



ARPH Conference 2024

Building bridges for health

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Abstract Book

- The abstracts are listed in order of the presenter's last name -

Coping with a dead end by relying on your own compass: A qualitative study on illness and treatment models in the context of fibromyalgia

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Presenter: Maité Van Alboom

Abstract

Background: Stigmatization is a common experience for individuals with chronic pain, in general, and fibromyalgia, in particular. In healthcare contexts, patient stigmatization may partially be rooted in perceived discrepancies between the illness model endorsed by the healthcare provider/system versus the patient. This study aimed to examine how individuals with fibromyalgia construct and negotiate an illness (and treatment) model relating to their pain condition in a dialectic with the healthcare system

Methods: Individual semi-structured interviews were conducted with 15 cis women with fibromyalgia, which were analyzed using reflexive thematic analysis.

Findings: The analysis produced two themes. The first theme encompassed the difficulty of developing a comprehensive illness model due to the biomedical healthcare system; the second theme described the importance of patients (re)gaining ownership and agency over their pain management, by constructing their own illness and treatment model.

Discussion and conclusion: Most women get stuck in the biomedically oriented healthcare web, not being provided with a clear illness and treatment model. Consequently, some women gained ownership of this process (self-empowerment). Conversely, a few women (with a lower socioeconomic status) felt powerless and paralyzed. Clinically, patients are in need of continued healthcare relationships with specialists who keep helping them in their search for treatments.

Building bridges: Treatment for patients with fibromyalgia faces several challenges, for instance patient stigmatization. This may be rooted in perceived discrepancies between illness models of patients and professionals. Examining the construction of illness and treatment models, with the healthcare system in mind, may lead to clinical recommendations for patients as well as healthcare professionals.

Bridging the Gap: Evaluating and enhancing the inclusive eHealth guide for tailored interventions in lower socioeconomic position populations

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Presenter: Isra Al-Dhahir

Abstract

This research builds bridges for health by facilitating more inclusive and tailored eHealth practices, bridging the gap in accessibility of healthcare, and ultimately improving healthcare outcomes for people with lower socioeconomic positions (SEP).

Background: Despite eHealth's potential for socially disadvantaged individuals to improve their healthcare, adoption and long-term use of eHealth are lower among individuals with lower socioeconomic position (SEP). This results in an increase in health disparities and thus a continued health gap. To help bridge this gap, we developed the Inclusive eHealth Guide (IeG), a practical tool for researchers and professionals, to help create accessible interventions and foster eHealth use and adoption. This study aims to evaluate professionals' perceptions of the IeG to be able to refine and improve its content.

Methods: The IeG was evaluated using think-aloud interviews with 13 professionals involved in 8 eHealth lifestyle interventions. Professionals included researchers, project managers and, psychologists. Thematic analysis was used for data analysis.

Results: Preliminary findings indicate the guide's strong assets: practicality, user-friendliness, and comprehensive content were highly evaluated. Participants appreciated the practical information, concise communication, and inclusion of scientific literature. Recommendations for future improvement consisted of adding more practical information using real-life examples, catering to diverse professional backgrounds, adding chapters on the implementation and evaluation phase, balancing scientific rigor for users with and without a scientific background, and providing more sources. Participants highlighted the

guide's broader relevance beyond low SEP populations, suggesting its applicability to a wider audience.

Conclusions: The positive reception, and recommendations for the IeG underscore its potential to stimulate the development of tailored eHealth interventions for people with low SEP, bridging health disparities by offering user-centered insights for effective development and implementation.

“What can her body do?”: Reducing weight stigma by appreciating another person’s body functionality

Jessica Alleva (Maastricht University - Netherlands), Kai Karos (Maastricht University - Netherlands), Angela Meadows (University of Essex - United Kingdom), Moon Waldén (Maastricht University - Netherlands), Sarah Stutterheim (Maastricht University - Netherlands), Melissa Atkinson (University of Bath - United Kingdom)

Presenter: Jessica Alleva

Abstract

Background: Weight stigma is prevalent across multiple life domains, and negatively affects both psychological and physical health. Yet, research into weight stigma reduction techniques is limited, and rarely results in reduced antipathy toward higher-weight individuals. The current pre-registered study investigated a novel weight stigma reduction intervention. We tested whether a writing exercise focusing on body functionality (i.e., everything the body can do, rather than how it looks) of another person leads to reductions in weight stigma.

Method: Participants were 98 women (Mage = 23.17, Range = 16–63) who viewed a photograph of a higher-weight woman, “Anne,” and were randomised to complete a writing exercise either describing what “Anne’s” body could do (experimental group) or describing her home (active control group). Facets of weight stigma were assessed at pretest and posttest.

Findings: At posttest, the experimental group evidenced higher fat acceptance and social closeness to “Anne” compared with the active control group. However, no group differences were found in attribution complexity, responsibility, and likeability of “Anne”.

Conclusions: A brief body functionality intervention effectively reduced some, but not all, facets of weight stigma in women. This study provides evidence that functionality-focused interventions may hold promise as a means to reduce weight stigma.

“I’ll never sacrifice my well-being again:” The journey from negative to positive body image among women who perceive their body to deviate from societal norms

Jessica Alleva (Maastricht University - Netherlands), Tracy Tylka (Ohio State University - United States of America), Carolien Martijn (Maastricht University - Netherlands), Moon Waldén (Maastricht University - Netherlands), Jennifer Webb (University of North Carolina at Charlotte - United States of America), Niva Piran (University of Toronto - Canada)

Presenter: Jessica Alleva

Abstract

Background:

Negative body image peaks in adolescence and remains stable throughout the lifespan, suggesting that not much can be done to change it. Yet, recent research on individuals with a positive body image has shown that many of them used to have a negative body image in the past. This study investigated what characterizes the journey from negative body image towards a positive body image.

Methods:

We conducted one-on-one interviews with 25 women who identified as having (a) a condition or characteristic causing their body to deviate from societal norms and (b) overcome a negative body image to develop a positive body image.

Findings:

Using thematic analysis, we identified 12 themes involving processes and experiences associated with shifts in body image. Women had moments that sparked and confirmed the importance of building positive body image (Enough is Enough). They experienced accepting Social Connections and Accessed Critical Knowledge. They engaged in Joyful Movement, Adaptive Appearance Investment, and Intuitive Eating. They identified how Changing Societal Norms, Becoming Older and Wiser, COVID-19 Pandemic, having Illnesses and Medical Conditions, Pregnancy and Motherhood, and Spirituality, Religion, and Nature affected their body image and values.

Discussion and conclusions:

As women engaged in these processes and experiences, shifts occurred in their perceptions of their embodied selves, represented by four “Bigger Lessons:” I Am More Than My Looks, I Am More Than My Body, I am More Than My Self, and I am Inherently Worthy of Love, Respect, and Joy. Collectively, the findings can inform body image programmes and clinical interventions.

Building bridges:

Body image is a determinant of health and is therefore relevant for healthcare professionals. The findings point toward “turning points” that can be used to guide more people toward developing positive body image and well-being.

A fuzzy cognitive mapping approach to vaccination behaviour

Charlotte Anraad (Maastricht University - Netherlands), Rob Ruiters (Maastricht University - Netherlands)

Presenter: Charlotte Anraad

Abstract

Background. We often look at determinants of vaccination behaviour in the context of regression analyses, but we have limited understanding of how determinants between the individual, environmental and societal levels interact. This study describes the first part of a two-step project combining expert knowledge and empirical data on vaccination behaviour. We will discuss the expert consultation and plans to integrate the outcomes with results from existing quantitative data.

Methods. We have conducted interviews with experts (n=12), who were facilitated to draw fuzzy cognitive maps representing vaccination behaviour and factors associated with it, and their causal (inter-)relations. These maps were combined through thematic analysis, adhering to predefined theoretical constraints.

Findings. Factors central to the resulting map were e.g. risk perceptions, emotions (e.g. fear), social norms and trust in governmental and healthcare institutes (individual level), community values, (social) media use and barriers to uptake (environmental level), and policies that encourage vaccination (societal level). Relationships between factors and balancing and reinforcing structures in the model will be discussed in the presentation, as well as further plans to validate and improve the expert model.

Discussion. A fuzzy cognitive map was created based on the mental representations of vaccination behaviour of experts. This model serves as the foundation for the next phase of the project, in which we will test the model by comparing simulation outcomes to existing quantitative data outcomes, and further verify individual relationships in the model where possible. The final model will serve to simulate intervention scenarios.

Bridge to health. This study is an example of how systems thinking can be used in health behaviour research. Furthermore, the final model will have the potential to inform policy decisions aimed at vaccination uptake by simulating intervention scenarios and studying their impact on vaccination uptake behaviour.

Changing your lifestyle with virtual reality: a scoping review of interventions for people with chronic- or life-threatening somatic conditions

Kai Rosen (Section of Psychology, Health & Technology, Faculty of Behavioral, Management and Social Sciences, University of Twente - Netherlands), Judith Austin (Section of Psychology, Health & Technology, Faculty of Behavioral, Management and Social Sciences, University of Twente - Netherlands), Christina Bode (Section of Psychology, Health & Technology, Faculty of Behavioral, Management and Social Sciences, University of Twente - Netherlands)

Presenter: Judith Austin

Abstract

Background: Lifestyle behaviors such as physical exercise, nutrition, stress management, sleep and substance use are pivotal in the self-management of most chronic- or life-threatening somatic conditions. Virtual reality (VR) has the potential to offer engaging and immersive simulated environments, and is increasingly used as a platform for lifestyle interventions. This review maps the study and intervention characteristics of VR lifestyle interventions for this population, in order to assess the state of the art and provide directions for further research and intervention development.

Methods: A systematic scoping review was conducted. Five bibliographic databases were searched for studies (published after 2016) that evaluated immersive VR lifestyle interventions for people with chronic- or life-threatening somatic conditions, without study design restrictions.

Findings: Forty-six studies met the inclusion criteria, of which 26 (57%) were pilot studies. Intervention content addressed stress management (63%), physical exercise (20%), diet (4%), or a combination (13%), and most commonly targeted people with chronic pain (33%), cancer (17%), overweight/obesity (11%), and cardiovascular disease (11%). Most interventions involved practicing a lifestyle behavior during VR exposure (e.g., full-body exercise, mindful breathing), while few (9%) focused on the process of behavioral change (e.g., motivational interviewing, information provision). Interventions were limited in terms of personalization and adaptation.

Discussion and conclusion: This review underscores the potential of offering lifestyle interventions in VR for people with chronic- or life-threatening somatic conditions. Recommended future directions include the further investigation of process techniques in interventions as well as exploring opportunities for personalization and adaptation.

Building bridges: This review brings together expertise regarding the opportunities and characteristics of VR with its application in the field of lifestyle behavior change. By focusing on a range of chronic- or life-threatening somatic conditions, knowledge from different specializations is synthesized into shared future directions that help guide an emerging field.

The effect of enacted and internalized stigma on mental health and wellbeing in sexual and gender minorities

Jan Behrens (University of Twente - Netherlands), Anne van Dongen (University of Twente - Netherlands), Tessa Dekkers (University of Twente - Netherlands)

Presenter: Jan Behrens

Abstract

Introduction: The minority stress theory (MST) posits that stigmatisation leads people with marginalised sexual and gender minority identities to experience unique stressors, specifically as a function of their minority group membership(s). These include distal stressors as observable instances of enacted stigma and proximal stressors as negative internal self-schema. However, little is known about the day to day experience of these stressors, nor the effects they have on mental health. The current study therefore applies ecological momentary assessment to examine everyday minority stressors on mental health in people belonging to a sexual or gender minority group.

Methods: The study enrolled 32 participants for 14 days via a mobile phone app. Prompts were sent five times per day to assess both internal and external minority stress and mental health (anxiety, depression, wellbeing). Multilevel Conditional Process Analysis was applied to investigate within-person processes of queer minority stress and mental health.

Results: Participants reported a mean of 0.4 stressors (SD 0.08) per prompt. The results indicate that an increase in distal stress leads to an increase in momentary internalised queerphobia (1.707, SD= 0.368). Internalised queerphobia significantly predicted momentary higher anxiety (3.047, SD= 0.642), depression (3.299, SD= 0.639), and wellbeing (0.974, SD=0.377). The analyses indicate full mediation of internalised queerphobia for the effect of distal stress on mental health and wellbeing.

Discussion: This study demonstrates that minority stress events lead to decreased mental health if the person has internalised queerphobia. Interventions focusing on resilience against stressors should therefore focus on decreasing internalisation of stigma.

Nudging Healthier Snacks at the Checkout of a Supermarket in a Deprived Neighborhood in the Netherlands

Loes van den Bekerom (Leiden University Medical Center (LUMC), Leiden - Netherlands), Laurens van Gestel (Leiden University, Leiden - Netherlands), Jet Bussemaker (Leiden University Medical Center (LUMC) and Leiden University, Leiden - Netherlands), Marieke Adriaanse (Leiden University Medical Center (LUMC) and Leiden University, Leiden - Netherlands)

Presenter: Loes van den Bekerom

Abstract

Background. Having an unhealthy diet follows a socio-economic gradient. Nudge interventions are often seen as promising in stimulating healthier consumption. However, empirical studies among lower socio-economic position (SEP)-populations are scarce. This study aimed to 1) examine the effectiveness of a repositioning nudge at a supermarket in a deprived neighborhood in improving purchases of healthier snacks, and 2) describe customers' experiences and needs regarding grocery shopping and healthy eating.

Methods. Daily sales data were collected during four-week control and intervention periods. During the intervention, healthier snacks replaced unhealthy snacks at the checkout. Besides, questionnaires were administered.

Findings. More healthier snacks were sold per day during the intervention period ($M = 3.14$, $SD = 2.45$) than during the control period ($M = 0.54$, $SD = 0.96$), $t(27) = 5.62$, $p < .001$, $d = 1.06$. There was no significant difference in daily sales of unhealthy snacks during both periods. Questionnaire data showed that customers report to not often buy snacks at the checkout, consider carefully what they buy in a supermarket, find it important to eat healthily and that lower prices could help them to eat (more) healthily.

Discussion and conclusion. Although results demonstrate a statistically significant nudge-effect, the absolute number of healthier snacks sold remains negligible. This highlights that effective interventions among high-SEP populations may not suit the circumstances and needs of low-SEP populations. More system-level interventions (e.g., on the healthiness or price of the offer) may be needed. A limitation was that no comparison was made with a high-SEP neighborhood.

Building bridges. In the Netherlands, low-SEP populations live on average four years less and 15 years longer in poor health than high-SEP populations. Current interventions unintentionally contribute to this health gap, by especially benefiting advantaged groups. To combat health inequalities, it is important to examine which behavioral interventions work for all individuals. Funding/conflicts of interests Not applicable.

Healthcare professionals' willingness to use the quality label to recommend apps: an experimental vignette study

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Presenter: ieva Biliunaite

Abstract

Background: To be able to recommend apps to their patients, healthcare professionals (HCPs) must feel confident about app quality. In 2021 the International Organization for Standardization formed a quality label for app assessment. Currently, the quality label is being tested with various stakeholders, including HCPs.

Objective: The goal of this study was to evaluate whether HCPs would be willing to use the quality label to recommend patients' health apps.

Methods: The study was a mixed-method experimental vignette study. The study instrument consisted of 12 text-focused vignettes. The quality label (present vs. absent) was a between-subject factor, while the type of app (prevention vs. self-monitoring vs. healthcare) and type of patient (with low vs. high socioeconomic background) were within-subject factors. HCPs with all backgrounds were able to participate, given they were fluent in English, older than 18 years, and licensed to practice in the EU, EFTA, or Ukraine.

Findings: 119 HCPs completed the study. We found a significant main effect of the quality label, with HCPs displaying a higher willingness to recommend apps in the quality label-present group as opposed to the HCPs in the label-absent group. The quality label effect was not moderated by the type of app or the patients' socioeconomic background.

Discussion and conclusion: The study's findings provide the first evidence for HCPs' willingness to use the quality label to recommend patients' health apps.

Building bridges: Our research findings acted as a starting point in assessing quality label's potential in HCPs' clinical work with their patients. We will conduct further studies on HCPs' intention to use the quality label and interpret the findings in light of findings from the other stakeholders to prepare for the label's implementation across the EU.

Mental health stigma: Cultural differences and healthcare challenges

Michèle D. Birtel (School of Human Sciences, University of Greenwich, London - United Kingdom), Briana L. Mitchell (School of Human Sciences, University of Greenwich, London - United Kingdom), Gemma Oldfield (School of Human Sciences, University of Greenwich, London - United Kingdom), Aisha Mirza (Mersey Care NHS Trust - United Kingdom), Sehar Ahmed (School of Psychological Sciences, University of Manchester, Manchester - United Kingdom), Melissa Pyle (Greater Manchester Mental Health NHS Trust - United Kingdom), Anthony P. Morrison (Greater Manchester Mental Health NHS Trust - United Kingdom)

Presenter: Michèle D. Birtel

Abstract

Background: Mental health needs to be understood within its sociocultural context, being intricately linked to cultural values and experiences. Migrants in particular can encounter stigma not only stemming from mental health issues but also from their status as ethnic minorities. While research has established mental health stigma as a universal phenomenon, we aimed to examine how its manifestation varies between cultures and between health professionals and the general population in the UK.

Methods: We conducted two cross-sectional studies with White British and South Asians (Study 1: N = 137; Study 2: N = 128) living in the UK as well as a cross-sectional study (Study 3) comparing healthcare professionals (n = 101 hospital nurses) with the general population (n = 116) in the UK.

Findings: The results from studies 1 and 2 showed cultural differences in stigma towards people with mental health problems (psychosis, depression). South Asians reported greater stigma (social distance) than White British, this effect was mediated by stigma by association (Study 1). They also reported lower contact intentions (Study 2) and greater beliefs in supernatural and moral causes of mental health problems (Studies 1, 2). The results from study 3 revealed that nurses reported greater stigma (affective, cognitive, behavioural) and poorer quality of contact with people with mental health problems than the general population. Negative emotions mediated the relationship between group and attitudes/intentions/contact.

Discussion and conclusion: We will discuss the implications of the findings, arguing that a greater culture-sensitive understanding is important to mitigate stigma and enhance the overall health outcomes for individuals from minority backgrounds, and that greater support is needed to support family members and healthcare professionals in their roles. **Building bridges:** This research aims to build bridges for health by fostering a greater understanding of cultural differences and healthcare challenges in mental health, so that stigma interventions and support for families and healthcare professionals can be designed to take into account the sociocultural context of individuals.

Underlying mechanisms of Virtual Reality Therapies in acute and chronic pain management: a systematic review

Christina Bode (University of Twente - Netherlands), Bijan Zahmat (Mediant - Netherlands), Jan H Renfordt (University of Twente - Netherlands), Franziska Knuppe (University of Twente - Netherlands), Sophie Galetzka (University of Twente - Netherlands), Mirjam Galetzka (University of Twente - Netherlands)

Presenter: Christina Bode

Abstract

Background: Pain is a major healthcare problem globally. Due to the enormous individual and societal burdens of pain, innovative treatment methods are needed. Virtual reality (VR) seems to be a promising treatment for pain. The aim of this systematic review was to describe the underlying mechanisms of VR therapies in acute and chronic pain management.

Methods: Scopus, PubMed and PsychINFO were searched using the search term ("virtual reality") AND pain AND (treatment OR intervention OR therapy). Of the 1261 identified studies published between January 2015 and June 2023, 66 studies were included, of which 45 acute pain studies and 21 chronic pain studies. Both adult and paediatric populations were included in this review.

Findings: Results showed that the majority of acute pain VR treatments worked with distraction and some studies also used relaxation, positive emotion induction and providing information. In contrast, most chronic pain VR treatments aimed to reverse cortical misrepresentations through neuromodulatory mechanisms. Chronic pain studies also employed distraction, relaxation, graded exposure, and biofeedback mechanisms.

