, they provide researchers and clinicians working with virtual cue-exposure with a valuable and versatile resource to re-create situations relevant to smokers.
Effects and acceptability of a dynamically tailored mHealth intervention to reduce excessive drinking among students

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Background: This study aims to evaluate the effects, use and acceptability of an mHealth intervention ‘What Do You Drink’ (WDYD app), in which students at risk receive dynamically tailored feedback about their alcohol consumption via multiple sessions (17 weeks), to reduce excessive alcohol consumption.

Methods: We used a two-arm parallel group randomized controlled trial. Participants who gave informed consent (N=6,129) were randomly assigned to the control (N=3,041; receiving a baseline and two follow-up surveys in weeks 9 and 33, and Ecological Momentary Assessments (EMAs; 7 times 7 consecutive days; in weeks 1, 7, 13, 19, 25, 31 and 33)) or intervention group (N=3,088; additionally receiving tailored feedback based on daily EMAs). Primary outcomes were excessive drinking, binge drinking and mean weekly alcohol consumption, secondary outcomes were motivation, self-confidence and mood.

Findings: Dropout was 63.26\% in week 1 up to 95.46\% in week 33. No intervention effects were found on primary outcomes and mood; both groups reduced their alcohol consumption over time. Positive intervention effects were found on motivation and self-confidence up to week 25 (Motivation: B=0.54, SE=0.24; 95\%CI=0.06 to 1.02; Self-confidence: B=0.72, SE=0.26; 95\%CI=0.22 to 1.23). Participants evaluated the intervention as acceptable and usable.

Discussion: WDYD is a promising mean to improve motivation and self-confidence towards reducing excessive alcohol drinking among students. The reduction in alcohol consumption over time in both groups was probably due to self-monitoring (EMAs). The large dropout could be caused by the use of EMAs and lack of in-person contact; this needs attention in future research.
Chatbots promoting smoking cessation: A mixed-methods study comparing motivational interviewing and confrontational counselling

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Background. Cigarette smoking is a major public health risk. Chatbots can serve as an accessible and useful tool for cessation promotion. This study aimed to identify effective counselling strategies for such chatbots and to understand smokers’ expectations and experiences with the chatbot.

Methods. This mixed-methods study incorporated an online experiment and semi-structured interviews. Smokers (N=229) interacted with either a motivational interviewing (MI) style chatbot (n=112) or a confrontational counselling (CC) style chatbot (n=117). Both cessation-related (i.e., intention to quit and self-efficacy) and user experience-related outcomes (i.e., engagement, therapeutic alliance, perceived empathy, and interaction satisfaction) were assessed. Semi-structured interviews were conducted with 16 participants, 8 each from both conditions, and data were analyzed using thematic analysis.

Findings. Results from a MANOVA test suggested an overall advantage of the MI (vs. CC) chatbot, Pillai’s Trace = 0.12, F (6, 222) = 5.00, p<.001. Follow-up discriminant analysis revealed that the differences were found mostly in user experience but not in cessation-related outcomes. Exploratory analyses indicated that smokers in both conditions equally reported significantly increased intention to quit after the chatbot interaction. Interview findings illustrated several constructs (e.g., affective attitude and engagement) explaining people’s prior expectations, timely and retrospective experience with the chatbot.

Discussion. The results confirmed that chatbots are a promising tool in motivating cessation, and the use of MI can improve user experience. We did not find extra support for MI to motivate cessation. Smokers expressed both relational and instrumental needs in the quitting process. Implications for research and practice are discussed.
The influence of information seeking on vaccination decisions

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Most interventions aiming at changing vaccination behavior treat decision makers as passive receivers of information. In contrast, evidence shows that active engagement with information has a greater effect on vaccination intention. We explore how decision makers actively seek for information when faced with a vaccination decision and the impact it has on knowledge and behavior.

We developed a new paradigm to directly observe and quantitatively measure participants’ seeking behavior in an online format: Participants faced with a fictitious vaccination decision could freely browse through an information catalogue that integrated the instructions for an interactive game, thereby simulating the real-world incentive structure of a vaccination decision. Seeking behavior was measured by time spent searching and the amount of information looked at.

In a pre-registered online study (\(N = 381\)), we tested the paradigm, while additionally assessing perceived knowledge and attitudes towards vaccination and information seeking.

We found that information seeking increased knowledge: The more participants searched, the higher was their perceived knowledge afterwards. While a positive attitude towards information seeking was the best predictor for the amount of information search, we found that participants who decided against vaccination had significantly worse attitudes toward information seeking.

The results show that health information seeking can function as a valuable tool before a vaccination decision. Many studies have shown, that a higher knowledge on vaccinations and infectious diseases can change vaccination behavior. As a next step, the newly-developed paradigm can be used to test interventions that motivate decision makers to search for information.
Healthy vending machines on campus: The effect of traffic light labelling on choice

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The overconsumption of unhealthy beverages and snacks is a growing public health issue. Of particular concern is the availability of unhealthy beverages and snacks in vending machines. The present study examined the effectiveness of a ‘healthy vending’ program run at the Flinders University campus, where new healthy vending machines were installed that featured a traffic light system and an increased range of healthy items.

Four new healthy vending machines were installed next to existing vending machines. The new machines included an increased proportion of healthy options, and included traffic light labelling (green, amber and red) under each item. Product sales data for each item category (green, amber, red) were compared to existing vending machine sales data.

The new healthy vending machines produced an average 36% increase in healthy (green) purchases, 21% increase in amber purchases, and 56% reduction in unhealthy (red) choices across the semester. These changes in sales remained stable across the semester, and did not significantly alter purchasing behaviour from the existing vending machines.

The new healthy vending machines resulted in healthier beverage and snack sales. However, their introduction did not result in a significant change to items purchased from existing vending machines (i.e., did not increase sales of unhealthy items from adjacent machines). The results suggest that the changes may persist beyond the introductory period. The present study shows that a ‘healthy vending’ program such as the one featured, offers a promising pathway towards increasing healthier snack and beverage choices.
HPV vaccination in gbMSM: Predictors, dynamic norms, and connectedness to the LGBT+ community

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Background:
Dynamic framing of counter-normative messages may be effective at increasing unpopular behaviours. This study tested social cognitive predictors of HPV vaccination and a dynamic norms intervention for increasing HPV vaccination intentions in gay, bisexual, and other men who have sex with men (gbMSM).

Methods:
Participants (n=217 gbMSM aged 18-45 in Ireland) provided data on sociodemographic constructs and constructs from the Theory of Planned behaviour and the Health Belief Model. Unvaccinated participants (n=94) were randomised between three experimental conditions (no norms, static norms, dynamic norms) and presented with information on HPV vaccine uptake in gbMSM in Ireland before reporting vaccination intentions.

Findings:
In an adjusted logistic regression, significant predictors of vaccination included being in a relationship (OR=8.69 [1.09, 38.91]), perceived susceptibility (OR=1.11 [1.04, 1.19]), healthcare provider recommendation (OR=107.24 [26.87, 427.99]), and perceived barriers (OR=.83 [.7, .98]). Adjusted linear regression models showed no significant differences in HPV vaccination intentions between no norms and static norms (B=-1.24 [-4.6, 2.12]), dynamic norms and static norms (B=-.62 [-3.86, 2.63]), and dynamic norms and no norms (B=.62 [-2.74, 3.98]). Connectedness to the LGBT+ community did not moderate these differences.

Discussion:
The impact of perceived susceptibility, the impact of barriers, and the strong influence of a recommendation from a healthcare provider in predicting HPV vaccination among gbMSM should be considered by policymakers. Dynamic norm messaging may be less effective for vaccination than other behaviours more easily influenced by social norms. Efforts to implement dynamic norm-based interventions in gbMSM should consider the limited evidence of efficacy.
Effects of Mental Contrasting on Sleep and Associations with Stress: A Randomized Controlled Trial

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Objective: Mental contrasting in combination with implementation intentions (MCII) has been successfully applied in interventions to improve health-related behaviors (e.g., physical activity). The present study explores if MCII is also effective to improve sleep duration and quality beyond the effects of providing sleep hygiene (SH) information, and investigated associations with stress parameters.

Methods: 80 early career researchers (mean age: 29.6, SD = 4.5, 62% women) were randomly assigned to either a MCII+SH condition (N=41) or a SH-only control condition (N=39). During a baseline-week before the face-to-face intervention and during a post-intervention week, sleep duration, sleep quality, and stress were assessed in daily diaries and saliva samples were collected to assess the cortisol awakening response (CAR). Additionally, we measured sleep duration via Fitbit Alta. Data were analyzed using multilevel modeling.

Results: For the total sample, self-reported sleep quality (b=2.977, p=.003) and duration (b=.172, p=.007) increased from baseline to post-intervention week. Contrary to our hypotheses, there was no statistically meaningful condition x week interaction for either sleep parameter or the CAR. Higher average stress was associated with shorter sleep duration and lower sleep quality, assessed via Fitbit and self-report. On the within-person level, days with higher than usual stress were followed by nights with lower sleep quality.

Conclusions: Although small improvements in subjective sleep parameters were found, positive effects of MCII could not be confirmed. MCII might be less effective to improve health-related domains which are less under individual control.
Developing theory-informed training for professionals to optimise delivery of social prescribing for mental health needs.

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Background:
Social prescribing (SP) involves connecting people with community-based services to improve their health and wellbeing. Theory-based training for SP professionals has potential to improve service design, fidelity of delivery and evaluations of SP on service user outcomes. We aimed to develop a training intervention for SP professionals underpinned by the Behaviour Change Wheel (BCW).

Methods:
One qualitative and one quantitative systematic review was conducted to identify active ingredients of SP services in the UK. Two qualitative interview studies (service users and SP professionals) were conducted to identify current needs and practice. Data were thematically analysed using the Theoretical Domains Framework (TDF). Behaviour change techniques (BCTs) and intervention functions were subsequently selected to inform a training intervention.

Findings
The quantitative review (N=13 studies) data identified 22 BCTs. The qualitative review (N=6 studies) identified the importance of person-centred care and supportive environments for behavioural change. Interviews with 21 SP professionals generated nine themes (across seven TDF domains) associated with service design and 13 themes (across nine TDF domains associated with SP delivery. Interviews with 18 service users identified 21 themes (across 11 TDF domains) of which seven suggested changed to current provision and 14 provided recommendations for future practice. Mapping findings onto the BCW informed five training intervention modules; knowledge of SP for mental health; essential skills; resource/caseload management; defining provider roles; and supervision and feedback.

Discussion
The training intervention has the potential to impact on SP providers’ capabilities to provide tailored support to address mental health needs of service users.
The role of mental well-being in the effects of persuasive health messages: A scoping review

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Abstract

Background
Persuasive health messages are designed to inform or change health attitudes or behaviours. Sometimes, exposure to certain characteristics of such messages (e.g., loss frames of fear appeals) can lead to unintended message effects, such as anxiety in recipients, possibly lowering mental well-being and interfering with intended message effects. Further, pre-existing mental well-being may alter the way in which participants process and interpret persuasive health messages. Literature on unintended effects of persuasive health message strategies and mental well-being has not been synthesized and relevant results are scattered across different fields.

Methods
This scoping review collected peer reviewed literature from four databases (PsycInfo, Medline, Embase, and Communication & Mass Media) in June 2022, yielding 3712 results. After deduplication, two-stage screening and reference screening, 24 studies were included.

Findings
Findings suggest that specific characteristics of persuasive health messages, such as negative emotional (e.g., fear appeals) and negative rational appeals (e.g., loss framing) might negatively influence (hedonic) indicators of mental well-being. However, there is also potential for positive effects (e.g., by use of humour). Mental well-being pre-exposure might negatively influence processing of persuasive health messages, depending on the severity of the negative symptoms, as well as (hedonic) indicators of mental well-being.

Discussion
Persuasive health messages might harm those already vulnerable and should be carefully designed considering the pre-exposure mental well-being status of recipient population, as well as affect on mental well-being. Furthermore, we recommend routine researching of mental well-being in health communication with unified measures.
The link between control beliefs, physical activity and, blood glucose among older adults

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A great deal of conceptual and empirical work has already acknowledged the relevance of control beliefs in successful aging and health. However, it is an open question whether and how control beliefs relate to blood glucose and diabetes. Diabetes is a serious, chronic disease that imposes a large social and economic burden in Germany. The objective of the present study was to, first, examine the link between (internal and external) control beliefs and blood glucose among older adults, and second, to explore the role of physical activity in this link. Using cross-sectional data from the Berlin Aging Study II (BASE II; N = 468; Mean age = 71; range 61–88; 64% women) hierarchical regression analysis were applied to test whether (internal and external) control beliefs were predictive of blood glucose over and above sociodemographic characteristics and overall physician assessed morbidity. Further, interaction terms were included into the models to examine the role of physical activity. Overall, results indicated no direct association between control beliefs and blood glucose. However, a significant interaction effect was found suggesting that the combination of higher levels of external control beliefs with lower levels of physical activity are associated with particularly higher levels of blood glucose. The present findings advocate an important role of physical activity for control beliefs and blood glucose among older adults. Further, our study provide impetus for future research to illuminate the relationship between control beliefs, physical activity and diabetes.
Background: According to the life-space constriction framework, maintaining mobility in old age depends on personal, social and environmental factors, but understanding of their relations with mobility when it comes to self-regulation and habit formation remains largely unknown. Thus, we aim to investigate the associations of self-regulation and habits alongside personal, social and environmental factors with out-of-home mobility of older adults in rural areas.

Methods: As part of the MOBILE trial, we present baseline data of 198 community-dwelling older adults aged 75 and older from Havelland, a rural region in Germany. At baseline, time out-of-home (TOH) was assessed via smartphone GPS (study device ZTE-BladeA5) for seven consecutive days. Age, gender, physical functioning, depressive symptoms, mobility-related automaticity and planning, loneliness, grip strength, green spaces, and number of revisited locations were assessed and regressed on TOH using mixed models.

Findings: Participants had a mean age of 82 (SD=4.0) years; 57% were women. Physical functioning (B=3.1; p=.008), mobility-related planning (B=26.2; p=.039), views on aging (B=106.8; p<.001), age (B=−8.8; p=.002), number of revisited locations (B=26.0; p<.001) and depressive symptoms (B=−18.8; p=.026) were significantly associated with TOH; whereas female gender, green spaces, mobility-related automaticity, grip strength, and loneliness were not significantly related (all p > .05).

Discussion: The findings highlight the importance of routines derived from GPS patterns, such as revisited locations, and self-regulation factors, such as mobility-related planning, as relevant factors for mobility behaviors in old age. The role of automaticity needs further elaboration, e.g. in longitudinal or interventional designs.
Fear of falling carries over into overprotection in old age: a cross-lagged panel analysis

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Background: When older adults fear to fall, their social network members might feel tempted to overprotect them. In turn, feeling dependent on others could increase older adult’s fear of falling. However, the association between fear of falling and perceived overprotection by others and their temporal order is under researched. This longitudinal study explores the potential reciprocal longitudinal association across three measurement points in time.

Methods: This study presents secondary analyses from a larger trial. We tested the association between fear of falling and perceived overprotection by others using a cross-lagged path model controlled for falls, health-related quality of life, age, gender, and group membership. N = 310 participants of the PREFER II study (M = 70 years, range: 64-92) completed self-reports on fear of falling and perceived overprotection at Time 1, 7 weeks (Time 2) and 11 weeks (Time 3) after baseline assessment.

Findings: We found a positive pathway from fear of falling to perceived overprotection across all assessment points (β = .12, 95% CI [0.02, 0.21], p = .02; β = .10; [0.01, 0.18], p = .03). The reversed cross-lagged paths were not significant. The model fit was good, CFI = 0.99, TLI = 0.98, RMSEA = 0.03, SRMR = 0.02.

Discussion: Findings suggest higher fear of falling translates into perceived overprotection by others. Our results do not support the reversed path. Fear-related beliefs and their potential carry-over effects on social interactions should be further investigated.
Personality traits and loneliness among older adults in England

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Background: Loneliness is a risk factor for mental and cognitive health among older adults. The association between personality trait and loneliness have yet to be explored while considering the genetic predisposition for loneliness and other individual factors.

Methods: We used data from 4,941 older adults 52 years and older from the English Longitudinal Study of Ageing (ELSA). We considered wave 5 (2010/2011) as our baseline and wave 6 (2012/2013) to wave 9 (2018/2019) for loneliness follow-up. Loneliness was measured using the three-item R-UCLA. We used linear regression and mixed-effects linear regression models. The five personality traits were included at the same time (mutually adjusted models). Polygenic scores (PGS), social isolation, sociodemographic, economic and health outcomes were included as potential confounders.

Findings: On average, the participants were 68 years old, married, with at least high education and retired. Extroversion (Coef: -0.390; 95% CI: -0.490-0.290) and neuroticism (Coef: 0.521; 95% CI: 0.448-0.594) were associated with loneliness at baseline. The stratified models for people with and without depressive symptoms showed that for people without depressive symptoms, agreeableness was also associated with loneliness (Coef: 0.126; 95% CI: 0.013-0.239). Extroversion was the only trait associated with the loneliness rate of decline (Coef: 0.021; 95% CI: 0.007-0.035). PGSs were only associated with loneliness at baseline.

Discussion: While only extroversion might help predict loneliness over time, extroversion, neuroticism, and agreeableness can inform older adults more at risk of being lonely. Health psychologists might consider personality traits and loneliness when assessing and planning mental health interventions for older adults.
Tackling the digital divide: Forming recommendations for health psychologists

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Purpose:
Digital interventions have many advantages, but a valid concern is that these interventions might widen existing health inequalities. A well-attended first roundtable ‘Mind the digital divide: How to reduce social inequalities in digital health promotion?’ was organized at EHPS 2022, focussing on exploring underlying mechanisms of the digital divide. One year on, we wish to enable further discussions amongst health psychologists on the topic, shifting the focus to possible solutions.

Objectives:
The aim of this roundtable is to continue to raise awareness of possible digital intervention-generated/-amplified inequalities and to activate health psychologists to think about innovative solutions and actions to overcome the digital divide. New evidence is presented, followed by a discussion on what health psychologists can do to mitigate this divide.

Rationale:
Digital interventions are common and increasingly used to target a range of health behaviours, yet have a high risk of exacerbating existing health inequalities. This is particularly the case for interventions focused on individual behaviour change, often designed and implemented in health psychology research and practice.

Summary:
The convenors will open the session with a brief introduction, summarising discussions of the EHPS 2022 roundtable and inviting the audience to actively take an actions- and solutions-focused mindset. Then, results of a recent systematic review investigating uptake, engagement and effectiveness of digital interventions will be shared (Heide Busse). Trying to explain why such inequalities might come from, Tina Jahnel will share her “digital rainbow model”, describing multiple possible entry points for digital determinants of health inequities. Subsequently, two presentations will discuss solutions to overcome the digital divide. Barbara Schouten will present on the MHealth4all project, developing and testing a digital intervention to promote access to mental healthcare services for low language proficient refugees and migrants. Lee Mercer will present on a study exploring belief differences between high and low socioeconomic status users of digital physical activity interventions, and on the results of a scoping review into the psychosocial mechanisms explaining differences in the efficacy of digital interventions for weight-related behaviours. A Q&A and short discussion will follow, after which small group discussions will focus on what specific recommendations should be given to health psychologists involved in designing, evaluating and/or delivering digital interventions. As output from this roundtable, the convenors will take the lead in developing an infographic that summarizes recommendations and share this with the broader health psychology and public health community, e.g., via social media.
The purpose of this study was to test a moderated mediation model. We first looked into whether fear of a cancer recurrence mediated the effect of time since diagnosis on trauma centrality, a concept rendering the impact of cancer on one’s self-identity. Secondly, we looked into whether the indirect effect would depend on the stage of diagnosis. We expected a more pronounced indirect effect for early stages as opposed to late stages.

Methods: We acquired data from 234 cancer survivors (78.02% female; Mage = 35.58), who received a cancer diagnosis, were undergoing cancer treatment or had finished their treatment. Together with demographics and basic medical information, participants completed the Fear of Cancer Recurrence Inventory Short Form (FCRI-SF) and the Centrality of Event Scale – the Short - Form (CED-SF).

Results: In line with our expectations, the results confirmed an indirect effect of fear of cancer recurrence which was stronger for survivors in the early stage of diagnosis (i.e., I, II) as compared to those in the late stage (i.e., III, IV).

Conclusions and future directions: The study emphasizes the significance of taking into account both the disease stage at diagnosis and the length of time since diagnosis when creating interventions to help cancer survivors address their fear of cancer recurrence. Theoretical ramifications and interpretive limitations are presented.
Sexual health concerns and daily functioning in partnered long-term head and neck cancer survivors

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Background: Sexual health is an important concern for head and neck cancer (HNC) survivors, however, there is a paucity of research among long-term HNC patients. The aim of the study was to explore the relationship between sexual health and daily functioning of partnered HNC survivors on average eight years after treatment.

Methods: A total of 189 partnered long-term HNC survivors (Mean age = 65.09, SD = 8.81 years) participated in a cross-sectional study. Mean [SD] time after treatment was 8.26 [1.58] years. Participants completed EORTC QLQ-C30 and EORTC QLQ-HN35 questionnaires. Multivariable linear regression analysis was used to investigate the relationship between sexual health (sexual interest and sexual enjoyment) and patient-reported daily functioning (physical, emotional, role, cognitive, and social functioning).

Findings: Two thirds of survivors reported at least some issues with sexual interest and enjoyment (M [SD]=37.77 [35.96], range 0-100). Less sexual interest and enjoyment were associated with worse physical functioning (p=.024), worse emotional functioning (p=.011), and worse social functioning (p=.005). There were no significant associations with demographic and treatment factors, cognitive functioning, or role functioning (ability to engage in work, daily and leisure activities).

Discussion: Prevalence of sexual health concerns was higher in our sample, compared to studies of HNC patients with a shorter follow-up. Patients that struggle with physical, emotional, and social functioning in their daily lives are most at risk. Since sexual dysfunction in HNC survivors has been associated with poorer quality of life and overall health, these determinants need to be considered when planning post-treatment interventions.
Reasons for acceptance and refusal of early palliative care in cancer patients

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Background: The integration of Palliative Care (PC) into oncology management is recommended well before the end of life. The literature shows that access to early PC would improve quality of life, reduce fatigue related to treatment side effects, and allow completion of the treatment protocol. The objective of this study was to assess the reasons for acceptance/refusal of early PC among cancer patients enrolled in an early phase clinical trial (Mixed Management – MM) and their understanding of this device.

Method: Thirty patients participated in a qualitative interview about reasons for acceptance (n = 27) or refusal (n = 3) of MM. A thematic content analysis was performed using NVIVO® software.

Findings: The main reasons for accepting MM were: to be psychologically accompanied, to anticipate in order to facilitate access to PC in the future, to have confidence in the medical profession, to reassure a relative. The main reasons for refusal are: the association in terms of belief between PC and death, the negative representation of psychological support, the absence of need for additional care. In addition, a difficulty in integrating information about PC was noted.

Discussion: Early PC seems to meet patients' needs and preferences. Informing, raising awareness, and increasing the knowledge of patients, healthcare professionals, and the general public about the objectives of SP appears to be essential to improve the quality of life of patients with a vital prognosis engaged.
Antibiotic resistance is listed among the top ten threats to global health. This problem has been exacerbated by patients’ expectations for antibiotics, regardless of medical necessity. Effective communication strategies to reduce such expectations and prevent overprescribing in primary care are needed. In a pre-registered online experiment with 1951 adult participants (average age = 40.2, 51% females) from the US, we investigated the impact of diagnostic uncertainty and social externalities of antibiotic use on patients’ expectations for antibiotics. The study design was a 2 (diagnostic uncertainty: certainty vs. uncertainty) x 2 (social externalities: communicated vs. not communicated) between-subjects design. Participants read a vignette describing a hypothetical doctor consultation and then expressed their expectations for antibiotics. A two-way ANOVA revealed that diagnostic uncertainty decreased expectations for antibiotics, $F(1,1947) = 941.47$, $p < .001$, $\eta^2 = 0.31$. Communicating social externalities also decreased patient expectations for antibiotics, $F(1,1947) = 161.63$, $p < .001$, $\eta^2 = 0.05$. The interaction of diagnostic uncertainty and social externalities was not significant, $F(1,1947) = 1.05$, $p = .306$, $\eta^2 < .001$. Exploratory analyses further revealed that communicating social externalities could buffer the negative effects of diagnostic uncertainty on trust in the doctor and their reputation. But if diagnostic certainty was present, providing contextual information about the social externalities had detrimental effects on trust and reputation. This study offers insights into how communication strategies can be used to reduce potentially unreasonable expectations for antibiotics. Further, the need for careful consideration of the positive and negative trade-offs in communication practices is highlighted.
Fostering appropriate antibiotic use in a delayed prescribing task

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Background: Antibiotic resistance is a global health challenge aggravated by the overprescribing of antibiotics in primary care. One of the recommended strategies to reduce antibiotic use in this setting is delayed prescribing. However, evidence suggests that psychological factors such as uncertainty and action bias might undermine its effectiveness. This study aimed to examine the effects of these mechanisms.

Methods: In this preregistered online experiment, adult participants from the UK (N = 690) completed a decision task with behavior-contingent incentives. The task modeled a delayed prescription situation where participants had either a fictional viral or bacterial infection. They were then assigned to one of the following conditions: (i) control, (ii) addressing uncertainty regarding disease type (i.e., monitoring of symptoms), or (iii) further addressing the action bias (i.e., active engagement during monitoring of symptoms).

Findings: Reducing uncertainty decreased antibiotic use when the disease was viral. Compared to reducing uncertainty alone, active engagement of the participants in the monitoring period further attenuated antibiotic overuse.

Discussion: The findings suggest that the potential of addressing uncertainty and the action bias can be further explored to promote appropriate antibiotic use in delayed prescribing situations.
The effect of base rates of viral infections on people’s antibiotic expectations

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Background: Previous research has shown that patients’ antibiotic expectations can influence prescribing practices and lead to antibiotic overuse, which accelerates antibiotic resistance. However, the cognitive factors underlying these expectations remain unclear. Here, using signal detection theory, we investigated the effect of the base rate of viral infections. We hypothesised that participants would display a liberal bias (i.e., higher inappropriate antibiotic expectations) in environments with higher base rates of viral infections.

Methods: Participants (N = 397) read 16 hypothetical medical scenarios and were randomly allocated to one of two conditions: control condition (50% of scenarios require antibiotic treatment) vs viral base rate condition (20% of scenarios require antibiotic treatment), and were asked to report their need for antibiotics as a treatment. We estimated the utility-based signal detection model parameters, bias and sensitivity, from participants’ rate of false alarms and correct detections using a hierarchical Bayesian approach.

Results: In the viral base rate condition, participants’ responses deviated systematically from the optimal criterion, and they displayed liberally biased antibiotic expectations, mean deviation = -0.88, 95% Bayesian CI [-1.01, -0.76] compared with the control condition, where participants did not display any liberally biased antibiotic expectations, mean deviation = -0.11, 95% Bayesian CI [-0.23, 0.02].

Discussion: Participants expected antibiotics for conditions which were not clinically appropriate when the decision environment approximated the real-world base rates of viral versus bacterial infections. Thus, the public’s inappropriate expectations for antibiotics can be seen as manifestations of diagnostic uncertainty in the environments with high base rates of viral infections.
Measuring knowledge, attitudes, and behavior regarding antibiotics use and AMR development

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The development of antimicrobial resistance (AMR) is a global health threat and largely driven by human behavior. Most prominently, AMR develops due to antibiotics misuse in patients, health care workers, and farming. To intervene, we must understand what humans know and think about AMR and how that influences their decision making and behavior. Despite some attempts to measure these constructs, none of the earlier used instruments adhered to psychological test development standards or have been reported to fulfill basic psychometric criteria. Thus, we developed a new measurement toolbox to assess individuals’ knowledge, attitudes and behavior regarding AMR. Item development was based on a taxonomy of AMR and a Delphi study. The initial item pool was administered to a general sample of n = 502 Germans (50\% female, Mage = 46.52, SDage = 15.45) Via psychometric analyses including exploratory and confirmatory factor analyses, we evaluated psychometric criteria and used them to select the best items from our larger item pool. Our final measurement tool box consists of 35 knowledge questions, 36 attitude items and 43 questions capturing relevant behavior in different target groups (patients, health care workers, farmers). The item sets allow reliable measurement and capture their intended constructs with broad content validity and good construct validity. Next, our measurement toolbox will be put to another test in a large representative sample from Zanzibar (target n = 1200) that will allow us to evaluate the status quo of AMR related constructs in a region particularly endangered by AMR.
The experiences of working cross-nationally in Commonwealth partnerships for antimicrobial stewardship

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Background: The Commonwealth Partnerships for Antimicrobial Stewardship were developed in 2019, funded by the UK Department of Health and Social Care, for groups of health professionals in UK, Ghana, Uganda, Zambia and Tanzania. The funding scheme included some training for partners in behavioural science and offered behavioural science volunteers to work with five of the twelve partnerships. We aimed to examine the behaviour change content of the interventions developed by the partners.

Methods: we conducted a behavioural content analysis of intervention materials. We asked for intervention materials from 12 partnerships and six submitted (50%). We compared partnerships with (n=2) and without (n=4) behaviour change volunteers.

Findings: we found that partnerships targeted 19 behaviours, most commonly hand hygiene and prescription of antibiotics. We found 23/93 (25%) behaviour change techniques in the interventions, with the most common being instruction on how to perform the behaviour. There was underreporting of specific behaviours, actor and target.

Discussion: interventions targeted multiple behaviours using a quarter of available behaviour change techniques. Intervention reporting did not lend itself to analysis or replication. In order to learn important lessons about antimicrobial stewardship projects, we need to increase the use of a shared language for reporting intervention targets and content.
Planetary Health: Towards a better understanding of food-related communication, cognitions, and behavior

14:00 - 14:15

‘Not my kind of food’: How diet shapes the presentation of sustainable food choices

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We analysed the relationship between food descriptions and dietary behaviour to better understand why shifting towards sustainable diets is so difficult. Specifically, we investigated how omnivores and vegans cognitively represent and publicly present meat and plant-based foods. Across three pre-registered projects (NProject1 = 3956, NProject2 = 1063, NProject3 = 996), food descriptions were coded according to whether they contained features about consuming and enjoying food (e.g. ‘rich’, ‘indulgent’, ‘treat’) or to aspects independent of the consumption situation (e.g. ‘healthy’, ‘protein’, ‘eco-friendly’), and analysed using binomial mixed-effect models. In Project 1, Instagram posts about meat foods were described with more rewarding consumption language than posts about plant-based foods, which were instead described with more situation independent features – especially health aspects and identity-focused discourse (e.g. ‘nutritious’, ‘vegan community’). In Project 2, participants described ingroup foods (meat dishes for omnivores; plant-based dishes for vegans) with more rewarding consumption features than outgroup foods (vice versa). Instead, omnivores used more situation independent features for outgroup foods, and vegans more socio-political context language (e.g. ‘animal abuse’). In Project 3, when trying to make a plant-based dish appealing to omnivores in a hypothetical social media setting, participants used more rewarding consumption language than when appealing to vegans. Despite people thinking about in-group foods in terms of rewarding consumption, plant-based foods are not publicly described in this way, even by vegans. As reward expectations drive food choices, this typical presentation of plant-based foods can hinder mainstream consumer transitions towards sustainable food choices and strengthen dietary group polarisation.
Revealing the beliefs behind meat reduction intentions

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Background. High meat consumption has negative consequences for public health, the environment, and animal welfare. To better understand the factors involved in reducing meat consumption, we used the Theory of Planned Behavior (TPB) to examine the effects of attitude, subjective norm, and perceived behavioral control (PBC) on intention and willingness to reduce meat consumption. Going beyond existing literature, we also explored which specific beliefs determine these three constructs.

Methods. In 2021, we conducted an online survey with a sample representative of the German population (N = 1093).

Findings. Results showed that the TPB constructs explained 55% of the variance in intention and 61% of the variance in willingness after controlling for sociodemographic characteristics. Importantly, each of the three TPB constructs affected intention and willingness to reduce meat consumption. Attitude had the largest impact and was determined by the beliefs that reducing meat consumption leads to a healthier diet, a reduced risk of developing certain diseases, a more natural diet, and the feeling of missing meat. In contrast, environmental and animal welfare concerns showed no effect on attitude. Both family and friends contributed to the perceived social pressure. Beliefs about being able to prepare meatless meals, being able to easily purchase meat substitutes, and having enough time to spend on one’s diet led to higher PBC.

Discussion. How these beliefs can be changed, and whether this is an effective strategy to reduce meat consumption, needs to be examined in future research by using experimental and longitudinal study designs.
Experts' perceptions on motivators and barriers of healthy and sustainable dietary behaviour among adolescents

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Background: The interplay of influences shaping dietary behaviours of adolescents need to be well-understood for developing effective strategies stimulating healthy and sustainable eating behaviours (HSEB). This study investigated the most relevant, urgent, changeable and effective motivators and barriers of HSEB among adolescents (12-18), as perceived by an interdisciplinary expert-panel.

Methods: Experts working in practice (N=20) and academia (N=13) were included. Five online semi-structured focus groups were conducted (6-7 participants). Data was thematically analysed by two coders, using a socio-ecological framework. The same experts individually selected the five most relevant determinants and rated (7-point scales) those on urgency, changeability and effectivity through an online questionnaire (N=21).

Findings: Experts revealed a wide system of 31 main-determinants including 176 sub-determinants that motivate or hinder HSEB among adolescents. ‘Role of peers’ (social environment) was mostly selected (N=13; urgency (M=6.38) changeability (M=3.85), effectivity (M=5.62)), followed by ‘food environment around school’ (N=9; urgency (M=5.78) changeability (M=3.44), effectivity (M=5.44)), ‘social influences’ (N=7; urgency (M=5.43) changeability (M=4.00), effectivity (M=5.71)), ‘autonomy in development’ (N=7; urgency (M=6.00) changeability (M=4.29), effectivity (M=5.86)) and ‘food availability in physical environments’ (N=7; urgency (M=6.29) changeability (M=3.29), effectivity (M=6.29)).