Conclusion: The findings are in line with the different characteristics of acute and chronic pain, as acute pain is accompanied by nociceptive stimuli, whereas chronic pain can occur in the absence of actual tissue damage but is produced by neural networks in the brain and is accompanied with maladaptive but reversible changes in the brain. Virtual reality interventions for chronic pain are more complex and less well studied until now. However, results indicate their potential for effective chronic pain management.

Explaining the role of health-related quality of life and disabilities in social and emotional loneliness among older adults: a longitudinal study

Janet M. Boekhout (Open Universiteit - Netherlands), Renate H.M. de Groot (Open Universiteit - Netherlands), Catherine A.W. Bolman (Open Universiteit - Netherlands), Lilian Lecher (Open Universiteit - Netherlands)

Presenter: Janet M. Boekhout

Abstract

The adverse consequences of loneliness on physical, mental, and social health and on well-being are becoming increasingly evident. The high prevalence of loneliness among older adults within our ageing society necessitates a comprehensive exploration of the associations between various health and quality of life dimensions and loneliness among this target population. This is particularly pertinent for older adults with mobility impairing chronic diseases, a group that in previous research is often overlooked, and where the prevalence of loneliness is especially high.

To address this need, we examined the associations of baseline levels of mental as well as physical health-related quality of life (HRQoL), disabilities, age, and marital status with social and emotional loneliness at six and twelve months among older adults with mobility impairments caused by chronic diseases. We conducted a secondary analysis of data from a prior randomized controlled trial (N=306; Mean age=74.44, SD=6.25) using sequential multiple regression analyses.

Our findings revealed that for social as well as emotional loneliness at both time points, mental HRQoL at baseline was the sole significant predictor. Furthermore, marital status emerged as significant variable in predicting emotional loneliness, but not social loneliness. In previous research, often associations between the wide spectrum of health and loneliness were examined: our study indicates that distinguishing between mental and physical HRQoL is relevant in future loneliness research among older adults with mobility impairing chronic diseases. In addition, this study underscores the importance of considering marital status when researching emotional loneliness.

More insights in the interplay between these variables may lead to interventions that can support healthy aging among older adults with mobility impairing chronic diseases, enabling them to continue contributing positively to society as long as possible.

Development of a measurement instrument for a broad approach of health

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Presenter: Mirte Boelens

Abstract

Introduction: The concept of health is changing, where health encompasses not only physical, mental and social dimensions but also resilience, meaningfulness and daily life aspects. Currently, no valid measurement instrument exists that captures these dimensions of health. The aim of this study was to develop a measurement instrument within care, social domain and public health.

Methods: Based on the previously developed Context-sensitive Positive Health Questionnaire (CPHQ), 9 focus groups were organized with different stakeholders, e.g. (para)medics, policy makers, citizens, researchers, and patients. Thematic qualitative analysis and an adapted quantitative Delphi consensus method was used leading to a preliminary measurement instrument. Items were categorized according to the Capability Approach, validated with experts and verified with a member check.

Findings: The previous CPHQ consisted of 32 items. The focus groups resulted in maintaining 10 items, adjusting 21 items and removing 1 item. After the expert sessions and member check, 23 items remained related to topics such as trust, acceptability and resilience. Most striking agreements between focus groups were the importance of the items "I feel healthy" and "I feel happy", avoiding examples or normative words such as "adequate" and avoidance of political items. Most discussion concerned items related to money and relaxation as necessary items to measure health.

Predicting clusters of physical activities – exploratory findings from an ecological momentary assessment study.

Maya Braun (Ghent University - Belgium), Geert Crombez (Ghent University - Belgium), Annick L De Paepe (Ghent University - Belgium)

Presenter: Maya Braun

Abstract

Background: While planning can help bridge the physical activity intention-behaviour gap, creating high-quality plans is perceived as difficult and burdensome by individuals. Offering support through personalized recommendations for physical activity plans can alleviate this burden and ensure better plans. Understanding the types of physical activities undertaken in various contexts is crucial for providing effective recommendations. The study aimed to identify meaningful clusters of physical activities and predict these clusters based on static (e.g. education, age, working hours) and dynamic person variables (e.g. intention, stress, pain).

Methods: In a 14-day ecological momentary assessment study, 42 participants provided daily diaries and answered questionnaires after physical activity of at least 5 minutes. Clusters of physical activities were identified using Partitioning Around Medoids algorithms and Gower distances. Conditional inference random forest algorithms were employed to predict clusters based on static and dynamic person variables obtained through profiles and morning questions.

Results: A five-cluster solution was tied to locations like home, on the way, work, city outdoors, and sports facilities. The "on the way" cluster was most common (41.92%). Using static and dynamic person variables, we accurately predicted 60% of activity cluster membership, with the highest variable importance for static person variables like gender, age, and parental status. Further exploratory analyses compare these results to a parametric approach.

Conclusion: Clusters of physical activity were identified and could be partially predicted by static and dynamic person variables – however, some clusters were more accurately predicted than others. Future work should consider expanding the selection of predictors.

Building Bridges: This study is part of a push towards personalized support in physical activity planning, which is needed to help bridge the physical activity intention behaviour gap. This is particularly relevant for individuals with lower socio-economic status, as their intention-behaviour gap is sometimes found to be larger.

The role of lifestyle factors in the severity and course of fatigue over time in patients with inflammatory bowel disease: A person-centered approach

Quirine Bredero (Department of Health Psychology, University Medical Center Groningen, Groningen - Netherlands), Joke Fler (Department of Health Psychology, University Medical Center Groningen, Groningen - Netherlands), Denise Blom (Department of Health Psychology, University Medical Center Groningen, Groningen - Netherlands), Gerard Dijkstra (Department of Gastroenterology and Hepatology, University Medical Center Groningen, Groningen - Netherlands), Maya Schroevers (Department of Health Psychology, University Medical Center Groningen, Groningen - Netherlands)

Presenter: Quirine Bredero

Abstract

Background: Fatigue is a prevalent and burdensome symptom experienced by patients with inflammatory bowel disease (IBD). Previous studies lack insight into the individual variability in severity and course of fatigue over time and characteristics of patients at risk of developing a pattern of severe and persistent fatigue. The present study examined distinct trajectories of IBD-related fatigue and lifestyle factors over a period of five years. Subsequently, we examined how lifestyle trajectories relate to trajectories of fatigue.

Methods: This longitudinal cohort study used prospectively collected data from the myIBDcoach telemedicine monitoring tool in the University Medical Center Groningen. We included 320 IBD patients who completed three or more online consultations between 2016 and 2021. We performed latent class growth analyses to identify distinct trajectories.

Findings: We found five trajectories for fatigue, showing individual variation in level and course over time, with a significant group (33%) characterized by chronic high levels of fatigue. Additionally, distinct trajectories were identified for physical activity, sleep problems and stress. The subgroup with chronic high fatigue levels was more likely to report patterns of persistent high levels of sleep problems and stress, and low levels of physical activity.

Discussion and conclusion: This study shows the existence of distinct paths of fatigue and lifestyle factors in IBD patients over time and the substantial role of chronic low levels of physical activity and high levels of sleep problems and stress in experiencing persistent high levels of fatigue. Targeting lifestyle factors may thus be important in the treatment of IBD-related fatigue.

Building bridges: IBD-related fatigue is a multidimensional and complex symptom. Treatment options for IBD-related fatigue are limited, partly because of an insufficient understanding of its underlying causes. A better understanding of the role of lifestyle factors in the severity and persistence of IBD-related fatigue, can inform healthcare professionals about possible treatment targets.

A qualitative study among vascular surgeons to explore determinants of performing early abdominal aneurysm aortic repair

Michelle Brust (Health Campus The Hague, Leiden University Medical Center - Netherlands), Laurens van Gestel (Leiden University; Health Campus The Hague, Leiden University Medical Center - Netherlands), Jan Lindeman (Department of Vascular Surgery, Leiden University Medical Center - Netherlands), Marieke Adriaanse (Health Campus The Hague, Leiden University Medical Center - Netherlands)

Presenter: Michelle Brust

Abstract

Background: An aneurysm of the abdominal aorta (AAA) can trigger an often fatal hemorrhage when it ruptures. While the risk of rupture is minimal for small AAAs (< 55 mm), it increases as the diameter rises. Therefore, current guidelines recommend surgical repair for AAAs of 55 mm or higher. Earlier surgical repairs involve unnecessary surgical risks for patients, and previous studies show no benefits in relation to mortality. Nonetheless, 30% of surgical repairs are currently conducted below the threshold of 55 mm. To address and potentially reduce the number of early surgical repairs, it is crucial to explore the behavior of vascular surgeons. The aim of this study is therefore to explore vascular surgeons' motivations for earlier repair, including their perceived barriers and facilitators of adhering to the guidelines.

Methods: Approximately 15 randomly selected vascular surgeons will participate in semi-structured interviews, with the final number of participants depending on data saturation. Inclusion is currently ongoing. The Theoretical Domains Framework (TDF) was used to develop the interview schedule. All interviews will be analyzed using Thematic Analyses including both inductive and deductive (based on TDF) coding.

Discussion: We expect to have initial findings by the time of the ARPH conference. These findings will contribute to a better understanding of behavior of vascular surgeons in the context of AAA repair. By identifying barriers and facilitators influencing adherence to the AAA repair guidelines, this study aims to inform the development of targeted interventions aimed at changing the behavior of vascular surgeons.

Building bridges: This study adopts a health psychological perspective to address a current issue within the field of vascular surgery. Through employing the TDF to delve into the behavior of vascular surgeons, this study aspires to build a bridge between health psychological research and vascular healthcare.

Lifestyle behaviour change of patients following cardiac rehabilitation: One-year follow-up data from the BENEFIT intervention study

Linda Breeman (Leiden University - Netherlands), Andrea Evers (Leiden University - Netherlands), Roderik Kraaijenhagen (Vital10 - Netherlands), Veronica Janssen (LUMC - Netherlands)

Presenter: Linda Breeman

Abstract

Background: The majority of people with cardiovascular disease do not maintain a healthy lifestyle. To promote initiating and maintaining a healthy lifestyle, the BENEFIT intervention was developed as an addition to standard cardiac rehabilitation care. Core of the intervention is access to an advanced eHealth platform consisting of functionality for daily goal monitoring, access to lifestyle interventions, personal coaching and a reward program. Goal of the current study is to examine the added value of the intervention on health behavior change at 1-year follow-up.

Methods: 7 Dutch cardiac rehabilitation centers participated between 2020-2023. Control group patients (n=361) received standard rehabilitation care, the intervention group (n=656) additionally received the intervention program. Online questionnaires were used to measure six lifestyle behaviors: physical activity, smoking, alcohol use, diet, stress, and sleep, at the start of rehabilitation and at one-year follow-up.

Findings: The program significantly impacted the maintenance of physical activity: while we found no difference in exercising in the control group, the intervention group had increased their exercising behavior with 42 minutes ($p = .03$) after one year. We found no effects on other lifestyle behaviors. After one year, 82% of intervention group patients reported to still actively work on, or have reached, their lifestyle goal.

Conclusions: Following cardiac rehabilitation along with partaking in an online lifestyle program at home may significantly increase healthy behaviors. Our healthy living program makes it possible to tailor lifestyle interventions to the needs and preferences of users, encouraging engagement and active self-management of a healthy lifestyle.

Our research build bridges within healthcare as the eHealth platform was iteratively developed by a unique public-private partnership in co-creation with users, stakeholders and with scientific input to create accessible, effective and engaging lifestyle interventions and thereby aims to contribute to the national health and reduction of future healthcare costs.

Sleep disturbances and sleep-related daytime impairments through the eyes of sleep practitioners: a qualitative expert survey

Marie De Bruecker (Ghent University - Belgium), Elke Veirman (Ghent University - Belgium), Katrien Hertegonne (Ghent University - Belgium), Fré Bauters (Ghent University - Belgium), Dimitri Van Ryckeghem (Ghent University - Belgium), Geert Crombez (Ghent University - Belgium), Dirk Pevernagie (Ghent University - Belgium)

Presenter: Marie De Bruecker

Abstract

Introduction: The use of patient-reported outcome measures (PROMs) is crucial for a personalised diagnostic approach in sleep medicine. Yet, no instrument is available that fully captures the outcomes of sleep disorders. Additionally, no research systematically identifies the symptomatology of sleep disorders. The aim of this study is to report on sleep disorder outcomes that sleep practitioners consider relevant in the prediagnostic process of patients.

Methods and materials: Sleep practitioners filled out an open-ended survey that gauges sleep disturbances, its personal and environmental influencing factors, and sleep-related daytime impairments. The questionnaire was administered to somnologists (6 pulmonologists, 1 psychiatrist and 4 neurologists) and 1 psychologist with expertise in treating patients with sleep disorders. Data was analysed using qualitative content analysis. Data was segmented into units of information (codes) and allocated to main- and subcategories.

Results: The coding frame comprised of several main categories, including influencing factors affecting sleep, sleeping behaviours, sleep disturbances and sleep-related daytime impairments. Subcategories of different levels included amongst others bodily sensations – palpitations, parasomnias – sleep walking, sleep initiation problems – sleep latency and sleepiness – in various situations.

Conclusion: The development of a standardized outcomes set applicable to any sleep disorder enables a comprehensive approach to sleep disorders, considering influencing factors, manifestations and impairments, surpassing the biomedical view. Systematically identifying sleep disturbances and sleep-related daytime impairments may lead to an optimization of (1) the assessment of sleep disorders, and (2) treatments that are tailored to patients' needs. This study establishes a foundation for designing a new sleep PROM that captures outcomes that matter to patients.

Building bridges: A systematic mapping of sleep disorder outcomes across a various spectrum of sleep disturbances and daytime impairments assists clinicians in providing patient-centered health care. Clinicians are encouraged to utilize a PROM covering these outcomes, which in turn can serve as a valuable guideline in consultations.

Psychosocial determinants of handwashing and physical distancing behaviour during the Covid-19 pandemic in the Netherlands: a longitudinal analysis

Carlijn Bussemakers (Radboudumc - Netherlands), Nicole Stappers (Radboudumc - Netherlands), Floor Kroese (Utrecht University & National Institute for Public Health and the Environment - Netherlands), Bas Van den Putte (University of Amsterdam - Netherlands), Marijn De Bruin (Radboudumc & National Institute for Public Health and the Environment - Netherlands)

Presenter: Carlijn Bussemakers

Abstract

Background:

Physical distancing and handwashing can be important infection prevention measures during an infectious disease outbreak such as the Covid-19 pandemic. To stimulate these behaviours, knowledge of psychosocial determinants as well as contextual factors is vital. We present longitudinal, within-person analyses of the impact of contextual and psychosocial factors for handwashing and distancing behaviour.

Methods:

We used individual-level data (186,490 participants completing 971,899 surveys) from the Corona Behavioural Unit Covid-19 Cohort, a dynamic cohort study conducted during 26 months of the Covid-19 pandemic in the Netherlands. Fixed-effects models were employed to estimate within-person associations between psychosocial factors and behaviour, combined with main and moderating effects of contextual factors.

Findings:

Pandemic severity was associated with more handwashing and distancing behaviour, while the duration of the pandemic had little effect. Within-person changes in response efficacy were most relevant for changes in both handwashing and distancing behaviour, while self-efficacy, descriptive norms and perceived severity of infecting others affected behaviour indirectly. These effects were stable over time. Associations were larger in cross-sectional models, indicating such models overestimate effects.

Conclusions: Our study highlights the importance of longitudinal data and within-person models to detect possible causal associations. The results suggest that during an outbreak, government and public health professionals should clearly communicate the severity of the pandemic (e.g., hospitalization rates) and the effectiveness of recommended prevention measures in reducing that risk; and seek to improve people's capabilities and opportunities to adhere to guidelines, for example by modifying the environment.

Building bridges:

This study was conducted by researchers of the BePrepared consortium, a collaboration of RIVM and various universities in the Netherlands. BePrepared aims to provide in-depth analyses of mixed-method behavioural data collected throughout the COVID-19 pandemic and inform preparedness strategies for future crises

Communication about death between patients and adult-child caregivers at the advanced cancer stage – a project description

Liyan Chen (University of Groningen, University Medical Center Groningen, Department of Health Psychology - China), Mariët Hagedoorn (University of Groningen, University Medical Center Groningen, Department of Health Psychology - Netherlands), Anne Looijmans (University of Groningen, University Medical Center Groningen, Department of Health Psychology - Netherlands)

Presenter: Liyan Chen

Abstract

Background:

In an ageing society, cancer-related deaths are increasing and adult-child caregivers have become the primary caregivers for elderly patients with advanced cancer. The disease progression triggers uncertainty and anxiety about death among patients and caregivers. Discussing death may help people regulate fears and clarify end-of-life preferences, emphasising the importance of understanding communication about death. However, disclosure of this sensitive topic remains controversial, with limited research on death communication between advanced cancer patients and adult-child caregivers. We aim to explore the impact of death anxiety on the wish to discuss death and also examine the relationship between this wish, self-disclosure, perceived partner responsiveness, and emotional and relational well-being in the dyadic communication about death among parents with advanced cancer and adult-child caregivers.

Methods:

First, a systematic review will be conducted to explore death communication between patients and caregivers. Next, semi-structured interviews will be conducted with advanced-cancer patients and adult-child caregivers to reveal their experiences of death communication. Then with a survey, we will explore the associations between the wish to discuss upcoming death, disclosure and responsiveness among advanced cancer patients and adult-child caregivers. Finally, drawing on the Actor Partner Interdependence Model, we will explore the intra- and interpersonal effects of disclosure and perceived partner responsiveness on the well-being of both patients and caregivers.

Findings:

The project has no results to report yet.

Conclusion:

This poster presents the four studies that will be carried out within this project.

Building bridges:

This project can provide healthcare providers more in-depth insight into the intergenerational communication about death between patients and adult-child caregivers at the advanced cancer stage and provide guidance for future intervention strategies in this specific context.

Recruitment strategies for reaching adults aged 50 years and older with low socioeconomic status for participation in online physical activity interventions

Eline Collombon (Open Universiteit, Heerlen - Netherlands), Catherine Bolman (Open Universiteit, Heerlen - Netherlands), Gert-Jan de Bruijn (University of Antwerp, Antwerp - Belgium), Denise Peels (Open Universiteit, Heerlen - Netherlands), Lilian Lechner (Open Universiteit, Heerlen - Netherlands)

Presenter: Eline Collombon

Abstract

Background: Generally, the health condition of those with higher socioeconomic status (SES) is better compared to those with lower SES. The application of appropriate strategies to reach low SES populations with electronic health (eHealth) interventions is thus of major importance to reduce health inequalities. eHealth-studies providing detailed information on recruitment strategies are scarce, despite the fact that this information is crucial for comparable research and implementation. This study provides insight into the reach, sample characteristics and costs of three pre-planned strategies for recruiting adults aged 50 years and older with low SES for participation in an online physical activity intervention, as part of a field study.

Methods: Recruitment took place via 1) invitation letters via a municipality, 2) gyms and 3) social media advertisements, aiming to include 400 participants. Additional procedures were followed to reach specifically the low SES group. Response rates, sociodemographic characteristics and costs per strategy were assessed.

Findings: The highest response was shown for the municipality approach (N=281), followed by social media (N=71) and gyms (N=45). Ten participants were recruited via family/friends. The most low-educated participants were reached via the municipality (N=128) followed by social media (N=9), gyms (N=8) and family/friends (N=5). Recruitment costs were with €2142.37 the highest for the municipality compared to €96.81 for social media and no costs for gyms.

Conclusions: Recruitment via invitation letters through a municipality has the highest potential for reaching low SES participants of the three applied strategies, although the higher recruitment costs need to be taken into account.