Discussion: A wide system of determinants was identified, spread throughout the socio-ecological model. Social factors (e.g., role of peers) and environmental factors (e.g., food environment around school) were dominantly selected as promising directions for intervention development. Interestingly, those factors scored relatively high on urgency and effectivity, but relatively low on changeability. Future research should investigate the changeability over time of those perceived less changeable determinants.
The healthy-sustainable heuristic: Do meal or individual characteristics affect the association between sustainability- and healthiness-perceptions?

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Research has shown that sustainability and healthiness perceptions of foods and meals overlap. The current study aimed to investigate whether this overlap is rooted in reality or rather the result of people applying a heuristic. Moreover, we investigated whether meal or individual characteristics affect the association between sustainability and healthiness perceptions. In total, 5021 participants rated the sustainability and healthiness of 29 meals in a University canteen context. Results showed a substantial association between sustainability and healthiness perceptions, which was, however, unrelated to the overlap in actual sustainability and healthiness of meals. This association was also unrelated to other meal characteristics, such as actual meal healthiness, sustainability, or content (i.e. vegan). Also, it was unrelated to the individual characteristics gender and eating style. However, this association was slightly higher in older than in younger participants. We conclude that there seems to exist a healthy-sustainable heuristic which is largely independent of the association between actual sustainability and healthiness of meals and foods. Future research is needed to shed more light on the nature, sources, and consequences of this heuristic.
Cross-cultural comparison of sustainable diet perceptions using a Fake Food Buffet.

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Background: Interventions to promote healthy and sustainable diets are urgently needed across the globe. Available studies predominantly focus on knowledge of sustainability and lack insights into consumers’ actual eating behavior. They furthermore usually focus on single Western countries, so lacking a global perspective. Therefore, this study investigates cultural differences between Global South and Global North countries regarding sustainable nutrition knowledge and sustainable and healthy eating behavior.

Methods: This experimental study used a 3 Meal Type (typical, healthy, sustainable) x 2 Region (Global North, Global South) mixed design. Participants (N = 45, 20 from the Global North and 25 from the Global South) were asked to self-serve three meals from a Fake Food Buffet and completed a set of questionnaires, including the Food Sustainability Knowledge Questionnaire (FSKQ).

Findings: FSKQ scores did not differ between regions (W[40.23] = 0.63, p = .534). Participants from the Global North self-served more vegetables, grains, and plant-based protein from the Fake Food Buffet (Fs[1, 43] > 9.08, ps < .004). Moreover, sustainable meals contained more vegetables, grains, legumes, and plant-based protein sources than healthy or typical meals (Fs[2,86] = 5.25, ps < .007) and fewer red meats, animal-based protein, and sugar than healthy or typical meals (Fs[2, 86] = 7.74, ps < .001). Interactions were not significant (ps > .303).

Discussion: People’s cultural background impacts their eating behaviors in general and sustainability perception specifically. It is therefore important to consider cultural differences when designing and implementing interventions targeting healthy and sustainable eating on a global scale.
Crossover associations between depressive symptoms and sedentary behavior: Findings from a longitudinal dyadic study

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Background: Several evidence-based models suggest within-individual and crossover associations between sedentary behavior (SB) and depressive symptoms. However, the ways in which symptoms of depression and SB are linked with each other are unclear. The aim of this study was to investigate crossover effects of SB of one person in the dyad on depressive symptoms in their partners. Second, the crossover effects of depressive symptoms of one person in the dyad on SB in their partners, were analyzed.

Method: Two competitive cross-lagged path models including data from 320 dyads (18-90 years old) were analyzed. Dyads consisted of a person attempting to change their lifestyle into more active (focus person) and their partners, supporting behavior change of focus persons. Depressive symptoms were assessed with the Patient Health Questionnaire-9 and SB time was measured with GT3X-BT accelerometers at Time 1 (T1; baseline), Time 2 (T2; 8-month follow-up), and Time 3 (T3; 14-month follow-up).

Findings: Focus persons’ depressive symptoms (T1) predicted partners’ SB (T2); partners’ SB (T1) predicted focus persons’ depressive symptoms (T2); and focus persons’ depressive symptoms (T2) predicted partners’ SB (T3). Higher SB time among partners (T1) predicted more depressive symptoms among focus persons (T2), which in turn was associated with higher SB time among partners (T3).

Discussion: This study is among the first to provide partial evidence for a dyadic vicious circle of SB and symptoms of depression and crossover effects linking SB in one dyadic partner to depressive symptoms in the other dyadic partner.
Symptoms of depression, self-regulation, and physical activity

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Background: The aim of this study was to establish the relationships between depression symptoms, self-regulation (physical activity-related awareness of standards, self-monitoring, self-regulatory effort, and avoiding temptations), and physical activity. In particular the order in which these variables operate and the indirect links between them were explored.

Methods: 603 participants from the general population (65.2% women, age range: 11- 86 years old) were enrolled. The self-reported data were collected at baseline (Time 1, T1), followed by Time 2 (T2) at two weeks later, and Time 3 (T3; 8 weeks after T2).

Findings: The results show that physical activity at T1 predicted self-regulation at T2 which in turn was associated with PA minutes at T3. Higher levels of PA at T1 predicted less depression symptoms at T2 and higher self-regulation at T3.

Discussion: Circular, bi-directorial associations were found for self-regulation and physical activity levels. Self-regulation was unrelated to the level of depression symptoms, which may be due to the non-clinical character of the sample. Low physical activity levels might constitute a risk factor for higher levels of depression symptoms in the general population. Self-reported character of data limits the conclusions.
The effects of physical activity planning intervention on body fat changes

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Background: Planning “when,” “where,” and “how” to act is considered an effective self-regulatory strategy to change physical activity (PA); however, less is known about its impact on health outcomes, such as body fat. Formulating a plan with close others might provoke changes not only in the target persons, but also in their partners (a ripple effect). This study aimed to investigate the effects of individual, dyadic, and collaborative PA planning intervention on changes in body fat in target persons and their partners.

Method: N = 320 adult target person—partner dyads participated in the individual, dyadic, collaborative planning condition, or the active control condition (Clinical Trials registration no. NCT03011385). At T0 (baseline), T3 (9-week follow-up), and T4 (36-week follow-up) a percentage of body fat was assessed with a bioimpedance method. Linear mixed models were fit to verify body fat changes at T0-T4, accounting for T3-levels.

Findings: Compared to the control group, there were no changes in body fat among target persons assigned to the three planning conditions combined or each of the three planning conditions analyzed separately. Regarding partners, no Time effects, but significant Time x Planning condition (for the 3 types of planning combined) and Time x Dyadic planning condition interactions were found. Partners in the control condition increased their body fat by 0.74%, whereas partners in any planning condition decreased their body fat by -0.84%.

Discussion: Dyadic planning fostered the ripple effect: supporting behavior change in target persons by partners has contributed to their body fat reduction.
Sedentary behaviors patterns in 2019-2022: small town versus big city

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Background
Besides intra-individual determinants of people’s behavior have been investigated often, the role of macro-environmental factors or significant events such as the COVID-19 pandemic requires more attention. The objective of this study was to analyze whether changes in sitting time can be attributed to a city's population size and the Oxford's Stringency Index – a measure of containment and restrictions policies during the COVID-19 pandemic.

Methods
Multilevel growth modeling was used to evaluate the change in total sitting time over a 37-week period in a sample of 603 adults and adolescents inhabiting 32 locations. The predictors included the size of a population of the cities/towns (<500,000 or >500,000 inhabitants) and the values of the OxCGRT Stringency Index (low, medium, high), obtained for the dates of data collection.

Findings
Participants from cities with population over 500,000 inhabitants reported more sitting time (7.48h) than those from smaller locations (6.51h). Over time sedentary behaviors were reduced, but only for those from cities with a population exceeding 500,000. The model fit was not improved when the Stringency Index values were added. The main effects of the containment and restriction policies were non-significant, nor were their interactions with time.

Discussion
As total sitting time may vary between inhabitants of smaller and larger cities, future health promotion campaigns aimed at reducing sedentary behaviors may need to target these populations differently. Further research, exploring contextual macro-environmental barriers and facilitators of sedentary behaviors, are also needed.
Sedentary behaviors predict self-efficacy: Longitudinal associations among people with overweight and obesity

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Background: This longitudinal study examined mutual relationships between three types of phase-specific self-efficacy beliefs and time spent on sedentary behaviors (SB) in people with normal body mass, overweight, and obesity.

Methods: The participants were 603 adolescents, adults, and older adults (59.7% women, age range: 12-86 years old); 15.8% had obesity, and 24.8% had overweight. Body weight and height were measured with the scale; self-efficacy and sedentary time were assessed across four time points spanning three months. Participants in the study were not knowledgeable about SB at baseline.

Findings: There were no significant associations between self-efficacy and sedentary behaviors among people with normal body mass. Among people with overweight, more SB time at Time 2 predicted weaker initiation self-efficacy at Time 4. Among participants with obesity, more SB at Time 1 predicted stronger initiation self-efficacy and stronger maintenance self-efficacy at Time 2. There was also a positive and significant relationship between SB at Time 1 and maintenance self-efficacy at Time 4 among participants with obesity.

Discussion: People with overweight who engaged in less SB at T2 felt more self-efficacious about their ability to limit their SB at follow-ups. In contrast, participants with obesity who have just learned about SB and its relationship to body mass (at T1) could have noticed that they engage in many SB, which made them motivated to change their SB patterns. It is possible that this change in motivation was reflected in an increase of initiation and maintenance self-efficacy at Time 2 and Time 4.
Predictors of interest in participating in a lifestyle trial among adults living with cancer

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Background: There is potential for bias in behavioural trials if those interested are already healthier. This study aimed to estimate effects of health behaviours and well-being on interest in participation in a trial of a lifestyle intervention.

Methods: Participants completed the Health and Lifestyle After Cancer survey (the recruitment method for the Advancing Survival Cancer Outcomes Trial). The survey assessed interest in trial participation, as well as self-report measures of physical activity (GLTEQ), fibre, red and processed meat, sugar, fruit and vegetables (FV) (adapted DINE), alcohol (AUDIT-C), smoking, and height and weight (body mass index; BMI). Participants were categorised as meeting/not meeting World Cancer Research Fund health behaviour recommendations. Fatigue (FACIT-F), quality of life (QoL) (EQ-5D), and sleep quality (PSQI) were measured and dichotomised to difficulties/no difficulties. Loneliness (Revised UCLA loneliness scale) was reported and categorised as higher or lower. A series of logistic regressions were run to estimate the influence of each variable on interest, controlling for confounders.

Findings: Of 5835 patients, 3354 (58\%) were “interested”. Only one health behaviour (meeting FV recommendations) was associated with interest (OR 1.29, 95\% CI 1.13, 1.47). Those meeting BMI recommendations and not having difficulties in QoL or sleep and lower loneliness had lower odds of being interested ((OR 0.76, 95\% CI 0.67, 0.86); (OR 0.80, 95\% CI 0.70, 0.91); (OR 0.76, 95\% CI 0.67, 0.86); (OR 0.85, 95\% CI 0.76, 0.96)).

Discussion: Those choosing to participate in this trial, aside from FV intake, were those who may potentially benefit most from the intervention.
Digital technology use for physical activity promotion: Results of a nationwide survey in Germany

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Background
Digital technologies can contribute to healthy behaviour. We aimed to investigate a digital technology use for physical activity (PA) promotion using a nationwide survey.

Methods
Our cross-sectional survey was conducted using a panel sample of 1020 adult internet users living in Germany (age: 18-92 years, 47% female). Computer-assisted telephone interviews were conducted using a self-developed questionnaire in November 2022. Survey data were analysed using relative frequencies and bivariate logistic regression.

Findings
Among all participants, 626/1020 reported internet use in health context and 278/626 (44%) reported digital technology use for PA promotion. Most of the 278 users for PA promotion reported that such technologies are easy to use (92%) and use them at least once a week (91%). The reasons for using digital technologies were to measure own PA (74%) or to find exercise ideas (57%). Most participants reported using mobile devices (e.g., smartphones, 77%, or activity trackers, 58%) and rated device feedback as helpful (69%). Among sociodemographic factors (age, gender, education, household income), health status and eHealth literacy, younger age was the only significant predictor (OR=.98, 95% CI: .97-.99) of digital technology use for PA promotion.

Discussion
Despite their availability, the prevalence of digital technology use for PA promotion is still low among adult internet users in Germany. Such technologies are likely to support PA behaviour change because users rate them as easy to use, their feedback as helpful and use them frequently. Health interventions are necessary to encourage digital technology use for PA promotion among adults in Germany.
Development and evaluation of an intervention to improve participation in colorectal cancer screening in Ireland

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Background: Worldwide, colorectal cancer is a burden in terms of health, quality of life, and healthcare costs. Despite the existence of an organised screening programme in Ireland, screening uptake remains low. The Creation of an Innovative Intervention for Improving Colorectal Cancer Screening (CRITICALS) project aimed to co-design an intervention with key stakeholders and to test its acceptability.

Methods: Two workshops with key stakeholders were organised to design the intervention. The results of a systematic review of qualitative research were used during the workshops to identify the reasons why people do not take part in screening. The Behaviour Change Wheel framework (Michie et al, 2011) was used to identify relevant intervention functions and behaviour change techniques to include in a revised version of the invitation letter and leaflet to participate in colorectal cancer screening.

Expected results and current stage of work: Through the co-design process, we revised the screening invitation materials in three ways:
(1) rewording of the current invitation letter to make it more appealing;
(2) addition of an information leaflet summary to highlight key information;
(3) addition of narratives from members of the public and a GP describing their positive experiences with colorectal cancer screening.
A mixed-methods feasibility study is currently in progress to assess the acceptability of the intervention materials in comparison with the usual invitation.

Discussion: This work took a systematic behavioural science approach and combined international evidence with stakeholder expertise to develop a theory and evidence based intervention tailored to the needs of the Irish context.
Financial INcentives to improve Asthma (FINA): a pilot RCT to improve medication adherence for children

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Background: Medication adherence for children and young people (CYP) with asthma is poor. Financial incentives are a widely used behaviour change technique (BCT) in healthcare, with growing use in CYP. The aim of this pilot is to assess the effectiveness of financial incentives in this context and to assess the feasibility of intervention and study processes.

Methods: CYP aged 11-17 years old who present to a London Emergency Department (ED) with a severe asthma exacerbation, are enrolled to a 24-week programme. All participants have their adherence measured using an electronic monitoring device (EMD) and receive twice-daily reminders. Participants randomised to the intervention receive £1 per AM/£1 per PM inhaler dose (max £2/day) for 12-weeks. Rewards are delivered at monthly intervals as ‘One4All’ e-vouchers. Data collection includes measures of adherence, asthma control, medicine beliefs, illness perceptions, habit and motivation. Focus groups with participants and interviews with parents/guardians will be conducted post-study.

Preliminary results: 22 participants have been enrolled (intervention, n=11) since July 2022; 6/11 have completed the 12-week intervention (reward: £38-168/£168; adherence: 23%-100%) and 9/11 have received the first monthly reward instalment (average reward: £46/£56 and adherence 82%). However, 2 participants have withdrawn, and 6 have experienced technical difficulties.

Current stage of work: Recruitment closes end Feb 2023; all participants will complete the pilot by Aug 2023. Focus groups/interviews will be conducted Aug/Sep 23.

Discussion: Technological problems and recruitment difficulties has made the implementation of this pilot challenging. Focus groups/interviews will be useful to obtain feedback on the financial incentives intervention.
Can we teach an old dog new tricks? Teaching behaviour change to practitioners in Paraguay

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Using theory- and evidence-based approaches (TEAs) when elaborating behaviour change interventions (BCI) in real world is highly recommended (e.g., Bartholomew et al., 2016). However, practitioners rarely use them (Hagger & Weed, 2019). Training practitioners might have the potential to change practitioners’ practices which ultimately might lead to behaviour change in real world.

The main objective was to assess the effects of a training about Behaviour change on knowledge, self-efficacy and intention towards using TEAs for behaviour change interventions.

A training based in the COM-B system (Michie, van Stralen, et al., 2011), doer and non-doer analysis (Mosler, 2012), the BCTs taxonomy (Michie, Ashford, et al., 2011) and surveys to assess healthy behaviours (e.g., the IPAQ, Craig et al., 2003) was delivered to Health Promotion Technicians (N=15) working in rural areas in Paraguay in 2022. Knowledge about BCIs was assessed by using a multiple-choice test. Moreover, self-efficacy and intention towards elaborating and evaluating BCIs were assessed by using scales. The three variables were assessed four times (before, during and after the training). Multilevel analysis was used to analyse the data.

Knowledge ($\beta = 3.81 [2.24; 5.39], p < .001$), self-efficacy ($\beta = 0.64 [0.32; 0.96], p < .001$) and intention towards using BCIs ($\beta = 0.36 [0.12; 0.60], p = .005$) significantly increased since the baseline.

The training seems to increase the knowledge, self-efficacy and intention towards BCIs. Further studies should assess the effectiveness of the training in other contexts and assess changes in health promotion practices.
A soft skills intervention in Higher Education: A randomized controlled trial

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Background: Soft skills are crucial for Higher Education (HE) students' employability, academic success, and mental health. However, current mental health promotion programs are often fragmented and fail to provide sustainable long-term effects. A systemic approach that integrates soft skills development within the curricula could benefit all students. This study aims to (1) evaluate the effectiveness of a soft skills intervention embedded within an undergraduate program in enhancing self-insight, psychological flexibility, and self-efficacy compared to a Waiting-list Control (WLC) among HE students, and (2) explore associated changes in mental health.

Methods: 100 Bachelor students were randomly assigned to a 6-week soft skills intervention or WLC (1:1) via computer-based randomization. Primary outcomes include self-insight, psychological flexibility, and self-efficacy. Secondary outcomes include positive mental health, depression, anxiety, and stress. Outcomes will be analyzed using a linear mixed-effect analysis with time (pre, post) and condition (soft skills intervention vs. WLC) as predictors.

Expected results: We expect an increase of self-insight, psychological flexibility, and self-efficacy scores only in the intervention group. No expected results of mental health.

Current stage of work: Data collection is finished, data analysis is ongoing.

Discussion: The results of this study could lead to the development of an evidence-based comprehensive and integrated approach to enhance protective factors for mental health in higher education students. Incorporating soft skills development into university curricula could provide sustained long-term effects, supporting the overall well-being of all students, and prevention of mental illness.
Supporting GPs and people with hypertension to maximise medication use: MIAMI pilot cluster RCT protocol

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Background:

International comparisons suggest that Ireland has relatively poor levels of hypertension control. According to recent international guidelines the most important cause of this is ‘poor adherence to treatment – in addition to physician inertia.’ The MIAMI intervention is a structured set of supports for GPs and patients to facilitate adequate information exchange about long-term antihypertensive medication use. GP intervention components include 30 minute online training, information booklet and consultation guide. Patient intervention components include ambulatory blood pressure measurement, chemical adherence test, consultation plan and educational videos.

Method:

We are conducting a pilot cluster RCT with an intervention arm (MIAMI intervention) and control arm (usual care). 60 patients will be recruited. Eligibility criteria include: age over 65, confirmed diagnosis of hypertension, >2 hypertensive medications and blood pressure readings not within target. A fidelity assessment and pilot health economic analysis will be carried out. Qualitative data will be collected via semi-structured interviews and analysed thematically.

Expected results:

Analysis of the feasibility data will allow the (1) refinement the intervention, and (2) determination of the feasibility of a definitive RCT.

Current stage of work:

5 out of 6 general practices have been recruited. As of February 2023, baseline data collection has been completed in two practices.

Discussion:

This pilot cluster RCT will allow us to gather necessary data to ensure optimal design of the MIAMI intervention for GP and patient use. It will also allow us to assess the potential feasibility issues involved in running a definitive RCT in Irish primary care.
Let’s talk CKD: supporting Primary Care Physicians to talk to patients about their CKD diagnosis

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Background: More than 840 million people worldwide have Chronic kidney disease (CKD), which causes substantial morbidity and increases cardiovascular and all-cause mortality. Early diagnosis is crucial, as treatment and lifestyle changes can slow disease progression and prevent complications. However, Stage 3 CKD (mid-stage kidney disease) is often left undiagnosed, and when a diagnosis is made this is often not disclosed to the patient.

Primary care physician (PCP) reluctance to disclose CKD diagnoses is a barrier to patients receiving appropriate care. This project aimed to identify disclosure barriers and develop a toolkit to address these barriers and encourage timely diagnosis and disclosure by PCPs.

Methods: A literature review and qualitative interviews with PCPs and nephrologists identified key disclosure barriers. The COM-B (Capability, Opportunity, Motivation, Behaviour) model and Theoretical Domains Framework were used to classify these barriers and identify the behavioural mechanisms that influence PCP behaviour related to CKD diagnosis disclosure. The Behaviour Change Technique Taxonomy and Intervention Mapping Framework were used to identify evidenced techniques to incorporate into the toolkit.

Findings: Barriers identified include lack of PCP knowledge, skills, and confidence (Capability); PCP perceptions of patients’ ability to understand and cope with the diagnosis, worry about potential unintended harm, and beliefs about disease progression and the necessity of disclosure (Motivation); lack of time resources, and collaboration between primary care and specialists (Opportunity).

Discussion: A description of the Let’s talk CKD toolkit will be presented, with detail of tools included to increase PCP capability, motivation, and opportunity to disclose CKD diagnoses.
Development of theoretically informed audit and feedback to improve asthma self-management in UK primary care

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Background: Audit and feedback is an evidence-based implementation strategy, but studies reporting the use of theory to guide design elements are limited. Within the context of a programme of research aiming to improve the implementation of supported asthma self-management in UK primary care (IMP2ART), we aimed to design and develop theoretically-informed audit and feedback that highlighted supported asthma self-management provision and areas for improvement in primary care general practices.

Methods: Aligned with the Medical Research Council (MRC) complex intervention framework, the audit and feedback was developed in three phases: 1) Development: literature and theory exploration, and prototype audit and feedback design; 2) Feasibility: eliciting feedback on the audit and feedback from general practice staff (n=9); 3) Pre-piloting: delivering the audit and feedback within the IMP2ART implementation strategy (incorporating patient and professional resources and an asthma review template) and eliciting clinician feedback (n=9).

Findings: Audit and feedback design was guided by and mapped to existing literature suggestions and theory (e.g. Theoretical Domains Framework, Behaviour Change Technique Taxonomy). Feedback on the prototype audit and feedback confirmed feasibility but identified some refinements (a need to highlight supporting self-management and importance of asthma action plans). Pre-piloting informed integration with other IMP2ART programme strategies (e.g. patient resources and professional education).

Discussion: A multi-stage development process including theory exploration and mapping, contributed to the design and delivery of the audit and feedback. Aligned with the MRC framework, the IMP2ART strategy (incorporating the audit and feedback) is now being tested in a UK-wide cluster randomised controlled trial.
Design and evaluation of a gender-sensitive intervention to prevent smoking in schools: Work in Progress

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Background. Like many countries, Germany is facing serious challenges in the fight against nicotine addiction: While cigarette smoking declined in recent decades, alternative products (e.g., e-cigarettes, hookahs) are becoming increasingly popular. Furthermore, the robust social gradient in smoking is evident across the lifespan: Adolescents from lower SES backgrounds, especially those attending the lower education track in Germany (schools that do not specifically prepare students for college), are at higher risk of initiation and progression to regular smoking. School-based prevention programs have shown modest, often short-lived, effects on smoking behavior. A limited number of stratified analyses by student gender suggests differential intervention effects for girls and boys. freipfad is a gender-sensitive, school-based smoking prevention program targeting lower-SES students. Interactive classroom sessions include components of health education, refusal skills training, and broader life skills training.

Methods. Intervention development is an iterative process including qualitative interviews with students, teachers, and educators, and feasibility testing of classroom sessions. A full, longitudinal clustered randomized controlled trial will be conducted assessing outcomes at 6 and 12 months post-intervention.

Expected results. We expect the program to increase students' intentions to be smoke-free and reduce smoking initiation rates and frequency of use across all smoking categories as well as for each form of smoking (i.e., cigarettes, hookah, and e-cigarettes).

Current stage of work. Interviews and the feasibility study are in progress in several schools.

Discussion. Findings from this study may inform future development of tailored, gender-sensitive interventions and prevention programs.
Habit decay in daily life: an intensive-longitudinal study on unhealthy snacking

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Habit is defined as the cognitive representation of a cue-behavior association that is learnt through repetition. Habits are long-lasting and characterized by automaticity. This makes them a useful resource for maintaining healthy behaviors, but poses challenges for disrupting unwanted habits. Past intensive-longitudinal research in daily life suggests habit formation to be an idiosyncratic process that follows a nonlinear time-trend. Research on habit decay in daily life, on the other hand, is lacking, even though breaking unhealthy habits is a common challenge people face. For the first time, we investigate with intensive longitudinal data how habit strength decays over time when trying to disrupt an unwanted habit. We investigate this at the example of unhealthy snacking, which poses a behavioral health-risk. In this observational intensive-longitudinal study, 76 participants (mean age 38 years, 90% female) from the general population were instructed to disrupt a self-selected habit related to unhealthy snacking with the help of implementation intentions over 12 weeks (data collection >95% completed). Habit strength was assessed in end-of-day e-diaries using the Self-Report Behavioral Automaticity Index. In this investigation, change in habit strength will be modelled at the person-specific and group level using linear, quadratic, cubic, asymptotic and logistic models (data analysis in early phase). Findings will shed light on how and when habit strength changes over time, and how this process differs at the individual level. Study findings could inform future behavioral change intervention development targeting the disruption of cue-behavior associations.
Efficacy of a self-regulation intervention on physical activity in dyads: A randomized control trial

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Background: Self-regulation training has positive effects on individuals' behavior change, but its maintenance remains a challenge. Interventions including close others could facilitate initiation and maintenance of behavior change for both partners. In this randomized controlled trial, we will investigate effects of training self-regulation and dyadic regulation on physical activity in dyads.

Method/Design: We will recruit dyads where both partners are not meeting the current recommendations for physical activity (150 minutes of moderate-intensity physical activity per week). After an intensive longitudinal assessment via daily diaries at baseline, dyads will be randomized into a treatment group and a waitlist control group. The intervention will consist of self-regulation training at Week 2 and 4, and additional dyadic regulation training at Week 4, with continued training prompts in daily diaries up to Week 8. The daily diaries will include items on daily physical activity goals and mechanisms of change. Participants will wear an accelerometer until the end of the trial (Week 16).

Multilevel analyses with linear models for continuous outcomes will be performed on hierarchically structured data with each partner’s repeated daily assessments (Level 1) nested within couples (Level 2).

Expected results: We expect an increase in daily physical activity and mechanisms of change (self-regulation, dyadic regulation).

Current stage of work: We are currently conducting a pilot study (n=20 dyads) to assess the feasibility of the study design.

Discussion: This study will evaluate an evidence-based self-regulation training for physical activity and provide insight regarding health behavior change with the involvement of individuals' close others.
Acceptability and Feasibility of an Online Theory-Based Tool to Reduce Stress-Induced Eating

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Background: The overconsumption of unhealthy foods in response to stress, known as stress-induced eating, has been associated with a range of negative health outcomes. Interventions that can help individuals to change this coping behaviour in favour of healthier coping behaviours are limited. The current research aimed to examine the acceptability of a range of coping strategies that can be used in place of stress-induced eating, and the acceptability of planning to adopt them using an implementation intention exercise, embedded with an online tool.

Methods: Participants were 277 community members in Australia aged 17–75 years old. Participants reported cues for stress induced eating, and then described the acceptability of a series of eight coping strategies which could replace stress-induced eating. Participants then formed an implementation intention, linking their preferred strategy with the previously identified cue. The study used a mixed methods design to assess feasibility and acceptability.

Findings: Almost half of the participants indicated a preference for physical activity or distraction as their replacement coping strategy. However, all other strategies were preferred by a substantive number of participants. Past experiences with the strategy and perceived utility of the strategy were reported as underpinning acceptability of all coping strategies. Pairing the implementation intentions exercise with the selected coping strategy was also acceptable.

Discussion: Interventions to reduce stress-induced eating should provide a range of options for replacement coping strategies and consider pairing them with implementation intentions exercises. Future research is needed to evaluate the efficacy of such approaches using randomised controlled trials.
Providing recovery education: a preliminary investigation on the determinants of the recovery behaviors in swimmers

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Introduction
Recovery strategies are health behaviors for swimmers to limit fatigue and achieve performance. The benefits of these recovery strategies are now widely promoted but a recent study reported that swimmers’ recovery behaviors differ from the actual recommendations. We aimed to identify the relevant determinants and sub-determinants of recovery behaviors following the Intervention Mapping protocol for future developing efficient recovery education interventions.

Methods
We conducted a cross-sectional study using an online questionnaire sent to swimmers licensed with the French Swimming Federation. Participants filled 33 items assessing determinants and sub-determinants of 5 targeted recovery behaviors. We used the Reasoned Action Approach to formulate the items and analysed the data using the confidence interval-based estimation of relevance (CIBER).

Results
From the 200 full-filled questionnaires, we found high intention to adopt recovery bedrock, passive mobilization and lower intention to adopt cooling and heating strategies. Attitudes, perceived referent behavior and approval, and perceived behavior control were positively associated with swimmers’ intention to adopt all of the recovery behaviors. We identified 2 items regarding perceived referent behavior and 3 items regarding autonomy appearing relevant for inclusion in the future interventions to improve the adoption of cooling and heating strategies.

Discussion
This study demonstrates that swimmers have already high levels of intention to adopt some recovery strategies and highlights that cooling and heating strategies require more attention. This approach allows to identify which determinants and sub-determinants need to be addressed in the development of recovery education interventions to improve the adoption of cooling and heating strategies.
Effective Behavior Change Techniques (BCTs) for successful weight loss maintenance among adults: A meta-analysis

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BACKGROUND. Maintaining a healthy weight, after weight loss is a challenge. In the present meta-analysis we examined which intervention components increase the likelihood of maintained weight loss amongst adults with overweight/obesity. Primary objective was to study total weight loss (baseline-follow-up) and weight loss maintenance (post-test-follow-up).

Methods: Meta-analytic review of RCT studies (March 2020-December 2021) with a focus on physical activity and/or diet and weight loss provided to non-clinical overweight/obese adults. We differentiated between three types of intervention studies: 1) weight loss only, 2) weight maintenance only, 3) combined. We examined BCTs.

Findings: 44 studies evaluated weight loss without a weight maintenance intervention, 14 studies evaluated weight maintenance interventions after weight loss, and 18 studies evaluated a combined intervention. The mean effect size of interventions studies on weight loss was ES (g) = -0.22. There was no significant difference between intervention and control groups during the weight maintenance period. Subgroup analysis showed that BCTs ‘Demonstration of behavior’ and ‘Graded tasks’ contributed to weight maintenance. An analysis of relative effectiveness showed 6 additional BCTs were likely to be effective: ‘Conserving mental resources’, ‘Adding objects to the environment’, ‘Self-incentive’ and ‘Incentive outcome’, ‘Review of behavioral goals’, and ‘Prompts and cues’.

Discussion. This study shows behavioral interventions have small, but significant effects regarding weight loss maintenance. This study suggests that ‘Demonstration of the behavior’, setting ‘Graded tasks’, ‘Conserving mental resources’, ‘Adding objects to the environment’, ‘Self-incentive’ and ‘Incentive outcome’, ‘Review of behavioral goals’, and ‘Prompts and cues’ likely contribute to weight loss maintenance.
A Novel Imagery Intervention to Change Implicit Theories About Self-Control and Improve Health-Related Behaviour

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Background: Implicit theories about self-control refer to whether an individual believes that self-control is a limited or a nonlimited resource. Implicit theories about self-control have been found to moderate the effect of self-control on a range of health-related behaviours. Most research into implicit theories about self-control has been observational and aimed at understanding how individual differences predict behaviour. The current study aimed to test the effect of a novel imagery intervention on implicit theories about self-control, smartphone social media use, and in turn, sleep hygiene.

Methods: In Phase 1 (N = 18) we developed and piloted the intervention. In Phase 2 (N = 141) we conducted a pre-registered randomized controlled trial to evaluate the effect of the intervention on Australian university students’ implicit theories of self-control, smartphone social media use, and sleep hygiene. Students attended a session on three occasions over three weeks for intervention delivery and collection of objective pre (7 days) and post (7 days) intervention smartphone social media use data, and self-reported implicit theories of self-control and sleep hygiene. Data were analysed using Bayesian ANOVAs.

Findings: Contrary to expectations, the novel imagery intervention did not have an effect on students’ implicit theories of self-control, or on subsequent smartphone social media use or sleep hygiene.