Building bridges: This study aims to build a bridge between research and practice since practical guidelines are provided on how to reach adults aged 50 years and older with low SES for participation in online physical activity interventions in a field setting. Funding: ZonMW, 546003005

Association of Technology-related Skills and Self-efficacy with Willingness to Participate in Heart Failure Telemonitoring

Sharon Cuppen (Máxima Medisch Centrum - Netherlands), Mayke Van Leunen (Máxima Medisch Centrum - Netherlands), Tamara Henken (Máxima Medisch Centrum - Netherlands), Mayra Goevaerts (Máxima Medisch Centrum - Netherlands), Martijn Scherrenberg (Hasselt University - Belgium), Maarten Falter (Hasselt University - Belgium), Paul Dendale (Hasselt University - Belgium), Harelde Kemps (Máxima Medisch Centrum - Netherlands), Willem Kop (Tilburg University - Netherlands)

Presenter: Sharon Cuppen

Abstract

The adoption of telemonitoring in patients with heart failure (HF) is influenced by technology-related skills and self-efficacy, as well as psychological, clinical and demographic factors. However, the relative importance of these factors with regard to willingness to use telemonitoring is insufficiently understood. This cross-sectional study examines the extent to which technology-related skills and self-efficacy are related to willingness to participate in telemonitoring in patients with HF.

Patients completed questionnaires during hospitalisation. Associations of technological skills and self-efficacy with willingness to participate in telemonitoring (dichotomous and continuous scale) were examined using regression models. Mediation-moderation analyses were used to investigate the role of self-efficacy in the association of technological skills with willingness to participate.

This study recruited 61 patients with HF admitted for acute decompensated heart failure (mean age 79.9 ± 9.5 years; 24 women). Higher levels of technological skills were associated with higher willingness to participate in telemonitoring (OR=1.073 per scale unit; 95%CI[1.031,1.117]). Technological self-efficacy and learnability were also related to willingness to participate (OR=1.141; 95%CI[1.039,1.252]; OR=1.029; 95%CI[1.006,1.052]), but did not mediate the association of technological skills with willingness to participate in telemonitoring. Psychological factors (anxiety, depressive symptoms, and perceived social support), age and cognitive/physical functioning did not moderate the association of technological skills with participation in telemonitoring.

In conclusion, technological skills, self-efficacy and learnability are interrelated factors that need to be considered in patients with HF who are eligible for telemonitoring. Future intervention studies that target these factors could increase patients' willingness and competence in using telemonitoring after admission for heart failure.

What predicts mpox vaccination uptake? It is not intention... Assessing the effect of intent-to-vaccinate versus other psychosocial determinants among men who have sex with men

Udi Davidovich (Amsterdam Public Health Service & The University of Amsterdam - Netherlands), Vita Jongen (Amsterdam Public Health Service - Netherlands), Marije Groot Bruinderink (Amsterdam Public Health Service - Netherlands), Jeffrey Koole (Amsterdam Public Health Service - Netherlands), Buhari Teker (Amsterdam Public Health Service - Netherlands), Nicole Dukers Muijers (South Limburg Public Health Service & Maastricht University - Netherlands), Ymke Evers (South Limburg Public Health Service & Maastricht University - Netherlands), Maarten Schim van der Loeff (Amsterdam Public Health Service & The University of Amsterdam - Netherlands), Maria Prins (Amsterdam Public Health Service & The University of Amsterdam - Netherlands), Henry de Vries (Amsterdam Public Health Service & The University of Amsterdam - Netherlands), Amy Matser (Amsterdam Public Health Service - Netherlands), Anders Boyd (Amsterdam Public Health Service & Stichting HIV Monitoring - Netherlands)

Presenter: Udi Davidovich

Abstract

Background: In response to the mpox outbreak, vaccination was offered in the Netherlands to men who have sex with men (MSM) at increased risk for mpox. We assessed the predictive value of intent-to-vaccinate and other predictors on vaccination uptake among participants of the Amsterdam Cohort Studies (ACS).

Methods: In July 2022, prior to the mpox vaccination campaign, we distributed a survey regarding mpox intent-to-vaccinate among ACS participants. Vaccination uptake was self-reported during study visits after August 2022. The associations between vaccination intent and uptake, and determinants of intent (such as attitudes, norms, perceived severity and risk, response efficacy) were jointly assessed using a structural equation model (SEM) following principles of the Theory of Planned Behavior. In a second SEM, determinants of intent were allowed to have a direct effect on vaccination uptake.

Results: 492 MSM (median age 46 years) were included in analyses. 380 (77%) had a high intent-to-vaccinate and 238 (48%) received at least one vaccine dose. In the first model, high intent-to-vaccinate was associated with getting vaccinated ($\beta=1.1$, 95%CI=0.6-1.5). However, 175/380 (46%) participants with high intent-to-vaccinate did not get vaccinated. The second model had an improved model fit. The effect of intent on uptake became non-significant, and only perceiving to be at higher risk of mpox infection significantly predicted vaccination uptake ($\beta=0.42$, 95%CI=0.26-0.59). Having a steady relationship decreased the probability of vaccination ($\beta=-0.59$, 95%CI=-1.0- -0.18).

Conclusions: While intent-to-vaccinate for mpox was high among MSM, high intent did not well predict long-term vaccine uptake. Mpox risk perception better predicted longer term uptake. To increase mpox vaccination uptake among MSM, helping individuals recognize high risk infection probability should increase their likelihood to vaccinate. This study provides a practical example how Health Psychology research can help developing tailored communication to promote a specific vaccine for a specific target group.

The experimental effects of health, climate and animal welfare arguments to lower individual meat intake, on self-reported meat consumption after two weeks.

Arie Dijkstra (University of Groningen - Netherlands)

Presenter: Arie Dijkstra

Abstract

Introduction: In addition to being a source of valuable nutrients, meat consumption has several negative consequences for health, climate and animal welfare. These consequences can be used as persuasive arguments to motivate individuals to lower their meat intake. However, it seems that some arguments activate defensive responses that lower persuasion.

Method: In an experimental field study (N = 127), participants recruited from the general Dutch population were randomized to one of the three conditions in which they were presented with a 3-minute audio message on the negative consequences of meat consumption for health, climate or animal welfare. The dependent variables were self-reported consumption of red meat and processed meat after 2 weeks. The individual difference cognitive self-affirmation inclination (CSAI) was assessed at pretest and used to predict defensiveness.

Results: With regard to processed meat, the interaction between CSAI and condition was significant ($p = .003$, $\eta^2 = .098$). Only in participants who scored low on CSAI, meaning that they are at risk to react defensively, processed meat consumption after two weeks differed significantly between the conditions ($p = .013$, $\eta^2 = .073$): In the health argument condition the consumption was lower compared to the climate ($p = .007$) and to the animal welfare ($p = .014$) conditions.

Discussion: The results are in line with the notion that particularly climate arguments to lower individual meat intake are met with skepticism and are perceived as weak arguments, at the least in a subgroup of receivers.

Building bridges: The present study integrates issues of sustainability by looking at the breadth of consequences of meat consumption and how people perceive and receive these consequences. In addition, these findings can already be used in practice.

Behavior change techniques in eHealth-based cardiac rehabilitation: A systematic review of behavior-specific applications and effectiveness

Emma Douma (Tilburg University - Netherlands), Tom Roovers (Tilburg University - Netherlands), Mirela Habibović (Tilburg University - Netherlands), Gert-Jan de Bruijn (University of Antwerp - Belgium), Jos Bosch (University of Amsterdam - Netherlands), Boris Schmitz (DRV Clinic Königsfeld - Germany), Willem Johan Kop (Tilburg University - Netherlands)

Presenter: Emma Douma

Abstract

Background: Cardiac rehabilitation reduces cardiovascular mortality and improves quality of life in patients with coronary artery disease (CAD). eHealth may enhance cardiac rehabilitation uptake by facilitating access. This systematic review identifies effective behavior change techniques (BCTs) in eHealth-based cardiac rehabilitation interventions. **Methods:** Databases (CINAHL, PubMed, PsychINFO, and MEDLINE) were searched for randomized controlled trials investigating eHealth-based behavior change interventions in patients with CAD. Risk of bias was assessed using the Effective Public Healthcare Practice Project quality assessment tool. The BCTs used in each intervention were coded following the Behavior Change Taxonomy. A best-evidence synthesis was conducted to determine the effectiveness of BCTs.

Results: Eighty-eight studies (25007 participants) met inclusion criteria and 31 different BCTs were identified. Instructions on how to perform the behavior (k=81), social support (k=69), prompts/cues (k=55) and self-monitoring of behavior (k=52) were most frequently used. There were overall differences in BCT effectiveness. Action planning was identified as effective in improving medication adherence and diet, whereas no benefits were found for reducing prompts/cues (number of prompts is gradually reduced) in interventions targeting physical activity, medication adherence and smoking cessation. BCT effectiveness also varied across target behaviors, as feedback on behavior positively affected medication adherence but negatively affected smoking cessation.

Conclusions: These findings indicate that while some BCTs may be more effective than others, the effectiveness depends on the health behavior that is targeted by interventions. BCT-behavior matching is likely to increase the effectiveness of eHealth-based cardiac rehabilitation but systematic reporting of BCTs in cardiac rehabilitation research needs improvement. **Keywords:** coronary artery disease, eHealth, health behavior change, behavior change techniques

Association of pain catastrophizing and illness perception with functional status in people undergoing total joint replacement

Julius Evelley (PJ Safarik University in Košice - Slovakia), Pavol Mikula (PJ Safarik University in Košice - Slovakia), Martin Vicen (PJ Safarik University in Košice - Slovakia), Peter Polan (PJ Safarik University in Košice - Slovakia), Robbert Sanderman (University of Groningen - Netherlands), Iveta Nagyova (PJ Safarik University in Košice - Slovakia)

Presenter: Julius Evelley

Abstract

Background: The improvement of functional status (FS) is one of the primary reasons why patients in the terminal stages of osteoarthritis (OA) seek medical care. Effective management of functional disability include surgical, pharmacological, and non-pharmacological interventions. The main aim of this study was to investigate the contribution of pain catastrophizing and illness perception to FS in patients with OA before total joint replacement (TJR).

Methods: The sample consisted of 423 patients with OA of the knee (n=241, mean age 65.1±8, 40.2% males) and hip (n=182, mean age 63.5±9, 60.9% males). FS was assessed by the Knee/Hip Injury and Osteoarthritis Outcome Score (KOOS/HOOS), pain catastrophizing by the Pain Catastrophizing Scale (PCS), and the Brief Illness Perception (BIPQ) was used to assess illness perception. Data were analysed using regression analyses.

Findings: Total explained variance of FS was 28% (knee OA) and 15% (hip OA). Sex ($\beta=-.24$, $p<.01$ and $\beta=-.18$, $p<.05$) together with pain catastrophizing ($\beta=-.33$, $p<.001$ and $\beta=-.28$, $p<.01$) significantly contributed to the explained variance of FS in knee and hip OA, respectively. When illness perception was added into the final model, it significantly contributed to the explained variance of FS and outweighed the impact of catastrophizing ($\beta=-.34$, $p<.01$ and $\beta=-.30$, $p<.01$).

Discussion and Conclusion: Results of this study indicate that the less patients magnified and ruminated about pain and helplessly anticipated future experience of pain, the better was their FS. Additionally, the less they perceived OA as threatening, the better was their functional status. [Grant: APVV-22-0587].

Building bridges: Focusing on building realistic perception of the illness may improve functional status of OA patients. Results can be implemented in programs for patients with end stage OA and physicians alike. Training programs for doctors, nurses and other healthcare professionals may help them in providing effective information for patients.

Determinants of Adherence to the Moderate to Vigorous Physical Activity guideline, Readiness for Change, and a Perceived need for Support in Post-Menopausal Breast Cancer Survivors

Nina Fennema (CoRPS, department of Medical and Clinical Psychology, Tilburg University, Tilburg - Netherlands), Sandra van Cappellen - van Maldegem (CoRPS, department of Medical and Clinical Psychology, Tilburg University, Tilburg - Netherlands), Bo Brummel (CoRPS, department of Medical and Clinical Psychology, Tilburg University - Netherlands), Floortje Mols (CoRPS, department of Medical and Clinical Psychology, Tilburg University; Comprehensive Cancer Organisation, Utrecht - Netherlands), Mirela Habibovic (CoRPS, department of Medical and Clinical Psychology, Tilburg University - Netherlands), Sabita Soendamah - Muthu (CoRPS, department of Medical and Clinical Psychology, Tilburg University, Tilburg - Netherlands), Laurien Buffart (Radboudumc, department of Physiology, Radboud Institute for Health Sciences, Nijmegen - Netherlands), Michiel de Boer (Department of General Practice and Elderly Care Medicine, UMCG, Groningen - Netherlands), Lonneke van de Poll - Franse (CoRPS, department of Medical and Clinical Psychology, Tilburg University; Comprehensive Cancer Organisation, Utrecht - Netherlands), Jacob Seidell (Department of Health Sciences and the Amsterdam Public Health Research Institute, VU University Amsterdam, Amsterdam - Netherlands), Meeke Hoedjes (CoRPS, department of Medical and Clinical Psychology, Tilburg University, Tilburg - Netherlands)

Presenter: Nina Fennema

Abstract

Postmenopausal breast cancer (PMBC) survivors are at risk for various adverse health outcomes, particularly those with multimorbidity and/or lower socioeconomic status (SES). Physical activity (PA) is known to positively affect health outcomes. Little is known about adherence to the moderate to vigorous PA guideline among PMBC survivors and on determinants of adherence.

This study aimed to investigate 1) adherence to the MVPA-guideline, 2) readiness for change, and 3) perceived need for support to enhance PA, and to identify determinants of these 3 variables in PMBC survivors.

Observational cross-sectional data from the OPTIMUM study of 498 PMBC survivors one year post-diagnosis were used. Participants completed validated questionnaires assessing PA, readiness for change (according to the transtheoretical model) and a perceived need for support. Multivariable logistic regression analyses were conducted to identify determinants.

Compared to survivors with high SES, survivors with low SES were less likely to adhere to the moderate to vigorous PA-guideline (33% and 51% respectively), reported lower readiness (39%; 50%) and a similar need for support to enhance PA (21%; 20%). Survivors with multimorbidity were less likely to adhere to the moderate to vigorous PA-guideline (43%; 55%), reported higher behavioral readiness (45%; 37%) and heightened need for support (19%; 10%) compared to survivors without multimorbidity. Multimorbidity was significantly associated with a perceived need for support.

Results emphasize the need for healthcare professionals to address PA-engagement among PMBC survivors with multimorbidity and a lower SES.

Building bridges: findings contribute to a better understanding of (determinants of) health behavior among PMBC survivors, which is relevant for patients, healthcare providers and researchers involved in health promotion.

A systematic scoping review of determinants of and interventions for Proton Pump Inhibitor prescription behavior

Laurens van Gestel (Leiden University - Netherlands), Marieke Adriaanse (LUMC, Leiden University - Netherlands), Shannon Kanis (LUMC - Netherlands), Rosalie Mensink-Bout (LUMC - Netherlands), Mattijs Numans (LUMC - Netherlands), Jessica Kiefte-de Jong (LUMC - Netherlands), Gertrude van den Brink (LUMC - Netherlands)

Presenter: Laurens van Gestel

Abstract

Background. Proton Pump Inhibitors (PPI) are frequently prescribed. Long-term PPI use is associated with side-effects and patients often lack a valid indication. Inappropriate PPI prescribing thus needs to be addressed. This scoping review aims to reveal 1) what determinants are focused on when studying reasons for PPI prescribing, 2) what strategies interventions use for changing PPI (de)prescribing, and 3) whether important determinants are addressed in these interventions.

Methods. We searched eight databases for relevant papers on determinants of physician PPI prescribing published until June 30, 2022. Studies were included if they were conducted in a Western country and focused on oral PPIs for an adult patient population. By following the Behaviour Change Wheel, we extracted information regarding PPI prescribing behavior, behavioral determinants and intervention strategies. The protocol was registered at OSF (<https://osf.io/v4axh>).

Findings. We found 74 papers eligible for data extraction. Most focused on the determinants knowledge and beliefs about consequences, while other domains received less attention. Beliefs about consequences was consistently related to PPI prescribing, while results for knowledge were mixed. Most interventions used strategies related to education or enablement (e.g., algorithms, quality check improvements, and involvement of pharmacists). Using enablement consistently improved PPI prescribing, while results for education were mixed.

Discussion and conclusion. There is an overemphasis on reflective processes in studies describing PPI prescription behavior and studies intervening on PPI prescribing. Future research should identify the full spectrum of behavioral determinants, focusing both on reflective and impulsive processes, such that interventions can address the most important determinants.

Building bridges. The review uses insights from health psychology to improve healthcare professional behavior.

A Better Understanding of Declining Support for COVID-19 Policies Over Time: A Procedural Fairness Perspective

Frank Gootjes (Department of Social, Health & Organisational Psychology, Utrecht University, Utrecht - Netherlands), Marijn Stok (RIVM & Department of Interdisciplinary Social Science, Utrecht University, Bilthoven & Utrecht - Netherlands), Floor Kroese (RIVM & Department of Social, Health & Organisational Psychology, Utrecht University, Bilthoven & Utrecht - Netherlands), John de Wit (Department of Interdisciplinary Social Science, Utrecht University, Utrecht - Netherlands), Denise de Ridder (Department of Social, Health & Organisational Psychology, Utrecht University, Utrecht - Netherlands)

Presenter: Frank Gootjes

Abstract

During the COVID-19 pandemic, securing public adherence to behavioural measures was paramount for virus containment. However, as reports show support and adherence dwindled over time, concerns arose regarding the perceived procedural fairness of these policies. This study investigates trajectories of declining procedural fairness perceptions from Autumn 2020 to Summer 2021 (the second lockdown), aiming to elucidate the factors behind the decline and the persistence of low procedural fairness post-lockdown.

Utilizing latent class growth curve analysis on longitudinal panel survey data from a Dutch cohort (N = 9733, 11 timepoints), distinct trajectories of procedural fairness are identified based on model fit criteria and interpretability.

While a large group maintained high procedural justice, another subgroup exhibited a decline, with a substantial portion not recovering post-lockdown. These findings underscore the enduring impact of COVID-19 policy changes on public perceptions and support throughout the pandemic. The study further explains the differing trajectories using individual-level demographic indicators and indicators of medical, economic, and social vulnerability.

This research unveils the dynamic nature of procedural fairness during pandemic lockdowns, emphasizing the enduring influence of policy decisions on public support. Implications for public health interventions are discussed, focusing on the need for targeted strategies to maintain public cooperation.

The study aims to build bridges between research and public health professionals, offering insights into the complex dynamics of public support during a crisis. Understanding trajectories and associated vulnerabilities can guide interventions for a more equitable and resilient response to future health emergencies.

Exploring the Impact of Message Fatigue on Sustainable Intentions and the Mediating Roles of Reactance and Inattention in Climate Change Doom Communication.

Janna de Graaf (Utrecht University - Netherlands), Marijn Stok (Utrecht University - Netherlands), John de Wit (Utrecht University - Netherlands), Michèlle Bal (Utrecht University - Netherlands)

Presenter: Janna de Graaf

Abstract

Background. The health of individuals and populations relies on planetary health, which is currently endangered by environmental problems, such as global warming. To safeguard health, urgent action to mitigate climate change is necessary. Efforts to evoke sustainable behavior have been channeled through extensively covering climate change in the media. However, besides instigating action, extensive media coverage may have contributed to feelings of being overexposed to or tired of climate messages. Message fatigue is an aversive motivational state caused by repeated exposure to similar messages over time, that energizes passive and active resistance.

Methods. This cross-sectional study investigated the role of message fatigue on sustainable behavioral intentions and acceptance of climate measures, mediated by reactance and inattention to the message (n = 390). The study consisted of two parts, separated by a one-week interval. In part 1, we assessed message fatigue, values, trust in institutions and political preferences. In part 2, participants were presented with a fictitious newspaper item about climate change. Thereafter, we assessed reactance, inattention, intentions to act sustainably, and acceptance of climate measures.

Findings. Results indicated that message fatigue was significantly associated with decreased sustainable intentions and diminished acceptance of climate measures. It was further found that reactance mediated the relationship between message fatigue and (1) sustainable intentions and (2) acceptance of climate measures, while inattention was not found to mediate these relationships.