Discussion: Results indicate that implicit theories about self-control may be less amenable to change than other implicit theories and mindsets. Future research should consider whether more intensive or longer-term intervention techniques are required in order to elicit changes in implicit theories about self-control.
Illness-related perceptions, attitudes, and identity in chronic illness

15:30 - 17:00

Can illness perception predict Tuberculosis patients’ coping strategy? Applying CSM in North-western Ethiopia

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According to Common Sense Model (CSM), patients’ perceptions of their illness predict their coping strategy preferences. The ecological validity of the CSM was ratified among different patient groups but it is not well documented among TB (Tuberculosis) patients. The present study explored the association between illness perceptions and coping strategies among adult TB patients in North-western Ethiopia. Using a descriptive survey design, data were collected from 346 TB patients using a pre-tested questionnaire. The collected data were analyzed using descriptive statistics, Pearson correlation, and multiple linear regression models. Emotional reaction, control, time-line cycliological and consequence were significant contributors to TB patients’ social withdrawal coping (AOR = .191, F = 17.288, p<.000). Eighteen percent of the variations in using instrumental action coping were explained by emotional representation and consequence components of illness perception (AOR = .184, F = 20.469, p<.000). Consequence, illness duration, and emotional representation were significant predictors of patient’ utilization of asking God coping (AOR = .158, F = 22.604, p<.000). Timeline-cycliological and control were important predictors of receiving instrumental support coping (AOR = .115, F = 12.219, p<.000) and praising God coping (AOR = .278, F = 67.433, p<.000). It is concluded that different components of patients’ perception of their TB were associated with the coping strategy they employed, partially confirming the ecological validity of CSM. Therefore, TB eradication campaigns that are geared towards improving TB patients’ illness perception will improve their coping strategies thereby their overall well-being.
Illness perceptions in preoperative Parkinson’s disease patients undergoing subthalamic nucleus deep brain stimulation.

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Background: Even after major motor improvement due to deep brain stimulation (DBS) in advanced Parkinson’s disease (PD) patients, it remains unclear why some patients are unsatisfied by the result of DBS. We postulate that illness representations could interact with postoperative dissatisfaction. Our aims were to describe illness perceptions in preoperative PD, and to determine the possible impact of cognitive restructuration over them.

Methods: 27 PD patients were included (mean age 59±.5.94 years, mean disease duration 9.89±4.15 years). 14 of them benefitted of two non-structured interviews during preoperative period (45 and 25 days before DBS). 13 other patients benefitted of a first semi structured interview (DBS-45 days) investigating illness perceptions and expectations for DBS. Then a second interview (DBS-25 days) was proposed, based on cognitive restructuration on dysfunctional cognitions. They completed the Illness Perception Questionnaire-Revised (IPQ-R) at DBS-45 days and at DBS-1 day.

Findings: The scores for “personal control” over PD were similar at DBS-45 days in the two groups, whereas it appears significantly higher at DBS-1 day for restructured patients than for the others (p=.039). No other significant time effect was found for IPQ-R dimensions.

Discussion: Illness perceptions seem to be quite stable over time in advanced preoperative PD, mainly influenced by disease experience. However, cognitive restructuration seems to improve patient’s perception of personal control over PD, giving patients’ control back over disease. This constitutes a major point to work on in these PD patients, in order to improve perceived benefits of neurosurgery.
What can we learn from online comments about attitudes toward the Covid-19 vaccine?

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Background: We conducted a study into attitudes toward taking the Covid-19 vaccine among South Africans. The aim of the study was to identify psychological variables that influence attitudes toward Covid-19 vaccine uptake. We struggled to recruit participants to take part in the qualitative sub-study when advertising the study online. However, several people made comments on the online study advertisements that provided interesting insights into these attitudes.

Methods: We submitted an application to the ethics committee to conduct a content analysis of these online comments. Online users commented on the advertisements on Reddit and Facebook. We took screenshots of these comments and exported them to Atlas ti. We conducted a thematic analysis of the posts.

Findings: The vast majority of comments were made by internet users who did not want to take the Covid-19 vaccine. Common reasons cited for not taking the vaccine included concerns about setting a precedent for the future when taking the vaccine and viewing the vaccine as dangerous. Several people used the study advertisements as a platform to share links to videos and posts about the vaccine. Some participants shared thoughts regarding secret agendas influencing the pandemic. Finally, we found several angry outbursts aimed at the researchers and a general mistrust of the study.

Discussion: Our findings indicate that there are multiple reasons for Covid-19 vaccine hesitancy. We are particularly concerned about public mistrust in research. In our presentation, we will discuss our findings in the context of online health-seeking behavior.
Illness Identity and Well-being in Congenital Heart Disease: Directionality of Effects and Developmental Trajectories

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Objective. Individuals with CHD face illness-specific challenges on top of the normative developmental tasks of emerging adulthood. Consequently, some emerging adults with CHD appear to be at risk for reduced well-being. To understand why some individuals experience these difficulties, whereas others do not, this study examined the development of illness identity and investigated how it was related to the well-being of emerging adults with CHD.

Methods. This three-wave longitudinal study (I-DETACH-II) examined illness identity and well-being in Dutch-speaking emerging adults with CHD (baseline: n = 204, age range = 24-28 years) through the use of self-report measures. First, the directionality of effects between illness identity and well-being was examined. Second, developmental trajectory classes of illness identity were studied. Finally, differences in the development of well-being among these illness identity classes were investigated.

Results. Bi-directional associations were uncovered between illness identity and well-being. For instance, acceptance predicted better quality of life and less depressive symptoms over time. In addition, three trajectory classes of illness identity were identified: the acceptance class, the rejection class, and the rejection-engulfment class. Individuals in the rejection-engulfment class experienced worse well-being compared to the two other classes. Further, individuals with a complex heart defect were overrepresented in this class.

Conclusion. This study demonstrates the importance of illness identity in capturing individual differences in well-being among emerging adults with CHD. Understanding the development of illness identity and how it relates to well-being enables clinicians to assess and target illness identity in these patients.
Do illness perceptions predict health outcomes in adults with Long COVID?

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Objectives: We aimed to identify the psychological characteristics of adults with Long COVID, investigate associations between illness perceptions and mental health, and explore whether illness perceptions and mental health were predictors of quality of life and functioning.

Design: A longitudinal cohort study was conducted using quantitative survey methods in order to observe potential changes in health outcomes over time.

Methods: 253 participants were recruited from a Long COVID assessment clinic within the National Health Service in England and completed outcome measures evaluating mental health, quality of life, functioning, and illness perceptions. These were completed face-to-face at baseline. 61 participants completed quality of life and functioning outcome measurements again via post and online at least three months later at follow-up between November 2020 and March 2022. Hierarchical regression was used to investigate whether baseline measures of illness perceptions and mental health were significant predictors of health outcomes at follow-up.

Results: At baseline 59\% reported clinically significant depression, 42\% reported clinically significant anxiety, and 37\% reported comorbid anxiety and depression. There was no difference in anxiety and depression scores between individuals who were hospitalised with acute COVID-19 and those who were not. The total Brief Illness Perception score was associated with poorer mental health at baseline. Mental health at baseline was a significant predictor of quality of life and adjustment at follow-up, but illness perceptions were not.

Conclusion: Individuals with Long COVID presented with higher levels of anxiety and depression than the general population which had a negative impact on health outcomes.
Illness perceptions and adjustment to Crohn’s disease in young adults

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Background: Crohn’s disease is often declared in early adulthood. Yet, the diagnosis’ impact on illness representations during this sensitive period remains little explored. The objectives were to identify the representations of Crohn’s Disease in young adults, assess whether illness perceptions differ depending on time since diagnosis, and identify clinical and psychosocial factors associated with illness perceptions.

Methods: In this cross-sectional study, fifty-two participants completed an online questionnaire assessing symptoms of Crohn’s disease, illness perceptions, coping strategies, social support and self-perception. Intergroup comparisons and regressions were used to test hypotheses.

Findings: Emotional representations of Crohn’s Disease are prominent in young adults, the highest scores of the scale being for the dimensions of emotional response (M=7.77, SD=2.31) and concern (M=8.40, SD=1.99). The most frequently reported beliefs regarding causes of illness were mental health (n=48), lifestyle/diet (n=39), impactful events (n=18), genetics (n=16), and medical causes (n=16).

More recently diagnosed young adults (<24 months v/s >24 months) perceive symptoms as more frequent (M=6.24 v/s M=5.29; p=.038), with a greater emotional impact (M=8.76 v/s M=7.10; p=.013). Those relying on pain catastrophizing report a great emotional response to symptoms (β=0.51, p<.001) and a poor belief in treatments’ effectiveness (β=0.27, p=.05). Those reporting severe abdominal pain (β=0.49, p<.001) and an altered appearance perception (β=0.31, p=.012) feel concerned about their illness.

Discussion: The diagnosis of Crohn’s disease at a young age has an emotional impact on illness representations, particularly the first two years following diagnosis. Therapies focused on illness representations and pain management could allow a better adjustment.
Longitudinal associations between physical environment perceptions, self-regulation, and physical activity

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Background: Informed by the socio-ecological models, the study investigated how self-regulation indicators (awareness of standards, self-regulatory effort, self-monitoring) and perceived physical environment (at home, work/school, local neighbourhood) are chained together in explaining physical activity (PA). In particular, we examined (a) the mediating role of self-regulation in the perceived environment--PA relationship (b) the mediating role of the perceived environment in the self-regulation--PA relationship.

Methods: The study accounted for two measurement points, within a span of time 6 months. Adolescents, adults, and older adult participants (N = 603; aged 11-86 years; M = 33.8; SD = 16.8; 65.2% women) were enrolled.

Findings: Contrary to the assumed indirect effects, only direct effects were found. For example, higher self-monitoring (Time 1) and perceived PA-promoting built environment in the neighbourhood (Time 1) were directly associated with higher PA (Time 2).

Discussion: Physical activity promotion may need to target self-regulatory skills, but also awareness of the availability of a PA-promoting environment in the local community. More research investigating the bi-directional associations between self-regulation and the physical environment is warranted to deliver more efficacious interventions, promoting adherence to PA recommendations.
Vertical inter-goal relations between health goals and personal values among the emerging adult population

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Background: Interference and facilitation between different behavioral goals are hypothesized to cause heterogeneity in the effectiveness of multiple healthy lifestyle interventions. Goal interference and facilitation are often studied between concrete actions (e.g., preparing a healthy meal and driving children to school), whereas healthy lifestyles can also facilitate or interfere with personal values (value of being a caring parent). The present study explores vertical relations (conflicting and facilitating) between health goals of physical activity (PA) and healthy diet (HD), and personal values. The self-concordance measure was included as a method of data triangulation to validate findings of the vertical facilitation measure.

Methods: In this cross-sectional mixed-methods study, participants (n=84) from the emerging adult population (18-30 years old) were administered an adapted Personal Project Analysis (PPA) to report their PA and/or HD goals, followed by cross-impact matrices to rate vertical inter-goal relations with the list of personal values by Schwartz. Qualitative interviews explored vertical inter-goal relations.

Findings: Participants (mean age=24.74y ± 3.22, 62 females (74.7%)) reported on average 5.97 goals (SD=1.20, range=4-8 goals), and half of the sample reported both PA and HD goals. The vertical facilitation and self-concordance measure were positively correlated with each other (r=0.28). ANOVAs showed significant differences in facilitation scores, with achievement showing the highest facilitation rating for PA, and self-direction for HD, while HD conflicted the most with hedonism.

Discussion: The personal values of achievement and self-direction should be emphasized towards adopting a healthier lifestyle, while conflicting relations with the personal value of hedonism can be minimized.
Understanding Self-regulation in Hot Spotters

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Background:
There has been a rise in patients with complex (health) problems in the Netherlands. Within this group there is a subgroup, referred to as hot spotters, who experience problems in multiple care domains that ultimately result in frequent hospitalization and high medical costs. Thus far, literature has only focused on medically defining hot spotters, which means that little is known about how this group self-regulates health behavior. Exploring self-regulation of these patients will improve our understanding of this group and may help guide the development of proactive health promoting interventions that are better tailored to the needs of this population. In this study we will focus on proactive coping, self-management self-efficacy and intention for self-management, as these constructs are fundamental for developing proactive care.

Methods:
We will conduct a questionnaire study among a sample of 40 identified hot spotters that includes measures of proactive coping, self-management self-efficacy and intention for self-management. All data will be analyzed descriptively.

Expected results:
We will describe the extent to which hot spotters display proactive coping, self-management self-efficacy and intention for self-management.

Current stage of work:
Data will be collected in May and results will be ready before September 2023.

Discussion and conclusion:
The information collected in this study can help us understand how this patient group, that places a high burden on the healthcare system, self-regulates health behavior. This information can be used for developing more proactive interventions.
Supporting GPs and people with hypertension to maximise medication use: development of the MIAMI intervention

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Background: Hypertension is a major preventable cause of cardiovascular diseases and all-cause mortality globally. People with hypertension often find it difficult to take antihypertensive medications as prescribed. Despite this, discussions around medication taking are often not a routine part of the general practitioner (GP)-patient encounter. The aim of this study was to develop an intervention to support GPs and people with hypertension to maximise medication use to control blood pressure.

Method: Using the Behaviour Change Wheel as guidance, we drew on theory and evidence to draft the intervention. We then held a “Collective Intelligence” (CI) workshop with 20 participants, including people living with hypertension, GPs, primary care nurses, pharmacists and researchers. We used scenario based design, informed by the Extended Common Sense Self-Regulation Model, to elicit views on the proposed intervention and generate targeted intervention options. A ‘Public and Patient Involvement’ (PPI) panel refined the proposed intervention.

Results: The MIAMI intervention is a structured set of supports for GPs and patients to facilitate adequate information exchange about long-term antihypertensive medication use and adherence skill development. GP intervention components include a 30 minute online training programme, information booklet and consultation guide. Patient intervention components include ambulatory blood pressure measurement, a chemical adherence test, consultation plan and educational videos.

Conclusion: The CI methodology provided a systematic approach to the stakeholder engagement component of the MIAMI intervention design. The acceptability and feasibility of the MIAMI intervention is currently being assessed in a pilot cluster randomised controlled trial.
A meta-analysis of social cognition predictors of drowning preventive behaviours

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Background: Drowning is a leading cause of unintentional death, accounting for 7% of injury-related deaths worldwide. We aim to conduct a meta-analysis of studies examining the determinants of drowning preventive behaviours (e.g., lifejacket wear, supervision of children, limiting alcohol). Specifically, the study aims to meta-analyze correlations among constructs (e.g., attitude, risk perception, self-efficacy) from key social cognition theories (e.g., theory of planned behaviour) and use them to test theory predictions and effects of salient moderators.

Methods: A systematic search identified 6753 potential studies of which 52 provided correlations between at least one theory construct and intention or behaviour for drowning preventive behaviours. Theory predictions are tested using meta-analytic structural equation modelling. Studies are also coded for candidate moderators of model effects (e.g., age, gender, country-type, publication status, study design, length of follow-up, behaviour type, and type of assessment), with the proposed models estimated at each level of the moderators.

Findings: Results are expected to support theory predictions with attitude, subjective norm, risk perception, and perceived behavioural control predicting behaviour mediated by intention; and perceived behavioural control and intention directly predicting behaviour. Model effects hold when controlling for past behaviour, supporting the sufficiency of the theory in this behavioural domain. Few moderator effects are expected on relations between theory constructs.

Discussion: Findings identify important social cognition determinants of drowning preventive behaviours, highlighting potential processes by which they relate to behaviour. The tested model signposts potentially modifiable targets for behavioural interventions aimed at fostering safe behaviours around water, ultimately saving lives.
The role of sadness and self-criticism in proneness to smoke; an intensive longitudinal study

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Background: Understanding the role of negative emotions has been a hallmark of addiction studies. Sadness, among other negative emotions, increases addictive substance use. Additionally, previous studies have shown a significant mediating role for self-focused attention in the relationship between sadness and smoking behavior. Therefore, this study investigates the direct and mediated effects of sadness and self-criticism, as negative self-focused attention, on smoking and craving to smoke cigarettes.

Method: Using a repeated daily measurement design, participants were asked to answer the daily questionnaires according to their experience in the last hour. Five times a day and for one week, Cigarette use and craving, sadness, and self-criticism were measured in a sample of university students based in Tehran. A total of 35 participants finished the study (9 women, 26 men). The average answering rate was 29.65 (N=1038).

Findings: Multilevel Modeling (MLM) was applied to analyze the data. The results show that changes in sadness and self-criticism are significantly related to smoking and craving cigarettes. Furthermore, self-criticism has a statistically significant mediating role in the sadness-smoking relationship and sadness moderates the relationship between self-criticism and smoking.

Discussion: self-criticism, as a negative form of self-focused attention, is a possible mediator for sadness-smoking relations. Finally, results suggest that sadness moderates self-criticism and smoking relationship. Using MLM, we could also search for between-person differences, but this would need a larger sample size.
"ProGRess" – Reduce procrastination to improve students’ health – Analysis of a pilot intervention

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Procrastination as a behavioral phenomenon is particularly common among university students. It leads to negative consequences for physical and mental health. “Self-regulation” in the sense of the PSI-Theory (Kuhl) has not yet been reverted to interventions against procrastination. A resource-oriented self-management training that promotes self-regulation in the sense of Kuhl is the “Zürcher Ressourcen Model” (ZRM). This contribution presents the development and evaluation of an anti-procrastination-training which is based on the ZRM and aims to promote students’ health.

The first pilot of this intervention was tested in a quasi-experimental uncontrolled pre-post-follow-up study with N = 10 students (Mage: 24; 7 females, 3 males). The measured outcome parameters were procrastination, stress and self-regulation.

First results of 1-factorial rmANOVAs show that the intervention across all three measurements significantly reduces the level of procrastination (p < .005, d = 1.85) and stress (p < .05, d = 1.99). Self-regulation was significantly increased from T1 to T2 (p < .05, d = 1.82) but descriptive decreased again at T3.

The intervention itself and the evaluation design are currently being modified. A quasi-experimental wait-list control group study will be conducted with N = 108 students in the summer term semester of 2023. The reduced levels of procrastination and stress may be attributed to an improved ability of self-regulation. The results of this pilot, although obtained in an uncontrolled design with a small sample size, encourage us to further develop the intervention as a promising approach to deal with procrastination and to promote students’ health.
Testing an integrative self-regulation model of bedtime procrastination

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Background: Bedtime procrastination is an avoidable cause of insufficient sleep. Sleep priority could protect against bedtime procrastination by supporting the formation of adaptive habits and strong, specific intentions. We propose an integrative model of sleep self-regulation with sleep habits and intention properties as mediators between sleep priority and bedtime procrastination.

Methods: An online survey containing the German version of the sleep priority scale (subscales: relative importance of sleep, importance of sleep for daily functioning and sleep as a health goal), the self-report habit index, measures of intention and the bedtime procrastination scale was completed by 717 participants (565f) between 18 and 64 years (M=30.53; SD=9.95). We analyzed the model using SEM.

Findings: Relative importance was associated with decreased bedtime procrastination (b=-0.65) via stronger intentions (b=-0.05) and habits (b=-0.37). Oppositely, sleep as a health goal (b=0.29) and importance for daily functioning (b=0.12) predicted bedtime procrastination positively, partly by decreasing habit strength (sleep as a health goal: b=0.10). Both were also associated with stronger intentions which, in turn, decreased bedtime procrastination (b=-0.12). Sleep duration intention and intention specificity did not predict bedtime procrastination [X²(631)=2176.18, p<.001, CFI=0.93, RMSEA=.06, SRMR=.06].

Discussion: Especially relative importance of sleep protects against bedtime procrastination by supporting the formation of strong intentions and habits. The other two facets potentially foster preoccupation and reduce the automatization of going to bed. Concludingly, particularly relative importance should be emphasized when aiming to improve sleep related behavior.
Young men’s self-reported nonconsensual condom removal ("stealthing"): Associated risk factors

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Background: Nonconsensual condom removal (NCCR; i.e., “stealthing”) has received global media and legal attention despite limited empirical investigation. This study addresses this knowledge gap by assessing NCCR rates and associated risk factors. Methods: Heterosexually active men aged 21-30 who were inconsistent condom users and nonproblem drinkers (N = 374) were recruited in the southwestern United States. Measures assessed NCCR experiences, alcohol use and expectancies, sexual risk behaviors, sexually transmitted infection (STI) history, and unplanned partner pregnancies. Findings: Preliminary analyses indicate that approximately 9% (n = 33) of participants reported NCCR perpetration (M = 2.03 times; SD = 2.22; Range = 1-10). Compared to other men, those who had engaged in NCCR reported significantly more female sex partners; significantly more sex partners known for less than 24 hours; significantly more paid/trade sex partners; and significantly more frequent vaginal sex events in the past three months. Chi-square analyses demonstrated that men with a NCCR history were significantly more likely to have had an STI (45.5% v. 20.9%) or an unplanned partner pregnancy (45.5% v. 13.4%). Finally, logistic regression indicated that typical alcohol use (OR = 1.28), sexual coercion-related alcohol expectancies (OR = 1.83), and condom use-related alcohol expectancies (OR = 1.09) were associated with higher odds of NCCR perpetration. Discussion: Men who engage in NCCR report an elevated pattern of sexual risk behavior, indicating a need for targeted prevention efforts. Findings suggest that such efforts may benefit from incorporating material pertaining to expectations about alcohol’s effects on sexually risky and coercive behavior.
Is Drinking the Psychedelic Ayahuasca Associated with Improved Health and Health Behaviors?

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Background: Ayahuasca is a psychoactive brew used for ritualistic and therapeutic purposes in several countries, including Portugal. Despite its increasing popularity, the health effects and risks of using ayahuasca are still to be determined, namely from a public health perspective. This study aims to compare normative data from the Portuguese population with data from a large sample of ayahuasca users, on health behaviours, health status, and psychological well-being.

Methods: This work-in-progress poster presents a cross-sectional study of the normative Portuguese population and ayahuasca users in Portugal. Participants (250-300) will be recruited through online advertisements, contacts in the ayahuasca community, and social media platforms. Demographic information, health status, behavioural patterns, and psychological well-being will be evaluated through an online survey. We will use descriptive and inferential statistics to compare the two groups.

Expected Results: Based on previous studies in Spain and Netherlands, we expect to find significant differences between the normative Portuguese population and ayahuasca users in terms of demographic, health, and lifestyle characteristics. Ayahuasca users are expected to have a higher prevalence of health behaviours, better psychological well-being, and improved perceived health compared to the population at large.

Discussion: This study will provide insights into the health status and lifestyle of Portuguese ayahuasca users. The use of ayahuasca and other psychedelic substances is often assumed to be detrimental to individual and public health but a growing body of evidence suggests risks may be considerably lower than benefits. This study will contribute to this discussion and may inform drug regulation policies.
Body awareness, health anxiety, emotional regulation in preventive choices: a preliminary study on colorectal screening

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Cancer screening programs identify risks of diseases in asymptomatic subjects. Adopting a bio-psycho-social approach, the screening participation represents for health psychology a scientific challenge centered on understanding the psychosomatic and emotional factors connected to engagement in health choices. In recent years, the construct of body awareness emerged as an important factor in determining self-care health behaviors. Furthermore, it has been observed that health anxiety contributes to determine health behaviors, use of health care services, and decisions to engage in screening behaviors; for this reasons, an individual’s emotional regulation style may also be significant. This contribution aims to analyze and discuss the associations between the aforementioned clinical variables and some psychosocial factors concerning the relationship with colorectal screening, i.e. the affective and cognitive attitude towards it, the intention to undergo it, and the perceived control on the screening behavior.

A convenience sample of 145 subjects belonging to the target population of colorectal screening participated in an online survey containing a questionnaire created ad hoc with the purpose of detecting the variables of interest; the data were then analyzed using the SPSS software. The results show, on the one hand, a positive correlation between body awareness, healthy habits, disease phobia and perception of behavioral control; on the other, a positive correlation between cognitive re-evaluation, cognitive attitude, and intention to undergo colorectal screenings. Furthermore, a negative correlation between reappraisal and affective attitude emerged. These results, although still preliminary, seem to suggest interesting links between individual psychosomatic profiles, affective regulation, and participation in cancer screenings.
The German National Cohort (NAKO) – a resource to investigate depression in the general population

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Background: Depression, characterized by emotional distress and functional disability, is a common mental disorder that affects the lives of millions. Large cohort studies are a valuable resource for studying depression in the population. The longitudinal German National Cohort (NAKO) study is the largest German health study with a total sample size of 200,000 participants. We present the assessment of depression and mental health in the NAKO and show the association of depression measures with a number of established risk factors.

Method: The current analysis uses data from the first 101,667 participants of the NAKO (54% female, age range: 20-72 years). Lifetime depression and depressive symptoms were assessed with self-reported physician’s diagnosis of depression, the depression module of the Mini-International Neuropsychiatric Interview (MINI), and the Patient Health Questionnaire (PHQ-9).

Results: Approximately 15% of the subjects reported a lifetime diagnosis of depression via the MINI interview or the self-reported physicians’ diagnosis, and 8% had a PHQ-9 score indicating at least moderate current depressive symptomatology. Higher rates of depression measures and depression scores were observed in women and participants with lower levels of education. In addition, both family history of depression and childhood maltreatment were associated with increased depression.

Conclusion: The results of the present study provide evidence for effects of multiple risk factors on depression, such as social demographics, genetic and environmental factors, in a large population-based sample. At the congress, we will present the first results of our investigation into the association of smoking with measures of depression.
Understanding relationships between anxiety and interoception in panic patients - the role of emotional intelligence

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The aim of our study is to investigate whether emotional intelligence moderates the relationship between anxiety and interoception (perception of inner bodily sensations) in panic patients. According to current understanding, interoception goes well beyond physiological, homeostatic control functions and influences cognitive and emotional processes. Consequently, it has been shown to affect behavior as well. Hence, interoception can affect development and maintenance of mental disorders including anxiety disorders. The role of emotional intelligence on associations between interoceptive dimensions and panic disorder is not well researched.

The aim of current study is to examine these associations in a sample of N=40 patients with panic disorder. Specifically, the study is aimed at uncovering whether emotional intelligence moderates the relationship between anxiety and inner bodily perception, and to what extent (maladaptive) stress coping strategies can explain (mediate) this relationship in patients with anxiety disorders. Results will help to improve our understanding of important characteristics of panic disorder and may aid future therapeutic treatment of panic disorder. Specifically, enabling patients with low emotional intelligence to improve their skills in perceiving their bodily signals and learn how to manage their emotions may improve integration of interoceptive signals which in turn may help to reduce anxiety symptoms.
Investigating the role of mindfulness in healthy lifestyle behaviors and mental health: A longitudinal study

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Background: Mindfulness (i.e., relating to one’s internal and external awareness with a non-evaluative attitude) is increasingly being applied to the promotion of health behaviors and well-being. To better understand how mindfulness and mindful practices may (inter)act as determinants of health-related behaviors, longitudinal studies that demonstrate the underlying mechanisms of actions are warranted. The aim of this study is to longitudinally explore the direct and indirect associations between (1) trait mindfulness and (2) behavior-specific mindfulness practices on dietary intake, physical activity, and mental health in the general adult population.

Methods: This study utilizes a prospective survey design. A representative sample of Dutch adults (N = 1,100) will be recruited from among the members of a nation-wide research panel. Direct and indirect associations between mindfulness components (i.e., acceptance and attitudinal components), mindful behaviors, health behaviors, and mental health are tested using structural equation models with specified within-time, autoregressive, and cross-lagged pathways.

Expected results: Direct and indirect associations between mindfulness facets, behavior-directed mindfulness, health behaviors, and mental health will be presented using data from the baseline and 4-month follow-up assessments.

Current stage of work: Data collection for the first time point has begun. Follow-up data will be collected in July 2023.

Discussion: Results from this study can help determine whether and how mindfulness can be used to promote healthy behaviors and mental health. This is crucial, as a thorough understanding of the working mechanisms that influence behavior change can help intervention developers use these mechanisms in effective program development.
Psychological aspects of orthorexia nervosa in Bulgarian context.

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The study investigates the relationship between psychological aspects such as depression, anxiety, big five, life satisfaction and orthorexia nervosa.

We conducted an online survey with a sample of 161 people (M=32, SD=9.73). Participants completed Zung Self-Rating Depression Scale (SDS), The State-Trait Anxiety Inventory (STAI), The Big Five Inventory (BFI), Satisfaction with Life Scale (SWLS) and the ORTO-15 questionnaire.

Confirmatory factor analyses yielded four-factor structure for ORTHO-15 accounting for 53.1% of the variance showing strong internal consistency. The internal consistency, measured by Cronbach’s alpha coefficients, for the ORTHO-15 subscales were 0.814 (emotional factor), 0.604 (cognitive factor), 0.453 (behavioral factor) and 0.228 (clinical factor). Total ORTHO-15 score was positively correlated with total SDS scores (r=0.42; p<0.05), STAI scores (0.41; p<0.05) and negatively associated with SWLS scores (-0.251; p<0.05). Our results show that only the emotional factor subscale of ORTHO-15 correlated weakly but significantly with Neuroticism (0.231; p<0.05) and Conscientiousness (-0.203; p<0.05) of the BFI.

Our results found that higher levels of orthorexia nervosa are associated with higher levels of depression and anxiety and lower levels of life satisfaction. These findings provide a deeper understanding about orthorexia nervosa and highlight the importance of addressing important psychological factors present within the condition. The high psychometric indices of the ORTHO-15 questionnaire make it a reliable screening and diagnostic tool for health professionals.
Borderline Personality Disorder mediates the relationship between Insecure Attachment Styles and Working Memory Deficits

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Patients with Borderline Personality (BPD) had deficits in emotion dysregulation and cognitive function. One of the reasons that influenced BPD was insecure attachment styles. Both BPD and insecure attachment styles led to problems in executive functions. However, there was a gap to explain the effects of gender on BPD symptoms and attachment styles. Therefore, we aimed to examine whether gender would moderate the relationship between insecure attachment styles and WMD via BPD. In the first study, 117 Russian women participants with a mean age of 27, and in the second study 237 Turkish participants with a mean age of 33 fulfilled in Experience in Close Relationship, Borderline Personality Beliefs scale, and the Adult Executive Functioning Inventory. Both studies demonstrated that BPD mediated the relationship between insecure attachment styles and WMD. Our second study showed that attachment anxiety (β= .53, p <.001), and attachment avoidance (β=.18, p =.004) were linked to BPD, whereas gender (β =.10, p = .045) was marginally associated with BPD. Interaction between gender and attachment anxiety was not related to BPD (β =.08, p =.17), the same as in the interaction between attachment avoidance and gender (β =.04, p =.54). Controlling for the mediator, attachment anxiety (β =.19, p <.001), and attachment avoidance (β =.06, p=.01) were significantly related to WMD. BPD did not mediate the relationship between gender and WMD (β=.03, p=.06). Our findings indicated that gender did not moderate the relationship between insecure attachment styles and WMD via BPD.
Better living with self-care and mindfulness? – Effects of a health promotion intervention for teachers

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Teachers are exposed to a variety of stressors in their work context. These can have a negative impact on their physical and mental well-being. An online intervention for prevention and health promotion is tested for its effectiveness in an experimental study with 196 teachers. The aim of the intervention is to promote self-care and mindfulness among participants and thereby prevent possible consequences of work-related strains (e.g. stress or burnout), and to strengthen mental health.

The study is designed as a randomized 2*2 factorial wait-list control group repeated-measures design with 4 (treatment group) resp. 6 (wait-list control group) measurement time points. Central dependent variables are measures of self-care, mindfulness, stress experience, emotional exhaustion, self-efficacy and well-being, which are surveyed 5 weeks and 1 year (spring 2023) after the intervention to assess the short- and medium-term effectiveness.

The first follow-up after the treatment shows a significant increase in mindfulness and self-care and a significant decrease in stress and emotional exhaustion. Effect sizes can be rated as medium to large, which is at the upper bounds of meta-analytic findings for mindfulness-based interventions. This might be explained by the fact that in our intervention self-care skills were trained additionally to mindfulness. Self-care is defined as treating oneself in a loving and appreciative way, taking one's own condition and needs seriously and actively contributing to one's own well-being. In our view, being mindful is an important component of self-care, but self-care additionally emphasizes that a person needs to take action to promote his/her well-being.
War impact on the quality of life and wellbeing among Ukrainian university students and staff

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Background: The Russian invasion of the Ukraine has caused fear, stress, and loneliness among many civilians. Among war related conditions, we hypothesize loneliness is a significant factor associated with the psycho-emotional well-being of Ukrainian adults.

Methods: A total of 2,266 university students (79.5%) and personnel (20.5%) from 5 universities in the country were surveyed from September to December 2022. On-line respondents were mostly female (77.1%). Valid and reliable survey instruments, translated to Ukrainian language, were used for data collection about fear of war, resilience, burnout, loneliness, depression, quality of life, substance use and eating behaviour. Human subject ethical standards were applied, and SPSS Version 25 was used for this study.

Findings: Loneliness level was significantly more prevalent among females and students (p<.001). One-way ANOVA shows high loneliness level significantly (p<.001) associated with more fear of war, burnout, depression including suicide ideation, low resilience, and quality of life. Two-way ANOVA shows the combination of loneliness, gender or university statuses not associated with personal quality of life and well-being. Loneliness level was significantly associated with last month substance (i.e., tobacco, alcohol, analgesic and/or sedative) use, unhealthy food intake and weight gain (p=.001; p<.001; p=.014 respectively).

Discussion: Present results confirm our hypothesis that war-caused loneliness is significantly associated with the psycho-emotional well-being of adult civilians. Further research is needed, over time, across location and with different population segments, to confirm this finding that has short and long-term implications for policy and mental health services intervention.
Personal and Illness Identity in Youth with Type 1 Diabetes: Developmental Trajectories and Associations

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Background. Having type 1 diabetes (T1D) may complicate the normative developmental task of personal identity formation in adolescence and emerging adulthood. Besides exploring and committing to identity choices in different life domains, youth with T1D need to integrate their illness into their identity, a process labeled as illness identity. The present study examined whether youth with T1D belonging to different personal identity trajectory classes developed differently on four illness identity dimensions (acceptance, enrichment, engulfment, rejection).

Methods. This four-wave longitudinal study used self-report questionnaires to examine how personal identity trajectory classes were related to illness identity over time in youth with T1D (baseline: n = 558; 54\% female; age range = 14-25 years). Personal identity trajectory classes were identified using latent class growth analysis. Differential development of the four illness identity dimensions among these personal identity trajectory classes were examined using multigroup latent growth curve modeling.