Discussion and conclusion. In the challenge of developing strategies to reduce global warming, it might be important to acknowledge the potential influence of message fatigue.

Opening Up or Not? Early findings from an iterative usability test of a decision aid to support students and staff at a Dutch University in their decision whether to disclose their mental health issues.

Thomas Gültzow (Open Universiteit - Netherlands), Daniëlle Zijlstra (Maastricht University - Netherlands), Sanne Brouwers (Maastricht University - Netherlands), Femke den Uil (Maastricht University - Netherlands), Véronique Vancauwenbergh (Maastricht University - Netherlands), Yil Severijns (Open Universiteit - Netherlands)

Presenter: Thomas Gültzow

Abstract

Background: Inclusive universities should aim to support all students and staff, including those facing mental health issues. Nevertheless, individuals dealing with mental health issues might encounter difficulties in deciding whether to disclose them, which in turn may hinder possible support. Decision aids have been shown to be able to facilitate such complex decisions. Therefore, they could provide potential assistance to university students and staff in the decision-making process regarding mental health disclosure. This research focuses on testing and refining an initial version of such a (digital) decision aid.

Methods: To evaluate the usability of the decision aid, a preregistered qualitative think-aloud study was conducted with five students and five employees. Participants were asked to use the decision aid while verbalizing their thoughts. The data was analyzed using rapid analysis.

Findings: In general, participants found the decision aid user-friendly, clear, and a valuable addition. Areas for improvement mainly revolved around: (1) addressing the volume of text and introducing more visual elements, (2) resolving technical issues, such as non-functioning tailored elements, (3) considering an expansion of the scope, e.g., by incorporating information in relation to non-university contexts, and (4) enhancing clarity regarding the Dutch context.

Discussion and conclusion: Our approach, notably the rapid analysis, facilitated a quick evaluation of our decision aid, helping us pinpoint lingering issues. Participants generally praised the decision aid for its user-friendliness and clarity but highlighted areas for improvement, including addressing text volume, resolving technical issues, considering scope expansion to non-university contexts, and enhancing clarity.

Building bridges: This research partly bridges the gap between inclusive university practices and external contexts, such as healthcare. A university environment fostering openness may enhance disclosure decisions outside universities too. Also, suggestions were noted for clearer descriptions of bridges with non-university mental healthcare.

The prevalence and severity of sexual symptoms experienced by dialysis patients: a systematic review.

Anouk Haine (Clinical Epidemiology, Leiden University Medical Center, Leiden - Netherlands), Ype de Jong (Department of Internal Medicine, Division of Trombosis and Haemostasis, Leiden University Medical Center, Leiden - Netherlands), Marc Hemmelder (Department of Internal Medicine, Division of Nephrology, Maastricht University Medical Center, Maastricht - Netherlands), Friedo Dekker (Clinical Epidemiology, Leiden University Medical Center, Leiden - Netherlands), Yvette Meuleman (Clinical Epidemiology, Leiden University Medical Center, Leiden - Netherlands)

Presenter: Anouk Haine

Abstract

Background: Despite increasing interest in the subject, no up-to-date comprehensive literature overview of sexual symptoms in dialysis patients exists. This systematic review evaluates prevalence and severity of both somatic (dys)function and evaluation of sexual-functioning.

Method: Medical-oriented databases (PubMed/MEDLINE) and social science-oriented databases (Emcare/PSYCHinfo) were searched. Studies were included when assessing sexual symptoms using patient-reported outcome measures (PROMs) in patients on dialysis, and published in English between January 2017-July 2023.

Findings: Most of the 45 included studies were from Turkey (n=10;22%), and 49% and 16% from the rest of Asia and Europe. Sample sizes were small, with 29 studies (64%) including <100 patients. Average age laid between 35-65 years for 35 studies (78%); above 65 years in 3 studies (7%), and no studies reported a mean age <35 years. Eleven different PROMs were used, mostly focusing on arousal and desire and some including physical sexual symptoms. The majority of PROMs focused solely on sexual symptoms of men (45%), 29% only on women and 26% on both sexes. Prevalence ranged from 1% to 100%, with the majority (60%) reporting a prevalence of >70%. Most reported mean severity scores could be classified as mild-moderate to moderate-high.

Discussion and conclusion: Sexual symptoms are frequently occurring and cause a high symptom burden in dialysis patients. Furthermore, high variation in prevalence and severity of sexual symptoms, small sample sizes, and uneven distribution of studies performed in 'only males' versus 'only females' illustrate that, despite increased interest, this field could still be considered open for further exploration.

Building bridges: Healthcare professionals should be aware of burden of sexual symptoms in their dialysis patients. This requires structural measurement of sexual symptoms, which could be incorporated in PROMs' implemented into routine nephrology care. This is necessary to make the first step towards improved management of sexual symptoms.

Obesity and overweight: from group to individual

Jikke Hesen (Maastricht University - Netherlands), Eva Vanbrabant (Maastricht University - Netherlands), Codrin Mironiuc (Maastricht University - Netherlands), Suzan Jordan (Maastricht University - Netherlands), Gijs Goossens (Maastricht University - Netherlands), Lotte Lemmens (Maastricht University - Netherlands), Anne Roefs (Maastricht University - Netherlands)

Presenter: Jikke Hesen

Abstract

Researchers agree that obesity is multifactorially determined, including biological, environmental and psychological mechanisms. Nevertheless, empirical evidence for these mechanisms is often inconsistent across group-based studies, showing large individual variability in outcome measures. Similarly, current (lifestyle) treatments for obesity show large variability in effectivity.

The study design that will be presented adopts the urgently needed individualized approach to understanding and treating overweight and obesity, where a large sample ($n = 600$) of participants varying in BMI (healthy, overweight, and obesity) is individually characterized by their own comprehensive baseline profile and daily lifestyle network, paving the way to personalized medicine for obesity.

This project is a collaboration between biomedical and behavioral sciences, and uses a variety of methods (e.g., smartphone-based EMA, activity tracker, blood sampling, spatial analysis) from different scientific fields.

Clinician vs. Google: Effects of Clinician Responses to Cancer Patients' Online Health Information Seeking Behavior – a Randomized Experiment

Tanja Henkel (Amsterdam UMC Location University of Amsterdam, Medical Psychology - Netherlands), Chamoetal Zeidler (Amsterdam School of Communication Research (ASCoR), University of Amsterdam - Netherlands), Annemiek J. Linn (Amsterdam School of Communication Research (ASCoR), University of Amsterdam - Netherlands), Julia C.M. van Weert (Amsterdam School of Communication Research (ASCoR), University of Amsterdam - Netherlands), Ellen M.A. Smets (Amsterdam UMC Location University of Amsterdam, Medical Psychology - Netherlands), Marij A. Hillen (Amsterdam UMC Location University of Amsterdam, Medical Psychology - Netherlands)

Presenter: Tanja Henkel

Abstract

Background. Cancer patients increasingly rely on online information about their disease. Yet, we don't know the effects of clinicians' various communication approaches when patients discuss such online information. This study systematically tested the impact of clinicians' communication approaches on cancer patients' trust, satisfaction, information seeking and information discussion. Additionally, we explored moderating effects of patients' personality characteristics.

Methods. In an online vignette experiment portraying an oncological consultation, we manipulated: (1) clinicians' communication approaches, i.e., patient-centered vs clinician-centered and (2) modality of the vignette, i.e., video vs text. (Former) cancer patients (N = 270, 62 ± 13 years old, 55% female) were randomly assigned to one group as analogue patients. 1-way ANOVA's, independent samples t-test and multiple regression were conducted.

Findings. Participants exposed to the patient-centered approach reported higher satisfaction ($d = 0.62$, $p < .001$), increased trust ($d = 0.49$, $p < .001$), and stronger intentions to seek and discuss online information ($d = 0.40$, $p < .001$ and $d = 0.69$, $p < .001$, respectively) compared to the clinician-centered approach. Moderation analyses indicated that the effect of communication approach on intention to discuss online information depended on participants' trait anxiety ($\beta = -0.43$, $p < .05$). Participants' monitoring coping style moderated the effect of communication approach on online information seeking ($\beta = 0.23$, $p < .05$).

Discussion and Conclusion. Clinicians' patient-centered responses to online information seeking may positively affect patient satisfaction, trust and online information seeking behavior, partly depending on patients' personality characteristics. Our recommendations for clinicians include emphasizing collaborative information exchange and guiding patients to trustworthy online sources.

Building bridges. Showing a cause-effect relationship between clinicians' communication approach and patients' satisfaction, trust, and behavior, our research provides practice

recommendations for clinicians regarding the discussion of online information with patients. The professionally crafted video vignettes can be used as teaching material for future clinicians, thereby connecting research, health care and education.*Contribution Statement: Chamoetal Zeidler and Tanja Henkel contributed equally to this paper.This research was funded by the Dutch Cancer Society (KWF), project number: 12760. There are no conflicts of interest.

Numbers or narratives? Perceptions of cancer patients on receiving patient reported outcome measures on health related quality of life

Saar Hommes (Tilburg University - Netherlands), Eva Boomstra (Netherlands Cancer Institute - Netherlands), Ruben Vromans (Tilburg University - Netherlands), Emiel Kraemer (Tilburg University - Netherlands), Lonneke Van de Poll-Franse (Netherlands Cancer Institute - Netherlands), Kelly de Ligt (Netherlands Cancer Institute - Netherlands)

Presenter: Saar Hommes

Abstract

Introduction: Some hospitals ask cancer patients to fill out questionnaires on a range of patient reported outcome measures (PROMs) for health-related quality of life topics. In practice however, such scores (or numbers in general) are rarely communicated back to patients as they might be difficult to interpret by patients. In the current study, we therefore explore if providing cancer patients with numerical information and personalized narrative information on PROMs is valued and what it adds to clinical practice.

Methods: Participants (N=30 cancer survivors) viewed a dashboard with numerical and narrative information on PROMs. The narratives were personalized on cancer type, gender, age, and PROMs-outcome. Participants were interviewed about their perceptions of the dashboard. The semi-structured interviews were analyzed using an inductive reflexive approach to thematic analysis.

Findings: Six themes were identified. (1) Understanding if they were doing "bad" or "good" in terms of PROM-score was most important. (2) Knowing about the purpose of PROMs beforehand would increase usefulness. (3) Participants wanted PROMs-feedback as they like to know what life has in store for them. (4) It seemed that numbers call for action, as a bad score would motivate patients to talk to their doctor. (5) In contrast, narratives would provide emotional support. (6) Participants identified most with the description of the diagnosis, rather than other personalized factors.

Conclusions: Personalized narratives could be a useful addition to regular PROMS-feedback; numbers help to facilitate action, personalized narratives provide recognition, support, and help to envision what the impact of cancer can be.

Building bridges: Patients should be informed about their health-related-quality-of-life better and currently lack opportunities to discuss this. This study showed that combining narrative with numerical information could help smoothening the communication process and improve patient centered care.

Redefining “Knowledge” as Target for Behavior Change Interventions: Implications for Effective Intervention Design

Gill ten Hoor (Maastricht University - Netherlands), Rob Ruiter (Maastricht University - Netherlands), Rik Crutzen (Maastricht University - Netherlands), Gerjo Kok (Maastricht University - Netherlands)

Presenter: Gill ten Hoor

Abstract

Background: Stimulating health behavior change is key to health promotion, welfare improvement, environmental conservation, and stigma reduction. Existing behavior change interventions often target knowledge enhancement, employing various communication channels, including flyers, commercials, educational programs, and social media. The prevalent assumption is that insufficient knowledge is the primary driver of unhealthy behavior, suggesting that providing more information would suffice. However, this oversimplification neglects the complexity of health behavior change and needs nuancing.

Methods/Results: In this presentation, we argue 1) that while knowledge is crucial, it is often “not just knowledge” and altering behavior requires addressing various determinants beyond knowledge alone—such as self-efficacy, social norms, and risk perception (using their corresponding behavior change methods), and 2) that methods to change knowledge are generally ‘just’ methods to facilitate optimal information exchange, which could be applied to all determinants at all ecological levels.

Discussion: We acknowledge that, like others, we have also fallen into the trap of emphasizing knowledge-centric interventions and conclude with solutions and practical recommendations.

Building Bridges for Health: A paradigm shift in designing behavior change interventions is needed. We urge planners to avoid selecting ‘Knowledge’ as determinant of health behavior, and to always try to understand what kind of knowledge is needed in terms of other determinants. We aim to contribute to more effective and inclusive health promotion strategies, fostering lasting impact on well-being.

It's your own fault: The effect of attribution style on stigma in the context of chronic pain

Kai Karos (Maastricht University - Netherlands)

Presenter: Kai Karos

Abstract

People with chronic pain frequently experience stigma from others, especially so when there are no biomedical markers for their pain. Even though we know stigma is common in chronic pain and associated with detrimental psychological and somatic complaints, we know relatively little about the underlying processes of stigma in chronic pain.

In the current experimental online study we investigated the effects of attribution processes and blame on stigmatization of people with chronic pain. We presented two vignettes to participants (N = 167) describing a patient suffering from chronic pain with no biomedical basis. One group was presented with a vignette describing a patient who followed the instructions of a physiotherapist (external attribution group, n = 89), whereas the other group read a vignette where the participant did not follow the instructions of the physiotherapist (internal attribution group, n = 78).

Results showed that participants in the internal attribution group attributed more responsibility and blame towards the fictitious patient. Similarly, participants in the internal attribution group also estimated the pain of the patient as lower and indicated that they were less likely to help the patient compared to participants in the external attribution group.

In conclusion, an internal attribution style might be one of the driving factors underlying stigma in the context of chronic pain.

State or Trait? How to assess the temporal stability of psychological constructs

Paul Lodder (Tilburg University - Netherlands)

Presenter: Paul Lodder

Abstract

Background:

Data in longitudinal health psychology research often contain a mix of repeatedly measured characteristics and a set of baseline characteristics. Whether to measure a characteristic only at baseline may depend on assumptions about the construct's temporal stability. Some characteristics such as personality traits are commonly assumed to remain stable across follow-up, yet developmental research has shown that personality traits can still change into adulthood, highlighting the importance of investigating if psychological constructs are stable across time.

Methods:

In this presentation, I will review commonly used methods to assess the temporal stability of psychological constructs and discuss the importance of modeling measurement error and testing the often-ignored assumption of longitudinal measurement invariance. I will illustrate how to assess temporal stability using a series of latent variable models, applied to data collected in 2625 colorectal cancer survivors, involving four yearly measurements of the constructs depression, anxiety, and the Type D personality traits negative affectivity (NA) and social inhibition (SI).

Findings:

After establishing longitudinal measurement invariance, all constructs showed temporal stability when averaging across all participants, yet significant individual differences were found in the change in NA, depression, and anxiety over time. These individual changes in NA correlated moderately with changes in depression and anxiety.

Conclusions:

Latent variable models can be used to simultaneously assess the temporal stability of multiple psychological constructs. In colorectal cancer survivors, individual changes in the personality trait NA covary with changes in psychological states depression and anxiety, suggesting that NA is not purely a stable trait and may be affected by changes in psychological states.

PainFlex validation study: The impact of attention alignment for pain on experimental pain outcomes.

Justine Mac Goris (University of Luxembourg - Luxembourg), Eleana Pinto (University of Gent - Belgium), Dimitri Van Ryckeghem (Maastricht University - Netherlands)

Presenter: Justine Mac Goris

Abstract

Introduction:

Attentional processing is thought to be key in the experience of pain and associated disability and therefore received a lot of research interest. Yet, findings are inconsistent, due to conceptual and methodological challenges. Current study aims to validate the newly developed PainFlex paradigm to assess rigidity/flexibility in attending towards or away from pain information using ecological valid stimuli (i.e., bodily sensations). In addition, current study aims to investigate the predictive value of attention processing (attention bias/ attention alignment for pain-related information) for experimental pain outcomes (pain experience/task interference by pain).

Methods:

To investigate this, we conducted a study using Virtual Reality based on a previously developed In Vivo Approaching Object (IVAO) paradigm.³ Particularly, 50 healthy participants performed the attention alignment paradigm, followed by an experimental cold pressor task probing pain experience and task interference by pain.

Results:

Results partially confirmed our hypotheses, results indicate that participants show an attention bias for pain information with a significant better detection accuracy for participants when the approached side and the tactile location are on the same location (i.e., threat side) (OR = 1.24, 95% IC [1.17, 1.31]). Additionally, current findings provide evidence for attention alignment for pain information, indicating that attention bias is depended upon the potential presence of threat. Finally, results indicate that limited attention bias alignment, rather than attention bias, predicted poor pain outcomes ($b = .41$, $t(43) = 2.84$, $p = .007$; $R^2 = .17$, $F(2,42) = 8.09$, $p = .007$).

Conclusions:

Overall, the current findings provide initial support for the link between attention bias alignment and poor pain outcomes with this novel experimental paradigm. Future research is however needed to address the causal relationship between attention bias alignment and poor pain outcomes.

The adoption of health, well-being, and safety apps among people with a low socio-economic position

Tessi Hengst (Open Universiteit, Heerlen - Netherlands), Lilian Lechner (Open Universiteit, Heerlen - Netherlands), Daan Dohmen (Open Universiteit, Heerlen - Netherlands), Catherine Bolman (Open Universiteit, Heerlen - Netherlands)

Presenter: Tessi Hengst

Abstract

Background: Today's society is becoming increasingly digital. However, not everyone can use online information, communication, and support (e.g., people without mobile devices, Internet access, or digital skills), increasing existing inequalities and reducing accessibility. Hence, this study aims to gain insight into the facilitators and barriers influencing the adoption of health, well-being, and safety apps among vulnerable citizens, and the preferred support in using these apps.

Methods: Semi-structured interviews discussed facilitators and barriers to general app adoption, support in using apps, and communication regarding apps and support. Additionally, per participant three case studies were discussed; a health, well-being, and safety app. From May to August 2023, 11 adult citizens living in low SEP areas were interviewed. Verbatim transcription and thematic analysis were used to analyze this data.

Findings: Over 30 facilitators and barriers were found in the areas of security and privacy, app content and design, support, and promotion of apps. Important facilitators were, amongst others, easy login, accessible design, a physical service point for information, personal aid, and training without costs. Important barriers were, amongst others, login difficulties and the experienced overabundance of apps which causes participants to lose track of important apps or to confuse related apps.

Discussion and conclusion: Participants want only a few useful apps on their smartphones, and adequate support to use them. Health, well-being, and safety apps need to be relevant, safe, and user-friendly to have added value for the participants. To achieve this, the facilitators and barriers found are important to keep in mind.

Sexual health and wellbeing of pre-vocational students: Work in progress of working with young peer researchers

Pascalie Heijligenberg (Maastricht University, Maastricht - Netherlands), Margreet de Looze (Utrecht University, Utrecht - Netherlands), Kai Jonas (Maastricht University, Maastricht - Netherlands), Karlijn Massar (Maastricht University, Maastricht - Netherlands)

Presenter: Pascalie Heijligenberg

Abstract

Participatory research engages community stakeholders in different stages of the research process. One participatory approach is research carried out by members of the community being studied, also called "peer researchers". In this abstract, we reflect on the challenges and opportunities to implement this participatory approach in an ongoing research project about the sexual health and wellbeing of pre-vocational students in the Netherlands. Our approach (so far) comprised of engaging a pre-vocational student council as an advisory board on the research content and approach, using the participatory method "World Café" for qualitative research, and involving a pre-vocational student as a peer researcher. This peer researcher designed and conducted focus group discussions, and was involved in recruitment and data interpretation.

Reflecting on the implementation of a participatory approach in this research project, several opportunities and challenges were presented, also specific to the research topic and target group. The involvement of peer researchers increases participants' comfort in talking about sensitive issues such as sexuality, thereby increasing their willingness to participate in the studies and share their experiences, and ultimately resulting in higher quality data. However, one has to anticipate that participants in sexuality research may mention adverse experiences or ask for help, necessitating more intensive training and support for peer researchers. Additionally, as research is often conducted from an academic, adult-centered stance, attention must be paid to creating an enabling environment where pre-vocational students can meaningfully participate. When done right, engaging pre-vocational students, an often unheard group, as peer researchers, offers opportunities for their empowerment and leads to deeper, richer research.

Between enthusiasm and chaos: Lessons from participatory research with primary school children

Anne-Mette Hermans (Tranzo, Tilburg University - Netherlands), Ini Vanwesenbeeck (Tilburg University - Netherlands), Marjolein De Boer (Tilburg University - Netherlands), Emmelyn Croes (Tilburg University - Netherlands), Sophie Boerman (Wageningen University - Netherlands)

Presenter: Anne-Mette Hermans

Abstract

This presentation will share some lessons learned with regard to a participatory research project into media literacy amongst primary school children (Filtering Reality: (Re)constructing media literacy programs related to body image on social media | Tilburg University).

Currently, most media literacy programs focus on developing and strengthening children's cognitive skills, and have been developed top-down by (academic) experts. In this project, we collaborate with multiple stakeholders – i.e., a media literacy organization and primary school children – to develop a (re)new(ed) lesson related to body ideals and body image, which encompasses elements children identify as relevant to them.

Adopting participation as both a method and a paradigm, we encountered several challenges, which we will discuss during this presentation. These challenges related to (1) the engagement of primary schools; (2) the engagement of children; and (3) the engagement of societal partners. Central to these challenges is the issue of recruiting diverse schools student populations and the debates surrounding active vs passive consent. Moreover, the question arises as to what (kind of) input researchers can expect from children and the reflective abilities of children which may be desirable for research projects.

Co-creative multistakeholder study to enhance the effectiveness of eHealth interventions for remote cardiac patient management

Sara Hondmann (Health, Medical and Neuropsychology Unit, Institute of Psychology, Leiden University, Leiden - Netherlands), Andrea Evers (Health, Medical and Neuropsychology Unit, Institute of Psychology, Leiden University, Leiden - Netherlands), Valentijn Visch (Department of Industrial Design Engineering, Delft University of Technology, Delft - Netherlands), Douwe Atsma (Heart Center, Leiden University Medical Center, Leiden - Netherlands), Veronica Janssen (Heart Center, Leiden University Medical Center, Leiden - Netherlands)

Presenter: Sara Hondmann

Abstract

Background: Remote patient management (RPM) is an integral part of the advancements in cardiovascular care. This allows for close monitoring and provides means for patient self-management. To further align the RPM intervention with the needs and motivations of the user, co-creation sessions were used to understand how and why patients use RPM and what further development steps could be. This study aims to develop design strategies to enhance the effectiveness of RPM in the long term: to increase adherence in the first year and support cardiac patients in adopting a healthy lifestyle.

Methods: Six iterative co-creation sessions were conducted with stakeholders including users, healthcare professionals, and design experts. The user journey and previously found personas were discussed. Thereafter, design strategies were discussed to address the opportunities found. These elements are to be integrated into the next RPM iterations.

Findings: These co-creation sessions resulted in themes such as personalized feedback, understanding the health data, regaining trust in one's own body, and connecting to the care-team. For example, the users find the RPM rewarding, but would like to understand more of what they can do themselves. These themes are being translated into design elements that create a more meaningful and motivating RPM intervention.

Discussion/Conclusion: Co-creation with stakeholders provides valuable insights and perspectives into the different opportunities for tailoring and personalization. Translating these into design strategies can allow for a meaningful and motivating intervention. Future research will investigate these strategies in their effectiveness to increase adherence. These findings could furthermore be translated into design strategies for other RMP or eHealth interventions.

Building bridges: This study expands the perspective in the development of healthcare innovations from including not only the healthcare institutions and technology but also the user/patient.

Do physical and mental fatigue factors differ in rheumatoid arthritis patients treated with biologics?

Alexandra Husivargova Theofanidis (Department of Social and Behavioural Medicine, Faculty of Medicine, PJ Safarik University in Kosice - Slovakia), Vladimira Timkova (Department of Social and Behavioural Medicine, Faculty of Medicine, PJ Safarik University in Kosice - Slovakia), Zelmira Macejova (1st Department of Internal Medicine, Faculty of Medicine, PJ Safarik University in Kosice and UNLP in Kosice - Slovakia), Zuzana Kotradyova (1st Department of Internal Medicine, Faculty of Medicine, PJ Safarik University in Kosice and UNLP in Kosice - Slovakia), Robbert Sanderman (Department of Health Psychology, University Medical Center Groningen, University of Groningen - Netherlands), Iveta Nagyova (Department of Social and Behavioural Medicine, Faculty of Medicine, PJ Safarik University in Kosice - Slovakia)

Presenter: Alexandra Husivargova Theofanidis

Abstract

Background: Despite being one of the most prevalent symptoms of rheumatoid arthritis (RA), fatigue is rarely discussed in doctor's appointments. Fatigue is a multidimensional phenomenon, and as such, a greater understanding of its dimensions and contributing factors may lead to the development of non-pharmacological interventions to address this unmet need among RA patients. This study aimed to identify the potential factors that are associated with physical and mental fatigue in RA patients.

Methods: We included 157 RA patients (84.7% female; mean age 56.4±13.9 years; mean disease duration 19.5±9.5 years). Participants completed the Multidimensional Fatigue Inventory, the Short Form Health Survey-36, the Pittsburg Sleep Quality Index, the General Anxiety Disorder-7, and the Patient Health Questionnaire-9. Correlation analyses and multiple linear regressions were used to analyse the data.

Findings: Univariate analyses found that age, education, functional disability, pain, sleep, anxiety, and depression were significantly associated with physical and mental fatigue. The final regression models showed significant associations between functional disability, pain with physical fatigue, and anxiety with mental fatigue. The explained variance in the final models was 38% for physical and 26.6% for mental fatigue.

Conclusion: The results of our study indicate that fatigue interventions in RA patients require a tailored approach based on fatigue levels experienced across multiple dimensions. Non-pharmacological interventions should also take into consideration the levels of the patient's functional disability, pain, and anxiety (Grant: APVV-22-0587).

Building bridges: Despite biologics' health benefits, fatigue is highly prevalent in RA patients in both physical and mental dimensions, emphasizing the importance of non-pharmacological interventions in fatigue reduction. According to our outcomes, fatigue interventions in RA patients need an individualized strategy depending on the different fatigue dimensions and the associated factors.

Exploring facilitators and barriers in the implementation of a complex eHealth intervention by public-private partnership in clinical practice – a multicentre qualitative analysis using the CFIR

Renée IJzerman (Leiden University - Netherlands), Rosalie van der Vaart (The Hague University of Applied Sciences - Netherlands), Linda Breeman (Leiden University - Netherlands), Roderik Kraaijenhagen (Vital10 - Netherlands), Andrea Evers (Leiden University - Netherlands), Wilma Scholte op Reimer (HU University of Applied Sciences - Netherlands), Veronica Janssen (Leiden University Medical Centre - Netherlands)

Presenter: Renée IJzerman

Abstract

Background: Cardiovascular disease (CVD) presents a significant challenge to healthcare systems worldwide. Complex eHealth interventions, promising for healthcare improvement, feature multiple interacting components and user groups within dynamic social systems. This necessitates collaboration to unlock full potential. Public-Private Partnerships (PPPs), combining resources, expertise, and technology, are crucial in this context. Yet, sustainably integrating complex eHealth interventions into practice remains challenging. This study identifies key barriers and facilitators affecting the implementation of a complex eHealth intervention, developed by a PPP, in clinical practice.

Methods: A qualitative study design was employed, involving semi-structured interviews with ten key stakeholders involved in implementing the BENEFIT program, a complex eHealth intervention promoting healthy living in CVD patients, at four cardiac rehabilitation sites. Interview transcripts were analysed to identify facilitators and barriers influencing the PPP and the implementation process. The Consolidated Framework for Implementation Research (CFIR) guided interview questions and analysis.

Findings: Key facilitators included program adaptability, communication and planning within local teams, acute need for digital healthcare, dedicated PPP leadership, a diligent PPP meeting structure, and the ability to modify implementation strategies due to the PPP. Key barriers included unique PPP challenges (i.e., frequently changed roles, unclear roles and responsibilities, limited staffing capacity), COVID-19 disruptions, poor IT integration, and an ambiguous primary program goal within the PPP.

Conclusions: This study highlights challenges involved in implementing complex eHealth interventions by PPPs in healthcare settings. Addressing identified barriers and leveraging factors is crucial for successfully implementing such interventions to help improve chronic disease management and patient outcomes.

Building bridges: Our research underscores the challenges of implementing complex eHealth interventions by PPPs within healthcare systems and provides vital insights for future endeavours.

Funding: Dutch Heart Foundation and ZonMw, 01-001-2021-B017.

Discussion and conclusion: Most of the CPHQ items were considered relevant and feedback on items was often similar across stakeholders. The second version of the 23-item CPHQ is currently being validated and tested among a panel and in longitudinal studies.

Building bridges: A valid, reliable and responsive measurement instrument for a broad health approach ensures a multidimensional perspective on perceived health unified in one tool. The broad consortium and co-design with various stakeholder groups and end-users will lower the threshold for adoption and national implementation within care, social domain and public health.

A goal without a plan is just a wish. Creating a personalized aftercare plan for breast cancer patients supported by a new patient decision aid.

Anneleen Klaassen-Dekker (Department of Research and Development, Netherlands Comprehensive Cancer Organisation (IKNL), Utrecht - Netherlands), Stans Drossaert (Department of Psychology, Health & Technology, University of Twente, Enschede - Netherlands), Regina Thé (Department of Development, ZorgKeuzeLab, Delft - Netherlands), Anneke Zeillemaker (Department of Surgery, Alrijne Hospital, Leiden - Netherlands), Marjan van Hezewijk (Radiotherapiegroep, Institution for Radiation Oncology, Arnhem - Netherlands), Irma de Keulenaar-Suiker (Department of Surgery, Noordwest Hospital Group, Alkmaar - Netherlands), Bart Knottnerus (Netherlands Institute for Health Services Research (Nivel), Utrecht - Netherlands), Aafke Honkoop (Department of Internal Medicine, Isala Clinics, Zwolle - Netherlands), Marije van der Lee (Scientific Research Department, Helen Dowling Institute, Centre for Psycho-Oncology, Bilthoven - Netherlands), Joke Korevaar (Faculty of Health, Nutrition and Sport, The Hague University of Applied Science, The Hague - Netherlands), Sabine Siesling (Department of Health Technology and Services Research, Technical Medical Centre, University of Twente, Enschede - Netherlands)

Presenter: Anneleen Klaassen-Dekker

Abstract

Background: According to guidelines, personalized aftercare plans should be used to support breast cancer patients' self-management during recovery after curative treatment. Currently, aftercare plans are not always applied in daily practice and limitedly personalized. This study aimed to develop a tool to support creation of a personalized aftercare plan, integrating information on support options and assessment of patients' personal goals, needs and resources.

Methods: A multidisciplinary workgroup convened throughout the development process to decide on the target audience, scope and purpose of the tool. Content and format requirements of the tool were aligned after assessing needs of 18 patients and 12 caregivers. After usability tests of a prototype among 7 patients and 10 caregivers, the tool was improved and finalized for implementation.

Findings: The tool, which we called 'Breast Cancer Aftercare Decision Aid' (BC-ADA) provides information on potential effects of cancer and options for self-help and support on five domains: physical wellbeing, emotions, relationships with others, regaining trust and return to daily routine. Patients can indicate which domain(s) they wish to improve, what resources they have and where additional help is needed. A generated summary of their answers can be used to create a personalized aftercare plan together with the healthcare provider, including personal goals, concrete actions and agreements on follow-up. The BC-ADA was assessed as usable and acceptable during alpha testing.

Discussion and conclusion: The 'Breast Cancer Aftercare Decision Aid' seems promising in stimulating patients' decision-making on aftercare and is currently being tested within the NABOR study.

Building bridges: The ongoing implementation of the BC-ADA in several Dutch hospitals and investigation of its effectiveness within the NABOR study, may contribute to more personalized and cost-effective aftercare after breast cancer. If successful, this approach could also help personalization of aftercare for other cancer survivors and in other health care settings.

The Behavioural Science of Pandemic Preparedness

Floor Kroese (RIVM/Dutch National Institute of Public Health and the Environment; Bilthoven - Netherlands), Saskia Euser (RIVM/Dutch National Institute of Public Health and the Environment; Bilthoven - Netherlands), Mart van Dijk (RIVM/Dutch National Institute of Public Health and the Environment; Bilthoven - Netherlands), Roos Dekker (RIVM/Dutch National Institute of Public Health and the Environment; Bilthoven - Netherlands), Mirjam Fransen (RIVM/Dutch National Institute of Public Health and the Environment; Bilthoven - Netherlands), Jet Sanders (RIVM/Dutch National Institute of Public Health and the Environment; Bilthoven - Netherlands)

Presenter: Floor Kroese

Abstract

The COVID-19 pandemic showed that behaviour is key to the spread of infection. However, we also learned that we – behavioural scientists – were not optimally prepared to deliver high-quality advice to policy makers on how to support preventive and coping behaviours. Because many determinants and behaviours do not change overnight (thus cannot be changed in the wake of a new pandemic), it is key to act in a cold phase. For this purpose, the Dutch Ministry for Health, Welfare and Sport (VWS) asked the National Institute for Public Health and the Environment (RIVM) to develop a program on pandemic preparedness from a behavioural perspective (PPb).

In this session we would like to discuss three central elements of this program: a) the conceptualisation of pandemic preparedness from a behavioural perspective b) the development of a monitor to assess pandemic preparedness in the general population in the Netherlands and across Europe; and c) a conceptualisation of 'pandemic literacy' as one important determinant of health behaviour during a pandemic, with a specific focus on groups in a vulnerable position.

Besides sharing an invitation to provide input to (and explore opportunities for collaboration on) the further development of these endeavours, we would like to discuss with the audience which innovative research methods, data linking and preparations could be valuable for assessing behaviour and/or its determinants prior to or during a crisis context. By doing so, we aim to foster a collaborative network of behavioural scientists on the topic of pandemic preparedness.

Building bridges: the Pandemic Preparedness program – financed by the Ministry of Health, Welfare, and Sports - explicitly aims to build bridges between policy, practice, and academic experts. A strong collaborative network of behavioural scientists helps to effectively support policy makers and professionals prior to and during a potential next pandemic.

The Privacy Calculus in the context of novel health technology for infectious diseases: the role of disease severity and technology's evidence base for effectiveness in adoption and voluntary health data-sharing

Nynke van der Laan (Tilburg University - Netherlands), Semeli Frangopoulou (Tilburg University - Netherlands), Wolfgang Ebbers (Erasmus University - Netherlands)

Presenter: Nynke van der Laan

Abstract

Background: In the past decades, accelerated by the recent COVID pandemic, healthcare has faced technological advancements, such as wearables and mobile applications, that collect personal or health data. However, such tools are ineffective if they are not adopted by a large part of the population or if relevant health data, collected by the application, are not (voluntarily) shared. This study assessed the role of disease severity and evidence base for the effectiveness of the technology in the Privacy Calculus cost-benefit trade-off to contribute or hinder technology acceptance and data sharing.

Methods: A large-scale 2 (Disease severity: high versus low) x2 (Evidence base: strong versus weak x2 (Data sharing option: voluntary versus mandatory) between-subjects vignette experiment (n = 822) was carried out, where participants were presented with a hypothetical scenario describing a novel technology capable of identifying whether its user had been infected from the disease.

Findings: A moderated linear regression ($R^2=.29$, $F(5,816)=67.44$) indicated that participants' privacy concerns negatively affected their intention to use the technology ($b=-0.50$, $t=-9.00$, $p<.001$), and that high disease severity weakened this relationship ($b=-0.19$, $t=-3.0$, $p=.003$). None of the other expected effects on intentions to use, willingness to share data or privacy concerns, were significant.

Discussion/conclusion: The study confirms the role of privacy as a barrier to technology acceptance and extends current knowledge by showing that disease severity plays a role in the Privacy Calculus risk-benefit trade off by weakening the negative effect of privacy concerns on adoption in contexts where disease severity is high.

Building bridges: This endeavour bridges the gap between theoretical research and practical application, offering crucial insights for pandemic readiness. It establishes vital connections between perceptions of privacy and contemporary disease severity, emphasizing the significance of risk communication in future pandemics. The project is co-funded by the Dutch Ministry of Health, Welfare and Sports. The authors have no conflicts of interest to disclose.

Building bridges between health psychologists to reduce health inequalities in research and practice.

Ann DeSmet (PACE research center, Université Libre de Bruxelles - Belgium), Anne van Dongen (Psychology, Health, and Technology, University of Twente, Enschede - Netherlands), Meeke Hoedjes (Center of Research on Psychological disorders and Somatic diseases, Department of Medical and Clinical Psychology, Tilbu - Netherlands), Nynke van der Laan (Department of Communication and Cognition, Tilburg University - Netherlands), Dimitri van Ryckeghem (Clinical Psychological Science, Departments, Maastricht University - Netherlands), Maya Schroevers (Department of Health Sciences, section Health Psychology, University of Groningen/University Medical Center Groningen - Netherlands)

Presenter: Nynke van der Laan

Abstract

Personal characteristics including socioeconomic position, ethnicity, health literacy, and gender have been related to variation in mortality and health outcomes. Unfortunately, people with an elevated risk for worse outcomes are typically underrepresented in research. Moreover, research suggests that the effectiveness of interventions may be lower in these vulnerable populations, as well as implementation problems.

Researchers in the ARPH community are actively addressing health inequalities, yet the existing knowledge is scattered. The ARPH has the potential to centralize and disseminate best practices in mitigating health disparities. This round table seeks to unite researchers and facilitate discussions on how to minimize health inequalities in our collective research efforts, fostering collaboration for improved outcomes.

Specifically, this round table aims to (a) identify in which areas health inequalities in research are observed and (b) inventorize strategies that have successfully been applied to reduce inequalities. Using this information, we will summarize best practices to reduce health inequalities in order to develop a survey that will be distributed to the ARPH community to verify the findings of this round table. In addition, we will explore members' needs and preferences with regard to the role of the ARPH in bringing researchers together on this topic (e.g., need for a Special Interest Group, research consortium).

During this round table, a few brief presentations will be held to introduce the topic and prompt a discussion based on specific questions (see aims). Discussions will take place in smaller groups and during a plenary discussion.

Fatigue after acquired brain injury and its association with personality traits

Bert Lenaert (Open Universiteit - Netherlands), Ela Savu (Maastricht University - Netherlands), Jeanet Dijkstra (Maastricht University Medical Center - Netherlands), Rudolf Ponds (Amsterdam University Medical Centre - Netherlands), Caroline van Heugten (Maastricht University - Netherlands)

Presenter: Bert Lenaert

Abstract

Background: Fatigue is among the most common symptoms after acquired brain injuries such as stroke or traumatic brain injury. Biological, psychosocial, and behavioral factors have been linked to fatigue, but research into associations with personality is sparse. We believe that personality is associated with fatigue after brain injury and may play a contributing or protective role, for instance through coping strategies.

Methods: In a series of studies in individuals with brain injury, we measured general fatigue using conventional questionnaires such as the Fatigue Severity Scale, and used Experience Sampling Methodology to capture momentary fatigue in daily life. In addition to the Big Five personality traits, we also measured generalized optimism and investigated their association with fatigue after brain injury.

Findings: Results from an exploratory study (N = 24) revealed that higher extraversion, $\beta = -.44$, SE = .12, $p = .001$; 95% CI = -.67-.19, and optimism, $\beta = -.18$, SE = .06, $p = .007$; 95% CI = -.30-.05, were related to lower momentary (and general) fatigue. Neuroticism was related to higher general (but not momentary) fatigue, $r = .53$, $p = .008$, 95% CI = .160-.759. We will also present data from a larger follow-up study (N = 100), the data collection of which has recently been completed.