Findings. Five personal identity trajectory classes were identified: achievement, foreclosure, moratorium, carefree diffusion, and troubled diffusion. Individuals in achievement and foreclosure displayed highest levels of diabetes integration (i.e., high levels of acceptance and enrichment; low levels of engulfment and rejection), whereas individuals in troubled diffusion displayed lowest levels of illness integration (i.e., low levels of acceptance and enrichment; high levels of engulfment and rejection).

Discussion. The present study confirms that personal identity development relates to illness identity development over time in youth with T1D. Understanding the intricate link between personal and illness identity may help clinicians to tailor their interventions to patients’ individual needs.
Validation of a French version of the "Brief Experiential Avoidance Questionnaire" (BEAQ) in non-clinical adults

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Background: Experiential avoidance (EA) describes the process whereby individuals are unwilling to remain in contact with unpleasant internal experiences like thoughts or emotions, and try to alter or avoid these experiences. Studies indicate associations between EA, smoking, overeating and alcohol consumption. EA is also central to acceptance and mindfulness-based interventions to behavior change. The Brief Experiential Avoidance Questionnaire (BEAQ; 15 items) is considered one of the best measures of EA. This study aims to validate in French the BEAQ. Methods: Three phases were planned. The first (completed) included the translation of the BEAQ using the translation and back-translation technique and the assessment of the clarity of the translated version’s items. Accordingly, the translated questionnaire was submitted to 93 psychology students to identify unclear/ambiguous items. Then, a final French version was retained through a committee approach. During the second phase, the original and translated versions of the BEAQ will be submitted to bilingual individuals two weeks apart to study the content validity and test-retest reliability of the scale. Finally, during the third phase, the BEAQ-French and other scales will be submitted to non-clinical adults to assess its internal consistency and convergent, discriminant and construct validity. Expected results: We expect the BEAQ-French to have good content validity, satisfactory test-retest stability, a one-factor factor structure, and good convergent and discriminant validity. Current stage of work: Currently, the second validation phase is ongoing. Discussion: A French validation of this questionnaire could allow its use in clinical practice and in research involving French-speaking individuals.
Self-compassion, adherence and stress in the context of psoriasis

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Background: Psoriasis is a chronic, incurable skin condition that is associated with maladaptive health behaviours and increased stress that can exacerbate symptoms. Theory and research indicate that self-compassion can promote disease management behaviours in the context of chronic health conditions, with reduced stress posited as an explanatory pathway. The current study aimed to investigate the associations of dispositional and situational self-compassion with perceived stress, treatment adherence, and symptoms in people with psoriasis over a 4-week period.

Methods: In this prospective experimental online study, participants with psoriasis (N = 317, Mage = 38.25, 73.82% female) completed measures of self-compassion, perceived stress, treatment adherence, psoriasis and itch severity, before being randomly allocated to a self-compassion writing task (N=155) or an active control (N=162) condition. Four weeks later participants (N = 207, Mage = 37.64, 71.91% female) completed the measures again.

Findings: Dispositional self-compassion was negatively associated with perceived stress, psoriasis and itch severity, and positively associated with treatment adherence, with a significant indirect effect for perceived stress in the association between self-compassion and itch severity $\beta = -0.54 [-0.94, -0.17]$. The self-compassion task increased state self-compassion at Time 1, but this increase was not maintained at the 4-week follow-up.

Discussion: Our findings extend the knowledge base regarding the benefits of self-compassion for adjustment to chronic conditions by demonstrating the relevance of self-compassion for psoriasis. A single administration online self-compassion task is effective for short-term increases in self-compassion, but repeated administrations may be needed to maintain these effects in people with psoriasis.
A Massive Open Online Courses: contribution to caregivers' knowledge

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Background: Massive Open Online Courses (MOOC) emerge as a solution to support the empowerment of family caregivers of vulnerable people, especially in times of social isolation due to the pandemic. This study intends to verify the MOOC’s effect on caregivers' knowledge, integrating personal and housing hygiene measures to be adopted in self-care-related activities, surveillance and monitoring by caregivers of the most vulnerable home-dwelling dependent people, in order to provide safe care and prevent coronavirus infection.

Methods: A pilot study, with pre-test, post-test, was carried out with a convenience sample of 33 caregivers from the north of Portugal. Caregivers filled a sociodemographic questionnaire and the knowledge questionnaire. Univariate analysis was performed through measures of central tendency and dispersion. The t-test for paired samples was applied for comparison between the median scores obtained in the knowledge test before and after the MOOC.

Findings: The participants were aged between 37 and 78 years (M=53.5; SD=9.44). They presented an average knowledge score of before attending the MOOC 14.94 (SD=2.72) and after viewing the course 16.52 (SD=2.28), (t(32)=4.180; p<.001), showing increased knowledge about the topics addressed. The questions with the highest number of incorrect answers were related to prevention measures, in the prevention of pressure injuries and how to dispose medicines.

Discussion: Nowadays, MOOCs represent a product and a resource to achieve better knowledge about caring, in a particular context of great social transformation associated with a pandemic scenario.
Easiness, usefulness, and intention to use a MOOC for caregivers

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Background: The COVID-19 disease caused several challenges to health systems, namely an increase in morbidity and mortality. The WHO, recommends healthy directives to the elderly and their caregivers in the pandemic context. The use of Massive Open Online Courses (MOOC) allows family caregivers to access contents to care for vulnerable people, mainly during the COVID-19 pandemic. This study intends to assess caregivers’ easiness, usefulness, and intention to use a Massive Open Online Course (MOOC) as an educational resource to contribute to the empowerment of family caregivers for vulnerable home-dwelling dependent people, in order to provide safe care and prevent coronavirus infection.

Methods: An exploratory, descriptive and transversal study was conducted. Participants were 33 caregivers from the north of Portugal. A sociodemographic questionnaire and a questionnaire supported by Davis Technology Acceptance Model (TAM) was applied.

Findings: The participants were aged between 37 and 78 years (M=53.5; SD=9.44). The questionnaire to evaluate the acceptance of the MOOC, following the TAM model, shows that the caregivers were satisfied with the course, considering it useful, with clear and understandable information. Caregivers evaluated the course positively, and those who had low literacy acknowledged the usefulness of the course to the caregiver’s role since it delivered clear and understandable information.

Discussion: The MOOC showed usefulness and caregivers’ intention to use this educational resource in future education. These massive courses unlock new opportunities for caregivers’ education, allowing empowering family caregivers to provide better care.
Confronting with a diagnose of cancer is a potentially stressful situation, as it often violates global beliefs. According to the meaning-making model, meaning-making is a coping strategy to reduce discrepancy between global and situational meaning. The process of meaning restoration can be automatic or deliberate. An example of automatic meaning-making is rumination, while deliberate meaning-making refers to conscious efforts like belief reconsideration. The question is how these two different processes influence cancer patients’ well-being.

To answer this question, a systematic review of studies on meaning-making will be conducted. First, we decided to focus on Core Belief Inventory as a tool to measure deliberate meaning-making. Then, we searched 8 databases (Scopus, EBSCO, PubMed, Google Scholar, SpringerLink, Cochrane, ScienceDirect, JSTOR) with following key words: "core belief*" AND ("cancer" OR "tumor" OR "oncolog*"). Using ASReview LAB we will look through articles and choose those that meet the inclusion/exclusion criteria. Basing on selected articles, data concerning the relation between deliberate meaning-making and well-being will be extracted and analyzed.

We expect results showing positive association of deliberate meaning-making on cancer patients’ well-being. We are currently reviewing articles and selecting those that meet the inclusion/exclusion criteria. We hope that separation into automatic and deliberate processes can help to better understand meaning-making process and its relationship with well-being. By showing the connection between deliberate meaning-making and well-being we can propose this process as a tool for psychological change. Positive results will be the basis for further research on fostering deliberate meaning-making to improve cancer patients’ well-being.
Self-Management of Long-Term Physical Conditions during Emerging Adulthood: A Systematic Review

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The aim of this mixed-studies systematic review was to synthesise existing research to identify if the five features of emerging adulthood (identity exploration; instability; self-focus; feeling in-between; possibilities) were evident in the self-management of long-term physical conditions by emerging adults (aged 18 – 29 years old). Five databases were systematically searched. Thirty papers met the eligibility criteria and were included. The synthesis identified that the five features of emerging adulthood are present in the self-management strategies and tasks of emerging adults living with long-term physical conditions. Due to numerous transitions, that characterise this unstable developmental period, emerging adults encounter specific self-management challenges. However, a greater understanding of the extent to which each of the five features are present and the challenges posed to the self-management of a long-term physical condition in emerging adults is required. This will inform targeted self-management supports and interventions in the future.
Yoga use, physical and mental health, and quality of life in adults with IBS

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Background: Intervention studies show yoga has several physical and psychological benefits for Irritable Bowel Syndrome (IBS), however few studies have explored yoga use in everyday life amongst people with IBS. This study explored yoga use as a predictor of IBS-related QoL in relation to other physical and psychological factors. It also utilized the COM-B model to investigate predictors of yoga practice, with a qualitative exploration of perceived IBS-related benefits and barriers to yoga.

Methods: A cross-sectional, mixed-methods survey was used. 219 adults with IBS (70 yoga practitioners) completed measures of symptom severity, psychological symptoms, general health, QoL, COM-B constructs in relation to yoga, and perceived effectiveness of yoga for IBS. Open-ended answers assessing perceptions of yoga in relation to IBS were analysed using thematic analysis.

Findings: In hierarchical linear regression, education, yoga use, symptom severity, anxiety, depression, and general health explained 64.6% of variance in QoL. Yoga use explained 6.1% after controlling for education. In hierarchical logistic regression, COM-B constructs explained 37.5% of the variance in yoga use. In the final model, only Opportunity and Motivation significantly predicted yoga practice. Qualitative analysis identified three themes reflecting perceived benefits of yoga (IBS Relief, A Valuable Self-Management Tool, Holistic Wellbeing), and three reflecting perceived barriers/limitations (Lack of Physical Capability, Need for a Tailored Approach, Limited Motivation).

Discussion: This study identifies significant relationships between yoga use in everyday life, physical and mental health, and IBS-related QoL, and identifies the COM-B model as a useful framework for understanding yoga practice amongst people with IBS.
Afraid of what? Barriers to medical rehabilitation from the perspective of the "sent" rehabilitant

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In Germany, public health insurance or the Federal Employment Agency may request people with long-term illnesses to apply for medical rehabilitation to continue receiving social benefits. Previous research suggests that uncertainties and obstacles associated with being "sent" may negatively affect motivation, attitudes towards, and the success of medical rehabilitation. To be able to address the issue adequately, this study's primary aim was to get a better understanding of this patient group's concerns and fears before the start of the rehabilitation program. A questionnaire was sent to 4000 insurants of the German Pension Insurance, who were requested to apply for medical rehabilitation, and whose application was approved. We assessed these future rehabilitants' motivation and expectations with the PAREMO-20 and FREM-8 and their concerns and fears with adapted items from previous studies. Once data collection is finished, correlation and regression analysis will be conducted. Through this analysis, we expect to identify this specific target group's most significant concerns and fears related to low motivation. The results of this study are intended to provide guidance for the development of an intervention by the German Pension Insurance, supporting the "sent" rehabilitant before the start of the medical rehabilitation program, and for future research endeavors.
Behavioral interventions to promote treatment adherence in Chronic Kidney Disease: A systematic review and meta-analysis

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Background: Chronic Kidney Disease (CKD) is a progressive disease requiring a complex and burdensome treatment regimen. Adherence behaviors, including dialysis attendance, taking medication, dietary restrictions and fluid limitations are crucial for survival and various health outcomes, but non-adherence is prevalent. This study aims to examine the effects of interventions promoting adherence behaviors in CKD, and to identify moderators of treatment effectiveness.

Method: We searched five databases for interventions targeting adherence behaviors in CKD. We coded studies for potential moderators, including use of theory, mode of delivery, behavior change techniques and other study and sample characteristics. Random-effects multilevel meta-analyses investigated the effects of interventions, and meta-regression analyses explored potential moderators.

Findings: We screened 16639 records and recovered 129 intervention studies, which reported data for any adherence outcome. Of these, 58 studies reported at least one direct measure of behavioral adherence. Overall effect sizes on direct behavioral measures were small and ranged from $d=0.11$ for protein intake to $d=0.50$ for medication adherence. Moderator analyses revealed several study- and intervention-related factors associated with intervention effectiveness.

Discussion: Interventions in this domain have limited effectiveness and rarely utilize behavioral theories. The moderators identified here can be used to inform the development and testing of novel interventions promoting adherence behaviors in CKD. Improved trial designs and standardized assessments of behavioral outcomes are needed to improve the quality of behavior change evidence in CKD.
The determinants of the quality of life of Parkinson’s carers: about the carer-cared-for dyad

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Introduction: The duration of couples increases at the same time as life expectancy and chronic pathologies related to age such as Parkinson’s disease. In France, spousal support concerns 3.9 million people and are those who provide exclusive help in the daily life of sick patients, which transforms the identity of the couple and their quality of life. The objectives of this study are multiple: (1) to understand the interaction between the quality of life of the Parkinson’s patient and that of the caregiver and the variables that influence it.

Mesures and procedure: 25 dyads of Parkinson’s patients and their caregiver-spouse completed quality of life questionnaires (SF-36, PDQ-8), anxiety-depression (HADS). Caregiver-spouses completed questionnaires on dyadic adjustment (FDCT-N), perceived burden (Zarit), social isolation (UCLA).

The preminilary results: Multiple linear regressions show that the psychological quality of life of the caregiver-spouse is predicted by age at diagnosis of patient, the presence of chronic disease, the spouse’s level of physical quality of life, a low perceived burden as well as a positive dyadic coping.

Discussion: Negative coping refers to hostile behavior (disparagement, distance, minimization) and superficial support for the other. Studies have shown that couples who implement positive dyadic coping strategies feel less stress, are more satisfied with their relationship and adjust better to the illness of the other.

Conclusion: The results of this study make it possible to identify the most vulnerable caregiver-spouse profiles in order to offer them couple support adapted to their needs.
Interventions addressing chronic disease – from intervention development to initial effectiveness and maintenance of change

15:30 - 17:00

Development of a toolkit promoting sustained lifestyle change among multimorbid individuals: the LifeMeds study

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Background:
Despite the need for appropriate tools to promote sustained lifestyle changes in individuals with a combination of chronic diseases, interventions are lacking. Therefore, this study aims to develop a toolkit for individually-tailored promotion of sustained lifestyle changes among individuals with a combination of the chronic diseases type 2 diabetes mellitus (t2dm), cardiovascular disease (CVD) and/or cancer. Specific tools are developed for individuals with low health literacy, low socio-economic status, and/or ethnic minorities.

Methods:
This mixed-methods study is guided by Intervention Mapping. Participants are overweight or obese individuals diagnosed with t2dm, CVD, and/or cancer (n=124) and relevant stakeholders involved in health care for these individuals. An extensive needs assessment is conducted using the following research methods: a systematic literature review; Delphi study; semi-structured interviews; longitudinal real-time assessment of lifestyle and parallel Ecological Momentary Assessment of determinants; focus groups; and questionnaires. Tools (i.e. methods and strategies for lifestyle change) are selected, adapted, or developed and integrated into a toolkit. End-products are co-created with end-users (health care professionals and patients).

Findings:
LifeMeds will result in a: 1) toolkit for use in (clinical) practice; 2) training on how to use the toolkit for health care professionals; 3) plan for adoption, implementation, sustainability, and evaluation of the toolkit.

Discussion and conclusion:
The toolkit is expected to improve health outcomes in individuals with a combination of the chronic diseases t2dm, CVD, and/or cancer, to improve health care, and to ultimately reduce the burden on health care providers and reduce health care costs.
Using the person-centered approach to adapt a digital therapy for inflammatory bowel disease

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Introduction.
Patient and public involvement (PPI) brings value to all stages of research, particularly intervention development and adaptation. The aim was to adapt COMPASS, a digital cognitive behavioural (CBT) based therapy designed for psychological distress in long-term conditions specifically for the inflammatory bowel disease (IBD) population (COMPASS-IBD); by working in partnership with people who have lived experience of IBD to maximise the acceptability of and engagement with COMPASS.

Methods.
Fourteen people living with IBD were recruited to a patient advisory group (PAG). We held a group workshop (n=5) and individual interviews (n=3), where members were asked to share experiences of living with IBD. These conversations were structured around the COMPASS intervention sessions, to identify relevant areas of adaptation. An iterative process was used to adapt the original programme, where members of the PAG group (n=12) and healthcare professionals (n=3) evaluated adapted sections and offered feedback on changes.

Results.
Main themes formulated through the focus group and interviews included the invisible and unpredictable nature of IBD, daily impact of IBD symptoms and medication, stigma, and feelings of isolation. These themes informed adaptations, such as creating IBD-specific patient stories and ensuring content around social and lifestyle factors were appropriate to IBD. During the iterative process, PPI provided 64 specific suggestions across the adapted programme, of which 56 were actioned.

Conclusion.
Through this approach to PPI in intervention adaptation, important needs for the IBD population were identified and informed COMPASS modifications. The adapted intervention is currently being evaluated in the ongoing COMPASS-IBD study.
Behaviour change after a type 2 diabetes self-management programme: A longitudinal qualitative study (Phase 1)

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Background
Although attendance at type 2 diabetes self-management education (DSME) programmes is associated with improved clinical outcomes, follow-up studies suggest that people often struggle to maintain behavioural changes over time, which attenuates the long-term impact of the programmes. This study aims to understand the experiences of behaviour change over time and post-programme care and support needs of adults with type 2 diabetes who attended a DSME programme in Ireland.

Methods
Twenty-one participants were recruited from two programmes, the Community Orientated Diabetes Education (CODE) and the Diabetes Education and Self-Management for Ongoing and Newly Diagnosed people (DESMOND) and consented to take part in four semi-structured interviews (eight weeks, five, ten- and fifteen-months post-programme attendance). Initial interviews were conducted between May and October 2022. Additionally, participants were given the option to take part in an experience sampling component (photographs and written notes) between the interviews. Interviews were recorded, transcribed and analysed using reflexive thematic analysis.

Findings
Data analysis of the initial interviews is currently underway, but it is expected to be completed by August 2023. Preliminary themes focus on experiences of diabetes diagnosis, perceptions of programmes, experiences of behaviour change, and expectations of behaviour change and post-programme care and support needs for the following months.

Discussion
This is one of the first studies to longitudinally explore behaviour change experiences, and post-programme care and support needs post-DSME in Ireland. Findings from this study will provide insights into how existing and new programmes can better support long-term behaviour change.
Maintenance of lifestyle changes following lifestyle interventions in breast cancer survivors: a systematic review

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Background:
Sustained favorable lifestyle changes may improve health-related outcomes in breast cancer survivors. To gain more insight into promising strategies to achieve sustained favorable lifestyle changes among breast cancer survivors, this systematic review aimed to synthesize the scientific evidence on maintenance of intervention effects on lifestyle and body weight in breast cancer survivors and to describe which methods and strategies were associated with effectiveness.

Methods:
For this pre-registered review (PROSPERO), four databases (PubMed, PsychINFO, CINAHL, MEDLINE) were systematically searched for relevant papers in the English language published from 2010 onwards. Retrieved papers were screened based on title, abstract, and full-text. Randomized controlled trials assessing the effectiveness of lifestyle interventions among breast cancer survivors reporting outcomes at baseline, directly at end of intervention, and at follow-up after end of intervention were included. Behavior change techniques were coded using the Behavior Change Technique Taxonomy version 1. Risk of bias and reporting completeness were evaluated using the Cochrane risk of bias assessment tool 2.0 and the Consolidated Standards of Reporting Trials (CONSORT) checklist. Screening, coding, and evaluation was conducted independently by two researchers. Inconsistencies were resolved by discussion and consultation of a third researcher.

Findings:
After removal of 365 duplicates, 1157 titles and abstracts and 154 full-texts were screened. Of these full-texts, 25 papers were included. Few studies reported significant intervention effects at follow-up.

Discussion and conclusion:
Findings inform researchers and health care professionals about what methods and strategies to use to promote sustained lifestyle changes in breast cancer survivors.
Stakeholder’s experiences of tailoring implementation of the DAFNE structured education programme for type 1 diabetes

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Background: Tailored implementation strategies effectively support implementation of interventions in healthcare. However, it is unknown which tailoring approaches are most feasible and acceptable to stakeholders and which outcomes they consider important. Dose Adjustment for Normal Eating (DAFNE) is an evidence-based patient education programme recommended for type 1 diabetes management, however its implementation and how best to support delivery are underexplored. Using DAFNE as a case study, we evaluated clinical stakeholder’s experiences of the tailoring process.

Methods: DAFNE clinical teams participated in a tailoring process involving three group discussions to prioritise determinants and select implementation strategies. Employing a mixed methods convergent design, participants’ experiences of tailoring are evaluated using multiple data sources (observation notes, surveys, interviews). Findings are integrated using a triangulation protocol. Data are combined using joint displays for within and cross-case analysis.

Results: In total 8 DAFNE centres in Ireland comprising 34 clinicians participated in the tailoring process. Teams prioritised determinants important to address now, including lack of available resources (administration support), access to knowledge and information (familiarity with course content), and networking and communication (long-standing relationships). A total of 20 clinicians from 5 centres completed post-tailoring evaluation interviews. Findings suggest the process is acceptable and feasible to clinicians, facilitating a dedicated opportunity to discuss DAFNE. However, additional guidance and evidence are not often used when prioritising determinants.

Conclusions: The findings inform best-practices for developing tailoring approaches which are feasible and acceptable to clinical stakeholders, incorporating the guidance and evidence they use and value to make decisions during tailoring.
Improving the lives of people with chronic conditions – Approaches to intervention

15:30 - 17:00

Biopsychological perspective on increasing physical activity in people with schizophrenia: pathways to adoption and maintenance.

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Background: People with schizophrenia experience high physical comorbidity, leading to a 15–20-year mortality gap compared with the general population. Lifestyle behaviours such as physical activity (PA) play important roles in the quest to bridge this gap. Understanding the impact of neurobiology associated with schizophrenia is vital for designing effective PA interventions because schizophrenia’s association with dopaminergic dysregulation, which can significantly impact motivation, cognition, and behavioural change. To address the problem of poor uptake and high dropout rates from PA interventions among people with schizophrenia, this study aimed to adopt an integrative theoretical approach, while considering the role of the neural circuits involved in motivation, to identify key strategies for promoting motivation and PA engagement from adoption to habit formation in people with schizophrenia.

Methods: Integrating evidence of empirically validated behaviour change theories, including theory of planned behaviour, self-determination, dual process, goal setting and habit formation theories, through a multidisciplinary discourse, we sought to address key motivational and cognitive barriers to adopting and maintaining PA in people with schizophrenia.

Findings: To address the dopaminergic and cognitive impairments associated with schizophrenia, incentivisation, enablement, planning, and modelling were identified as the key intervention targets at the adoption stage, while eliciting autonomous motivation and environmental restructuring with cues, with continuous planning and modelling, were instrumental for habit formation.

Discussion: By emphasising incentivisation and through engaging habitual, automatic processes, PA interventions may be tailored to by-pass some of the unique motivational and cognitive deficits experienced by people with schizophrenia.
Efficacy of a motivational and implementation intentions intervention on walking behaviour in women with fibromyalgia

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Background: We tested a motivational and implementation intentions intervention (MII) with women with fibromyalgia to increase their adherence to walking by focusing on the pain avoidance goal preference and considering the influence of catastrophizing.

Method: We carried out a laboratory experimental study in a Fibromyalgia Unit. Participants’ mean age was 53.5 years (SD=9.2). They were randomly assigned to a MII group (n=47) or a control group (GC; n= 45). We adapted the Six-Minute Walk Test as a proxy measure of maintenance of the walking behaviour. Participants decided either to stop or continue walking in five voluntary 6 min bouts.

Results: Participants walked during a mean time of 15.5 minutes (SD=9.6) and walked a mean of 1033 meters (SD=731, [60, 2627]). Nineteen women (20.7%) walked during the 30 minutes of the test duration and eighteen women (19.6%) did not complete the first bout. We did not find differences between both groups in the test performance (number of bouts, total distance, number and time of stoppages). However, ANOVA factorial analyses showed that participants in MII group tended to walk more distance in case of high catastrophizing (mean difference= 141.0 m; SD=195.2), while the total distance in CG was higher in low catastrophizing (mean difference= 106.0 m; SD= 247.3)

Conclusions: While women with low catastrophizing would benefit from programs that only making them aware of the goal (walking), women with high pain-related worrying would benefit from MII interventions that modifies the pain avoidance goal preference that hinder walking. (MINECO: PSI2016-79566-C2-1-R)
The general trust and CoViD-19 fear role on the variance of anxiety during balneological treatment

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The success of the medical approach depends on many variables, starting from the prescription and usage of medicines, and ending with the patient’s characteristics. One of the understudied aspects is the patient’s anxiety during medical procedures and the variables that influence it.

Objective. The current study investigates the role of variables like trust, CoViD-19 fear, and resilience, on the level of anxiety, during a 2-week balneological procedure.

Methods. In-patients from a medical balneological resort (N = 798) were asked about their state and trait anxiety, resilience, general trust in medical doctors and procedures (GTR), and fear of CoViD-19 (FCO) during the pandemic restrictions. State anxiety and FCO were longitudinally measured - on the first day, mid-time, and on the final day of the treatment - whilst GTR and resilience were measured only at the beginning of the medical treatment.

Results. Data were analyzed with a Jamovi package. The results show a significant decrease in state anxiety, from the beginning till the end of the medical procedure, mediated by GTR (15.9%) and FCO (4.26%). The moderating role of resilience on the relationship between GTR and anxiety state was not significant.

Conclusions. Based on previous studies, GTR is an important variable regulating the level of stress and anxiety during a medical procedure. This idea was emphasized, once again, by our study. Still, other variables may interfere in the same way, affecting the quality of life and the results of the medical treatment, for the patients.
Patients with severe asthma receiving mepolizumab report stronger positive emotions than mepolizumab-naïve patients

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Background: The prevalence of depression and anxiety in people with asthma, an incurable inflammatory respiratory condition, is 2-10 times that of the general population, even higher in severe asthma (SA). Psychological distress can impair asthma self-management and increase both patient and healthcare burden. Evidence on the effectiveness of psychological and/or behavioural interventions to address psychological distress in SA remains inconclusive. Based on evidence on complex biopsychological interactions between inflammation, mood states and discrete emotions, we aimed to examine whether emotions and psychological and clinical outcomes of patients with SA treated with a novel drug to reduce airway inflammation (mepolizumab) differ from those of patients who receive other anti-inflammatory treatment (mepolizumab-naïve).

Methods: We collected cross-sectional data from 30 adults with SA on their psychological distress, health-related quality of life, physical and psychological functioning, subjective asthma control and emotional composition using validated psychometric and clinical instruments. We compared these with cross-sectional data of the same measures from two groups (well and unwell) in a previous study in mepolizumab-naïve SA patients.

Findings: The mepolizumab group had better outcomes on all measures than the comparison groups apart from depression and asthma control that were equal in the study and well comparator group. The study group had different emotional composition and had significantly more intense positive emotions than any of the comparison groups.

Discussion: Patients treated with mepolizumab had better psychological and clinical outcomes and stronger positive emotions than mepolizumab-naïve patients. Biopsychological interactions are subject of a subsequent study.
Reducing self-stigma in people living with HIV in the Netherlands: Preliminary results of the RESET-intervention


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Background: HIV-related self-stigma is associated with poorer health outcomes, reduced quality of life and less access to HIV care and treatment for people living with HIV (PLHIV) worldwide. Unfortunately, programs that effectively target self-stigma among PLHIV remain scarce. The RESilience & Empowerment Training (RESET) is a Dutch face-to-face group workshop for PLHIV aimed at reducing self-stigma comprising three weekly sessions of 2.5 hours each. Preliminary results of the RESET effectiveness evaluation were investigated.

Methods: Sixty PLHIV were recruited through a Dutch HIV treatment center (OLVG) and HIV organizations for participation in the intervention and evaluation. For the evaluation, participants completed questionnaires at baseline, post-intervention and at three months follow-up. No control group was included. The primary outcome was self-stigma (HSS); secondary outcomes were quality of life (WHOQOL-BREF), self-esteem (RSES), and empowerment (ESR). Post-intervention effectiveness was evaluated with one-sided paired samples t-tests.

Findings: Comparing baseline and post-intervention, participants reported a significant reduction in self-stigma (p < .001, d = .66) and improvement in self-esteem (p < .001, d = .53), resilience (p < .001, d = .41), and empowerment (p = .022, d = .27). Concerning quality of life, participants reported an increase in psychological health (p < .037, d = .24), but no improvement in social support (p = .370, d = .04). Comparisons including follow-up will be incorporated for the conference presentation.

Discussion: Preliminary results indicate that the RESET workshop reduces HIV self-stigma and is promising for further implementation.
Understanding pain-related avoidance with the exploration-exploitation dilemma.

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Daily life is full of decisions, some straightforward (e.g., having a coffee with or without sugar) and others more complex (e.g., returning to work after a medical leave). When facing difficult decisions, individuals may encounter the following dilemma: exploiting previously acquired information (e.g., staying home and keeping pain under control) or exploring to obtain new information (e.g., going back to work with the risk of increasing pain). This dilemma is called the exploration-exploitation dilemma (EDD). The EED is particularly relevant in pain because according to the fear-avoidance model, after a painful event, avoiding potentially painful activities (i.e., over-exploiting safe options) can create a cycle of pain related-avoidance and maintain pain over time.

In the present study, we investigated how individuals solve the EED and what is the potential role of individual differences in this trade-off.

Participants (n = 200) completed a 4-arm bandit task online with appetitive (i.e., reward) and aversive outcomes (i.e., pain-related pictures).

Our results revealed the following main findings: First, participants mainly exploited options with low probabilities of pain-related pictures and high probabilities of reward. Second, the learning rate (i.e., how fast individuals learn) for the pain-related stimuli was higher than the reward. Finally, participants were more sensitive to rewards than to pain-related stimuli.

This study provides evidence of the underlying mechanisms of the EED in a pain-related context. These findings can have an implication for the development of prevention strategies for chronic pain.
The role of sex and gender role self-concept in the Trier Social Stress Test

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Background: The study aimed to investigate the influence of biological sex and gender role self-concept on subjective and biological stress reactivity in the Trier Social Stress Test (TSST).

Methods: 175 participants (98 women, 77 men) underwent the TSST. Subjective stress levels, capabilities to cope with the stressor and biological stress parameters (salivary cortisol, heart rate variability) were measured at four different time points (t0 acclimation period, t1 introduction of stress task, t2 immediately after stress task, t3 relaxation period). Gender role self-concept with the dimensions agency and communion was assessed by the Bem Sex Role Inventory (BSRI) at baseline. Regression models with stress parameters as outcome variables were calculated.

Findings: Women reported higher overall subjective stress levels than did men (F(1, 173)=13.20, p<.001, η² = .05). Women had a greater increase in self-reported subjective stress in reaction to the stress task (t1 to t3, β=0.36, p=.005) but also a greater decrease during the recovery period (t3 to t4, β=-0.28, p=.032). Additionally, higher levels of agency (at t0, β=-0.42, p<.001) and higher self-reported capabilities to cope with a stressor (at t0, β=-0.36, p<.001) were associated with lower subjective stress levels across all four time points, independent of gender. Association between agency, communion and biological stress parameters are currently being analysed.

Discussion: The results highlight the importance of considering sex and agency when assessing stress reactivity in the TSST.
Internalized heterosexism among LGBQ+ Lithuanians and it’s associations with psychological distress and well-being

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Internalised heterosexism (IH) – a minority stressor, experienced by LGBQ+ people associated with higher psychological distress. The formation of IH is highly influenced by societal attitudes regarding same-sex relationships. Therefore, the aim of this study was to explore the prevalence of IH in Lithuania (characterised as LGBQphobic country) and it’s associations with psychological distress and well-being.

A cross-sectional survey was conducted among LGBQ+ Lithuanians (N=181, Mage=28.01, SD=8.54) as a part of the larger study funded by the Research Council of Lithuania (P-ST-22-211). Reactions to Homosexuality Scale-Revised was used to assess IH. Outcome measures were assessed using Kessler’s 10 Scale and WHO-5 scale.

In comparison to other European countries, LGBQ+ Lithuanians presented with higher IH levels (M=16.57, SD=6.72). Regarding psychological distress and well-being, higher total IH was associated only with more expressed worthlessness (r=.219, p=.003). Although, higher personal discomfort with LGBQ+ identity was associated with higher total psychological distress (r=.181, p=.015), more expressed depressive state (r=.150, p=.044), higher anxiety state (r=.190, p=.011) and more expressed worthlessness (r=.294, p<.001). Other IH aspects were not related to psychological distress nor well-being. Gender differences were also found, with more elements of psychological distress being associated with higher IH in men than in women or non-binary/transgender people.

Consistent with our prediction, it seems that living in LGBQphobic Lithuanian society results in higher levels of IH which is associated with worthlessness feeling. It is also important that relations between IH and psychological distress are more prevalent in men, who often faces more homophobic stigma and discrimination.
Barriers to self-disclosure and emotionality in young men: Creating a more equitable future

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Previous research has indicated gender differences in help-seeking behaviours. Taking a critical approach to gendered health allows us to better understand why (young) men may find it difficult to disclose information about their own mental health and, or their feelings in general. Data from a qualitative questionnaire study of over 90 young people between the ages of sixteen and twenty-five highlighted young men’s reported desire to have more opportunities to express themselves emotionally. The responses from young women and non-binary participants also evidenced their support for such increased freedom of expression for young men – important since masculinity is constructed relationally between genders. This data questions the notion that the younger generation are challenging structural ‘norms’ that uphold gendered inequities. Following these initial findings, my final study looks to recruit young people for focus groups informed by a ‘Future Workshop’ design. The focus here is on young people addressing the question, ‘What would you like the ideal man to be?’, with a view to considering some of the barriers highlighted in the aforementioned study and how participants think these can be overcome. This study will look to recruit twenty to thirty participants and data will be analysed thematically. Currently, an ethics application has been submitted and recruitment for the study will commence soon. It is hoped this study will enable an understanding of how mental health and well-being across (young) men may be progressed and how barriers to self-disclosure and emotionality may be addressed.
Gendered eating: Can gender role orientations explain gender differences in healthy eating?