Discussion and conclusion: Personality traits are associated with fatigue after brain injury and this association may depend on how fatigue is measured. Due to low sample size of the first exploratory study, generalizability of our findings may be limited and will have to be corroborated by findings from the second study which will be presented at the conference.

Studying the content and role of cognitions in binge eating with fine grained EMA

Lotte Lemmens (Maastricht University - Netherlands)

Presenter: Lotte Lemmens

Abstract

Binge eating is a common and severe phenomenon with many negative consequences. Existing interventions for binge eating are promising, but with short- and long-term remission rates ranging from 37-69%, there is substantial room for improvement. As a starting point for treatment improvement, insight in the mechanisms that drive this phenomenon is crucial.

The leading theoretical explanation for the occurrence of binge eating resides in cognitive-behavioural theory. According to this theory, dysfunctional beliefs about e.g., (the function of) eating, weight and body shape play a decisive causal role in the complex network of environmental, psychological, physiological, and behavioural factors that drive binge eating. Unfortunately, comprehensive empirical evidence for the cognitive-behavioural explanation of binge eating is lacking.

As a result, it remains to be tested whether cognitions do play a crucial role in binge eating, or whether the phenomenon can be better predicted by other factors. In this presentation, the first results of a large ongoing transdiagnostic research project (Beating the Binge; 3x n = 120) in which the predictors of binge eating as proposed by the CBT model, and the content and role of cognitions in particular, are systematically examined in daily life using Ecological Momentary Assessment (EMA), will be discussed. This information will serve as a first step in the development of a personalised tool for preventing binge eating in daily life, which will also be introduced.

Everything All At Once: Mapping Lay Beliefs about Self-Control

Jinyao Li (Department of Social, Health, and Organizational Psychology, Utrecht University, Utrecht - Netherlands), Marleen Gillebaart (Department of Social, Health, and Organizational Psychology, Utrecht University, Utrecht - Netherlands), Tim van Timmeren (Department of Social, Health, and Organizational Psychology, Utrecht University, Utrecht - Netherlands), Denise de Ridder (Department of Social, Health, and Organizational Psychology, Utrecht University, Utrecht - Netherlands)

Presenter: Jinyao Li

Abstract

Background: Self-control is a key ability for people's long-term goal achievements. Prior research has suggested that lay people's beliefs about self-control, such as beliefs on whether self-control is a limited or unlimited resource, affect their self-control exertion in daily health behaviors, academic performance, and consumption behaviors. However, a systematic overview of lay beliefs about self-control is lacking.

Methods: To comprehensively map the beliefs, across two studies we recruited 300 participants from the Netherlands, the United States, and China. We assessed their self-control beliefs by employing open-ended scales. In Study 1, we directly asked participants how they viewed self-control, while in Study 2, participants imagined themselves in everyday self-control scenarios and reported their thoughts during those self-control conflicts. Data were independently coded and analyzed by four researchers.

Findings: Our findings have distinguished 14 kinds of self-control beliefs by categorizing participants' responses (Study 1). The beliefs were shown to be used by lay people in their daily self-control conflicts (Study 2). In addition, the relationships between these beliefs and trait self-control, country, and demographical factors were examined.

Discussion and conclusion: Findings provide a comprehensive overview of lay people's beliefs about self-control by directly approaching this group. Despite overlaps, lay people's self-control beliefs appear not exactly the same as those studied by experts. These findings stress the importance of understanding lay people's beliefs about self-control. It may contribute to developing a strategy for increasing people's self-control performance in broader domains such as healthy eating, impulsive drinking, and physical activity.

Building bridges: Beliefs often impact actions and may vary from person to person. For instance, if self-control is seen as an abundant (rather than limited) resource, one is more likely to continuously resist unhealthy eating. This study identifies fundamental lay beliefs about self-control, providing insights into factors underlying people's daily health behaviors.

Personal predictors of sleep disturbances in older patients with cognitive impairments and depression: a series of eight single-subject studies

Zijun Li (University of Groningen - Netherlands), Harriëtte Riese (University Medical Centre Groningen - Netherlands), Richard C. Oude Voshaar (University Medical Centre Groningen - Netherlands), Marij Zuidersma (University Medical Centre Groningen - Netherlands)

Presenter: Zijun Li

Abstract

Background. Focus on mental health is shifting towards more personalized approaches both in research and clinical settings. Therefore, the single-subject approach that applies quantitatively statistical techniques on individual cases is increasingly being advocated. The current study illustrates this approach while evaluating personal predictors of sleep disturbances among older people.

Methods. Eight out of twelve individuals (≥ 60 years) with depression and cognitive impairments were included in analysis. Time-series data were collected with daily diaries (sleep quality, behavioural and contextual predictors) and actigraphy (total sleep time and sleep efficiency) for 63 days. Generalized least squares analyses were applied on each individual separately to identify personal predictors of sleep disturbances.

Results. Caffeine and alcohol consumption, moderate and intensive physical activity, positive and negative affect, social interactions and daytime naps were identified as significant predictors for sleep disturbances in some individuals but not in others. Some behaviours even had opposite effects in different persons. For example, more intensive physical activity was associated with lower sleep quality in two participants ($\beta(\text{SE})=-0.005(0.002)$; $\beta(\text{SE})=-0.019(0.008)$), but with higher sleep quality in one other participant ($\beta(\text{SE})=0.01(0.005)$).

Conclusions. This study found large individual differences in the predictors of sleep disturbances with well-established risk factors to be present for only some persons. Our findings emphasize the need of a more personalized approach both in research and clinical practice.

Evaluation of fatigue assessment items: a discriminant content validity study in a transdiagnostic chronic medical population

Sarah Maes (Ghent University - Belgium), Dimitri Van Ryckeghem (Maastricht University - Netherlands), Dries Debeer (Ghent University - Belgium), Stefaan Van Damme (Ghent University - Belgium)

Presenter: Sarah Maes

Abstract

Background: Contemporary theories highlight the multidimensional nature of fatigue, hereby emphasizing the implicitly represented third component of the ICF definition on fatigue, namely motivation, i.e., the urge to disengage from effortful behaviour. The ICF definition of fatigue underlines two more components, namely the subjective feeling of fatigue and energy depletion. A variety of questionnaires were developed to assess fatigue via a limited number of items. The underlying assumption is that the items of these questionnaires are actually identifying the multidimensional nature of fatigue. To test this assumption, we conducted a content analysis investigating the (discriminant) content validity of questionnaires assessing fatigue.

Methods: Items (n=533) of 26 fatigue questionnaires were rated by 516 people with chronic medical diseases (I.e. cancer n=69, auto-immune disease n=83, metabolic problems n=65, multiple sclerosis n=63, diabetic problems n=86, respiratory disease n=66, heart failure n=66 and chronic pain n=63). Most participants had only one diagnosis (72.8%), others had multiple diagnoses. Participants were asked to rate whether the questionnaire items assessed the different dimensions of fatigue, i.e., (1) a feeling of tiredness (defined as 'any sensation appraised as tiredness, lethargy'), (2) depletion ('the experience of weakening or depletion of one's physical or mental resource'), and (3) motivation ('a person's willingness to exert physical or mental effort in pursuit of a goal or outcome') as well as discriminant constructs (dysfunctioning, distress and sleepiness) and to which extent they were confident about this rating.

Results: Bayesian hierarchical models were used to analyse the data. These results demonstrated large variability in the extent to which the different fatigue dimensions were represented in the 26 surveys. Specifically, the motivational dimension was not strongly represented in most surveys. Moreover, ratings showed that the items do not always distinctively capture the fatigue dimensions, but also discriminant constructs.

Discussion: Current findings demonstrate that the content validity in fatigue surveys used in chronic medical populations is suboptimal. It is recommended to better align fatigue assessment with fatigue theories.

Building bridges: Within current study we aim to build a bridge between theoretical accounts and actual assessment of fatigue in research and clinic contexts.

Who develops long COVID? Longitudinal evidence from a Dutch representative sample using the LISS panel

Isabel Slurink (Department of Medical & Clinical Psychology, Tilburg University - Netherlands), Sophie van den Houdt (Department of Medical & Clinical Psychology, Tilburg University - Netherlands), Gaëtan Mertens (Department of Medical & Clinical Psychology, Tilburg University - Netherlands)

Presenter: Gaëtan Mertens

Abstract

Background:

Long covid is a syndrome of persistent symptoms such as fatigue and brain fog in the aftermath of a COVID-19 infection. However, there is considerable heterogeneity in the symptom presentation of long COVID and little is known about the risk factors. This study aimed to investigate clustering of long COVID symptomatology and determine risk factors assessed before the corona pandemic using data from a nationally representative panel study in the Netherlands.

Methods:

A questionnaire on COVID-19 history, perceived symptoms, and medical care use was administered to 3022 members of the LISS panel. Those respondents identified as having long COVID (n=415) provided additional information on the severity of 26 long COVID symptoms. This data was merged with previous data collected from the LISS panel from 2018-2019 to identify pre-pandemic predictors. Data were analyzed using Lasso regression and k-means clustering.

Findings: We found four clusters of long COVID symptoms: one characterized by only smell, taste, and fatigue complaints (43.9%), one characterized by additional pulmonary and systemic complaints (21.0%), one characterized by additional brain fog and psychosocial complaints (22.9%), and one with overall high complaints (12.3%). Several pre-pandemic predictors of long COVID were identified, including higher age, Western ethnicity, basic/intermediate education level, higher BMI, chronic disease, more specialist visits, COVID-19 infection severity, and lower self-rated health and self-esteem.

Discussion and conclusion:

These results provide novel insights into the heterogeneity and risk factors of long COVID and can be used for further research into prevention and care for this syndrome.

Building bridges:

This work uses data analysis techniques to identify different clusters of patients suffering from long COVID and associated risk factors. This can inform practitioners (e.g., MDs, physiotherapists, nurses, etc.) about the heterogeneity in the presentation of long COVID and therefore improve prevention, treatment, and care of this condition.

Correcting the misperceived social eating norm to dispel pluralistic ignorance and increase sustainable food choices: A field experiment

Reinoud Moojen (Utrecht University - Netherlands), Marleen Gillebaart (Utrecht University - Netherlands), Denise de Ridder (Utrecht University - Netherlands)

Presenter: Reinoud Moojen

Abstract

Numerous factors influence people's food choices, including the perceptions of eating habits of people in their immediate surroundings. Yet, these perceptions can be inaccurate, potentially leading people to misperceive the social eating norm and influencing them to make food choices that do not align with the actual social norm and their own true preferences. This phenomenon of misperception is called pluralistic ignorance.

The current study's primary goal is to examine whether misperceptions regarding sustainable eating can be corrected to promote sustainable food choices within a real-world food environment.

To determine prevailing food perceptions we first assessed importance, frequency, normalcy, and intentions regarding sustainable eating in a group of students (N = 193) within an university cafeteria. Subsequently, we exposed a different group of students (N = 175) with these norms via a flyer with the aim of correcting potential misperceptions about the social eating norm.

While the intervention proved successful in alleviating pluralistic ignorance across three out of four dimensions, it did not increase sustainable food choices. These findings are discussed with a focus on the potential for further development of pluralistic ignorance interventions within the food environment.

Longitudinal monitoring of Alcohol Craving: Psychophysiological Perspectives and Methodologies in Daily Life Contexts

Matthijs Noordzij (University of Twente - Netherlands), Erika van Lier (University of Twente - Netherlands), Marcel Pieterse (University of Twente - Netherlands)

Presenter: Matthijs Noordzij

Abstract

This poster presents an overview on a PhD dissertation on psychophysiological studies related to alcohol craving in daily life. Since this was one of the first longitudinal single case designs for alcohol craving, multiple preliminary studies were carried out prior to designing the final monitoring study.

This final study was a longitudinal Intensive Repeated and Continuous Measures in Naturalistic Settings Case-study design of physiology, craving and lapses. Ten clients with alcohol use disorder were followed for 100 days during outpatient treatment. The association between physiology, craving and lapses was explored, as well as the possibility of improving the understanding between physiology and craving by accounting for contextual and psychological variables.

Key findings are that currently, multiple prerequisites to develop a longitudinal ambulatory monitoring system for craving in daily life are in place. Stress, Negative Affect and Positive Social situations are found evidence based context variable to increase the ecological validity of researching craving with an EMA design. Additionally, the E4 wearable is a valid device to measure heart rate and mean skin conductance level in stress events.

The device is not perceived as a burden, was usable and compliance was acceptable. However, alarming a person on physiology as replacement for subjective craving seems not viable as an ecological momentary intervention, meaning outside the lab, since physiology and craving do not co-occur in high enough frequencies over time in daily life.

A scoping review on the conceptualization, operationalization and role of identity in physical activity and smoking in individuals aged forty-five and over

Kristell Penfornis (Leiden University - Netherlands), Milon van Vliet (Leiden University Medical Center - Netherlands), Emma von Haeseler (Leiden University - Netherlands), Winifred Gebhardt (Leiden University - Netherlands), Eline Meijer (Leiden University Medical Center - Netherlands)

Presenter: Kristell Penfornis

Abstract

Background: Identity is an important determinant of health-promoting behaviors like physical activity and health-compromising habits such as smoking. This scoping review offers a comprehensive synthesis and comparison of the relationship between identity and behavior for physical activity and smoking. Where applicable, the role of personal, physical activity-related and smoking-related characteristics in this relationship were considered. The review focuses on individuals aged forty-five and over, assuming a more established identity and heightened health risks related to physical inactivity and smoking in this demographic.

Methods: Following a thorough screening process, a total of 45 peer-reviewed empirical studies were synthesized.

Findings: Findings illustrate an intricate, lasting relationship between identity and behavior for both physical activity and smoking, encompassing identity processes like identity formation, maintenance, change, and loss. Similarities and differences between physical activity and smoking were outlined. Characteristics such as gender, age and behavioral history were identified as relevant for shaping identities related to both physical activity and smoking.

Discussion & conclusion: This scoping review is the first to synthesize and compare identity terminology and measurement tools employed for evaluating identity concerning smoking cessation and physical activity in adults aged 45 and above. In essence, embracing an identity related to physical activity and abstaining from smoking proves crucial for becoming physically active and successfully quitting smoking, respectively. Avenues for future research were proposed, including causality between identity and behavior.

Building bridges: Findings provide essential building blocks for further research in the field and the development of effective smoking cessation and physical activity promoting interventions.

After the End of Construct Validity: Thinking About and Studying How Psychological Measurement Instruments Work

Gjalt-Jorn Peters (Open University - Netherlands)

Presenter: Gjalt-Jorn Peters

Abstract

Background: Along with Open Science practices, the replication crisis has been argued to be a symptom of an underlying measurement crisis or theory crisis. Validity is a central concept in these reflections. Within validity theory, construct validity has become a dominant approach since its proposition in the 1950s. It has also been persuasively argued to be fundamentally flawed, and its tools of the trade (e.g., factor analysis, internal consistency estimates, and convergent and divergent validity) have been shown to lack diagnostic value as to the validity of a measurement instrument for a given construct.

Methods: Narrative response models are tools to reason about and study the validity of psychological measurement instruments. Unlike the construct validity approach, they allow studying how measurement instruments work. They do so by providing a procedure for devising probes for cognitive interviews or web probes for response process evaluation.

Findings: The procedure will be illustrated at the hand of an investigation of the items for the Reasoned Action Approach. As results, the narrative response models, used probes, and results will be presented.

Discussion: Describing narrative response models for an existing measurement instrument is a challenging task. However, once developed, they provide a concrete foothold for interrogating a measurement instrument's validity. By examining heterogeneity in participants' response processes at the hand of the steps in a narrative response model, cognitive interviews or response process evaluation can directly provide evidence as to a measurement instrument's (lack of) validity.

TOWARDS VITALITY: A COGNITIVE BIAS MODIFICATION EHEALTH INTERVENTION TO COUNTER FATIGUE IN CHRONIC KIDNEY DISEASE PATIENTS (VitalMe) AND BREAST CANCER PATIENTS (IVY)

Jody Geerts (University of Twente - Netherlands), Christina Bode (University of Twente - Netherlands), Ester Siemerink (ZGT - Netherlands), Peter Ten Klooster (University of Twente - Netherlands), Elske Saleminck (Universiteit Utrecht - Netherlands), Goos Laverman (University of Twente - Netherlands), Femke Waanders (Isala - Netherlands), Nicole Oosterom (ZGT - Netherlands), Marcel Pieterse (University of Twente - Netherlands)

Presenter: Marcel Pieterse

Abstract

Introduction: Fatigue is major symptom in chronic illness, which is influenced by implicit cognitive biases. Cognitive Bias Modification (CBM) training can counter such biases. The aim of two pilot studies was to test effects of the CBM on bias (self-identity and attentional), self-reported fatigue and vitality, and fatigue-related behaviour.

Methods: VitalMe study: Twenty-two Chronic Kidney Disease (CKD) patients (50% female, age: 26-84, M = 63) completed the study with 2 weeks daily training, and 4-week follow-up. IVY study: Sixty-four breast cancer (BC) patients (100% female, age: 32-77, M = 50) were allocated into a treatment and control group with 3 months follow-up. Outcome measures included self-identity bias (IAT), attentional bias (VPT; for CKD only), vitality (Vita-16), fatigue (CIS), and all-or-nothing and avoidance behaviour (CBRSQ). The data was analysed with Linear Mixed Models.

Results: In both patient groups, training effects were found on bias level; the neutral or slight fatigue bias at baseline became vitality bias at post and follow-up. In BC patients, training effects on self-identity bias were significant compared to controls. No significant effects were found on self-reported measures. However, in CKD patients, a small training effect was found on vitality.

Discussion: Consistent post-treatment and sustained training effects on two cognitive biases were found across two different patient groups, but not on self-reported outcomes. This study supports the potential of targeting implicit cognitions in the treatment of fatigue. More research is needed to explore whether bias modification translates into clinical outcomes.

Building bridges: By testing this intervention in two diverse patient populations we gain insight into the generic psychological mechanisms underlying fatigue in chronic illness. Additionally, current intervention was designed to be undemanding and user-friendly, taking away barriers for implementation and for upscaling when sufficient evidence for clinical effectiveness becomes available.

Beyond Hospital Walls: A serious game that empowers pediatric patients and their parents in their preparation process for a hospital visit

Britt Müller (Faculty of Industrial Design Engineering, Delft University of Technology, Delft - Netherlands), Charlotte Poot (Stichting Hospital Hero, Leiden - Netherlands), Dayella Rademaker (Stichting Hospital Hero, Leiden - Netherlands), Nicole Donkel (Willem-Alexander Children's' Hospital , Leiden University Medical Centre, Leiden - Netherlands), Richard Goossens (Faculty of Industrial Design Engineering, Delft University of Technology, Delft - Netherlands), Maaïke Kleinsmann (Faculty of Industrial Design Engineering, Delft University of Technology, Delft - Netherlands), Arno Roest (Willem-Alexander Children's' Hospital , Leiden University Medical Centre, Leiden - Netherlands)

Presenter: Charlotte Poot

Abstract

Background: Many children experience stress and anxiety prior and during a hospital visit. Children undergo multiple medical examinations in a setting that is unfamiliar to them. Effective preparation helps to diminish fear and anxiety. However current preparatory materials are not child-centred or too generic and largely rely on parents' capabilities. This study introduces a serious game, an add-on to the Hospital Hero app, that aims to empower children and parents with home-based preparation.

Methods: Employing a human-centred design, we conducted context mapping to understand current practices, children's needs and identify comforting and stress-triggering elements. Data collection included observations, conversations with healthcare professionals, and 'make-and-say' sessions with children (n=9) and parents (n=7). A prototype was evaluated with parents (n=2) and healthcare professionals (n=12), developed and subsequently tested in a 3-month pilot study in practice.

Findings: We identified multiple contextual stress triggers, including sensory stimuli, and factors hampering effective parental support, including information accessibility and lack of (emotional) guidance. To support children and parents, the 'Even Spieken' game was developed. Even Spieken encourages children and parents to explore and familiarize themselves with the different examination rooms and medical devices. In addition, it offers practical support to parents. Even Spieken was evaluated positively on the context-specific, child-directed, and comprehensible support it provides. All healthcare professionals would recommend the use of Even Spieken to their patients.

Conclusions: Our innovative solution, emphasizing familiarization, trust-building, and empowerment, has the potential to alleviate procedural stress and anxiety. This holds relevance for various healthcare settings, such as vaccination and dentistry.

Building Bridges: Our highly scalable and modular solution offers a versatile product tailored to individual needs, transcending medical silos and building bridges between specialisations. Our iterative and human-centred design approach ensures that our research insights are directly translated into a feasible, solution that meets stakeholders' needs and can be applied in practice.

Social Perceptions Going Online: Exploring the Impact of Social Media Food Content Exposure on Perceptions of Food Norm

Kaiyang Qin (Universiteit van Amsterdam - Netherlands), Saar Mollen (Universiteit van Amsterdam - Netherlands), Sixu Cai (Universiteit van Amsterdam - Netherlands), Wilma Waterland (Amsterdam UMC - Netherlands), Eline Smit (Universiteit van Amsterdam - Netherlands)

Presenter: Kaiyang Qin

Abstract

This study investigates the impact of social media content on the perception of food norms, particularly focusing on the influence of unhealthy food-related content. Recognizing the role of social media recommendation algorithms in shaping these norms, this research explores how exposure to different types of food content affects individuals' perceptions of dietary norms.

We will analyze participants' YouTube history and survey responses to assess the relationship between exposure to food-related content and perceptions of food norms. We will also examine the role of individual characteristics, such as algorithmic media content awareness, and content types (ads versus user-generated content) in this hypothetical association.

To achieve this, we used an innovative data donation approach, allowing participants to donate their social media data (such as their YouTube history and content types) for research purposes. Additionally, we employed a mixed content analysis approach for data analysis. First, participants' YouTube history will be coded using a fine-tuned BERT language model, classifying videos as not-food/food-relevant and then categorizing them into unhealthy/healthy food relevant according to the Dutch dietary guidelines. We will also measure participants' algorithmic media content awareness and social norms using established scales.

This research holds potential implications for developing interventions and educational programs aimed at promoting healthier food choices by increasing awareness of algorithm-driven content exposure. By elucidating the relationship between social media content and food norms, this study may also contribute to the broader understanding of social media's impact on health-related behaviors and attitudes.

Unprecedented and Unpredictable: A systematic review exploring the impact of COVID-19 policy stringency on mental health to inform future pandemic preparedness

Keenan Ramsey (University of Twente - Netherlands), Anne van Dongen (University of Twente - Netherlands), Sissel Kugai (University of Twente - Germany)

Presenter: Keenan Ramsey

Abstract

Background:As the COVID-19 pandemic unfolded, the world grappled the consequences of policy responses as well as the virus. Stringent measures fundamentally disrupted daily life and demanded social isolation; inadvertently affecting wellbeing. However, the association between stringent policies and mental health remains uncertain. This systematic review investigated the impacts of varying policy stringency on mental health.

Methods:Three electronic databases were searched for articles studying the association between policy stringency and mental health from January, 2020 through 2023 (update in progress). Eligibility criteria included using Oxford COVID-19 Policy Stringency Index, and a validated screening tool to measure anxiety, depression, or psychological distress. Effect estimates and relevant information on the study and country-level were extracted. For each outcome, results were synthesized through effect direction heatmaps and albatross plots.

Findings: Out of 1,943 articles identified, 15 articles were included representing 17,144,693 individuals from 75 countries. Few articles per outcome and methodological heterogeneity precluded meta-analysis. Nonetheless, through comparing effect sizes, a clear positive association between policy stringency and depression was evident, and suggested for overall mental health. The few studies measuring anxiety and psychological distress showed inconsistent results with some evidence of bidirectionally.

Conclusions: Substantial heterogeneity in the results may reflect that policy stringency impacts mental health through nuanced mechanisms. Evidence indicates that depression and overall mental health are impacted by stringent policies. However, for psychological distress and anxiety the evidence is less robust. These findings highlight the complexity in psychosocial responses during the pandemic and warrant further research contributing to evidence synthesis.

Heart rate variability during a behavior change program: The association with health behaviors

Tom Roovers (Tilburg University - Netherlands), Mirela Habibovic (Tilburg University - Netherlands), Jos Widdershoven (Tilburg University - Netherlands), Willem Johan Kop (Tilburg University - Netherlands)

Presenter: Tom Roovers

Abstract

Background: The incidence of cardiovascular disease (CVD) has increased over the past decades, partly because of an increase in adverse health behaviors. The autonomic nervous system might play a key role in this relationship. The present longitudinal study examines whether HRV-based indices of autonomic nervous system activity change during an eHealth-based behavior intervention program and assesses whether improvements in health behaviors are associated with increases in HRV indices of autonomic nervous system activity.

Methods: Data from the Do CHANGE-2 study, an eHealth-based behavior change intervention were used. Psychological and demographic data were obtained using questionnaires at baseline, 3, and 6 months. Electrocardiograms were obtained by participants at home (40 seconds daily for 6 months). Per participant, the HRV index RMSSD was calculated from 15 ECGs across the three time points. Linear mixed models and general linear models were performed to test for changes in RMSSD and health behavior over time.

Findings: The study included 58 participants with CVD (mean age=58.9 [SD=12.7] years, 21% women). Significantly lower RMSSD values were observed at six months compared to baseline ($B=-19.336$ [95%CI -36.291; 2.381 $p=.026$]). Health behaviors improved significantly during the active intervention period ($B=13.360$ [95%CI 6.931 19.789], $p < .001$). RMSSD was significantly associated with BMI ($B=-.369$ [-.739; .000]; $p=.05$) and age ($B=-.404$ [95% CI -.597; -.211]; $p<.001$) over time. No consistent associations were found between changes in health behaviors and changes in RMSSD.

Conclusion: This study shows changes in HRV and health behaviors within the context of a behavioral change intervention. No evidence was found for an association between changes in health behaviors with autonomic activity changes over time.

Reducing the impact of cigarette brand variant names on product appeal, choice, and use: three randomised controlled experiments

Jet Sanders (Centre for Health and Society, RIVM - Netherlands), Anne Havermans (Centre for Health and Society, RIVM - Netherlands), Charlotte Pauwels (Centre for Health Protection, RIVM - Netherlands), Reinskje Talhout (Centre for Health Protection, RIVM - Netherlands)

Presenter: Jet Sanders

Abstract

Significance: Branding evokes a positive emotional response and facilitates product bonding. Tobacco companies use brand variant names to sustain or increase brand awareness, enable differentiation in their brand portfolio, signal product quality, appeal to different consumer segments, and indicate taste and flavor. In countries with large restrictions on tobacco marketing and labeling (i.e., plain packaging in The Netherlands) the brand name is the last remaining tool for product bonding. Brand variant names often indicate attributes (e.g., quality, taste, color, or filter type) typical for that brand variant. This study compares two proposed policy measures aimed at reducing brand and variant impact on purchase intention, smoking intentions, and product appeal.

Methods: A total of 1030 young adults (18-25; 354 regular smokers, 293 occasional smokers and 383 non-smokers) and 351 regular adult (26+) smokers were included. In three experimental studies, participants were presented with (one of) three policy scenarios: 1) one variant per brand, 2) brand names replaced with 3-digit numbers and/or 3) a control condition. They reported on intention to buy (study 1), smoking intentions (study 2) and product appeal (study 3).

Results: While intention to buy increased for all smoker-groups when brand names were replaced by numbers, intention to quit and reduce smoking amongst young occasional smokers did for both of the proposed policies. The effect was largest for the one-variant-per-brand policy. All smoker-groups also report increased likelihood to substitute smoking with another nicotine or tobacco product. Neither proposed policy result in increased intention to buy or start smoking among non-smokers.

Conclusion: Replacing brand names with 3-digit numbers and a one-variant-per-brand policy are likely to stimulate youth to quit or reduce smoking. Regulators can consider implementing such policy but must beware that the 3-digit number policy may result in an initial boost in purchasing behavior (likely a surprise or curiosity effect). Unintended smoking uptake amongst non-smokers is not expected. Giving attention to suitable substitution behaviors (i.e., other nicotine or tobacco products) is advised. Policymakers can use the findings to further reduce cigarette appeal and product bonding, ultimately contributing to the prevention of cigarette smoking uptake among youth and young adults.

Supporting COVID-19 vaccination uptake: a mixed methodological approach to change the default.

Jet Sanders (RIVM & LSE - Netherlands), Floor Kroese (RIVM & UU - Netherlands), Sumit Mehra (RIVM - Netherlands), Mattijs Lambooi (RIVM & Erasmus - Netherlands), Marijn de Bruin (RIVM & Radboud - Netherlands)

Presenter: Jet Sanders

Abstract

In fall 2023 the Ministry of Health, Welfare and Sport (VWS) aimed to switch their COVID-19 vaccination invitations system for adults aged 60 and over from opt-in (self-scheduling) to opt-out (pre-scheduled appointments). Literature indicates that opt-out systems increase vaccination turnout. Yet for concerns of reactance, some hesitancy remained to implement the new system.

Using a mixed methodological approach, across three studies, we studied vaccination willingness and uptake over the course of implementation of the novel system. First, we examined sources of hesitancy around the proposed invitation letters and appointment systems in 10 interviews. Next, we experimentally tested invitation systems for vaccination willingness in a representative online panel (n=1.886). Once the opt-out system was implemented nationally, a quasi-experimental observational design compared vaccination uptake of all those aged 71-72 and 89 receiving an opt-out invitation with those aged 70-71 and 90 receiving an opt-in invitation nationally (n=447.650). Interviews report initial resistance toward the switch in scheduling system, with some noting it may usefully nudge vaccination uptake for highly willing individuals. Study 2 finds that participants prefer the opt-in system, but that this preference does not translate to differences in vaccination willingness. Study 3 shows increased vaccination uptake for those who received an opt-out invitation.

Comparing different data around the same choice context, we conclude that opt-out invitations are suited to populations with high vaccination willingness, that vaccination willingness is a poor indicator of vaccination uptake in an experimental opt-in vs opt-out context, and that opt-out invitations to increase vaccination uptake without signs of reactance.

One-Year Trajectories of Physical and Mental Health-Related Quality of Life in COVID-19 Survivors

Gerko Schaap (University of Twente, Enschede - Netherlands), John Davelaar (University of Twente, Enschede - Netherlands), Peter ten Klooster (University of Twente, Enschede - Netherlands), Carine Doggen (University of Twente, Enschede - Netherlands), Ruben Zaal (Ziekenhuis Groep Twente, Almelo - Netherlands), Job van der Palen (Medisch Spectrum Twente, Enschede - Netherlands), Christina Bode (University of Twente, Enschede - Netherlands), Harald Vonkeman (Medisch Spectrum Twente, Enschede - Netherlands)

Presenter: Gerko Schaap

Abstract

Background: A substantial number of people experience persisting complaints after COVID-19, with long-term impact on health-related quality of life (HRQoL). The current study aimed to identify trajectories of physical and mental HRQoL over a year in previously hospitalised COVID-19 survivors.

Methods: 500 participants were followed in a longitudinal cohort study. Primary outcomes were measured by the Short Form Health Survey 36 (SF-36). Trajectories between 3 and 12 months after hospital discharge were determined using Growth Mixture Modelling, and interpreted with SF-36 norming. Sociodemographic and clinical characteristics were investigated as potentially associating factors using multivariable logistic regression analyses.

Results: Three trajectories were identified for physical HRQoL: 'stable high' (16%), 'improving' (40%), and 'stable low' (44%). Compared to the 'stable high' trajectory, 'stable low' physical HRQoL was associated with older age, overweight and obesity, lower education, and having (co)morbidities. Four trajectories were found for mental HRQoL: 'stable high' (43%), 'improving' (14%), 'middle declining' (17%), and 'low' (26%). Compared to the 'stable high' trajectory, 'low' mental HRQoL was associated with younger age and obesity.

Conclusion: Physical and mental HRQoL trajectories differ for COVID-19 survivors. Physical HRQoL trajectories are associated with health status before hospitalisation. A considerable number of survivors experience low mental HRQoL indicative of severe mental health issues. Regular checkups and timely (psychological) interventions are warranted especially for COVID-19 survivors with prior health complaints or those with psychological issues after 12 weeks of hospital discharge.

One-Year Trajectories of Fatigue in COVID-19 Survivors

Gerko Schaap (University of Twente, Enschede - Netherlands), John Davelaar (University of Twente, Enschede - Netherlands), Peter ten Klooster (University of Twente, Enschede - Netherlands), Carine Doggen (University of Twente, Enschede - Netherlands), Ruben Zaal (Ziekenhuis Groep Twente, Almelo - Netherlands), Job van der Palen (Medisch Spectrum Twente, Enschede - Netherlands), Harald Vonkeman (Medisch Spectrum Twente, Enschede - Netherlands), Christina Bode (University of Twente, Enschede - Netherlands)

Presenter: Gerko Schaap

Abstract

Background: Fatigue is one of the most commonly reported persistent complaints after COVID-19. However, little is known about the long-term development of this fatigue. The current study aimed to identify trajectories of fatigue severity over a year in previously hospitalised COVID-19 survivors.

Methods: 500 participants were followed in a longitudinal cohort study. Fatigue was measured with the Short Fatigue Questionnaire (SFQ). Trajectories between 3 and 12 months after hospital discharge were determined using Growth Mixture Modelling. Sociodemographic and clinical characteristics were investigated as potentially associating factors using multivariable logistic regression analysis.

Results: Four trajectories were identified, of which two signalled severe fatigue. Compared to a 'good' trajectory (no complaints over time; 15% of sample), a 'moderate' trajectory (some fatigue below the SFQ cutoff, improving over time; 40%) was associated with overweight and obesity. A 'low-severe' fatigue trajectory (stable, somewhat above the SFQ cutoff; 27%) was associated with obesity, lower education and (co)morbidity. A 'high-severe' trajectory (stable, 18%) was associated with female sex, obesity and (co)morbidity.

Conclusion: Almost half of COVID-19 survivors experienced severe chronic fatigue comparable to serious diseases or chronic fatigue syndrome even after 12 months since hospital discharge. To some extent, this might be attributable to prior health conditions, but might also be related to post-COVID-19 syndrome. This finding underlines previous findings and shows that fatigue severity for many patients remains persistent for over a year. Continuous monitoring is warranted in this population.

Fatigue in all stages of chronic kidney disease: patients' experiences and needs for support

Eline Schade van Westrum (Leiden University Medical Center, Leiden - Netherlands), Ellen K. Hoogeveen (Jeroen Bosch Hospital, Den Bosch - Netherlands), Wanda S. Konijn (Dutch Kidney Patients Association, Bussum - Netherlands), Friedo W. Dekker (Leiden University Medical Center, Leiden - Netherlands), Yvette Meuleman (Leiden University Medical Center, Leiden - Netherlands)

Presenter: Eline Schade van Westrum

Abstract

Background: Fatigue is common in all stages of chronic kidney disease (CKD). Predominantly qualitative research among dialysis patients has contributed to our knowledge about CKD patients' experiences of fatigue. Therefore, this survey study aims to explore experiences and needs regarding fatigue in all CKD-stages. **Methods** In The Netherlands, a survey was constructed and distributed by the Dutch Kidney Patients Association to assess patients' experiences and needs regarding fatigue. Descriptive statistics were used to summarize results, also stratified by CKD-stages, sex, and age.

Findings: Results were relatively similar for all CKD-stages (n=385; 130 prior to kidney replacement therapy [KRT], 39 dialysis, and 216 kidney transplantation). Fatigue was often experienced in the previous month (92-100%), present for >6 months (77-92%), and in the top three of most burdensome symptoms (79-87%). Compared to elderly patients, younger patients were limited in more life domains. Fatigue was regularly (32%) never or rarely discussed with physicians. Most patients who received treatment/advice (67%), did not feel it helped (58%). Patients prior to KRT, women, and patients aged 18-50 years, more often received insufficient social support (42-65%; 37-60%). Many patients desired acknowledgment of their debilitating symptom burdens, and more information about treatments and coping strategies for fatigue and its consequences.

Conclusions: High fatigue burden and insufficient fatigue support are experienced in all CKD-stages. To address patients' unmet needs, future research should focus on the development and implementation of structural measurement and discussion of fatigue, and multidisciplinary fatigue symptom-management strategies (including psychosocial strategies) in routine nephrology care.

Building bridges: This study is part of the PRO-GUIDE project: using complementary co-creation methods, available scientific knowledge and new insights about symptoms (including fatigue) will be bundled and made accessible for routine nephrology care by means of a 'living' multidisciplinary symptoms (communication and treatment) guide including toolbox tailored to stakeholders' needs.

The role of cognitive social capital and drinking motives in explaining disparities in alcohol use disorder symptoms: testing a moderated mediation model.

Karen Schelleman-Offermans (Maastricht University - Netherlands), Oslić Katja (European Commission - Belgium), Sasso Alessandro (European Commission - Italy), Karlijn Massar (Maastricht University - Netherlands), Catia P. Teixeira (Maastricht University - Netherlands)

Presenter: Karen Schelleman-Offermans

Abstract

Background: Empirical evidence of the buffering effects of cognitive social capital and its underlying psychosocial mechanisms on socio-economic inequalities in alcohol use disorder (AUD) symptoms is limited. As socio-economic disadvantage often goes together with deficits in resources and considering social capital's beneficial effects on health, we hypothesized a disproportional buffering (at high scores) or a cumulative disadvantaged effect (at low scores) of cognitive social capital on AUD symptoms among people reporting higher socio-economic disadvantage. Furthermore, we investigated whether this moderation effect was mediated by coping and enhancement drinking motives.

Methods: Three-hundred and sixty-five young adults participated in a cross-sectional online questionnaire measuring all model variables. First, we tested a moderation model, including AUD symptoms (DV), perceived socio-economic disadvantage (IV) and cognitive social capital (moderator). Secondly, we tested a moderated mediation model, additionally including enhancement and coping drinking motives as mediators.

Findings: Supporting the buffering hypothesis, young adults reporting higher socio-economic disadvantage reported disproportionately less AUD symptoms than their more disadvantaged counterparts in case cognitive social capital was high. This effect was explained by their lower endorsement of enhancement motives. In line with the cumulative disadvantage hypothesis, in case cognitive social capital was low, young adults reporting higher socio-economic disadvantage showed disproportionately higher AUD symptoms than their advantaged counterparts. This effect was explained by their higher endorsement of coping motives.

Discussion and conclusion: Cognitive social capital can buffer for (at high levels) or aggravate (at low levels) socio-economic inequalities in AUD symptoms, and coping and enhancement motives explain why this happens.

Building bridges: Our results indicate that to decrease socio-economic disparities in AUD symptoms and related coping and enhancement drinking, intervention efforts should target improving cognitive social capital specifically among those reporting a high socio-economic disadvantage. Ways to increase cognitive social capital are therefore a promising avenue to explore in future studies. **Declarations of interest:** none. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Sex differences in the course of health-related quality of life and psychological distress among colorectal cancer patients

Cynthia Bonhof (TiU - Netherlands), Belle de Rooij (IKNL - Netherlands), Dounya Schoormans (TiU - Netherlands), Lonneke van de Poll-Franse (IKNL/NKI - Netherlands), Dareczka Wasowicz (ETZ - Netherlands), Gerard Vreugdenhil (MMC - Netherlands), Floortje Mols (TiU - Netherlands)

Presenter: Dounya Schoormans

Abstract

Background: Sex differences in the incidence and mortality of colorectal cancer (CRC) are well documented, while little is known about sex differences in patients' health-related quality of life (HRQoL) and psychological distress. Given the increasing emphasis on the importance of providing patient-tailored care, the aim of this study is to examine sex differences in HRQoL and psychological distress among CRC patients from diagnosis up until 2-year follow-up.