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Background:
Across different studies women have been reported to engage in healthier eating than men. However, the debate about gender differences so far widely ignores factors that can explain these differences. Gender role orientations, defined as an individuals’ identification with certain personality characteristics associated with masculinity and femininity in a given society, might be one of these explaining factors. Yet, no study so far examined whether gender role orientations can explain the effect of gender on healthy eating. Therefore, this was the aim of the current study. Moreover, we aimed to investigate whether gender role orientations can also explain gender differences in the theorized antecedents of healthy eating according to the Health Action Process Approach (i.e., self-efficacy, risk perception, outcome expectancy, intention).

Methods:
We aim to recruit a gender-balanced sample of 1325 participants representative for the Austrian adult population with regards to age, education and residential area. Data will be collected via an online survey, including measures on sociodemographic information, gender role orientations, healthy eating, and its antecedents. Group comparisons, correlational and mediation analyses will be performed.

Expected results:
We hypothesize, in line with previous research, that women score higher on healthy eating and its antecedents than men. Further, we expect that this relationship is mediated by gender role orientations.

Current stage of work:
We expect to start data collection in March 2023.

Discussion:
Findings will contribute to a better understanding of gendered health behaviors and explicate in how far gender role orientations account for differences in healthy eating.
Exploring the construction of gender identity in young women living with Polycystic Ovary Syndrome

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Background: Polycystic Ovary Syndrome (PCOS) is the most common endocrine condition with estimates of its prevalence ranging from 10-20% of women of reproductive age. Despite high rates of prevalence, there continues to be a lack of awareness surrounding PCOS. This study aimed to understand through a qualitative lens how young South African women with PCOS construct their gender identity and femininity.

Methods: 11 in-depth qualitative interviews were held over online platforms with South African women between the ages of 18 and 30 years. Participants were also asked to draw or find an image that depicted their experience of living with PCOS. Text and visual sources were analysed by making use of thematic decomposition analysis.

Findings: PCOS impacted how women constructed their femininity and gender identity. The ideal feminine body was constructed as being lean and hairless which led to psychological distress in participants who felt they could not meet this ideal. Infertility and childlessness also affected women in the sample. A striking finding was that women often experienced doctors and medical care as being insufficient and thus constructed counter-narratives, such as holistic approaches to treatment, redefining femininity and womanhood, and refuting biological motherhood as being the crux of successfully performing womanhood.

Discussion. While the findings highlight the challenges women faced, it also illuminated women’s resilience and how they constructed new definitions of what it means to be a woman. Recommendations for future studies and clinical practice is to further explore the qualitative and psychosocial aspects of women’s experiences of PCOS.
A comparison of individuals affected by SARS-CoV-2 and controls: Impairment in working memory and fatigue

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Background: The COVID-19 pandemic, with its severe limitations in several domains of life, represented a prolonged multidimensional stressor for the entire population. Individuals infected with the neurotropic SARS-CoV-2 experienced an additional stressor and may therefore be more vulnerable to the development of long-term sequelae, particularly of a neuropsychiatric nature. Our objective was to examine long-term cognitive and affective symptoms in individuals at least 3 months after their SARS-CoV-2 infection.

Methods: In this cross-sectional study, we compared individuals with (N = 40) and without (N = 42) proven SARS-CoV-2 infection regarding their hair cortisol levels, cognitive functioning (BTACT), fatigue (FAQ), self-reported long-COVID symptoms (C19-YRS) and health-related quality of life (SF-36).

Findings: In cognitive functioning, SARS-CoV-2 infected individuals performed worse in auditory-verbal learning (p = .014), working memory (p = .023), cognitive flexibility (p = .034) and processing speed (p = .001). Further, this group reported higher physical (p < .001) and cognitive (p = .007), but comparable affective (p = .745) fatigue. Anxiety was the most reported long-term symptom in both groups. SARS-CoV-2 affected individuals had lower physical (p = .004), but similar mental (p = .442) health-related quality of life. Hair cortisol levels did not differ between groups (p = .782).

Discussion: In summary, our results indicate impairment in working memory and (physical) fatigue in individuals affected by SARS-CoV-2, which could be caused by neuroinflammatory cascades. Remarkably, there was no difference in terms of mental well-being, which emphasizes the notion that all individuals faced challenges during the pandemic.
Associations between psychological distress and COVID-19 disease course: a retrospective cohort study of 3084 cases.

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Previous research showed that psychological distress has a negative impact on the disease course of viral infections. For COVID-19, the same association was observed in small samples of specific segments of the population. The present study presents a more refined analysis of this association, measuring a broader spectrum of psychological distress in a large sample (n=3084) of the general Flemish population of Belgium. Several types of psychological distress (state, trait and health anxiety, depression, intra- and interpersonal stress) are registered throughout three periods: one year before the contamination, one week before the contamination and during the contamination. In doing so, validated scales such as DASS-21, IIP-32 and FCV-19S are used. Furthermore, the course of COVID-19 is registered in several ways: number of symptoms, number of days sick leave and number of days the symptoms have lasted. Also, different control variables such as vaccination status, medical and psychological history are taken into account. Statistical analysis shows that all types of psychological distress are positively correlated with the severity of the COVID-19 disease course. Anxiety during the contamination shows the strongest correlation, but psychological distress one year before the onset of COVID-19 was still significantly associated with the worsening of the disease course. In view of possible future pandemics, it is important to focus on general stress and anxiety reduction in the general population as soon as possible. It is also advisable to minimize the use of stress-inducing messages to encourage the population to adhere to the measures issued during a pandemic.
Psychological determinants of intention to volunteering. Study of Polish and Ukrainian volunteers during the war.

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Objectives: In 2022 we examined the mental health status and individual psychological predispositions of volunteers working for war refugees in Poland and Ukraine in relation to their intention to volunteer in the future. The study was financed with funds from the Foundation for Polish Science in the framework of the FOR UKRAINE Programme.

Material and Method: 720 volunteers for war refugees (Poland: 435; Ukraine: 285) were examined by questionnaire methods (DASS-21 Scale; The Psychological Capital Questionnaire, The Norwegian Revised Scale of Hardiness, (DRS-15R))

Depression, anxiety and stress connected with taking part in voluntary activity for war refugees and psychological characteristics were measured. Then the volunteers were asked to assess their intention to volunteer in the future. The Student’s t-test was used to test the significance of differences in the variables measured between the Polish and Ukrainian samples. We used also multivariate linear regression to identify factors associated with readiness to voluntary work.

Results and conclusions: The results show that there are statistically significant differences between Polish and Ukrainian volunteers in the willingness to participate in volunteering for war refugees, differences in mental health status and hardiness. They prove the significance of depression and stress severity, as well as psychological capital and hardiness for their readiness to undertake volunteer activity in the future. Depression severity may be a factor discouraging Polish volunteers to act for war refugees in the future, in contrast to Ukrainian volunteers, who are also characterized by higher hardiness, resilience and optimism than Polish ones.
Quality of life, illness perception, and action crisis in orthopaedic post-trauma rehabilitation - pilot study

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Background: Patients undergoing post-trauma rehabilitation might experience action crisis (AC) leading to goal disengagement. Moreover, the health-related quality of life (HR-QoL) and illness perception (IP) can be associated with action crisis. The aim of our study was to assess the relationship between HR-QoL, illness perception and action crisis in post-trauma patients.

Methods: The study was observational/longitudinal. Psychological assessment was performed with EQ-5D/VAS for HR-QoL and self-rated health, Brief IPQ for illness perception, ACRISS for the action crisis and goal progress scale at the beginning and the end of rehabilitation. The statistical analyses included rho-Spearman correlation and paired samples Wilcoxon test.

Findings: The study group comprised of 35 (22-68 y.o.) patients referred to early orthopaedic post-trauma rehabilitation. There was a decrease in AC (p=0.033) and improvement in goal progress (p=0.012) during the rehabilitation. There was also negative relationship between VAS and AC at the beginning, but not at the end of rehabilitation (p=0.040 vs p=0.076). The VAS was inversely related to the perceived goal progress (p=0.013). The level of pain/discomfort and the level of usual activity at the beginning of rehabilitation was related to AC at the beginning (p<0.001; p=0.028) and the end of rehabilitation (p<0.001; p=0.043). Perceived consequences of the injury and timeline were related to AC (p<0.001; p=0.004) and the emotional response – to the AC (p=0.021) and goal progress (p=0.041).

Discussion: Perception of the post-trauma symptoms burden and disability are related to action crisis and goal processing and could be a potential aim of psychological intervention during rehabilitation.
To act or not to act – what drives our behaviour in times of crises?

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Introduction
Often, mitigating societal crises requires individuals to change their behaviour. Scarcity (not having enough resources to meet one’s needs), and a proclivity for conspiratorial thinking may shape construal of crises that influence decisions on whether or not to act. This study aims to gain insight into these questions by studying the Dutch general public’s behaviour in regarding climate change and COVID-19.

Methods
An online survey was filled out by a representative sample of the Dutch population (N=2,300). The survey enquired about changes in daily life behaviours (currently or in the past) due to different crises, e.g., recycling due to climate change or wearing a mouth-nose mask in public places due to COVID-19. It also measured several potentially related factors like general conspiracy thinking and perceived material, psychological, and time scarcity.

Findings
Binary logistic regression models showed that conspiracy thinking and material scarcity decreased the odds of several behaviours, e.g., recycling (OR=0.79, 95%CI [0.67, 0.92] and OR=0.64, 95%CI [0.55, 0.74] respectively) and wearing a face mask (OR=0.49, 95%CI [0.40, 0.60] and OR=0.59, 95%CI [0.50, 0.71]). Psychological and time scarcity were negatively associated with crisis-mitigating behaviours, but to a lesser degree.

Discussion
The results show that different health and sustainability behaviours are motivated by different factors, however, a higher tendency towards conspiracy thinking and more severe perception of material scarcity (not having enough financial resources to make ends meet) can decrease the odds of people performing behaviours that are beneficial to themselves, others, and the planet in the long run.
Critical Health Psychology after Fukushima Nuclear Disaster: Discourses concerning “Next-generation Innovative Reactors”

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The accident at the Fukushima No. 1 nuclear power plant started on March 11, 2011, causing massive environmental contamination by radioactive materials, and has seriously affected the health and lives of people. Radiation can cause serious health damages. People had an urgent need to know the full reality of the accident. The authorities, the power company and scientists had to communicate information about it. Then a massive “discourse analytic social situation” occurred around the accident, and discourses related to it have had a significant impact on people, influencing a generation and increasing anxiety about the effects of low-dose radiation exposure. After the accident, the Japanese government shifted to a policy of reducing dependence on nuclear power. But in 2022, the prime minister stated that the government would move forward with the construction of “next-generation innovative reactors” (NGIRs). When I read this in a newspaper report, I had the impression that a new generation of safe, clean, and economical nuclear power plants was about to be realized. Currently, related legislation is being proposed and the policy is being implemented. What are NGIRs? Are they safe? This issue can obviously affect our health and lives. By whom, when, and how did NGIRs come into use? What is this going to bring us? To answer these questions, articles containing the term in major Japanese newspapers are being collected and analyzed from the perspective of Foucauldian discourse analysis. Tentative analysis shows NGIRs are collectively constructed mainly by authorities to advance their policy.
Posttraumatic Stress Disorder, Childhood Trauma, and Health Behaviors in Victims of Intimate Partner Violence

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Intimate partner violence (IPV) is considered a serious public health problem and a significant risk factor for women's health. In Portugal, studies that focus on the investigation of post-traumatic stress disorder (PTSD), childhood trauma, and health behaviors in victims of IPV are scarce. This research aimed to explore the relationship between childhood victimization and adult re-victimization with PTSD, also evaluating the involvement of women in health behaviors. This study presents a cross-sectional, descriptive-correlational design. The total sample consisted of 67 victims and 50 non-victims. The Childhood Trauma Questionnaire, the Revised Conflict Tactics Scales, the Health Attitudes and Behaviors Questionnaire, and the Posttraumatic Stress Disorder Checklist were applied. T-tests, Pearson correlation (r) tests, and hierarchical regression analyses were conducted. The results showed that women victims of IPV have higher levels of childhood abuse and PTSD, and fewer health behaviors compared to nonvictimized women. Childhood abuse and IPV were positively correlated with PTSD and health behaviors were negatively related to IPV, PTSD, and childhood sexual abuse. Hierarchical regression analyses showed that childhood physical and emotional abuse and psychological aggression in adulthood were the strongest predictors of PTSD while childhood sexual abuse and sexual coercion in adulthood were negative predictors of involvement in health behaviors. This study shows the impact of trauma on mental health and on health behaviors, and highlights the need to design effective interventions that prevent future revictimization and promote healthy behaviors in victims, especially in sexually abused women.
Profile of adults seeking voluntary HIV testing and counseling in Portugal

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Users of publicly funded HIV Counseling and Early Detection Centers (CDCs) in the Portuguese National Service have been found to have higher rates of HIV risk behavior than the general population, but data concerning their specific socio-demographic, behavioral, and cognitive profile are limited. In this primary health center-based study, we document profiles of adults seeking voluntary testing and counseling and analyze correlates of HIV testing. A cross-sectional study was conducted in a sample of 308 Portuguese users of CDCs (98 women and 210 men) using interviewer-administered fully structured questionnaires. Significant gender differences were found for consistent condom use in vaginal sex, number of lifetime sexual partners, and barriers towards safer sex, with men showing higher results, and for consistent condom use in anal sex, with women showing higher results. In a multivariate analysis, correlates of HIV testing were being male, being younger, having a higher educational level, living in urban areas, and having higher HIV transmission and prevention knowledge. Hierarchical regression analyses also showed that being younger, having a higher perception of negotiation self-efficacy in condom use, having higher HIV knowledge and lower barriers towards safer sex were the main factors associated with safer sex practices among CDC’s users. This study provides baseline data on this understudied population and identifies variables associated with HIV testing, factors that would allow developing effective interventions to reduce risk behavior targeting the identified variables.
The moderating role of type of screen time on the relationship between loneliness and insomnia

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Background:
College students experience unique sleep-related challenges, frequent media use and elevated rates of loneliness which are each related to mental and physical health outcomes. The goal of the present study was to examine the influence of different types of screen time on the relationship between loneliness and insomnia in college students.

Methods:
Participants (N = 1,011 college students; M age = 19.9 [SD = 2.3]) completed questionnaires of demographics, loneliness, insomnia, and daily screen time. Type of screen time was classified as: social, non-social, or productivity-related. The PROCESS macro (Model 1) examined whether type of screen time moderated the relationship between loneliness and insomnia. Correlations and odds ratios were calculated.

Findings:
Insomnia was significantly correlated with loneliness (r = .27), social screen time (r = .07), and non-social screen time (r = .08) but not productivity. Loneliness was significantly correlated with social screen time (r = -.10), non-social screen time (r = .16) and productivity (r = .07). Lonelier students were more likely to report insomnia symptoms than less lonely individuals (OR = 1.8, 95% CI [1.4, 2.3]). Social screen time, but not non-social or productivity-related screen time, moderated the relationship between loneliness and insomnia (b = -.01, SE = .01, p < .05).

Discussion:
It appears loneliness is a better predictor of insomnia than screen time in college students. Screen time is frequently blamed for impacting sleep health, yet it may not be the most salient factor. Further research should examine whether intervening on loneliness can impact insomnia.
Do study-related and personal resources buffer the impact of study demands on academic burnout?

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Academic burnout is an increasing problem in higher education as it is associated with low well-being and poor performance. According to the Study Demands-Resources model, academic burnout is the result of high study demands and low resources. Additionally, the model purports that resources mitigate the impact of study demands on academic burnout. This proposed buffering effect was investigated for study-related (perceived peer and teacher support) and personal (time management, reading comprehension, mindfulness) resources. Three cross-sectional online survey studies were conducted among university students in the Netherlands (Ns>259). The relevant concepts were measured by validated questionnaires. Data were analysed by moderation analyses containing hierarchical regression and simple slope analyses. Multiple regression analyses showed that demands were positively (βs .16 to .65) and resources were negatively associated with burnout (βs .17 to .43). None of the added demands*resource interactions reached significance (ps>.103), indicating that resources did not function as buffers. Analyses focussing on emotional exhaustion the main dimension of burnout as outcome also showed no buffering effects of the personal resources (ps>.178), but weak buffering effects of the study-related resources (ps<.08). Simple slope analyses indicated that the effect of demands on exhaustion was diminished but not eliminated with increasing peer and teacher support. Only weak support was found for the buffering hypothesis. Assisting students to develop personal resources and creating a supportive learning environment might reduce academic burnout but is not sufficient to prevent academic burnout, as the impact of study demands persists. Universities are advised to also consider diminishing study demands.
“I get by with a little help...” social support and wellbeing in multiply burdened students

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Background: Some groups of students experience an increased risk for reduced wellbeing due to the co-occurrence of academic stress and burdens from other sources. The study aims to investigate whether social support buffers the negative effects of stress also in this group.

Methods: Students from different universities and study programs are invited to participate in this cross-sectional online survey. Participants fill in a questionnaire assessing wellbeing (HSWBS), mental health (PHQ-4), perceived stress (Perceived-Stress-Scale, PSS10), social support from private environment (MSPSS) and from university (BARI-S), and items indicating multiple demands (workload for university studies, occupational activities and care-work in hours/week). Currently, N=688 (women: 74%) students have completed the questionnaire (M = 35.53, SD = 12.21 years).

Expected Results: We expect that especially in students with higher stress levels social support correlates with enhanced wellbeing and mental health.

Current stage of work: First analyses show that 87% of the current sample report multiple demands and perceived stress levels above average compared to reference groups, indicating that multiple burdens are a common phenomenon in students. However, wellbeing seems not to be accordingly impaired (HSWBS: 55.03; min. 13, max. 78). Also, social support from university is reported to be lower than from private environment.

Discussion: From the results we expect insights into the processes underlying the relations between students’ wellbeing, mental health and social support from different sources. Also, results can provide starting points for interventions tailored for students with multiple demands.
Health of music and acting schools' students and coping with stage fright

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Background: The theoretical base of the researches is Functional Model of Health (FMH, Wrona-Polańska 2003), in which health is a function of creative coping with stress and personal resources. A study on the relationship between level of stage fright, coping styles, personal resources and students' health from music and actors' schools is presented.

Examined persons: 208 students: 172 of music and 36 of actors, - 36% men and 64% women.

Methods: Questionnaires examining stress, styles coping, personal resources and grading scales of health.

Findings: Health and effective coping with stage fright depend on: coping styles and level of personal resources: sense of coherence (-.49), positive self-esteem (-.47) and good instrumental preparation for the performance. The level of stage fright is different by music and actors students (p = .05).

Conclusions: The level of stage fright is a function of creative coping and personal resources.

To promote health should: increase positive self-esteem and social support.

Keywords: health, stage fright, coping, personal resources
Validation of the Italian Version of the Stress Control Mindset Measure in University Students

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Background. The present research aimed to evaluate the psychometric properties of the Italian version of the Stress Control Mindset Measure (SCMM; Keech et al., 2021). The scale measures the extent to which an individual believes that the effect of stress can be enhancing.

Methods. The 15 items of the SCMM were translated into Italian and data were collected from a sample of 800 Italian university students (80.2% women), aged 18-77 years. Confirmatory factor analysis (CFA) was performed, and construct validity was examined based on relations to other scales such as the Maslach Burnout Inventory for Students Scale (MBI-SS); the Utrecht Work Engagement Scale (UWES); and the Need for Recovery Scale (NRS). Further, multigroup CFA was carried out to evaluate measurement invariance across gender.

Findings. The results of the CFA showed that the original hierarchical model with four lower-order factors (performance and productivity, learning and growth, health and vitality, and general) and one higher-order factor, yielded a satisfactory fit to the data (Chi2 (df = 73) 238.53; p < .001; CFI = .98; RMSEA = .05; TLI = .97). Further, this model was found to be factorially invariant between men and women. Reliability was supported by satisfactory Cronbach’s alpha index (.94) and McDonald’s Omega score (.94). The construct validity analysis showed significant correlations (-.16 < r < .29) in the expected directions with the selected measures.

Discussion. The Italian version of the SCMM has good psychometric properties. Limitations of the study and suggestions for further research are discussed.
Effects of autogenic training on subjective stress indicators and physical functioning in chronic heart failure

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BACKGROUND: People with heart failure with reduced ejection fraction (HFrEF) are heavily burdened by depression, anxiety and stress. This has a negative impact on their physical performance and the prognosis of the disease. It is currently unknown if systematic stress management is effective in these patients.

METHODS: Patients with HFrEF (Ø61 years, 74.1% male) participated in a randomized controlled intervention of autogenic training (AT, n=14) versus active control group (CG, n=13). Perceived stress (TICS), state- and trait-anxiety and depression (STADI), burden of symptoms and complaints (ASS-SYM) and physical functioning (6-MWT) were measured at baseline (T0), after the two-month intervention (T1) and three months after the end of the intervention (T2). The short- and medium-term changes in the dependent variables and their stability were examined.

FINDINGS: In the AT-group burden of symptoms and complaints (dT1=.72), state- and trait-anxiety (dstate,T1=1.02, dtrait,T1=.69) and depression (rstate,T1=.71, dtrait,T1=.68) were significantly reduced at T1 (p<.05). The 6-MWT improved significantly (p<.05, dT1=.8) by an average of 49m (SDT1=71.4). These effects remained stable from T1 to T2 (p>.05, d-values between dTrait-Anxiety,T2=.78 and dState-Depression,T2=1.36). In addition, perceived stress decreased from T0 to T2 (p<.05, dT2=.68). In the CG only state-anxiety decreased permanently until T2 (p<.05, dT1=.62, dT2=.82). The 6-MWT was not affected in this group.

DISCUSSION: These pilot trial of standardized AT was an effective method to reduce anxiety and depression in people with HFrEF. AT provides a promising option to effectively manage stress and anxiety and to improve physical functioning in these patients.
The impact of eating behavior and emotional state on the severity of Irritable Bowel Syndrome

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Background: This study aims to determine whether a Dietary Inflammatory Index (DII), Visceral Sensitivity Index (VSI), negative affective state, difficulties in emotion regulation and emotional eating are related to the severity of Irritable Bowel Syndrome (IBS) among adults. It is hypothesized that these predictors are associated with the severity of IBS.

Methods: This cross-sectional study will be conducted as a self-completed online survey in two stages. In the 1st survey the Irritable Bowel Symptom Severity Scoring Scale (IBS-SSS), VSI, the Depression, Anxiety and Stress Scale (DASS-21), the Difficulties in Emotion Regulation Scale (DERS) and the Three-Factor Eating Questionnaire – R18 (emotional eating subscale TFEQ-R18-EE) will be used. While, in the 2nd survey all participants will complete a 7-day food diary. This study will recruit 92 adults diagnosed with IBS (ROME-IV criteria). We will use multiple linear regression analysis.

Expected results: Higher severity of IBS-SSS is associated with ↑DII (higher pro-inflammatory diet), ↑VSI (higher visceral sensitivity), ↑DASS-21 (more severe emotional distress), ↑DERS (impaired emotion regulation), ↑TFEQ-R18-EE (increased emotional eating).

Current stage of work: Ongoing study, data collection.

Discussion: Our study provides a holistic view of the IBS severity. Previous research has demonstrated associations between IBS and ↑DII /emotion deregulation. We will expand these findings to evaluate the relationships between diet and emotion and the IBS severity. Identifying the negative impact of ↑DII and the impaired emotional state on IBS severity may help change eating patterns and improve psycho-dietetic support, thus improving physical and mental health among patients with IBS.
Leaving the laboratory: Daily life dynamics between physical activity and low back pain

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Background: Low back pain (LBP) is a highly prevalent and disabling health complaint. As part of interdisciplinary research on how spinal morphology and motion are related to LBP, our research project focuses on the linkages between LBP and modifiable behavioral and psychosocial parameters. Integrating insights from health psychology and pain medicine, we examine the interplay of physical activity (PA), cognition, and emotions for experiencing LBP in everyday life. Methods: This prospective micro-longitudinal study encompasses continuous assessment of PA using accelerometry (movisens Move 4) on 14 consecutive days. Simultaneously, participants fill out five short questionnaires per day using a smartphone-based app (movisensXS). Health and psychosocial functioning are assessed at baseline (T0), 3 and 6 months later (T1 and T2). In total, 230 participants (115 persons with LBP, 115 asymptomatic individuals) aged 18 to 64 will be included. Expected results: We hypothesize that PA-related and pain-related cognition will be associated with PA engagement, the pattern of findings depending on whether the cognition enhances or diminishes PA in the presence of pain. Compared to asymptomatic individuals, we expect lower levels of PA and more negative affect among persons with LBP. Current stage of work: Participant recruitment has started in January 2023 and is currently ongoing. Discussion: Investigating daily life dynamics of PA, cognition, and emotions with LBP complements previous research utilizing cross-sectional study designs and may provide new insights into behavioral and psychosocial correlates of LBP. A better understanding of modifiable factors related to LBP is crucial for prevention and treatment of LBP.
Personality traits of future health leaders: Lessons learned from the Young Physician Leadership Program

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Background: Young physician leaders help advance health of citizens, by challenging existing health norms, systems and hierarchies, as well as addressing dynamic health concerns. We will explore the profiles of candidates selected for the Young Physician Leaders (YPL) Program by the InterAcademy Partnership for Health (IAP)

Methods: A total of 233 physicians from all continents were selected throughout the 2011-2022 period, based on their age (< 40 yrs) and leadership potentials (as outlined in their CVs). Of those, 115 respondents (mean age: 39.77, ±6.06 yrs) completed a short version of the Big Five Inventory (BFI-10). First, we will examine the psychometric properties of BIFI-10. Then, we will focus on the prominent personality traits of young physician leaders across the five dimension domain.

Expected results: Earlier evidence suggests that conscientiousness (honesty, ethics and trustworthiness), as well as extroversion (adaptability and good communicating skills) are the most prioritized and most prominent characteristics among health leaders. We expect to corroborate and expand on those findings by providing novel insights for the emerging physician leaders across the globe.

Current stage of work: The survey was employed in accordance with IRB regulations by the last author’s institution, and data collection was completed as soon as we reached approximately half of the population. Next, we will proceed with data analysis in accordance with the plan outlined above.

Discussion: Our findings could provide valuable insight and help tailor future leadership development programs to advance leadership capacities of future health leaders.
The physiological effect of non-driving-related tasks in conditionally automated driving: a systematic review and meta-analysis

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Background: In conditionally automated driving, the driver is free to disengage from controlling the vehicle, but they are expected to resume driving in response to situations or events that the system is not equipped to navigate. As the level of vehicle automation increases, drivers often engage in non-driving-related tasks (NDRTs), defined as any secondary task unrelated to the primary task of driving. This can have a detrimental effect on the driver’s ability to resume vehicle control by increasing stress and cognitive load. Therefore, monitoring the driver’s state is an important safety feature for conditionally automated vehicles, and physiological measures offer a valuable means of doing so. The present systematic review and meta-analysis therefore sought to understand the physiological effect of NDRT engagement during conditionally automated driving.

Methods: Five electronic databases were searched for records published since 2012. These records were screened for eligibility, and relevant data was extracted from a final sample of 32 studies. Analysis was conducted using a narrative synthesis and a meta-analysis.

Findings: There was evidence that NDRT engagement led to an increase in heart rate, an increase in electrodermal activity and a decrease in heart rate variability. There were mixed findings with respect to measures of eye movement.

Discussion: The findings of the review revealed that performing an NDRT led to heightened physiological arousal. Understanding psychological factors such as stress is of critical importance to the development of driver monitoring systems which can track driver state changes – physiological measures can help to reach this goal.
Psychometric Properties of the King’s Health Questionnaire Symptom Severity Scale

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Urinary Incontinence is a condition with numerous repercussions in women’s lives, and it is often underreported/underdiagnosed. In research and clinical practice, the symptoms of incontinence should be properly assessed. The objective of the study was to contribute to the validation of King’s Health Questionnaire (KHQ) Symptom Severity Scale, which consists of a separate symptom checklist for the measurement of the severity of urinary symptoms. It is often excluded from validation studies that only consider the eight main dimensions of KHQ. As far as we know, this is the first study to address its psychometric properties.

Cross-sectional. The sample consisted of 1538 women collected online who self-reported having urine loss occasionally/frequently (Mage=50.19, DPage=6.58). All data analyses were done with the IBM SPSS Statistics (v. 27), and with R (Rstudio, v.27). The items are assessed in a four-point rating system and total scores range from 0 (best) - 30 (worst). Psychometric properties were assessed through Confirmatory Factor Analysis.

The scale showed evidence of factorial validity, external validity, composite reliability, and sensitivity. After the elimination of 3 items with factorial loadings above 1 (indicating full redundancy with other items of the same construct), the model fit (entailed by six items and a unifactorial structure) was very good (CFI=.974; TLI=.942; RMSEA=.075; SRMR=.048). Limitations: Low values of convergent validity due to construct/items’ heterogeneity. The model’s convergent validity must be reassessed in another sample to assess whether this is a characteristic of the instrument or sample.

Results suggest that this scale is a psychometrically robust self-report measure of the severity of urinary symptoms, in a sample of middle-aged women with UI.
Intuitive Eating Scale-2: an adaption for Italian university students

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Background: Intuitive eating is an adaptive eating style, which refers to a set of behaviors characterised by a reliance on physiological hunger and satiety cues. This research aims to explore the psychometric characteristics of an Italian version of the Intuitive Eating Scale-2 (IES-2) among university students. This scale includes four dimensions: Eating for Physical Rather than Emotional Reasons (EPR), Unconditional Permission to Eat (UPE), Reliance on Hunger and Satiety Cues (RHSC), and Body-Food Choice Congruence (B-FCC).

Methods: In Study 1 (n = 462) we reduced the total number of items to 15 and evaluated the construct validity of the subsequent brief scale through Confirmatory Factor Analyses. Moreover, we tested the invariance of the factorial structure across gender and we examined the relationships with gender and BMI. In Study 2 (n = 359) the construct validity of the 15-item scale was confirmed, and criterion validity was explored by examining the correlations with self-esteem, well-being, and other eating styles (emotional, external, and restrained eating). Also, we considered the relations with social desirability. Findings: Overall, results confirmed the four-factor structure, the measurement invariance across gender, and the criterion validity of the scale. EPR and RHSC dimensions were associated with lower BMI; men reported higher scores on EPR dimension. The scale also showed no correlation with social desirability. Discussion: Overall, our 15-item version of the IES-2 showed good psychometric properties in Italian university students and can be a valuable tool for both measuring and promoting a more adaptive eating style among this population.
Translation and validation of the Diabetes Acceptance and Action Revised Questionnaire in French

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Background: The prevalence of pharmacologically treated diabetes was estimated at 6.1% in 2021 in France. In order to improve the quality of life of patients, as well as their management in the daily life of the disease, the concept of acceptance within diabetes is essential. The study aims to validate the revised 9-items Diabetes Acceptance and Action Scale (DAAS-R) in French for use in studies based on Acceptance and Commitment Therapy (ACT).

Methods: The questionnaire was developed in accordance with methodological recommendations. For its validation, the DAAS-R questionnaire was distributed online to 170 patients. The psychometric properties were assessed by Confirmatory Factor Analysis (CFA) and internal consistency. The CFA parameters were estimated using the maximum likelihood method with a robust standard error. The results were standardized for comparison. Model fit was assessed by chi², Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), Comparative Fit Index (CFI) and Tucker Lewis Index (TLI). Internal consistency was assessed by Cronbach’s α.

Findings: The RMSEA (0.097), SRMR (0.051), TLI (0.93) and CFI (0.95) indicated acceptable model fit. Furthermore, the scaled chi-square (70) divided by degrees of freedom (27) indicated good model fit (p < 0.001). Internal consistency was considered good (0.90).

Discussion: The psychometric properties are relatively good in the French version. This validated scale can be included in studies based on Acceptance and Commitment Therapy both in research and in clinical settings with patients.
STUDY OF THE CUTOFF POINTS OF THE INFORMAL CAREGIVER BURDEN ASSESSMENT QUESTIONNAIRE

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Introduction: The cutoff point of an instrument is a very useful reference in clinical practice. Objective: to study the cutoff point of the Informal Caregiver Burden Assessment Questionnaire (ICBAQ).

Method: A cross-sectional and correlational study was used with secondary data analysis from two primary studies conducted in the last years in North of Portugal (148 participants). The receiver operator curve (ROC) was used to determine the optimal cut-off point of the measure. The predictive validity was assessed through sensitivity and specificity, positive and negative predictive values, the ROC area under the curve (AUC) and the Youden Index. The SF 36 quality of life and Hospital Anxiety and Depression Sale were used.

Results: Caregivers have high values of anxiety and depression, with 53.7% (108) participants with values greater than 11 on the anxiety scale and/or on the scale of depression. The ICBAQ had an inverse moderated correlation with quality-of-life dimensions.

A ROC curve analysis (AUC = 0.82, IC95% [0.76-0.88]) with a cutoff score of 39 was found, provided by the maximum value of Youden Index (0.53), confirming that anxiety and depression disorder prediction using this model was 82% accurate. The model showed a sensitivity of 78% and a specificity of 75%.

Conclusion: The values found are in line with the perception of professionals about the problematic values of caregivers’ burden values. The results will contribute to the measurement used with greater rigor and detail in clinical practice.
COuppies’ OBesity (COOB) Initiative: Validation of the COouples’ OBesity Life Impact Profile in Portuguese couples

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Background: Obesity may have a (very) negative impact on some areas of couples’ life, and the influence of the health-related behavior of one partner on the other is an important issue, as it can impact negatively or positively a couple’s shared life and mutual management of every day. This study sought to develop and assess the psychometric properties of the COouples’ OBesity Life Impact Profile (COOBLiP) and evaluate the COOBLiP in a dyadic frame – the Couple.

Methods: Through a quantitative study, 123 Portuguese couples (M=45.23, SD=12.18) filled out a sociodemographic and health-related survey and the COOBLiP. Inclusion criteria were: cohabitation for at least 12 months and at least one member had the presence of obesity (BMI≥30kg/m2). The unifactorial scale has 11 items, using a five-point scale (1--“Completely disagree” to 5--“Completely agree”). Confirmatory Factor Analysis (CFA) of dyadic data was computed to evaluate the unifactorial structure of the COOBLiP in R (v.4.2.2) and RStudio (v.2022.12.0+353).

Findings: CFA demonstrated acceptable model fit (CFI=.983; TLI=.980; NFI=.967; RMSEA=.092; SRMR=.094). COOBLiP showed composite reliability and internal consistency (Men: alpha and omega=0.91; Women: alpha and omega=0.92). The model was invariant (Weak or Metric: $\chi^2(10)=10.74;p=.378$; Strong or Scalar: $\chi^2(9)=13.46;p=.143$) among dyads.

Discussion: COOBLiP is a valid, reliable, and new measure for evaluating the impact of obesity (health threat) on several couples’ life dimensions (e.g., financial, health, social activities, marital relationship, and sexual function). COOBLiP will allow the assessment (in both clinical and nonclinical contexts) of a relevant construct, which might expand and complement the habitual conceptualization of “health threat”.
Assessing attitudes during the recovery process in the of long term care context

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Introduction: After a critical event, which has left the person dependent in self-care activities, their recovery is influenced by the emotions and attitudes that the person adopts. Objective: To develop an instrument that allows the assessment of attitudes and emotional factors with the greatest impact on recovery, of a person dependent on basic self-care activities. Methods: A methodological study that aims to describe the construction and study of the metric properties of the Attitudes Assessment Scale during the self-care recovery process. Data were collected at a hospital and two long-term care units, between October 2019 and December 2020, 118 people with dependence on basic self-care activities participated. Results: A four-dimensional structure with 37 items showed adequate psychometric characteristics of validity after an exploratory factorial analysis. The coefficient alpha of Cronbach varied between 0.84 and 0.96, suggesting a good internal consistency. Conclusion: Assessment of emotional disorders and attitudes of the person, with a deficit in self-care, during the recovery process, contributes to a more effective and integrated recognition and planning of care needs, ensuring higher quality and a more personalized care. The replicability and validation of this measure in other contexts, countries and cultures, can probably contribute to a more informed analysis of the attitudes of the person with dependence in the basic self-care activities, during the recovery process after a disabling event.
A systematic review of online platforms for integrating research findings: Implications for health psychology.

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Background: The proliferation of research data provides both opportunities and challenges to gain insights on questions of relevance to health psychologists (e.g., relationships between health behaviours). Meta-analysis is typically used to aggregate effect sizes across studies. However, such reviews are static and users cannot query the data to answer new questions. Online platforms have been developed that allow users to contribute and aggregate data and query the database. As no research to date has reviewed these online platforms, their potential for health psychology may be missed.

Methods: We searched Google and Google Scholar using combinations of search terms ('meta-analysis', 'dynamic meta-analysis' AND 'online tools', 'online platforms', 'open-source', 'open access', AND 'behaviors', 'behavioral relationship'). The searches were examined to identify online platforms that (i) were available online, (ii) without payment/registration, (iii) had a database of studies, and (iv) applied a form of dynamic meta-analysis to aggregate data. The review considered how such platforms might be employed by health psychologists.

Findings: Ten platforms were identified, including MetaBus, Cooperation Databank, and MetaZipf. The platforms varied in their features (e.g., graphical interface, functionality, accessibility), syntax/analysis engine used to query the database, nature of the dataset (e.g., whether users can add data), and nature of the output (i.e., how results are displayed).

Discussion: Online platforms have the potential to give researchers access to vast amounts of data and allow them to conduct meta-analysis and make evidence-based decisions with ease. Future research should assess the usability of the platforms and the value of their features.
Interater reliability of guideline recommendations for early childhood allergy prevention by experts in public health

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Background: The S3 Allergy Prevention Guideline gives recommendations on the nutrition of mothers during pregnancy and lactation and on the nutrition of infants. The study was conducted within the framework of the DFG research group HELICAP [FOR 2959; AP 235/3-1] and aimed to assess the correspondence between the content of the guideline and the according knowledge of experts in public health and midwifery care.

Methods: The guideline recommendations were translated into N=18 performance items. These were answered by N=26 experts and N=156 health education students (as controls not professionally familiar with allergy prevention).

Findings: In the experts group, 4 of the 22 experts showed an insufficient rater discrimination < .5, indicating considerably deviating judgements. For the remainder, the expert separation values fell within a good range at > .75. Interrater reliability was significantly higher for the expert (ICC(2,1)=.662 [95%-CI: .514-.818]) than for the students (ICC(2,1) = .331 [95%-CI: .216-.529]). For 12 of the 16 items, knowledge was significantly higher in the expert group than in the student group (Cohens d = .480-.1,855). The internal consistency of the guideline-related knowledge items proved to be sufficient in both the expert and student groups: Cronbach’s alpha = .785 / .670.

Discussion: By considering (a) the reliability of the guideline related knowledge regarding the individual recommendations and (b) salient expert segregation, information about the reliability of the expert knowledge can be derived. This provides a differentiated insight into the reliability in the implementation of the guideline recommendations in practice.
Schools in the interplay between genetic risk for high BMI and academic performance

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Background: The environment of a given child can be conceptualized as ecological levels interacting with their individual genetic propensity. There is a negative association between BMI and academic outcomes. Still there is a lack of studies evaluating to what extent the individual risk for high BMI affects academic performance differently in different schools. The current study quantifies the variability in effect of genetic risk over 2800 schools in Norway to evaluate the total scope of unobserved school environments. The approach fully adjust for social selection by accounting for parental polygenic risk for high BMI making the child risk for high BMI conditionally independent of the parents.

Methods:
The study utilize population-wide administrative data on children’s standardized tests results, schools (n=2800), neighborhood (n = 14 000), and municipal identifiers (n = 420) linked to genotyped parent-child trios (n = 50 000 families). We evaluate gene-environment interactions using multi level models comprising interaction terms between BMI polygenic score (PGS) and random effects for school environments (i.e. total unmeasured school environments). Parental PGS for BMI are used to control for all factors associated with parental traits and characteristic effectively making the children conditionally independent of parents due to genetic recombination (i.e. akin to population-wide random adoption).

Discussion:
The results will inform on the importance of school as an arena for augmenting or reducing the association between individual risk factors for high BMI and educational performance. The model will be used to statistically evaluate different theoretical models such as diathesis-stress and differential susceptibility.
A new case-definition for the SCL-90 for quality assurance

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Background: In psychotherapy, the focus is on psychological distress with pathological value. Rehabilitation examines the psychological comorbidity of chronic illness and/or disabilities, and prevention dominates in occupational and health-psychology. The evaluation of the frequently used SCL-90 should be improved for these areas of application to improve quality assurance.

Objective and Methods: The newly developed four groups: “no”, “mild”, “remarkable” and “severe” psychological distress are to be analyzed in three samples: inpatient psychotherapy (Psy, n=500), orthopedic rehabilitation (Ortho, n=237) and occupational assessment (Job, n=209).

Findings: No psychological distress (Psy: 11.2%, Ortho: 37.5%, Job: 34.9%): unspecific health-promoting information can be given, because no T(2 scales) ≥60.

5.6% (Psy), 12.7% (Ortho) and 7.2% (Job) showed slight mental stress: shorter diagnostic examination and tests lead to low-threshold, outpatient group programs for general preventive health promotion; retest in 4 weeks, because T(2 scales) and/or T(GSI) ≥60 and <63).

Remarkable psychological distress (Psy: 39%, Ortho: 27.4%, Job: 29.7%): in-depth exploration, tests and questionnaires led to usually outpatient psychotherapy at individual and/or group level; close follow-up because T(2 scales) and/or T(GSI) ≥63 and <70.

44.2% (Psy), 22.4% (Ortho) and 28.2% (Job) were severely psychologically distressed: in-depth exploration leads to immediate specific -mostly inpatients- individual and/or group offers; close follow-up because T(2 scales) and/or T(GSI) ≥70.

Discussion: The new evaluation strategy of the SCL-90 should improve diagnostic, intervention and quality assurance, and will be put up for discussion.
Using photography to capture health-related perceptions: A systematic review of health-related photo-based studies

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Background: This systematic review focuses on perceptions of health and well-being obtained through photography-based research. We include health perceptions that refer to general health and health behaviours (e.g., healthy eating, physical activity). Main research aims are: (1) to explore how health is conceptualised by people participating in photography-based studies; (2) to assess how photography-based methodologies are used in health-related research.

Methods: This is a protocol for a systematic review of photography-based research focusing on health and health behaviours. The inclusion criteria are: adults from general populations, people with medical conditions, vulnerable and hard-to-reach populations. Databases searched are: CINAHL, PubMed, Embase, PsycINFO, Scopus, OpenGrey.

Expected results: We expect to identify which health behaviours are explored in photography-based research, and the resources and barriers to maintaining health and/or a health behaviours captured in the images. We will describe the most common photography-based methodologies used to explore health-related topics and how they are applied. The review will also allow us to assess which populations are targeted and who participates in photography-based research most frequently.

Current stage of work: The systematic review is registered and we have completed preliminary searches.

Discussion: Photography-based research is a powerful means of communication between researchers and research users. Exploring health perceptions through photography may facilitate understanding of health-promoting behaviours.
Opportunities to support spousal dementia caregivers during the transition to long term care

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Background: Most older adults with dementia are cared for in their homes in Ireland, but some face a transition to long-term care (LTC). The transition is associated with positive and negative outcomes for spousal dementia caregivers. Very little support is available for these caregivers during the transition.

Methods: We interviewed 10 spousal dementia caregivers during 2020 and 2021 about their spouse moving to LTC in the recent past (fewer than five years ago). A grounded theory approach was used to analyse the interview data.

Findings: We reported a grounded theory of “regaining relationships” in the transition to LTC. Spousal dementia caregivers reported specific challenges associated with the transition to LTC, such as that faced by LGBTQ spouses; decisions hurried by the lack of healthcare associated with the COVID-19 pandemic; seeking information about nursing homes; “gut feelings” in choosing a nursing home; guilt; bonding with nursing home staff; visiting restrictions associated with the COVID-19 pandemic; and new beginnings.

Discussion: We present a grounded theory describing the challenges of the transition to LTC faced by spousal dementia caregivers. We also extrapolate opportunities for supporting caregivers during this transition, which are framed as recommendations for those who work with such caregivers.
The effects of immersive virtual nature on psychological outcomes: Preliminary results of a meta-analysis

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The study of immersive virtual nature has been yielding compelling results in recent years. Data shows that VR is viewed as an innovative and user-friendly tool, and immersive nature is considered to be a pleasant and positive experience, capable of promoting better psychological outcomes, such as lower levels of stress and negative mood. Yet, if immersive virtual nature is to be used to intervene in mental health problems, it is important to systematically synthesize the results of the existing studies and assess its overall effectiveness. For this purpose, we are currently conducting a meta-analysis focused on assessing how effective immersive virtual nature is in improving affect, emotion regulation, stress, mental health, restoration, and well-being among both clinical and non-clinical adults. We also aim to conduct additional analyses to help determine which variables play an important role in its effectiveness. We have searched Scopus, Web of Science, PubMed, PsycINFO, and PsycArticles for relevant peer-reviewed articles published in English, between 2013 and 2023 (inclusive of January 2023), and are presently working on the title and abstract screening of the retrieved articles. The protocol has been registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY; registration number INPLASY202310068), and the study is being conducted according to the "Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)". This work is particularly important to guide future interventions with immersive virtual nature.
Reconnect with nature: discovering the benefits of forest bathing through virtual reality

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Background: According to previous research, the effectiveness of forest bathing was already claimed, even in the context of stress reduction. Our project will therefore focus on testing this effect on virtual reality and the following variables, such as self-protection (the relationship between forest bathing and self-protection has not yet been studied.), self-criticism, and self-compassion.

Methods: Our sample will consist of adult participants both from non-clinical and clinical populations in Slovakia. A pilot study will guide sample size estimation. They will be randomly assigned to either a virtual forest or a city. Participants will spend a max. 30 minutes in the assigned virtual environment, and complete pre and post-intervention questionnaires measuring stress, self-compassion, self-criticism, and self-protection. We will also measure heart rate variability as an objective physiological indicator. A 3-month follow-up assessment will be conducted to assess longer-term effects. To analyse the data and determine the intervention’s effects mixed-model ANOVAs will be used or in case of abnormal distribution, non-parametric tests will be used.

Expected results: We anticipate significant effects of virtual forest exposure on stress, self-compassion, self-criticism, and self-protection, compared to virtual city exposure. Effects are expected in both clinical and non-clinical samples.

The current stage of work: Perfecting research plan and working on systematic review.

Discussion: Based on the outcomes of our project, we may provide an additional form of psychotherapy or psychological treatment for the non-clinical and clinical population in the context of stress reduction and related mental health issues.
How to finish unfinished business: Empty Chair Intervention for virtual reality.

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Background: The Empty Chair is a therapeutic intervention of EFT and involves expressing unfinished business towards a significant other. The client is encouraged to engage in a dialogue with an imaginary other person "sitting" on an empty chair, which requires good imagination. VR provides feelings of presence and immersion. This aspect is crucial because the intervention in VR should facilitate the imagination and emotional processing of memories or persistent unresolved feelings towards a significant other.

Methods: Our research population will consist of a non-clinical population. The research has an experimental character and will also involve physiological measurements: heart rate variability. Based on group assignment experimental and control each participant repeatedly completes 2 exposures in VR, approximately 45 min long. Before and after each exposure, participants complete a questionnaire measuring stress, self-compassion, self-criticism and self-protection. We assume a non-normal distribution of the data, so we will use non-parametric tests.

Expected results: Through the collected data, we will attempt to determine the impact of the intervention on increasing self-compassion and self-protection, and conversely reducing stress levels and self-criticism after completing the intervention. At the same time, we will also focus on determining the long-term effectiveness of the intervention. We will verify its effect two months after completing the intervention.

Current stage of work: Enhancing research plan. Psychometric analysis Stress profile questionnaire.

Discussion: Access to psychotherapies is not always simple due to possible social stigma and they are also time and money consuming. An ideal solution might be virtual reality intervention developed on the latest findings of evidence-based psychotherapy.
Trust and effects of digital health interventions

15:30 - 17:00

Quality label for app certification: evaluating healthcare professionals' willingness to recommend apps

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Background: Health apps should be reliable and secure. Recently, ISO 82304-2 Technical Specification (TS) quality label was established for app certification. To assess the quality label’s potential, with this study we aim to evaluate healthcare professionals’ app-recommending behavior with and without the quality label. The study is part of Label2enable - a large EU project for quality label implementation.

Methods: The Behavior Change Wheel (BCW) was used in designing the study. To reach the study’s objective a mixed-method experimental vignette survey was designed. A total of 12 text-focused vignettes were prepared. The type of app (prevention vs. self-monitoring vs. healthcare) and type of patient (with low vs. high socioeconomic background) were selected as between-subject factors and the quality label (present vs. not present) as a within-subject factor. The study’s population will be healthcare professionals (18+ years) practicing in the EU, EFTA, or Ukraine, and fluent in the English language.

Expected results: We expect healthcare professionals in the quality label condition to be more willing to recommend apps. Also, to be more willing to recommend prevention-focused apps to patients with a high as opposed to low socioeconomic background.

Current stage of work: Recruitment for the study started at the end of February 2023 and is estimated to continue for approximately two months. We aim to recruit 800 healthcare professionals. Preliminary results are expected by May 2023.

Discussion: If accepted by healthcare professionals, the health quality app label could increase healthcare access and overall healthcare digitalization across Europe.
Reduced confidence in online health information based on nationwide surveys in Germany


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Background
Trust and confidence in using online health information can empower individuals to actively manage their health. We aimed to compare the confidence in online health information between two nationwide surveys in Germany.

Methods
Cross-sectional surveys were conducted using computer-assisted telephone interviews in October 2020 (Survey-1) and November 2022 (Survey-2). Panel samples of adult internet users residing in Germany rated their use of online health information with the eHealth literacy scale (eHEALS). Data were analysed using frequencies and linear univariate regression analysis.

Findings
Survey 1 included 754 participants (18-93 years, M±SD: 54±15 years, 51% female), and Survey 2 included 818 participants (18-92 years, 55±16 years, 47% female). The participants in both surveys had similar education level (complete up to tertiary education) and a net household income (up to 3500 Euro/month). In survey 1, most participants (73-91%) were confident in obtaining online health information (ability to locate, find, use, and evaluate online health information). However, only 44% were confident in using such information for health decisions. In survey 2, the participants were less confident in obtaining online health information (64-85%) and in using such information for health decisions (34%). Higher eHealth literacy was associated with younger age and more education in both surveys, with higher income in Survey 1 and female gender in Survey 2.

Discussion
Reduced confidence in navigating online health information could be due to the "Infodemic" associated with the COVID-19 pandemic. Interventions are needed to improve the trust in online health information among the general population.
The effectiveness and psychological mechanisms of a gamified digital intervention to promote physical activity.

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Background: Digital and gamified interventions are emerging as high-potential behavior change tools to tackle the physical inactivity pandemic. However, although e-health interventions are gaining popularity for the treatment of obesity, appearing advantageous compared with current programs, no evidence of effectiveness has been demonstrated and the underlying mechanisms of these interventions are poorly understood.

Methods: The DIPPAO randomized controlled trial aimed to evaluate the effectiveness and potential moderators of a group-based digital intervention – grounded on gamification strategies, enhanced by social features, and informed by the tenets of the self-determination theory and the social identity approach – in comparison to the usual care (i.e., face-to-face supervised physical activity). To this end, 50 obese patients have been randomized to one of the 3-month programs with evaluations before, after the program, and after a 6-month follow-up. The primary outcome was the daily step count change from baseline and potential mediators relative to motivation, enjoyment, in-group identification, or perceived weight stigma were tested in multilevel models.

Findings: Compared with the usual care, patients who benefited from the Kiplin intervention had a significantly greater increase in mean daily steps from baseline during the intervention and during follow-up periods. In-group identification within the Kiplin condition positively moderated the intervention effect.

Discussion: This study confirms that a gamified digital intervention can be an interesting alternative to current programs. One of the main active ingredients of this program appears to be its ability to facilitate self-categorization and the emergence of social identity, fostering cohesion and social connectivity.
Better understanding the heterogeneity observed in gamified digital interventions.

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Background: Digital interventions integrating gamification features hold promise to promote physical activity. However, results regarding the effectiveness of this type of intervention are heterogeneous. This study aimed to examine potential moderators of the effectiveness of a gamified intervention in a large-scale sample and in real-life conditions. Specifically, based on the behavior change intervention ontology we tested whether different variables such as intervention characteristics, the context, settings, or the exposure of participants with the program moderated the effect of the program.

Methods: Data from 4812 individuals who registered for a gamified digital program between 2019 and 2022 were retrospectively analyzed. Physical activity was assessed via the daily step count of participants. Exposure to the intervention, the intervention content, and participants' characteristics were included in multilevel models to test the study objectives.

Findings: We observed that intervention effectiveness was dependent on participants' initial physical activity. Whereas the daily steps of participants with <7500 baseline daily steps significantly improved from baseline both during the intervention and during follow-up periods, participants with a higher baseline had no improvement or significant decreases during the intervention. The age of participants and engagement with the app positively moderated the intervention effect.

Discussion: This study highlighted that factors such as the initial physical activity, motivation, age, or engagement of individuals can influence the effect of a gamified intervention. Taking these variables into account could allow us to optimize the effectiveness of our interventions and propose more adaptive programs.
Methodological solutions to challenges in undertaking single case design studies in health psychology

9:30 - 9:45

Analysis of single case data using the logistic model

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Background: When psychological constructs or behavior change, such change typically manifests as a transition from one state to another. However, the statistical models commonly used to analyze changes in n-of-1 designs do not provide for this; they assume infinite increases or decreases (e.g., the piecewise regression model) or instantaneous change from one level to another (e.g., mean-bases approaches).

Methods: The logistic model for single case data fits a logistic curve to approximate longitudinal single case data. This enables studying changes involving continuous state transitions. Examples are provided to illustrate the use of this model in practice.

Results: This model can be used to shed light upon the effectiveness of an experimental design, such as the AB design, but also non-experimental longitudinal data can be analyzed using this model.

Discussion: The model is a new tool for n-of-1 studies, that can also be generalized to replicated N-of-1 designs using a multilevel approach.
Sharing single case participant summary data during qualitative interviews to deepen insights and promote engagement

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Background: Single case design studies can provide intra-individual insights that most other study designs are unable to reveal. However, quantitative single case designs typically lack participant-centred explanations for observed patterns of data, often making findings challenging to interpret. Mixed methods approaches, where participants are interviewed alongside the provision of summaries of their intensive longitudinal quantitative data, can facilitate a more comprehensive understanding of individual data patterns.

Methods: Drawing on three mixed methods studies with single case design components, we will describe the process for using summary data to elicit qualitative data and provide a narrative summary of insights and challenges this approach generates. Studies include a smoking cessation app feasibility investigation, an intensive longitudinal health behaviour study during Covid-19 lockdowns and a single case study investigating dual e-cigarette and tobacco use.

Findings: For all studies, data was summarised in a personalised report, including graphs and figures, and sent to participants in advance of their interview. During interviews, participants were comfortable reviewing and discussing their report, facilitating knowledge co-creation, though participants varied in how much they consulted it. Of particular value was seeking participant explanations for potential outlier values, which provided powerful insights into behaviours that might have been incorrectly interpreted by quantitative data alone. The promise of receiving a data summary was perceived to promote engagement with quantitative data collection.

Discussion: Triangulation through data summary sharing during interviews was an effective tool for enriching understanding of longitudinal observations and promoting engagement, and has potential for enhancing individualised intervention development.
Single-case design (SCD) studies facilitate high quality research with small numbers of participants, typically to assess the effectiveness of interventions. As interest in SCD research continues to grow across fields such as psychology, education, and medicine, so too do the guidelines around how these studies should (ideally) be conducted. Although information and guidance on SCD methodologies is helpful, as conducting quality SCD studies can be challenging, it is often difficult to determine what is most important when embarking on SCD research. This presentation will provide a “need-to-know” guide for researchers who are new to, or considering using SCDs. The key steps involved in conducting quality SCD studies will be summarised, including the importance of careful planning, selecting an appropriate design, data collection procedures, and analysing data. The role of visual analysis techniques in interpreting data and making decisions regarding intervention effectiveness will also be discussed. Additionally, the presentation will consider common pitfalls and challenges that researchers may encounter when conducting SCD studies and provide suggestions for overcoming these challenges. Attendees will leave this presentation with a greater understanding of the steps involved in conducting quality SCD studies and the knowledge needed to design and execute their own studies.
A Bland-Altman approach to replacing multiple-item measures with a single item measure in longitudinal studies

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²Department of Psychology, Maynooth University, Ireland

Background: Extensive scales in intensive longitudinal studies increase participant load and reduce attrition. Therefore, the present study assesses whether an 18-item scale, namely the Short Health Anxiety Scale (SHAI), can be satisfactorily replaced by a single-item measure, for use in future longitudinal designs.

Methods: A cross-sectional survey was completed by a sample of n = 161 participants from the Republic of Ireland, who responded to the SHAI, a novel single-item measure of health anxiety, and the SF-12 scale for measuring health-related quality of life (QoL). Bland-Altman (BA) plots visualised the agreement between the SHAI and the single-item measure. A set of hierarchical multiple regressions compared the explanatory power of the single-item and multiple-item measures of health anxiety, in predicting physical and mental health-related QoL.

Findings: BA plots showed that there was some agreement between SHAI and the single-item measure. Regression analyses indicated that lower levels of health anxiety were associated with higher physical and mental health-related QoL levels. The single-item measure significantly predicted mental health-related QoL only (β = -4.28, p < .001), while the SHAI did not predict either physical or mental health QoL. Additionally, the SHAI only explained an additional 3% of variance in mental health-related QoL, and no additional variance in predicting physical health-related QoL.

Discussion: A single-item measure of health anxiety can be used to effectively capture variation in QoL outcomes. Although single-item measures are more likely to contain random error and item response bias, their inclusion in intensive longitudinal designs is recommended, if validated first.
Using the single case design to evaluate a community-embedded befriending service: Practical Challenges

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Background: Single case experimental designs are a gold standard way of assessing the impact of an intervention, and can be considered a valuable alternative to a more traditional randomised controlled trial in situations in which it would be difficult or unethical to randomise into a control condition. For instance, when evaluating an existing community-based service, it is often not possible to use such a traditional method, since new users would have their service requests denied or postponed. Methods: To circumvent this issue, we conducted a single case design evaluation of a community-embedded service, ALONE’s Befriending and Practical Support Service. In such a design, data are collected from participants pre-intervention, and post-intervention, and as such, participants act as their own control. Data were gathered from 86 new users of the service across 13 timepoints. Data were analysed using generalised additive modelling and grounded theory analyses, and integrated. As part of our integrated knowledge translation approach, we derived recommendations for ALONE on the basis of the evaluation results. Findings: A list of recommendations for those using single case designs in community-embedded services were produced. Such recommendations pertain to: the service-research relationship; participant load; prioritising secular data collection; establishing recruitment strategies; and contingency plans. Discussion: We wish to present this methodology to health psychologists as a useful if challenging way of evaluating community-embedded services. We also present a protocol to help researchers and service providers to plan their single case evaluation of community embedded designs in the future.
Advances in implementation of health behaviour change interventions within healthcare

Health service staff experiences of implementing the Making Every Contact Count chronic illness prevention programme

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³Health Service Executive, Ireland

Background

Brief behaviour change interventions offered opportunistically by healthcare professionals can support patients with enhancing their health behaviours. The Making Every Contact Count (MECC) programme is a national programme in Ireland to support healthcare professionals to use brief behavioural interventions. Implementation of MECC is inconsistent across the health service. The aim of this study was to gain an in-depth understanding of the individual-level and organisational-level enablers of and barriers to the implementation of MECC.

Methods

We conducted individual semi-structured interviews with 36 participants (healthcare professionals, Health Promotion and Improvement staff and managers responsible for MECC implementation) to understand barriers and enablers to MECC implementation. Data was analysed using a Framework Analysis approach guided by the Theoretical Domains Framework.

Findings

Eight theoretical domains influenced MECC implementation: environmental context and resources; health care professionals’ beliefs about the consequences of MECC delivery; health care professionals’ beliefs about their capability to deliver MECC interventions; knowledge; professional role/identity; skills and intentions/goals. Environmental context and resources was reported to be the key influencing factor. Important aspects of the work environment that influenced implementation were: consultation type/setting; integration of MECC documentation processes; a multi-professional approach; access to/visibility of resources/services; management support/expectations; time and resource management; the COVID-19 pandemic; the salience of the MECC programme and the strategic fit of MECC with other health service initiatives.

Discussion

Implementation of brief behaviour change interventions can be influenced by a range of individual-level factors (e.g. skills, knowledge, intentions). However, developing enabling environments is key to widespread implementation across healthcare systems.
Optimising implementation of the Making Every Contact Count programme in Ireland – a consensus study

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Background
Rapidly increasing rates of chronic disease are a global societal challenge, which can be addressed by changing health-related behaviours. Brief behavioural interventions delivered by health professionals can support people to modify their health behaviour. The Making Every Contact Count (MECC) programme is a national programme in Ireland to train healthcare professionals to use brief behavioural interventions. Implementation, however, is suboptimal and an evidence-base is lacking. We aimed to (1) understand current enablers and barriers of MECC implementation and (2) co-produce evidence-based recommendations to enhance MECC implementation.

Methods
Three studies: (1) a survey based on the Theoretical Domains Framework (TDF) of 357 healthcare professionals who had completed the MECC training; (2) a qualitative interview study with 36 health care professionals and HSE staff with a role in MECC implementation to further understand barriers and enablers; (3) a two-phase consensus study, with an online consultation (23 stakeholders) and a consensus meeting (17 stakeholders) to agree implementation strategies.

Findings
Enablers and barriers to MECC implementation were identified in the following TDF domains: environmental context, goals and intentions, knowledge, professional role, beliefs about consequences, beliefs about capabilities and skills practice. Through the consensus process, nine implementation strategies were agreed. We co-produced a policy brief containing our recommendations to disseminate to policy makers.

Discussion
We successfully co-produced a policy brief with evidence-based recommendations to improve the implementation of MECC. A partnership and co-production approach has been central to the success of this research and will increase the likelihood of translation into practice.
Understanding successful implementation of an opportunistic mental wellbeing behaviour change intervention

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Background
Government targets and initiatives to improve health include both mental and physical health; and implementation of this is often through Making Every Contact Count (MECC) framework. Initiatives focused initially on physical health but there is now additional focus on mental health. An extensive experiential training programme and a sustainable cascade model were developed to embed opportunistic mental wellbeing support. A research study was designed to understand the impact for trainees of this training on two key behaviours: Having conversations with people about their mental wellbeing; referring people for more support for their mental wellbeing.

Methods
We gathered data through interviews / focus groups, online questionnaires and observations of the training. We asked trainees about their expectations that they would conduct these behaviours, before, after the course and at follow up. We asked about the capability, opportunity and motivation of the trainees. To understand fidelity of the trainers, we asked trainees to state whether their trainers used the key behaviours of transformational educators.

Findings
450 people participated. Themes from interviews and focus group included filling a gap for all, quality, flexibility and evolution of training, developing communities of practice, embedding training in the workplace and sustainability/impact. From questionnaires, behavioural expectations and influences for both behaviours increased from pre to post course.

Discussion
A mixed methods evaluation of a comprehensive training package gives a deep understanding of the effectiveness and experience of the training package and is a replicable model for future behaviour change interventions involving education and training.
Development of a behaviour change counselling training program and assessment tool for health care professionals

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\textsuperscript{6}Montreal Behavioural Medicine Centre - CIUSSS - NIM, Canada

Background: Most people see a healthcare provider (HCP: e.g., physician/nurse) on a regular basis, which provides opportunities to address health risk behaviours. Although evidence supports the efficacy of behavioural interventions to improve health risk behaviours and reduce chronic disease morbidity and mortality, their uptake by HCPs remains low, and the quality of their implementation is often poor. To address this, we embarked upon an ambitious research program designed to co-develop and pilot test an evidence-based behaviour change counselling (BCC) training program for HCPs, and validate an accompanying competency assessment test.

Methods: Using an integrated knowledge translation approach, we identified 11 core communication competencies HCPs should acquire when doing BCC for chronic disease management. We then co-developed a 4 hr BCC training program (MOTIVATOR), and an accompanying BCC competency assessment tool (Motivational Communication Competency Assessment Test, MC-CAT). We conducted a proof-of-concept study among 7 HCPs and 30 patients, and an internal validation study of the MC-CAT with 14 experts and 24 participants.

Results: A total of 71\% (5/7) of HCPs achieved competency thresholds post-training and 71\% of their sessions over the following 3 months were judged to be MC-compliant during actual consultations with patients. We achieved over 70\% agreement (criterion) among 90\% of experts across all 11 competencies assessed by the MC-CAT, and initial tests of internal consistency among participants were in the acceptable range (\(\alpha=.78\)).

Conclusion: MOTIVATOR demonstrates a strong signal for efficacy and the MC-CAT good internal consistency. The next steps of this research program will be discussed.
Predictors of COVID-19-related impacts on delivery of behaviour change interventions: A survey amongst healthcare professionals

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Background
Understanding the predictors of healthcare professional delivery of health behaviour change interventions is crucial to inform the development of interventions to support practice in the recovery from COVID-19. This study aimed to examine the predictors of COVID-19-related impacts on delivery of behaviour change interventions.

Methods
Cross-sectional representative survey was administered in 2022 of 1008 healthcare professionals working in the UK’s National Health Service (NHS). Participants were asked about their: (a) perceptions of the proportion of patients that would benefit from behaviour change interventions, (b) the proportion of patients to whom healthcare professionals deliver interventions, (c) the amount of time spent on this activity, and (d) perceptions of the social and psychological impacts of COVID-19 (impact of events, overall job stress, job satisfaction, and fear of COVID-19). Data were analysed using descriptive statistics and multiple linear regression.

Findings
Higher proportions of perceived patient benefit, higher prevalence of delivering behaviour change interventions, and greater amount of reported time delivering interventions were each associated with being older, and reporting higher levels of job satisfaction. Higher proportions of perceived patient benefit and greater time spent delivering interventions were associated with higher levels of perceived impacts of COVID-19, and being a GP, nurse or health visitor (compared to all other healthcare professional groups).

Discussion
Interventions would benefit from considering psychosocial impacts of COVID-19 on delivery of behaviour change interventions. Interventions targeted at younger healthcare professionals, those reporting lower job satisfaction, and healthcare professionals other than GPs, nurses or health visitors would be particularly beneficial.
Consistency between definitions and measurement of mindfulness in eating and physical activity: A scoping review

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Background: Mindfulness (i.e., relating to one’s internal and external awareness with a non-evaluative attitude) is increasingly being applied as a strategy to change dietary and physical activity behaviors in the general adult population. However, current applications of mindfulness lack methodological standardization, thereby limiting their comparison across health behavior change interventions.

Methods: Using scoping review methodology, we investigated currently used conceptual definitions of mindfulness, the range of distinct mindfulness elements, its measurement, and the consistency between and completeness of definitions and measurement. We searched PubMed, PsycINFO, and Web of Science databases for peer-reviewed literature. Definitions were analyzed using an inductive content analysis approach. Consistency between definition and measurement of mindfulness was scored per protocol on an index.

Findings: Across 57 included records, less than half defined mindfulness as a trait, state, or action. One third described mindfulness as an awareness process without attitudinal components. An additional 30% mentioned non-judgment as the singular attitudinal stance underlying mindfulness. Empirical articles (n = 45) predominantly assessed dispositional mindfulness as a single score and frequently lacked measurement of defined attitudinal elements or measured components that were not defined.

Discussion: To commence standardizing the field, researchers should make an informed decision on a formative mindfulness framework, incorporate an explicit operational definition specific to one or multiple mindfulness types and its facets, and mirror these components with an appropriate measurement instrument(s) for the context, mindfulness form, and its elements.
Estimating true effectiveness of smoking cessation interventions under variable comparator conditions: systematic review and meta-regression

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Background and aims: Behavioural smoking cessation trials have employed comparators that vary widely between studies. This study aimed to estimate the relative effectiveness of (individual) smoking cessation interventions, while accounting for variability in comparators.

Methods: 172 randomised controlled trials with ≥6 months follow-up and biochemically verified smoking cessation were included. Authors were contacted to obtain unpublished information on experimental and comparator interventions. This was coded for active content, study population characteristics and methods. Meta-regression was used to create a model predicting smoking cessation outcomes. This model was then used to re-estimate effectiveness of different intervention types for individual and clusters of trials, as if all interventions have been evaluated against the same comparators.

Findings: The meta-regression model predicted smoking cessation rates well (pseudo $R^2=.44$). Compared with no support, self-help was 1.33 times (95% CI=1.16 to 1.49), brief physician advice 1.61 times (95% CI=1.44 to 1.90) and nurse individual counselling 1.76 times more effective (95% CI=1.62 to 1.90). Individual psychologist counselling and psychologist group counselling interventions were 2.04 (95% CI=1.95 to 2.15) and 2.06 (95% CI=1.92 to 2.20) times more effective. These differences were markedly different without adjustment for comparators.

Discussion: Using meta-regression to model the impact of smoking cessation behavioural support while standardising comparators, psychologist individual and group counselling appear to be most effective, followed by physician advice and nurse individual counselling and then self-help packages. We conclude that comparator variability needs to be taken into account when interpreting and synthesising evidence from smoking cessation trials.
‘I’m letting them down’: The perceived challenges for women when making life changes for health

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Background: ReDO-10® is a 10-week group programme facilitated by occupational therapists to support people make changes to daily activities for a more satisfying and balanced everyday life. The programme was piloted in primary care in Ireland for women with psychological distress. While women reported positive outcomes, there were social/personal challenges and resources that influenced how well all women were able to make life changes. The objectives of this analysis were to understand (1) the personal/social challenges women faced when trying to implement new daily strategies for better wellbeing and (2) the personal/social resources that supported their efforts.

Methods: Three ReDO®-10 groups were facilitated in 2019-2020 (n=21). Fourteen women were interviewed after their participation. Data was analysed using directed content analysis with the Theoretical Domains Framework (TDF) as a coding framework.

Findings: The TDF-guided analysis showed that women faced significant challenges in capabilities, motivation and opportunities when trying new strategies. Beliefs about their own capabilities and about the consequences changes would have on others were particularly influential. Socially, women with children and partners were supported or hindered in making changes by interpersonal factors in the home and their own beliefs about their social roles/identities.

Discussion: Those that attend healthcare interventions inhabit a life context and have personal strengths, challenges and resources that can influence how likely health behaviour change is for them. Future adaptations of ReDO®-10 can include more resources to better support women as they try to make changes to daily activities.

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Background
A key component for controlling COVID-19 transmission was regular self-testing using lateral flow tests (LFTs). However, falsification of home LFT results was a concern. Responses to direct questioning surveys probing sensitive behaviours are compromised by social desirability bias. This study is the first to compare prevalence estimates of LFT falsification behaviours between people surveyed with direct and indirect questioning technique, the extended crosswise model (ECWM).

Methods
1,577 adults living in England who had used LFTs took part in an online survey and were randomly allocated to either the DQ or the ECWM condition. They were asked about four types of falsification behaviours. In the ECWM condition, respondents jointly answered a non-sensitive question paired with the sensitive question (behaviour of interest).

Results
DQ method underestimated the prevalence of three behaviours: reporting negative results when none was conducted (5.7% DQ vs 18.4% ECWM); reporting positive results as negative (4.6% DQ vs 11% ECWM); and reporting positive results after producing a fake positive (1.7% DQ vs 6.4% ECWM); p < 0.001 for all three. The estimates obtained for fourth behaviour “sharing information of the LFT with someone else” were assessed as unreliable.

Discussion
Prevalence estimates of falsification behaviours were influenced by social desirability in DQ. Higher levels of anonymity via the ECWM appeared to obtain more realistic and valid prevalence estimates. We also demonstrated its ability to assess the validity of the estimates. However, the ECWM requires a relatively larger sample size and prevalence estimates are obtained only at group level.
Period pain and treatment uptake amongst allistic and autistic menstruators: A Thematic Analysis

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Background: The experience of menstruation across diverse populations is understudied. This study aimed to explore the experience of period pain and treatment uptake within allistic and autistic populations.

Methods: Semi-structured qualitative interviews were conducted with 37 participants (17 autistic participants; mean age 27.7 years). Transcriptions of interviews were analysed using Braun and Clarke’s Reflexive Thematic Analysis. Data were initially analysed together for common themes. Autistic menstruators’ data was subsequently analysed separately to elucidate the unique experiences of this group.

Findings: Three themes were constructed. Social perceptions of menstruation was discussed, highlighting the normalisation of pain, the taboo nature, and gendered experience of menstruation. Issues within menstrual healthcare were also shared, including experiences of ineffective treatment, dismissive interactions, and insufficient menstrual education. Impaired functionality was repeatedly highlighted, with menstruators detailing significant limitations to their usual functioning due to menstrual pain and ineffective treatment. Three further themes were constructed from separate analysis of data from autistic menstruators. Autistic menstruators discussed the impact of menstruation on their sensory experiences and needs, with many identifying overstimulation during menstruation. Social exclusion was discussed as a factor contributing to the experience of menstrual pain and poor treatment uptake. Pain communication differences between autistic and allistic menstruators presented challenges in healthcare interactions for this sample.

Discussion: Communication differences, sensory aspects, and social factors contributed to the experience of period pain and treatment uptake for autistic menstruators. The study highlights societal and healthcare factors that could be improved to ensure accessibility of support and treatment for menstrual issues.
Stress eating in adult ADHD – An Ecological Momentary Assessment study

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Background: Originally conceptualized as a neurodevelopmental condition restricted to childhood, it is now recognized that Attention Deficit Hyperactivity Disorder (ADHD) persists into adulthood, with around 2.5-2.8% of adults reporting clinically-significant symptoms. Considerable evidence supports the presence of a close link between adult ADHD and obesity. Beyond that, individuals with ADHD seem at risk for disordered eating, particularly overeating, and show emotion regulation deficits and maladaptive stress coping strategies, while reporting elevated levels of perceived stress. Objective: Since these findings suggest that individuals with ADHD might be at particular risk for stress eating (i.e., overeating as a response to stress), the present study assessed the stress and eating relationship in 38 adults with ADHD using Ecological Momentary Assessment. Methods: Over a period of three days, participants reported perceived stress and state-impulsivity eight times a day (signal-contingent) and recorded food intake (event-contingent). It was assessed whether emotion regulation, trait-impulsivity, and state-impulsivity moderate the stress and eating relationship. Multilevel two-part models were used to study the relationship between stress and the occurrence as well as the amount of food intake. Results: Stress was not related to the occurrence and the amount of food intake. Trait- and state-impulsivity as well as emotion regulation did not moderate the stress and eating relationship. Conclusions: No evidence was found that individuals with ADHD are at particular risk for stress eating. Yet, future studies are needed to replicate these findings. Individuals with ADHD could benefit from preventative measures targeting overeating and should therefore be studied further.
Parenting stress, coping and resilience

9:30 - 9:45

Dyadic coping as a moderator for parenting stress and emotions in youth sport

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Background: Parents play a central role in supporting their children to excel in both academic and extra-curricular achievements. As such, studies show that parents of high-performance athletes encounter intricate emotional experiences and stress due to their involvement. To date, knowledge on how parents in youth sport cope with these stressors is limited. Given that dyadic coping describes how couples jointly manage a stressor outside of their relationship, the aim of this study was to assess whether parents’ dyadic coping can serve as a protective factor regarding sport-specific parenting stress. Methods: 330 parents (Mage = 46.0 [6.2]) in youth soccer academies completed the Primary Appraisal Secondary Appraisal, the Sport Emotion Questionnaire as well as the Dyadic Coping Inventory. Findings: Moderation analysis shows that dyadic coping significantly moderated the relationship between parents’ perceived stress and their anxiety, adjusted R² = .27, F(3, 317) = 40.93, p < .001. Further, findings indicate that parents who attend their children’s competitions together have significantly higher dyadic coping values compared to those parents attending on their own, t(138.8) = -2.68, p = .004. Discussion: Managing sport-specific stressors together as a couple seems to be beneficial for parents’ psychological health. Future studies should examine whether parents’ dyadic coping affects their behavior during competitions as well as their children’s coping strategies and well-being. When designing interventions, practitioners should opt for a systemic approach in parent education to promote couple-centered coping strategies.
Adversity triggers resilience: understanding resilience among young mothers affected by HIV in South Africa

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Background: Young women face multiple sexual and reproductive health risks: HIV infection, unintended pregnancies, and socio-economic issues. While the syndemic of HIV and motherhood may exacerbate vulnerabilities, it may also trigger opportunities for resilience. Little is known about the strategies adopted by adolescent mothers affected by HIV when facing adversities.

Methods: Between 2020-21 we recruited 15 young mothers at risk of or living with HIV from the HEY BABY longitudinal cohort study, for semi-structured interviews, which included cognitive interviewing for the adaptation of a resilience measure. Participants lived in urban, rural and peri-urban areas in the Eastern Cape Province, South Africa. Thematic analysis was used to explore emerging themes and interpret patterns. Ethical approval was obtained from the Universities of Oxford and Cape Town.

Results: Interviews provided extensive insight into the experiences of young mothers and the personal and relational support accessed from their caregivers, intimate partners and their children’s fathers. Caregiver support included childcare to support mothers’ return to school or work. Intimate partner support included partners’ sharing in the responsibilities of the home and with the child, and educational and aspirational support towards young mothers’ dreams and goals by assuming childcare responsibilities while she goes to school or work.

Conclusions: Research and programming with young mothers living with and affected by HIV requires careful consideration of context-specific needs to enable resilience-centred interventions. These interventions need to support them in age- and life stage- appropriate ways, as needs may differ by HIV and motherhood status.
Long-term Functioning of Childhood Cancer Survivors: Longitudinal Associations With the Parental Context

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Objective. The long-term psychological effects of childhood cancer vary, with survivors reporting depressive symptoms and cancer-related worries as well as benefit finding. As cancer is considered a family disease, investigating parental functioning and parenting may provide insight into such individual differences in long-term functioning of childhood cancer survivors. This study examined the directionality of effects among parental sense of incompetence, parenting dimensions (responsiveness, psychological control, overprotection), and survivor functioning (depressive symptoms, cancer-related worries, benefit finding).

Methods. Our three-wave longitudinal study included 125 Dutch-speaking adolescent and young adult survivors, 114 mothers, and 91 fathers. Survivors reported (SR) about their functioning and mothers’ and fathers’ parenting. Mothers (MR) and fathers (FR) reported about parenting and sense of incompetence. Cross-lagged panel models were estimated for each informants’ perspective on parenting separately.

Results. Primarily unidirectional relations were found from parental sense of incompetence to parenting, and from parenting to survivor functioning. Different relations were obtained for each informant. First, maternal and paternal sense of incompetence positively predicted psychological control MR, FR, and SR, as well as maternal overprotection SR. Second, maternal and paternal responsiveness SR, respectively, positively predicted survivors’ benefit finding and negatively predicted survivors’ depressive symptoms. Responsiveness MR positively predicted survivors’ cancer-related worries and overprotection MR positively predicted survivors’ depressive symptoms. One reverse pathway emerged: maternal and paternal responsiveness SR negatively predicted maternal and paternal sense of incompetence, respectively.

Conclusion. The results support parent-driven processes impacting survivors’ long-term functioning and stress the need to focus on multiple perspectives when investigating family dynamics.
Comparing youth with and without type 1 diabetes on perceived parenting and peer functioning

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Background. The premise of this study was to gain more insight into whether type 1 diabetes (T1D) can impact how youth perceive parents and peers. To address limitations of previous observational studies that compare youth with T1D to control youth, propensity weighting was used to mimic a randomized controlled trial.

Methods. A total of 558 youth with T1D and 426 control youth (14-26 years old) completed questionnaires on parental responsiveness, psychological control, overprotection, emotional support from friends, extreme peer orientation, and a host of background and psychological functioning variables. The groups were statistically weighted to become as comparable as possible except for disease status (i.e., having T1D or not). The analysis plan and hypotheses were preregistered on the open science framework.

Findings. Youth with T1D perceived their mothers to be more overprotective, perceived fewer friend support, and were less extremely oriented toward peers than control youth. There were no group differences for paternal overprotection and paternal and maternal responsiveness and psychological control.

Discussion. Mothers of youth with T1D seem at risk to practice parenting that is not attuned to their child’s developmental needs. Clinicians could play an important role in making mothers aware of this risk. In addition, there is growing evidence that at least some youth experience T1D as a barrier that hinders them from engaging in peer relationships.
Modifiable and non-modifiable vulnerability factors for perinatal stress and anxiety: An umbrella review and framework

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Background: Perinatal maternal stress and anxiety can significantly impact on the wellbeing women and children. This umbrella review aimed to identify modifiable risk and vulnerability factors related to stress and anxiety across the prenatal period and up to two years postpartum, and to develop a framework of factors guided by the social ecological and diathesis-stress models to inform future intervention development.

Methods: The following databases were searched from inception September 2022: MEDLINE, CINAHL, PsycINFO, and Maternity and Infant Care. Papers were eligible for inclusion if they 1) included women who were pregnant and/or up to 2 years postpartum 2) examined factors associated with perinatal maternal stress and/or anxiety, and 3) reported a quantitative or qualitative systematic review, rapid review, scoping review, or meta-analysis. Review quality was evaluated using the AMSTAR-2 tool.

Findings: Thirty-six reviews were included in this umbrella review. Findings indicate that factors related to maternal stress and anxiety are relevant across all social-ecological levels. The strongest evidence for modifiable factors was identified for interpersonal factors, such as social support, and for existing mental health issues. Moderate evidence was identified for modifiable factors including social norms and stigma, expectancies, and health behaviours. Important non-modifiable vulnerability factors identified included sociodemographic factors, maternal health, life history, birth-related factors, interpersonal factors, and child-related factors.

Discussion: It is essential to address identified modifiable factors across multiple ecological levels, with consideration of vulnerability factors that impact on stress and anxiety outcomes, to reduce perinatal maternal stress and anxiety.
Validation and psychometric properties of the parent-rated Child Intuitive Eating Scale-2 (C-IES-2-P)

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The Intuitive Eating Scale-2 (IES-2) is a sound instrument to assess intuitive eating (IE) in adults. However, research on IE in children is scarce and instruments to measure IE in childhood are lacking. Aim of this study was to develop the parent-rated Child Intuitive Eating Scale-2 (C-IES-2-P) and investigate its psychometric properties. A sample of N = 461 parents (Mean age = 36.57 years) rated the C-IES-2-P regarding their child’s IE (Mean age = 5.06 years). Factor structure, internal consistency, measurement invariance across gender and construct stability over six months (n = 165) were tested. Associations with the Child Eating Behaviour Questionnaire (CEBQ) and Structure of Family Meals (SFM) Subscale from the Meals in Our Household questionnaire were examined. The CFA with post-hoc modifications revealed good fit indices (CFI = .98; RMSEA = .05; SRMR = .06) and supported a three-factor solution (Second-order factor: IE; Three first-order factors: Eating for physical rather than emotional reasons, Reliance on hunger and satiety cues, Body-food choice congruence). Mean values were found to be high. The C-IES-2-P showed good reliability, scalar invariance across gender and good temporal stability. The C-IES-2-P was negatively associated with Food responsiveness and Emotional overeating (CEBQ) and positively with SFM. Results demonstrate that the C-IES-2-P is a useful tool for assessing IE in children. As the level of IE was higher than in adults, this research provides first evidence that children may be more able to eat intuitively. More longitudinal studies are needed to understand trajectories of IE across childhood/adolescence.
EHPS' United Nations committee: Advancing SDGs in policy and practice

9:30 - 11:00

E. Neter¹, M. Karekla², J. Kollmann³, C. Teran Escobar⁴, B. Ambuehl⁵

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Purpose: Present and discuss activities of the EHPS' United Nations committee and uncover new opportunities and interests among the audience.

Objectives: (1) present past and on-going activities to the audience, thus providing exposure to committee's work to EHPS members; (2) discuss ways of implementing and disseminating on-going work, specifically strengthening collaborations, and enlisting new interested EHPS members; (3) identify news areas/activities of interest within the mission of the UN committee among EHPS members; (4) tentatively set up structure and network to advance new initiatives.

Rationale: The EHPS UN committee's mission is to support the EHPS in the application of health psychology to meet the global challenges of the UN agenda, specifically those detailed in the Sustainable Development Goals (SDGs). The committee collaborates with other psychological organization in UN-related activities (e.g., position papers, UN Psychology Day), comply with regulations to ensure consultative status with the UN, and advance SDGs within the EHPS. Many EHPS members are unaware of these activities and the session aims to expound on some activities.

Summary: Convenors Efrat Neter and Maria Karekla will open the session with a brief introduction of EHPS' mission on work related to the UN, with the EHPS both being affected and attempting to have an impact. Afterwards, Josianne Kollmann will present how the SDGs are represented at the EHPS conferences' presentations, based on 2019-2022 conferences' submissions, that is, the number of submissions per each goal generally, and by tracks. The next two presenters will discuss ways of transferring behavior change knowledge from the health context to pro-environment behaviors. Thus, Claudia Teran-Escobar will present her initiative on a book chapter written collaboratively by several EHPS members, delineating how theories and methodologies in health psychology can contribute to healthy and sustainable living. Maria Karekla will then present how can eco-friendly behaviors be effectively promoted, using insights from contextual behavior science. Benjamin Ambühl will present collaborative north-south partnerships focused on health and environmental issues, using participatory methods. Lastly, Efrat Neter will present an ongoing initiative/lobbying effort to set up an EHPS-sponsored fellowship at the WHO.

The second part of this session will start with a Mentimeter poll on the interests of the audience, which will assist in directing attendees to small group discussions on avenues for future potential activities/directions. Lastly, each group will report to the plenum session and an open discussion will follow.
Psychophysiologial pathways towards health and disease: From basic research to interventions

9:30 - 9:45

PSYCHONEUROIMMUNOLOGICAL PATHWAYS: IMMUNE-NEUROENDOCRINE PATTERNING AND RESPONSE TO STRESS. A LATENT PROFILE ANALYSIS IN ELSA

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Background. Psychosocial stress exposure can disturb communication signals between the immune, nervous, and endocrine systems that are intended to maintain homeostasis. This dysregulation can provoke a negative feedback loop between each system that has high pathological risk. Here, we explore patterns of immune-neuroendocrine activity and the role of stress.

Methods. Using data from the English Longitudinal Study of Ageing (ELSA), we identified the latent structure of immune-neuroendocrine activity within a population-based cohort using latent profile analysis (LPA). Then, we determined which of the derived profiles were most strongly associated with a composite stress score over time. We followed 4,934 male and female participants of a median age of 65 years over a four-year period (2008-2012).

Findings. A three-class LPA solution offered the most parsimonious fit to the underlying immune-neuroendocrine structure in the data, with 36%, 40%, and 24% of the population belonging to profiles 1 (low-risk), 2 (moderate-risk), and 3 (high-risk), respectively. After adjustment for genetic predisposition, sociodemographics, lifestyle, and health, exposure to stress was associated with a 61% greater risk of belonging to the high-risk profile (RRR: 1.61; 95%CI=1.23-2.12, p=0.001), but not the moderate-risk profile (RRR=1.10, 95%CI=0.89-1.35, p=0.401), as compared with low-risk profile four years later. In addition, financial stress was the strongest individual risk factor.

Discussion. Our findings extend existing knowledge on psychoneuroimmunological processes, by revealing how inflammation and neuroendocrine activity cluster in a representative sample of older adults, and how individuals exposed to high levels of stress were at greatest risk of adverse immune-neuroendocrine responses over time.
Daily stress and eating in adolescents and young adults: Exploring cortisol reactivity and eating styles

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Background: Stress-related eating has been well documented in previous literature. Nevertheless, the precise mechanisms underpinning the stress-eating relationship remain unclear with evidence suggesting that biological (e.g., cortisol reactivity to stress) and psychological (e.g., eating styles) factors can, in part, explain individual differences in vulnerability to stress-related eating. However, there is limited research investigating the role of cortisol reactivity and eating styles in daily stress-eating associations in samples of adolescents and young adults. Methods: 123 participants completed a baseline questionnaire and the Trier Social Stress Test in groups. Four saliva samples were taken at -10, +00, +10 and +40 minutes during the stress-induction task. Following this, participants completed an online daily diary each evening for 14 consecutive days to record daily stress and between-meal snack consumption. Findings: Multilevel modelling indicated that daily stress was positively associated with daily snack intake, specifically ego-threatening and work/academic stressors. Emotional and external eating styles were found to moderate the stress-snacking relationship. Cortisol reactivity also moderated stress-eating associations, such that as cortisol reactivity levels increased from lower to higher levels, the impact of stress on eating decreased. Discussion: The current findings highlight the importance of cortisol reactivity status and eating styles in understanding the complex relationship between daily stress and eating behaviour in adolescents and young adults. Future research should endeavour to continue investigating stress-eating associations in these groups and explore the role of other aspects of hypothalamic-pituitary-adrenal axis functioning.
Development and initial evaluation of a Cardiovascular stress reactivity treatment model for hypertension

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Background: Dysregulated cardiovascular stress reactivity in people with hypertension is associated with a greater risk of cardiovascular complications and poorer psychological health. Most health psychology therapeutic models only target psychosocial processes of change, so integrating biofeedback has the potential to optimise the effectiveness of health psychology models in improving cardiovascular stress reactivity and hypertension outcomes. This presentation describes the processes undertaken to develop and evaluate initial outcomes from a hospital cardiovascular stress reactivity treatment model.

Method: Our systematic review summarised the evidence for biofeedback interventions for hypertension (32 studies, N=1425). Patient and stakeholder consultations co-designed the treatment model which combined Acceptance and Commitment Therapy psychological flexibility skills training with biofeedback breathing exercises. We also evaluated initial outcomes from case reports and semi structured interviews from 15 patients who attended sessions with a Health Psychologist in a hypertension specialist outpatient’s service.

Findings: At 8 weeks follow up, 90% of participants reported clinically meaningful improvements in blood pressure status (i.e. 5mmhg reduction in BP). 85% reported improvements in psychological outcomes (e.g. improvements in stress reactivity, increase in valued activities) and 11 patients reported improved health behaviour change (increased physical activity, improved diet, reduction in alcohol intake). Interviews highlighted that patients valued the opportunity to gain coping skills in psychological flexibility and biofeedback breathing to help manage hypertension.

Conclusions: Cardiovascular stress reactivity biofeedback with psychological flexibility support can help improve psychological health and quality of life, as well as improvements in systolic blood pressure within a specialist cardiovascular health psychology service.
Are virtual reality breathing interventions effective in improving mental health? Systematic review and Meta-analysis

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Background: Breathing interventions have been shown to reduce mental health problems in clinical and non-clinical populations. Despite the potential benefits of VR implementation of breathing interventions, it remains unclear whether VR breathing interventions are more effective at improving mental health than non-VR implementations.

Methods: We conducted a systematic literature search in six electronic databases (Web of Science, PsycINFO, Embase, Cochrane Central Register of Controlled Trials, Scopus, and PubMed) up through November, 2022. We focused on randomized controlled trials evaluating effects of VR (vs. non-VR) breathing interventions on mental health outcomes (primary), physiological measures of stress, and evaluation outcomes (secondary) in (young) adults.

Findings: A total of 2,848 records were identified, 65 full-text articles were assessed, and 7 RCTs were included, of which 5 were suitable for meta-analyses. VR, compared to non-VR, breathing interventions did not significantly improve mental health (SMD= 0.07, SE= 0.08, p= 0.39, 95% CI [-0.10 0.24], I² Level 3 = 10.3%, I² Level 2 = 2.9%). There were no significant changes between VR and non-VR breathing interventions in heart rate (SMD= -0.06, p= 0.74), and heart rate variability (SMD= -0.06, p= 0.74). Participants neither liked (SDM=0.53, p= 0.142) nor would use (SMD= 0.33, p= 0.41) VR breathing interventions more than non-VR breathing interventions.

Discussion: Results suggest that VR breathing interventions are not more effective in improving mental health outcomes compared to non-VR breathing interventions. Further research is required to determine the long-term effects of VR-implementation over a longer period of time.
Standard 0.1 Hz breathing induces stronger cardiac vagal activity than super-slow 0.05 Hz yoga breathing.

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Introduction: Slow-paced 0.1 Hz breathing (SPB) has been shown to enhance psychophysiological health, which is attributed to its cardiac vagal activity (CVA) boosting effects. While the majority of research has been focusing on SPB, little is known regarding the psychophysiological effects of super-slow breathing techniques (SSB). The latter could leverage tidal volume, prolonged exhalation as well as breathing pauses, which are hypothesized to enhance CVA. Hence, this study assessed whether 0.05 Hz SSB facilitated via Ujjayi, a yoga technique using pharyngeal contraction to slow down breathing rates, induces distinct effects on CVA compared to SPB. Methods: N = 52 executed SPB and SSB in randomized order, with CVA (e.g., RMSSD), systolic (SBP) and diastolic blood pressure (DBP) indexing cardiovascular activity. Positive (PA) and negative affect (NA) were assessed pre-/post breathing trials. Results: RMSSD was higher during SPB compared to SSB (d = .78, ps < .001). PA decreased exclusively after SPB (d = .46, p = .002), while NA decreased after SSB (d = .34, p = .019) and SPB (d = .67, p < .001), with the latter yielding stronger reductions (d = .34, p = .019). DBP increased after SSB (d = .65, p < .001), with SBP showing a similar trend (d = .47, p = .054). Conclusions: SPB induced stronger CVA than SSB, which triggered a minor physiological stress response. We suggest that analogous to exercise training, SSB may foster beneficial psychophysiological adaptions via hormesis. Thus, SSB could supplement SPB programs, possibly enhancing the latter’s effectiveness.
Is alexithymia demanding for vagal activity during an interpersonal stress task?

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The relationship between alexithymia and vagal activity is not yet frequently studied despite arguments to do so. This emotional processing deficit is consensually related to emotion regulation deficits well-known for their relations with vagal activity. Indeed, it has been shown that vagally mediated heart rate variability (vm-HRV) is lower for people experiencing emotion dysregulation. Since then, we suggest first that vm-HRV at rest is different between high and low alexithymia levels and second, that alexithymia influence the vagal activity during an interpersonal stress task.

Data were extracted from the Common Cold Study, an open database based on a large clinical trial designed to assess psychosocial predictors of resistance to viral infection. 193 participants, aged 18-55 years, performed a modified version of the Trier Social Stress Test and complete the Toronto Alexithymia Scale. After excluding participants with a BMI > 30 and with only one datapoint, 124 participants (78 females) were considered for multilevel linear analyses, controlled for age, BMI, physical activity and restlessness during the TSST.

The quadratic model shows that vm-HRV decrease at a higher rate for high alexithymia scorers between baseline and anticipation periods and rise more importantly between task and recovery period. Against all odds, both baseline and recovery vm-HRV were higher at high than at low alexithymia.

Alexithymia is associated with a higher resting vagal brake activity that release quickly during a demanding task to achieve a similar activity to that of people with low alexithymia, questioning the role of this higher parasympathetic activation at rest.
Health Psychology in 2023: Transforming Paradigms

9:30 - 9:45

The Regression Trap: Why Regression Analyses Are Not Suitable For Pretty Much Anything in Psychology

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Background: Regression analyses are commonly used for selecting determinants to target in behavior change interventions, but the aim of this contribution is to explain why regression analyses are not suitable for this purpose (i.e., the regression trap).

Methods: This aim is achieved in three ways: by providing (1) a theoretical rationale based on overlap among determinants; (2) a mathematical rationale based on the formulas that are used to calculate regression coefficients; and (3) examples based on real-world data.

Findings: First, the meaning of regression coefficients is commonly explained as expressing the association between a determinant and a target behavior 'holding all other predictors constant.' We explain that this often boils down to 'neglecting a part of the psyche.' Second, we demonstrate that the interpretation of regression coefficients is distorted by correlations between determinants. Third, the examples provided demonstrate the impact this has in practice. This results in interventions targeting determinants that are less relevant and, thereby, have less impact on behavior change. In closing, we discuss a possible solution to circumvent the regression trap.

Discussion: There are theoretical, mathematical, and practical reasons why regression analyses, and by extension multivariate analyses, are not suitable to select determinants to target in behavior change interventions. Preprint: https://doi.org/gkx2bf
Knowing What We're Talking About: Facilitating Decentralized, Unequivocal Reference to Psychological Construct Definitions and Instructions

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Background: A theory crisis and measurement crisis have been argued to be root causes of psychology’s credibility crisis. In both, the lack of conceptual clarification and the jingle-jangle jungle at the construct definition level as well the measurement level play a central role.

Methods: We introduce a conceptual tool that can address these issues: a Decentralized Construct Taxonomy (DCT). This consists of comprehensive specifications of construct definitions and corresponding instructions for quantitative and qualitative research. Using this conceptual tool in practice requires operational tools, and so we developed these.

Results: We report on three open source technical tools that allow working with DCT specifications: the R package {psyverse}, the Constructor Shiny App, and the PsyCoRe construct repository.

Discussion: We discuss how researchers can develop DCT specifications as well as how DCT specifications can be used in research, practice, and theory development. Finally, we discuss the implications and potential for future developments to move towards machine-readable research outputs without relying on curation by a single authority. We hope these tools can help to answer the call for conceptual clarification and epistemic iteration, contributing to a transformative move towards a psychological science that progresses in a cumulative fashion through discussion and comparison. Preprint: https://doi.org/jnjp
Towards Improving the Precision of Health Psychology Theories: Translating Narrative Theories into Dynamical Systems Models

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Background: The much-discussed theory and measurement crisis in psychology is fuelled at least in part by the dominance of narrative theories – i.e., natural language descriptions of how psychological constructs measured at a baseline assessment are linked to other constructs measured several weeks or months later through predominantly linear functions. In parallel, a growing body of evidence from studies harnessing technology-enabled, repeated measurements in people’s daily lives indicates that many health behaviours unfold idiosyncratically and non-linearly over time.

Methods: This talk will first provide an overview of the observed mismatch between narrative health psychology theories and the idiosyncratic and non-linear trajectories of many health behaviours. Next, the benefits of taking a dynamical systems perspective for the prediction and explanation of phenomena of interest will be outlined. Finally, accessible methods from the dynamical systems modelling toolbox will be introduced, applied within the context of smoking cessation.

Findings: Although narrative theories have had utility for the prediction/explanation of health psychology phenomena, they are limited by the ambiguity of natural language. Dynamical systems modelling allows health psychologists – for example, by drawing on domain knowledge from multiple stakeholders – to transform narrative theories into a precise series of difference or differential equations which can generate the expected system dynamics. Such dynamical systems models allow researchers to test different hypotheses through simulation prior to data collection and model refinement/validation.

Discussion: The use of dynamical systems modelling in health psychology research and practice has transformative potential for the development of more precise theories.
Qualitative/Unified Exploration of State Transitions (QUEST): taking time into account in qualitative research

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Background: In grasping complexity within qualitative data, focus is often placed on atemporal patterns in codes, which precludes studying processes unfolding over time. There are several techniques to investigate sequential or causal-process observations, such as personal timelines from biographical interviews or visual temporal frameworks from lifegrid interviews. These methods leverage within-case analyses effectively, but are less suited for aggregating data across multiple data providers. Insofar as research goals include making inferences beyond individuals’ outcomes, there is utility in extracting and aggregating analytically relevant features of data.

Methods: To examine order across data providers, we offer the Qualitative/Unified Exploration of State Transitions (QUEST), a tool visualizing Markovian models of transitions between states or steps in a process.

Results: Computations for QUEST are based on a state transition network where frequencies of transitions from a state to itself and other states constitute the total transition counts for each state. Then, an adjacency matrix is created for every unit of analysis (e.g., participant) and aggregated across units (e.g., summed). This cumulative, asymmetric matrix signifies the input for the network visualizer, where nodes represent states, and edges are transition probabilities between states.

Discussion: Albeit QUEST visualizes transition probabilities between unique pairs of states and thus does not enable aggregating sequences of three or more states, it can be a potent tool in discovering patterns within data from multiple cases. We introduce QUEST through an example of online health-related information-seeking behavior among experts and novices in information retrieval and assessment.
Encouraging causal thinking in applied health research with causal Directed Acyclic Graphs (DAGs)

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Background: Observational studies tend to rely on associational rather than causal analysis. Nevertheless, causal conclusions are often made by researchers. This practice limits the potential of observational data to inform and guide public health decision making and policy development. Causal Directed Acyclic Graphs (DAGs) provide the necessary tools for articulating the assumptions on which causal interpretations of statistical associations rely and provide a clear basis for constructive discussion among researchers. The aim of this presentation is to explain the importance of thinking causally and give an overview of the currently available guidelines for constructing DAGs.

Methods: A scoping review was conducted searching for papers and resources explicitly focusing on the development of DAGs. Three bibliographic databases were searched and reference lists of selected papers were screened. Information extracted was categorized according to three themes: (1) the purpose of DAG development, (2) proposed guidelines and recommendations and (3) guidance on how to obtain domain knowledge for DAG development.

Findings: 902 records were identified from the bibliographic databases and eleven papers and resources were included. Most of the included papers focused on DAG development for data analysis. Similar steps were proposed for developing a DAG. Crucially, there were some differences on how to implement common causes. Little to no information was available on the implementation of domain knowledge in the development of DAGs.

Discussion: Causal DAGs are relevant and essential tools in guiding different phases of the research process, from study design to data-analysis. Key recommendations for applied health researchers are discussed.
Health Psychology for All: Supporting Equity, Inclusiveness and Transformation in Healthcare addressing Professionals and Parents-to-be

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Health psychology aims to understand and predict different behaviors associated with health and well-being. Behavior change theories have been used to predict and improve different behaviors by means of interventions. While we know much about behaviors such as physical exercise and diet, little is known about communication behavior and multiple health behaviors especially connected to birth. In this state-of-the-art presentation, evidence is synthesized to support equity, inclusiveness and transformation addressing communication and teamwork.

Specifically, beside the finding that theories and models (HAPA, CCAM) from health psychology fit communication behavior well, the following demonstrate the potentials of health psychology to ensure equity, inclusiveness and transformation especially in the health care system:

Adverse events were detected in 23% of births with 3% preventable adverse events, which can be addressed by interventions. Needs analyses revealed barriers and facilitators for training and healthcare workers request implementation of interventions.

Interventions for healthcare workers improved perceived patient safety and resulted in a 30% decrease in preventable adverse events at an exemplary hospital. Analysis of costs indicates that the average cost per patient decreased after the healthcare worker intervention. Results indicate that the average cost per patient decreased by 135 Euros following implementation of the intervention.

The intervention addressing pregnant women’s communication behavior improved perceived quality of birth and coping planning compared to the control group. Most participants improved in awareness of personal wishes, competence and positive experiences. The intervention did also reduce costs: A significant intervention effect was found for patients with complications, revealing that the intervention reduced average patient costs by 30%.

Future research and practice should support interdisciplinary teams, implement communication interventions and trainings in regular intervals, test feasible digital options, and focus on multiple behavior change especially in marginalized groups to meet patient safety and health challenges.
Measuring anhedonia in adolescents - construction and validation of the Youth Anhedonia Scale (YAS)

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The ability to experience pleasure is one of the key elements of subjective well-being, mental health, and proper human development. Numerous sources indicate that the prevalence rate of depressive disorders and anhedonia among children and adolescents is high. However, there is a lack of updated diagnostic instruments to diagnose anhedonia in these age groups.

The paper presents an original tool to measure anhedonia in adolescents. Our goal was to create a measure that would be useful in both clinical and non-clinical populations. YAS was designed to measure ability to experience pleasure in both aspects - anticipatory and consummatory. The items reflect adolescents’ current habits, language styles, and behavioral tendencies.

A non-clinical sample of adolescents (N=534) was involved in the study, conducted in three stages. In each stage, different groups of adolescents aged 11-18 were tested. The samples did not differ in age, gender, or ethnicity. The scale’s psychometric properties were examined by verifying its reliability, relevance, and factor structure. After piloting the new scale, we established the structural validity of the measure in two groups of adolescents 11-14 years old and 15-18 years old, using EFA and CFA.

The final version of the tool consists of two scales: YAS-ANT (13 items) and YAS-CON (16 items), with one general factor. The tool has good psychometric properties, high reliability, and converges with standardized measures of depression and positive and negative affect. The results suggest that the Youth Anhedonia Scale is a valid and reliable tool to measure anhedonia in youths.
How do we best engage young people in decision-making about their health? A scoping review

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Background: International organisations have called to increase young people’s involvement in healthcare and policy development, yet meaningful methods of involvement are lacking. The purpose of this scoping review is to identify deliberative priority setting methods and explore the effectiveness of these in engaging young people in healthcare and policy decision-making.

Method: We conducted a scoping review. Seven databases were searched systematically, using MeSH and free text terms, for articles published in English before July 2021. All titles, abstracts and full-text papers were screened by independent reviewers. Data extraction followed the Centre for Reviews and Dissemination guidelines. The results are presented as a narrative synthesis, structured around four components for evaluating deliberative processes.

Findings: The search yielded 9 reviews and 21 studies. The more engaging deliberative priority setting tools involved young people-led committees, mixed-methods for identifying and prioritising issues and digital data collection and communication tools. Long-term and frequent contact with young people to build trust underpinned the success of some of the tools, as did offering incentives for taking part and skills development using creative methods. Consideration of power dynamics is needed, since young people’s decisions are likely to be made together with family members, health professionals and academics.

Discussion: Young people’s engagement in decision-making about their health is best achieved through investing time in building strong relationships and ensuring young people are appropriately rewarded for their time and contribution. Health psychologists can play a role in developing and delivering meaningful methods with young people about decisions about their health.
Treatment beliefs in children and adolescents with chronic health conditions: a scoping review

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Background:
Children and adolescents with chronic health conditions gradually take on more responsibility for their illness management as they grow up. In this context, individual beliefs about illness and treatment are crucial, which evolve in dependence on developmental issues and a social-ecological context. While there is relative consensus on the dimensions of illness beliefs, the content of children’s treatment beliefs remained unclear. Hence, this scoping review aimed to identify treatment beliefs dimensions in children and adolescents with chronic health conditions.

Methods:
Following the Joanna Briggs Institute methodology for scoping reviews, systematic searches in electronic databases (Medline, PsycINFO) were conducted, including the components child, adolescent and chronic health condition (“population”), treatment belief (“concept”), and treatment (“context”). Qualitative, quantitative and mixed-methods studies were included. Terms describing children and adolescents’ perception of treatment were extracted.

Findings:
Thirty-five references were included. A variety of treatment beliefs contents of both positive and negative valence and at different levels of abstraction was identified. The most frequent treatment beliefs dimensions were necessity, concerns, perceived benefits and costs, and expectations, which were differentiated into outcome, social, and structural expectations. Further dimensions covered emotions and one’s own role in the treatment process.

Discussion:
The identified treatment beliefs dimensions need to be considered in combination with the methodological approach used and theoretical model applied. Thus, we often observed similar dimensions as previously found in adults, while child-specific contents were underrepresented. As treatment beliefs are relevant for illness management, future research in children and adolescents with chronic health conditions is needed.
School-based stress management interventions – results from a meta-analysis

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Background: School-based health psychology interventions have outstanding importance, given the relatively high and ever-increasing ratio of school-aged children suffering from milder or more serious mental health problems. The aim of the present meta-analysis was to evaluate the effectiveness of school-based intervention programs targeting stress management and coping /resilience in school-aged children.

Methods: The present study followed the PRISMA guidelines. Compared to previous meta-analyses, we analysed only randomized controlled trials to increase the validity of the meta-analysis. Altogether, 55 studies were selected for the analysis and two multi-level random-effect meta-regression analyses were conducted for the two outcomes separately. Effects were calculated as standardized mean differences (Hedges’g) between intervention and control conditions at post-test. A moderator analysis was conducted, where effect modifiers as covariates were tested in multiple regression models for each outcome.

Findings: Without outliers, the results indicated a small significant overall effect for stress (g=-.19) and no significant effect for coping/resilience. Including outliers, the effect sizes were doubled for both outcomes. Although we did not find any significant effect modifiers concerning stress, coping/resilience interventions were significantly more effective in the older age group, in selective samples and in programs including yoga and CBT elements.

Discussion: The present meta-analysis suggests a conflicting view on the effectiveness of school-based interventions targeting stress and coping. The results of the moderator analysis set the direction to follow for more effective interventions, and recommendations are provided on methodological concerns and on applying different perspectives in the prevention of stress in school-aged children.
Active Living, Social Networks, and Digital Interventions in Adolescents: a Qualitative Focus Group Study

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Background: Children's participation in organised sports and other forms of active living usually declines after transition to secondary school. The social network, and digital interventions using the social network, can play a key role in supporting children in active living. This study aims to gather insights into 12–14-year olds’ thoughts on active living and sport participation, motivators and demotivators, the potential role of their social network, and digital interventions.

Methods: 26 participants aged 12–14 from different levels of Dutch secondary schools took part in one of five focus group interviews. All interviews were transcribed and analysed using a thematic qualitative approach.

Findings: Participants regarded social benefits as strong motivators for active living: being together, making friends, having fun together; however, the social network can also demotivate. Participants were willing to share and hear about positive experiences, descriptive norms, and inspiration for physical activity, but not negative experiences or personal information. In digital interventions, participants stated a preference for social challenges, personalised feedback / goals / activities, and rewards. Competition was seen as less important or even unattractive.

Discussion: The research shows that adolescents feel their social network is and can be a strong driver of active living. They are willing to use digital solutions that make use of the social network for physical activity, as long as these solutions involve their current (close) network and uses an approach based on being together and having fun together. This offers possibilities for future digital interventions for active living.
Weight-teasing, internalizing symptoms and disordered eating in early adolescents. Mediating role of internalized weight bias

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Background: Weight teasing is increasingly common in early adolescence and may have negative consequences for various indicators of mental health, such as internalizing symptoms and disordered eating. The present study aimed to examine the impact of weight teasing on internalizing symptoms and disordered eating behavior and whether internalized weight bias and body esteem play a mediating role on these relations, on a sample of early adolescents. Methods: The study used a cross-sectional design with a sample of 376 early adolescents (59.5% girls) aged between 11 and 13 years old (Mage=12.17). They completed self-report measures assessing perceived weight teasing, internalized weight bias, body esteem, internalizing symptoms and disordered eating behavior. Findings: Results of path analysis indicated very good fit indices for the hypothesized mediational model, $\chi^2(4)=6.70$, $p=.15$; NFI=.99; CFI=.99, RMSEA=.04, 95% CI [.00, .09]. Perceived weight teasing was positively related with internalized weight bias which was further negatively related with body esteem and positively related with internalizing symptoms and disordered eating behavior. Internalized weight bias mediated the relations of weight teasing with internalizing symptoms, disordered eating and body esteem. Body esteem partially mediated the relations of internalized weight bias with internalizing symptoms and disordered eating behavior. Discussion: The findings highlight internalized weight bias as a psychological mechanism explaining the negative effects of weight teasing on mental health outcomes in early adolescence, emphasizing the need for early intervention during this developmental stage, in order to prevent future health problems.
13:30 - 13:45

Telephone-delivered versus written guidance on demand in a digital resilience intervention: A randomized-controlled non-inferiority trial

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Background: Providing guidance has repeatedly found to increase efficacy, adherence and acceptance of internet interventions. To date, guidance in digital interventions has mostly been offered in forms of written feedback and different formats of guidance have scarcely been compared directly. The aim of this randomized controlled non-inferiority trail was to investigate whether telephone-delivered guidance on demand in a digital resilience intervention is non-inferior to written guidance on demand.

Methods: Care workers (N=219) were randomized to one of the two conditions: access to written guidance (n=109) or telephone guidance (n=110). All received the same digital resilience intervention, RESIST, consisting of a six sessions long web-based training and an accompanying smartphone-based app. RESIST is based the positive appraisal style theory of resilience (PASTOR) and strengths-based cognitive behavioral therapy (SB-CBT).

Results: The two groups did not differ in terms of stress after 8 weeks (d=0.2; 95% CI: 0.16-0.63; p=0.247), the non-inferiority margin of d=0.3 was not exceeded. Both groups with written guidance (-3 points; d=0.46; 95% CI: 0.16-0.74; p=0.010) and telephone guidance (-3.5 points; d=0.46; 95% CI: 0.15-0.75; p=0.002) reported significantly reduced stress. Written guidance was asked for 26 times, telephone guidance 29 times.

Discussion: Telephone-delivered guidance on demand is non-inferior to written guidance on demand in the digital resilience intervention RESIST. Offering digital interventions with different options of support could facilitate uptake and implementation of digital interventions. However, offering support on demand led to low uptake of support. Offering support by default, with the option to unsubscribe, might be the preferred alternative.
Live online group against individual web-based stress management training in employees: a randomized pilot study

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Background: Over the past decade, web-based stress management trainings have gained increasing attention, typically targeting individuals. Digital stress management trainings can also be delivered in a group format. In the present study, we tested the feasibility and beneficial effects of a live online course in comparison to established web-based training for the individual.

Methods: In a randomized-controlled feasibility trial, adults (N=62) participated either in the group course “Calm and Confident in Stress” (n=32), adapted for delivery in 7 weekly live online sessions, or in the individual web-based training “Fit in Stress” (n=30) consisting of 7 weekly sessions including written feedback by an e-coach. Primary endpoint was group difference in stress (Perceived-Stress-Scale-10) with a non-inferiority threshold of Cohen’s d=0.3 after 8 weeks, tested by analysis of covariance. Semi-structured interviews explored comparative experiences of participants made with both training formats (study registry: DRKS00024965).

Results: Per-protocol findings suggest no significant difference in stress reductions (p=0.579). Participants in both formats reduced stress (group: -5.4 points; n=27; individual: -6.6 points; n=21). Adherence was significantly higher in the group format (4.9 vs. 3.5 completed sessions; p=0.045). The interviews revealed that participants in the group format valued the personal exchange of experiences with others, whereas those in the individual training format valued flexibility in time the most.

Discussion: The study indicates that online stress management can be comparably effective in an individual and in a group format. Considering format-specific benefits should be considered in finding the best fit between personal preferences and delivering format.
A serial mediation analysis on the impact of recreational behavior in digital interventions for insomnia

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Work-related stress is a risk-factor for insomnia. While is highly prevalent, first line treatment is not widely available. Recently, there is growing evidence for digital intervention to be effective in different groups including the general working population. GET.ON-Recovery is digital intervention with 6 weekly session based on cognitive-behavioral-therapy for insomnia and adapted to the needs of employees. The adaptation follows a theoretical framework assuming behavioral change in recreational activities facilitating mental detachment from work-related stressors that in turn affects sleep quality. While there is evidence for the efficacy of the intervention, the proposed underlying mechanism is unknown.

A serial mediation analysis with individual data pooled from 3 randomized-controlled trials (N=433) was conducted to test the proposed mechanism of GET.ON-Recovery.

The intervention led to an increase in both mediators, recreational activities (a1=5.75 (3.72-8.18)) and mental detachment (a2=0.53(0.38-0.68)). The marked effect on insomnia severity three months after randomization was mediated by an increased frequency of recreational activities (d21=0.01(0.01-0.02) and increased mental detachment from work (b2=-1.17(-1.74- -0.60) at the end of the intervention.

Results suggest that encouraging workers to incorporate more recreational activities into their daily lives is an appropriate way to promote mental detachment from work, which in turn is a good precondition for restful sleep. This may provide new insights into the mechanisms of action making digital interventions for insomnia in workers effective.
Personalized intervention to improve medication adherence for persons with Multiple Sclerosis

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Background: Up to 50% of persons with multiple sclerosis (PwMS) prescribed disease-modifying treatments (DMTs) do not take them as prescribed. Although many studies report on adherence rate, few studies report on interventions among PwMS. The current study evaluated the feasibility of an intervention to increase medication adherence among persons with relapsing-remitting multiple sclerosis (PwRRMS).

Methods: Participants were 91 PwRRMS who were prescribed DMT and identified as non-adherent. Participants received verbal education and counseling from their treating physician, a tailored Motivational Interviewing (MI) counseling with a health psychologist, an additional booster session with the psychologist via telephone within 7-10 days of the first meeting, and a concluding MI counseling six months later. Each PwRRMS filled a battery of questionnaires, including the Probabilistic Medication Adherence Scale (ProMAS), at baseline, six months, and 12 months later. The design was quasi-experimental pre-test-post-test across a year.

Findings: Sixty of identified persons (n=91) consented to enroll, 52 completed the intervention and 46 completed the follow-up. At six-months following baseline, adherence scores increased and were significantly different than at baseline (Z = 2.17, p = .030), but at 12 months follow-up there was no significant difference from baseline in reported adherence (Z = 1.62, p = .106).

Conclusions: This study demonstrated the feasibility and initial efficacy of a combined psycho-education and MI protocol for PwRRMS to enhance medication adherence to DMT. In order to maintain the change, a more sustained intervention is required.
Interventions on the Posttraumatic Growth of Adults with Cancer: Initial findings from a Systematic Review

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Background: People struggling with cancer can experience post-traumatic growth (PTG). This allows them not only to overcome their trauma, but also go over and above their pre-cancer state. This systematic review aims to identify the most effective interventions facilitating PTG in adults with cancer.

Methods: The PRISMA guidelines and the Cochrane Handbook guided the review. The included interventional studies were comprised of 30 or more adults with cancer, used the posttraumatic growth inventory, and were conducted from 1994 forward. The articles were retrieved from PsycInfo, PubMed, Scopus, Cochrane library, and ProQuest.

Findings: A total of 2,731 articles were retrieved, 1,028 of those were screened and 37 unique trials were included (46 articles). The majority of studies (52.4%) were published since 2018, they were randomized control trials (43.2%), and had group interventions (34.8%). Most studies (51.4%) included only female participants, with a single type of cancer (54.1%), although breast cancer was by far the most proliferated individual diagnosis (40.5%). The most common interventions drew from cognitive-behavioral therapy and were high in effectiveness and effect sizes. Promise was shown by expression-based and positive psychology in terms of effectiveness, and mindfulness-based approaches in terms of effect sizes.

Discussion: There was a great diversity of approaches in interventions that facilitated PTG. Two major limitations of the literature were grouping together people with different cancer experiences and the clear emphasis on mainly including women. Future interventions should aim to include all genders and people with the same type of cancer to ensure health equity.
Mindfulness Based Cognitive Therapy in Breast Cancer Patients in Turkey: A Randomised Controlled Trial Study

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³Ege University, Turkey

Mindfulness-based cognitive therapy aims to establish a new relationship with the psychological distress by giving people’s attention to what is happening in the moment and by making them accept their experiences with compassion. When studies in Turkey that examined the effectiveness of mindfulness-based cognitive therapy in breast cancer were reviewed, no study was found. Thus, this study aims to adapt the mindfulness-based cognitive therapy for breast cancer patients living in Turkey and to examine its effectiveness. The sample consists of 56 women aged 18 to 65, stage I- II breast cancer patients. Pre-intervention, post-intervention and 3 months post-intervention measurements were taken from participants who were randomly assigned to mindfulness-based cognitive therapy (MBCT), Sharing Group (SG) and waiting list control group (WL) conditions. Personal Information Form, Mindful Attention Awareness Scale, Cognitive and Affective Mindfulness Scale – Revised, Hospital Anxiety Depression Scale, Perceived Stress Scale, European Organization for Research and Treatment of Cancer Quality of Life Questionnaire, and Post Traumatic Growth Inventory were used. According to results, statistically significant differences were found within and/or between groups in mindfulness, depression, stress, and global health subscale of quality of life questionnaire. These results were preserved in the three-month follow-up measurements. According to the results of Intention to Treat analysis the effect on awareness, depression, stress and global health subscale of quality of life questionnaire continued.
Impact of digital interventions on health behaviour in patients with chronic obstructive pulmonary disease

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Background: Health behaviour change, such as smoking cessation or physical activity promotion, is important for management of chronic obstructive pulmonary disease (COPD). Digital interventions (DI) can assist with treatment and monitoring of COPD. This study aimed to assess if health behaviour change was addressed in systematic reviews (SRs) of DI in COPD.

Methods: Data from a prospectively registered (doi: 10.2196/40538) overview of SRs were used. The information sources were four bibliographic databases and the bibliographies of the included SRs. The SRs were independently selected and coded using a self-developed data extraction sheet by two researchers and appraised with AMSTAR 2.

Findings: Of 1439 records, 30 SRs met the inclusion criteria. The assessment of health behaviour outcomes was planned in 10/30 SRs, and 8/10 SRs reported such outcomes (mainly physical activity or capacity that were measured using different methods). Few short-term beneficial effects of DI on physical activity were reported in 4/8 SRs, but there was no evidence to indicate if any benefits were long lasting. According to AMSTAR 2, the confidence in the results of 25/30 SRs was critically low and only 3/30 SRs received high confidence ratings.

Conclusions: Although improving health behaviour, such as promoting physical activity, could be monitored using DI and positively affect COPD management, health behaviour outcomes were assessed in only few SRs. Further research is needed to determine if primary studies focus on improving health behaviours in COPD. Our results also show that reporting guidelines need to be better followed by SR authors.
An examination of obesity-related policies and public acceptability of these policies

13:30 - 13:45

Calorie labelling and proportional pricing on food and beverage orders through a virtual delivery app

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Background: Mandatory calorie labelling in the out-of-home food sector has recently been introduced in the UK, and pricing strategies that ensure cost is equivalent to portion size (proportional pricing) have been proposed as a policy to reduce obesity. Food delivery app-based platforms contribute significantly to diet, but public health policies to improve nutritional quality of food ordered from these platforms have received limited examination. This study assessed the impact of calorie labelling and proportional pricing on meal, sandwich and drink size selection, calories ordered, and money spent through a mock food delivery app.

Methods: Participants (N=1126, 49% female) had a mean age of 40.21(±13.6) and were stratified by gender and education level. All participants completed an online study where they ordered items from three branded food and beverage outlets. Using a 2x2 between-subjects design, participants were presented food options with or without calorie labels and with value (larger portions are proportionally cheaper) or proportional pricing.

Findings: Calorie labelling did not influence size selection, but significantly reduced calories ordered from drinks (95% CI -33.07 to -4.84) and fast food (95% CI -86.04 to -22.33). Proportional pricing reduced the likelihood of choosing a larger beverage (95% CI -0.83 to -0.12), but was associated with increased calories ordered from fast food (95% CI 19.59 to 82.90). No consistent interactions were observed with participant characteristics.

Discussion: Calorie labelling and proportional pricing may both have positive effects on ordering behaviour through a food delivery app, however further research in real-world settings would be valuable.
The evolution of packaging cues in food products aimed at children in 2018-2022

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Background: Packaging has the power to influence children’s consumer behaviour. In the case of unhealthy products, incitation to consumption could contribute to high obesity rates. Different social policies have been established to reduce the use of persuasive elements in child-directed food packaging. This research wants to know the evolution of packaging design over some time to evaluate if the actions taken by governments and organisations are producing some change in the food industry.

Methods: A cross-sectional content analysis was carried out in which the packaging of 458 food products aimed at children in different food categories was examined. Product identification data, Marketing Techniques, and FOPL were collected. Nutritional information was analysed following OFCOM Nutritional Index. The sample was obtained from seven food chains in Córdoba, Spain, in 2018 and 2022.

Findings: 80.57% of food products analysed are unhealthy. The use of Marketing Techniques in unhealthy products has increased (78.60% in 2018 vs 81.66% in 2022 p>0.05), while the use of FOPL in unhealthy products has decreased (22.27% in 2018 vs 10.92% in 2022 p<0.05). Processed meat & similar and Breakfast cereals have increased the most in the use of Marketing Techniques, while Sweets and Breakfast cereals have decreased the most in their use of FOPL.

Discussion: The results demonstrate that the food industry still uses robust Marketing Techniques to attract children’s attention. A decrease in FOPL, which could help regulate the impact of these cues, suggests the importance of its regulation and homogeneity throughout the UE.
Consumer behaviour changes following implementation of mandatory calorie labelling in the English out-of-home food sector

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Background: In April 2022, mandatory calorie labelling in the out-of-home food sector (OHFS) was introduced as a policy to reduce obesity in England. The policy requires food outlets belonging to large (>250 employees) businesses in England selling food for immediate consumption to provide kcal labelling on all unpackaged food and non-alcoholic drink items. We aimed to determine the change in consumer behaviour following the implementation of mandatory calorie labelling in England has influenced OHFS consumer behaviour.

Methods: We conducted intercept surveys with over 6548 participants (pre-assessment n=3308, post-assessment n=3240) as they left OHFS outlets pre (2021) and post (2022) implementation. The number of calories participants purchased and consumed during OHFS visits and whether they reported noticing and using calorie labelling was measured. Demographic information was collected to examine any differential effects by age, gender, ethnicity and socioeconomic status.

Findings: Younger adults, males, and white people purchased and consumed more calories pre and post-implementation. The mean number of calories purchased and consumed at baseline was M= 1012 and M= 915 and at the post-assessment was M=1073 and M=974. Demographic adjusted multiple-regressions demonstrated that there was no effect of mandatory calorie labelling implementation on the number of calories participants purchased (p=0.746), or consumed (p=0.977) pre vs post-implementation.

Discussion: The introduction of mandatory calorie labelling policy in England was not associated with a decrease in the number of calories purchased in OHFS outlets. The implementation of mandatory calorie labelling alone may be unlikely to lead to significant impacts on obesity in England.
Perceptions of obesity policies in UK adults with eating disorders and other mental health conditions

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Background: This study assessed the perceptions of UK obesity-related public health policies (mandatory calorie labelling, banning of advertisements of unhealthy food and drinks online and before 9 pm on TV, and banning “buy one get one free” deals for unhealthy food and drinks) in people with eating disorders (EDs) and other mental health conditions.

Methods: We recruited 1,273 participants with self-reported mental health conditions (583 participants with EDs) from Prolific Academic and social media (September–November 2022). Multinomial logistic regression was used to compare the levels of perceptions of the policies between participants with and without EDs (with other mental health conditions). Opinions on the potential effects of the policy on current ED symptoms were analysed using thematic analysis.

Findings: Participants with EDs were less likely to support the implementation of the calorie labelling policy than their counterparts without EDs and reported labelling may worsen their symptoms. Participants with EDs (vs. without) agreed and disagreed (relative to neutral) that they would prefer to use a menu with calorie information when available. Some themes indicated that calorie information may provide harm (gateway to relapse, negative effects on mood, hyper fixation on calories) and benefits (feeling informed and in control, calorie counting and feeling reassured) for participants with EDs. No differences in the level of perceptions of the other two policies were observed between participants with and without EDs.

Discussion: Future studies are warranted to explore the potential benefits and how to mitigate the harm of calorie information in people with EDs.
Increasing public support for obesity policies: a rapid review

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Background: The implementation of many obesity policies could make significant progress towards the prevention of obesity worldwide, yet many policy makers fear a public backlash if these policies are implemented. Many communication strategies have been tested to increase support, such as communicating the health risks of obesity or the effectiveness of policies at reducing obesity rates however there is no overall synthesis of this evidence. Following a review of the WHO “best buys” and a meeting with the WHO European office for the prevention and control of non-communicable diseases, three policy categories were selected to prioritise: nutritional labelling, regulating food advertising/marketing, and food levies/taxes. The research question was: What interventions are effective at increasing public support for obesity policies?

Methods: Eligible studies will have one of the following designs: randomised experiments, natural experiments, or pre-post designs. They will measure public support for an eligible obesity policy and any intervention types are eligible. Searches of four databases identified 7,175 abstracts after removing duplicates. Title-abstract screening is currently on-going, and the results will be ready by the conference.

Findings: The findings will categorise intervention types and estimate the effectiveness of those interventions at increasing support for obesity policies. Meta-analysis will be used if the assumptions are met and synthesis without meta-analysis (SWiM) will be conducted if assumptions are not met.

Discussion: This project will identify promising routes for increasing public support for policies, therefore aiding wider efforts to implement effective obesity policies.
Using the smartphone as a naturalistic assessment tool: Social interactions, health, and well-being

13:30 - 13:45

Sleeping off stress? The association between stress in daily life and nocturnal autonomic recovery

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Stress represents a significant risk factor for cardiovascular disease. One mechanism that may contribute to this detrimental association is impaired autonomic recovery during sleep as a consequence of stress. However, to date, no study has evaluated how stress in daily life affects nocturnal autonomic recovery on a day-to-day basis. Therefore, this preregistered 10 day-ambulatory assessment study investigates whether daily stress decreases autonomic recovery during sleep. Since, in real-life settings, individuals’ wellbeing is dependent on close others, such as the romantic partner, we further explore whether the partner’s stress might affect own autonomic recovery beyond one’s own stress experiences. We hypothesize that daily stress (own and partner stress) is negatively associated with autonomic recovery both between and within individuals. Participants and their partners answer a short questionnaire (5 items) assessing their stress level each evening. Further, participants wear an ECG sensor each night. Autonomic recovery is operationalized as the average HF-HRV (high frequency power of heart rate variability) during the first four hours of sleep. The hypotheses are tested using multilevel modelling (to differentiate between-person from within-person effects) controlling for daily caffeine/alcohol consumption and sports (current N = 60 participants and their partners). The study may contribute to the understanding of the association between stress and autonomic recovery during sleep and inform on pitfalls in the assessment of nocturnal recovery in everyday life.
Psychological availability in daily co-regulation of affective well-being in young and old couples

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Background: Social relationships are central resources for successful co-regulation and thus wellbeing and health. At the same time, interpersonal tensions and marital problems are impactful stressors. Not much is known which situational variables predict whether co-regulatory processes succeed or fail. Psychological availability of the partner fluctuates over time and is characterized by the perception of having resources to be attentive to the partner. In this study, young and old couples were surveyed with smartphone-based questionnaires regarding psychological availability, co-regulatory attempts, and affective well-being in everyday life.

Methods: N=62 young adult (18-33 years) and N=56 older adult (57-87 years) different-sex couples reported on smart phone 3 times a day over three weeks momentary psychological availability, psychological intimacy, affective wellbeing, and strategies of emotional (co-)regulation

Findings: Dyadic Actor Partner Multilevel Analyses showed that situations with more psychological availability were situations with more positive affect and psychological intimacy not only in the psychologically available partners but also in their romantic counterparts. Older couples reported less psychological availability as younger couples, and the partner effects of psychological availability were weaker in older female partners. Generally, psychological availability coincided with less maladaptive individual and interpersonal regulation strategies like ruminative (co)rumination, and more adaptive strategies and perceived authenticity in the partner.

Discussion: These findings open the door for further research on situational factors predicting health-promoting relational processes which have important implication for health psychological interventions fostering positive relationship processes just-in-time e.g., in digital interventions.
Studying naturalistic supportive interactions in couples’ dyadic management of type II diabetes

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Background: Type II diabetes mellitus (T2DM) is a chronic disease requiring to initiate and sustain changes in multiple health behaviors. Management of chronic disease often occurs in a social context, and supportive interactions are crucial for the management of disease-associated challenges. As romantic partners affect each other’s health in a day-to-day context, the current study takes a naturalistic observation ambulatory assessment approach to explore the feasibility of studying everyday supportive interactions. Methods: Participants with T2DM (N = 11) and their romantic partners wore smartwatches that periodically captured brief 5-min audio recordings of ambient sounds multiple times a day over seven days to observe couples’ dyadic T2DM management in their natural context. Findings: A total of 992 5min audio files were gathered and coded by trained research assistants. 73% of the audio files contained speech whereof most were recorded at home (78%) and included talking with the romantic partner (88%). Supportive interactions were topic of approximately 6% of couples’ conversations, and they were more often informational (67.5%) than emotional (32.5%). Discussion: This naturalistic observation study of everyday supportive interactions revealed that this method could be implemented within the sensitive context of dyadic T2DM management and detecting supportive interactions in everyday life. As a complement to laboratory and other ambulatory assessment methods, a naturalistic observation approach with audio recordings can contribute to a more comprehensive understanding of everyday supportive interactions in couples’ management of T2DM which could be used to tailor programs supporting couples living with T2DM in their everyday life.
How is everyday smartphone usage related to well-being? An intensive longitudinal smartphone sensing study

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Background: Smartphones are an integral part of daily life for many people worldwide. However, many researchers as well as lay people are concerned that long usage times and the fragmentation of daily life through smartphone usage are detrimental to well-being. This study assessed whether differences in smartphone usage behaviors between situations predict whether an individual is feeling better or worse.

Methods: This preregistered study combines objectively-measured smartphone usage with self-reports of well-being in a 14-day experience sampling period (N = 378, n = 5,775 datapoints). In addition to total smartphone usage time, we developed several indicators to capture fragmentation of usage and nonusage time providing first empirical evidence for this understudied aspect. Data was analyzed using multi-level models. To ensure the robustness of the results, we replicated our analyses in a second measurement period (N = 534, n = 7,287 datapoints).

Findings: We considered the pattern of effects across different operational definitions and our two measurement periods instead of drawing conclusions based on single p-values. Results show no consistent and robust association between smartphone usage behaviors and well-being.

Discussion: Our study alleviates some concerns regarding smartphone usage in daily life. The results help to re-direct and inform efforts to develop interventions aiming at an increase in well-being through a change of smartphone usage behaviors.
What’s phub? Parental phubbing behavior and children’s affective wellbeing in daily life

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Background. Smartphone technology has spread rapidly across the globe and a growing body of literature has spotlighted how substantially these devices impact people’s everyday lives, including their family interactions. The use of the smartphone in the presence of a child (parental phubbing) has been associated with decreases in the quality of parent child interactions (e.g., less responsivity and sensitivity) and negative child outcomes (e.g., internalizing and externalizing problem behavior). In this daily diary study, we investigate intra- and interindividual associations between parental phubbing and children’s affective wellbeing in daily life.

Methods. Each evening for 10 consecutive days, both parents (n=100 individuals) reported to which extent they had used their smartphone in the presence of the child that day and reflected on the child’s negative and positive affect. The data were analyzed using multilevel models.

Results. Mother’s and father’s reports of the target child’s affective wellbeing were significantly correlated. Finding of multilevel models reveal that more parental phubbing was associated with more negative and less positive child affect.

Discussion: These results shed light on the role of the smartphone in family environments and suggest that the child’s mood might be affected if parents engage in smartphone use during parent-child interactions.