Methods: Newly diagnosed CRC patients from four Dutch hospitals were eligible for participation. Patients (N=334) completed questions on HRQoL (EORTC QLQ-C30) and psychological distress (HADS) before initial treatment (baseline), four weeks after surgery, and one and two years after diagnosis. Also, HRQoL and psychological distress was assessed in a sex- and age-matched reference population.

Findings: When directly comparing female (N=126, 38%) and male (N=208, 62%) CRC patients, results showed that female patients reported significantly worse HRQoL, such as more insomnia at baseline, worse physical and role functioning four weeks after surgery, more diarrhea at 1-year, and more pain and constipation at 2-year follow-up. However, comparison with a sex- and age-matched reference population revealed worse HRQoL and more psychological distress among male patients. For example, at 1- and 2-year follow-up, male patients reported significantly worse cognitive and social functioning, more insomnia, and more anxiety compared to healthy males.

Conclusions: Especially male CRC patients reported worse HRQoL and more psychological distress from diagnosis up until 2-year follow-up when compared with a reference population. As we seek to provide patient-tailored care, information provision and care should be sex-specific.

Attentional biases for somatosensory stimuli in individuals with chronic pain; novel and emerging research

Daniel Schoth (University of Southampton - United Kingdom)

Presenter: Daniel Schoth

Abstract

Attentional biases for symbolic linguistic and pictorial pain-related information have been established in individuals with chronic pain via a variety of experimental paradigms, including response-time tasks such as the visual-probe task and eye-tracking methodologies which record moment-to-moment visual attention.

One unanswered question is whether the same individuals also demonstrate biases towards somatosensory stimuli; actual physical stimuli that can evoke a sensation of pain, such as pressure, hot and cold stimuli. In this presentation I will discuss exciting and novel research exploring this emerging area of investigation taking place in the Pain Research Laboratory at the University of Southampton.

I will present the results of a recent meta-analysis which revealed chronic pain patients to show significantly greater attentional bias to stimuli in the somatosensory modality than healthy controls. I will also discuss current and ongoing experimental research, which among other results has shown a combination of pain-related interpretation bias and attentional bias to painful sensations is associated with avoidance of pain words.

Can we optimize exposure therapy via sleep?

Ghislaine Schyns (Maastricht University - Netherlands), lotte Lemmens (Maastricht University - Netherlands), Pim Heckman (Maastricht University - Netherlands), Karolien van den Akker (Cendeterdata - Netherlands)

Presenter: Ghislaine Schyns

Abstract

Exposure therapy seems to work well for anxiety disorders, as well as for eating disorders and obesity. Specifically, exposure therapy has shown to reduce overeating behavior, binge eating and can potentially facilitate weight loss. However, considering that overeating behaviors are mostly reduced for foods that were included in exposure therapy sessions, whereas food not included in therapy remain unaffected, there is a need for optimization of exposure treatment.

One potential factor that could optimize exposure therapy is good sleep. Sufficient and good quality sleep has many important influences on physical and mental wellbeing, including the impact of sleep on memory functioning. Exposure therapy is the clinical translation of extinction learning: the better the learning, the better the outcomes. Therefore, well-rested participants receiving exposure therapy might benefit much more for the exposure's effects compared to participants who sleep badly.

Given the high prevalence of sleeping problems in individuals with obesity, this 2 (exposure therapy vs. control) x 2 (full night of sleep vs. restricted sleep) experimental study investigates whether manipulating sleep after exposure therapy alters the treatment outcome, measured via behavioral measures in the laboratory. In this presentation, the first results of this ongoing study will be presented.

Effects of prognostic communication strategies on patient outcomes: an experimental study in advanced cancer

E. M.A Smets (Dept. of Medical Psychology, Amsterdam UMC - Netherlands)

Presenter: E. M.A Smets

Abstract

Background: Although most patients want to know their prognosis, inaccurate prognostic perceptions are prevalent. Clinicians often experience difficulty with prognostic disclosure and lack evidence-based guidance on how to best communicate prognosis. We investigated the effects of prognostic communication strategies on patient outcomes.

Methods: This experimental study comprised eight videos of a scripted consultation, varying in prognostic communication strategies. Participants (n = 1036) watched one randomly allocated video, while imagining being the depicted patient. We investigated effects of the type of disclosure (prognostic disclosure vs. communication of unpredictability vs. non-disclosure) and the content of disclosure (standard vs. standard and best-case vs. standard, best- and worst-case survival scenarios; numerical vs. word-based estimates) on cognitive and affective patient outcomes.

Findings: Participants perceived dying within 1 year as more likely after prognostic disclosure, compared to communication of unpredictability or non-disclosure ($p < .001$), and after numerical versus word-based estimates ($p < .001$). They could also better decide about treatment after prognostic disclosure ($p < .001$), and after numerical versus word-based estimates ($p = .017$). Participants reported more satisfaction ($p < .001$) after prognostic disclosure versus communication of unpredictability; and more satisfaction ($p = .005$) and less uncertainty ($p = .042$) after numerical versus word-based estimates. Effects of different survival scenarios were absent

Discussion and Conclusion: Oncologists should be aware that if and how they discuss prognosis can influence how individuals perceive prognosis, which treatment they prefer, and how they feel. Communicating numerical estimates may positively affect prognostic understanding and decision-making without detrimental emotional effects.

Building bridges: Recommendations for prognostic communication were published in various Dutch journals for oncology clinicians and incorporated in educational materials. Additionally, we developed an animation for patients to stimulate them to reflect on their need for prognostic information and stimulate the discussion thereof with their clinician.

The relationships between news consumption, interpersonal communication, and trust in government on adherence to behavioural regulations

Adriana Solovei (University of Amsterdam - Netherlands), Saar Mollen (University of Amsterdam - Netherlands), Julia van Weert (University of Amsterdam - Netherlands), Marijn de Bruin (Radboudumc - Netherlands), Bas van den Putte (University of Amsterdam - Netherlands)

Presenter: Adriana Solovei

Abstract

Background: Adherence to behavioural regulations (ABR) is crucial for containing viruses during pandemics. News consumption, interpersonal communication and trust in government can impact ABR, however there is scarce literature investigating their interconnectedness. This study explores the longitudinal relationships between these factors during the first COVID-19 pandemic year in the Netherlands.

Methods: We used data from a cohort study conducted by the RIVM Corona Behavioural Unit. Data from four waves (May 2020-January 2021), on 6341 respondents, were analysed. A cross-lagged model was employed, in AMOS-29, including four variables: news consumption frequency, interpersonal communication valence, trust in government, and ABR, all measured in each of the four waves. Given the large sample size, only effects above $\beta > .10$ were considered worth interpretation (p -value $< .05$).

Results: Preliminary results, focusing on handwashing behaviour, revealed reciprocal effects between interpersonal communication valence and trust in government, throughout all four waves (β between .17-.31). More positive interpersonal communication led to higher trust in government, and vice-versa. No substantial effects were found between news consumption frequency ($\beta < .07$), nor ABR ($\beta < .03$) and the other variables. For ARPH-2024, we plan to analyse and present the effects on adherence to other behaviours as well.

Discussion: Interpersonal communication valence and trust in government appear to influence each other during pandemics. Therefore, public campaigns aiming to increase trust in government could focus on/promote positively valenced interpersonal communication. The two-step flow communication theory, suggesting that interpersonal communication mediates news consumption effects on (health) behaviour does not seem to apply to handwashing behaviour, however, future research should explore this in the context of other behaviours.

Building bridges: This conference contribution provides useful information regarding societal processes during crises like pandemics. The results can be used during future (health) crises, bridging research and practice by informing policymakers and practitioners on ways to strengthen the trust in government among the population. This is crucial for adherence to behavioural regulations.

Emotional memory bias in adolescents with chronic pain: Examining the relationship with neural, stress, and psychological factors

Emma Biggs (Stanford University, Palo Alto, CA, USA - United States of America), Inge Timmers (Tilburg University, Tilburg, The Netherlands - Netherlands), Lauren Heathcote (King's College, London, UK - United Kingdom), Alexandra Tremblay-McGaw (UCSF, San Francisco, CA, USA - United States of America), Melanie Noel (University of Calgary, Calgary, Canada - Canada), David Borsook (Harvard Medical School, Boston, MA, USA - United States of America), Laura Simons (Stanford University, Palo Alto, CA, USA - United States of America)

Presenter: Inge Timmers

Abstract

Background: Memory biases for pain-related information may contribute to the development and maintenance of chronic pain; however, evidence for when (and for whom) these biases occur is mixed. Therefore, we examined neural, stress, and psychological factors that could influence memory bias, focusing on memories that motivate disabling behaviors: pain perception, conditioned responses to threat and safety cues, and responses to aversive non-noxious stimuli.

Methods: Two studies were conducted with adolescents with and without chronic pain. Data from 58 participants were included in Study 1 (chronic pain n=34, pain-free n=24, mean age=16 years), and 39 participants were included in Study 2 (chronic pain n=26, pain-free n=13, mean age=16 years). Both studies assessed threat-safety learning and memory recall (>1 month later). Participants completed structural and functional (resting-state) magnetic resonance imaging (MRI), salivary cortisol measurements, and self-report measures.

Findings: Adolescents consistently recalled being more afraid of safety cues and, during heightened stress at encoding, also reported being more afraid of threat cues. However, no memory bias was present for the emotional response to an aversive stimulus (loud scream) or for the recall of pain intensity. Functional connectivity of the amygdala and hippocampus with memory circuits related to the degree of memory bias, but the specific connections varied between studies, and we observed no relationship between memory bias and brain morphology.

Conclusions: Our findings highlight the value of considering the interaction between implicit and explicit memory systems, contributing to a more comprehensive understanding of emotional memory biases in the context of chronic pain.

From Theory to Assessment: How to Avoid Getting Lost in Translation?

Dimitri Van Ryckeghem (Maastricht University - Netherlands), Geert Crombez (Ghent University - Belgium), Rik Crutzen (Maastricht University - Belgium)

Presenter: Dimitri Van Ryckeghem

Abstract

In recent years, psychology has gone through a replication crisis. In this context it has been argued that a theory crisis - i.e. psychological theories are of poor quality and lack clear construct definitions - and a measurement crisis - i.e. (items of) measurement tools that are developed to measure the same construct assess different things as well as (items of) measurement tools that are developed to measure different constructs measure the same thing - are at its basis. Both crises have resulted in a call for action to improve measurement and theories/construct definitions in psychology. Within current round table discussion, we want to discuss the current state of progress in this domain.

Particularly, we want to discuss pitfalls resulting in recent advances crises and how to avoid these to happen in future. In addition, we will discuss methodologies (e.g., discriminant content validity methodology, use of taxonomies, ...) which can help in overcoming to get lost in translation. In doing so we hope that this round table discussion can help to build a bridge between theoretical accounts and construct assessment.

Food insecurity and other barriers to adhering to a gluten-free diet in Dutch individuals with celiac disease and non-celiac gluten sensitivity

Sharine M. Smeets (LUMC PHEG/ Health Campus The Hague - Netherlands), Jessica C. Kieft - de Jong (LUMC PHEG/ Health Campus The Hague - Netherlands), Laura A. van der Velde (LUMC PHEG/ Health Campus The Hague - Netherlands)

Presenter: Laura A. van der Velde

Abstract

Background: Food insecurity remains an important global issue, and it is of particular concern for individuals with celiac disease (CeD) and non-celiac gluten sensitivity (NCGS), because of their reliance on a gluten-free diet. This study aimed to characterize food insecurity among individuals with CeD and NCGS and evaluate its association with diet quality and perceived barriers to adhering to a gluten-free diet.

Methods: Between June and September 2023, an online survey was completed by 548 adults with CeD and NCGS in the Netherlands who adhered to a gluten-free diet. Data on sociodemographics, food insecurity status, diet quality, and perceived barriers were collected. Multiple regression analyses were conducted to identify associations between food insecurity, diet quality, and perceived barriers. Additionally, qualitative interviews with eight food insecure individuals with CeD provided insights into perceived barriers to adhering to a gluten-free diet.

Findings: The study revealed an overall prevalence of food insecurity of 23%. Food insecurity was associated with younger age, lower income, lower educational level and poorer self-reported mental health. Very low insecurity was associated with poorer diet quality ($\beta = -5.52, 95\%CI = -9.17; -1.86$). Food insecurity was associated with heightened perceived barriers across multiple domains, including skills, social circumstances, resources and gluten-free products.

Discussion & conclusion: These findings indicate the prevalence of food insecurity among individuals with CeD and NCGS in the Netherlands, highlighting its association with diet quality and perceived barriers to adhering to a gluten-free diet. The study underscores the need for future public initiatives to address these multifaceted challenges and enhance the well-being of this population.

Building bridges: With this study, we aim to help build a bridge by demonstrating the multifaceted challenges that people with CeD and NCGS in vulnerable positions face to adhering to a gluten-free diet, highlighting the need for taking into account the broad context of a person when aiming to reduce disparities in health care in this population.

The effect of identity-based interventions on physical activity- and smoking-related identities, and behavior: A systematic review

Milon H. M. van Vliet (Department of Public Health and Primary Care, Leiden University Medical Centre, Leiden - Netherlands), Kristell M. Penforis (Institute of Psychology, Unit Health-, Medical and Neuropsychology, Leiden University, Leiden - Netherlands), Winifred A. Gebhardt (Institute of Psychology, Unit Health-, Medical and Neuropsychology, Leiden University, Leiden - Netherlands), Niels H. Chavannes (Department of Public Health and Primary Care, Leiden University Medical Centre, Leiden - Netherlands), Anke Versluis (Department of Public Health and Primary Care, Leiden University Medical Centre, Leiden - Netherlands), Eline Meijer (Department of Public Health and Primary Care, Leiden University Medical Centre, Leiden - Netherlands)

Presenter: Milon H. M. van Vliet

Abstract

Background: Identity (i.e. self-perceptions of 'who I am') is important for health behavior change. Hence, identity-based interventions, which aim to influence how people view themselves, show promise for health promotion. It is interesting to investigate the effect of identity-based interventions on a health-promoting behavior, like physical activity (PA), as well as on a health-compromising behavior, like smoking. This systematic review describes the effect of identity-based interventions on PA- and smoking-related identities, and behavior in adults.

Methods: A comprehensive search, last updated in May 2023, identified 5801 publications across eleven databases. After screening, 19 publications were selected, describing 21 different studies. Relevant data were systematically extracted and a quality assessment was conducted using the Mixed Methods Appraisal Tool.

Findings: Identity-based interventions were more commonly used for PA enhancement (n=13) than for smoking cessation (n=7). Only one study targeted PA- and smoking-related identities to promote PA and smoking cessation simultaneously. The studies included various identity-based interventions, e.g. possible (future) selves manipulations and possible selves avatar games. The target population was rarely involved in developing these interventions. Additionally, the interventions' effect on identities, and on promoting PA and smoking cessation will be outlined. Finally, identified moderating factors, e.g., social support, will be delineated.

Discussion and conclusion: Identity-based interventions are promising for promoting PA and smoking cessation. Future research could focus on investigating identity-based interventions targeting more than one behavior, e.g., both PA and smoking cessation, leveraging the synergy between those identities and behaviors.

Building bridges: Effective identity-based interventions for PA and smoking cessation could help to improve public health. Collaboratively developing these interventions with the target population (i.e., patient and public involvement) could render them more accessible and

suitable for diverse groups, including disadvantaged populations. This approach may contribute to reducing health disparities.

Personalizing digital “just-in-time” nudges for healthier food choice: A randomized controlled trial.

Rachelle de Vries (Tilburg University - Netherlands), Nadine Bol (Tilburg University - Netherlands), Nynke van der Laan (Tilburg University - Netherlands)

Presenter: Rachelle de Vries

Abstract

Background – “Just-in-time”[JIT] nudges represent an emerging strategy to promote healthier food choices within digital food environments. We investigated whether personalization increases the effectiveness of (JIT) nudges. Two forms of personalization were examined: Nudge content was (mis)matched to users’ (health vs price) food choice motivations, while nudge type was (mis)matched to users’ (visual vs verbal) cognitive style.

Methods – In a 2 (Nudge Content: Non-personalized vs Personalized) by 2 (Nudge Type: Non-personalized vs Personalized) randomized controlled trial, 200 healthy participants completed a two-phase online grocery shopping task on a mock supermarket app. In Phase 1, (JIT) nudges were administered when an unhealthy product was selected, which recommended a healthier alternative. In Phase 2, participants could revise and replace products prior to checkout (i.e., nudge “spillover”).

Main Findings – In Phase 1, healthier alternatives were more frequently accepted in personalized nudge type conditions than in non-personalized counterparts (Mean difference = 7.0% [0.3%, 13.7%], $\eta^2 = .027$). Personalized nudge content led to more healthier product replacements in Phase 2 relative to non-personalized content (Mean difference = 3.1% [0.3, 5.9], $\eta^2 = .030$).

Discussion and conclusion – Personalizing (JIT) nudge content and type has small positive effects that seemingly operate at different decision making phases. The psychological mechanisms underpinning these effects merit further assessment – preferably in samples allowing for stronger manipulations of (content) personalization (e.g., clinical populations).

Building bridges – This work forges connections between research disciplines, including the digital sciences, cognitive and health psychology. The mobile (JIT) app was co-created with an industry developer (Nakko BV), to facilitate a seamless application of the technology into real-world health-relevant contexts, such as an app for Type 2 diabetes patients.

Shaping health behaviors beyond reality: A full body illusion to experience the consequences of unhealthy snacking

Nadine van der Waal (Tilburg University - Netherlands), Loes Janssen (Tilburg University - Netherlands), Marco Otte (Vrije Universiteit - Netherlands), Marjolijn Antheunis (Tilburg University - Netherlands), Nynke van der Laan (Tilburg University - Netherlands)

Presenter: Nadine van der Waal

Abstract

The temptation of engaging in unhealthy behaviors, such as unhealthy snacking, often stems from the lack of immediate negative health consequences, as these consequences develop on the long run. A Virtual Reality full body illusion is proposed as a solution, allowing individuals to experience immediate health consequences, such as weight gain, on their virtual bodies.

It is examined whether experiencing the consequences of unhealthy snacking affects healthy snacking intentions and healthy snack intake. Furthermore, explanatory mechanisms (i.e., perceived severity and perceived susceptibility) are examined. Lastly, given that virtual body ownership (VBO) is considered crucial for subsequent behavioral effects, determinants of VBO of an overweight body (i.e., visuotactile stimulation, facial similarity and avatar body size) are investigated, as well as the moderating roles of these determinants in behavioral effects.

A 2 (Experiencing consequences: yes vs. no) x2 (visuotactile stimulation: congruent vs. incongruent) x2 (Facial similarity: similar vs. generic) between-subjects design was employed (N=229). Using Hayes' Process macro, analyses revealed that experiencing consequences increased individuals' healthy snacking intentions ($b = 0.06$, bootstrapped 95%CI [0.001, 0.15]) and healthy snack intake ($b = 0.03$, bootstrapped 95%CI [0.01, 0.06]), but only through perceived severity, and not through perceived susceptibility. Furthermore, embodying an overweight avatar inhibited VBO ($\eta^2_{\text{partial}} = .04$), while congruent visuotactile stimulation facilitated VBO ($\eta^2_{\text{partial}} = .03$). Unexpectedly, VTS and facial similarity did not moderate effects of the virtual experience on behavior.

This study provides valuable insights into full body illusions, paving the way for innovative research avenues in behavior change tools. Although this research line is still in its infancy, further examination holds the potential for advancing practices in promoting health behavior using the full body illusion and manipulations of the avatar's body weight, for example for weigh-management programs.

Determinants of Pre-Exposure Prophylaxis Discontinuation among Men Who Have Sex with Men: A Global Systematic Review

Haoyi Wang (Maastricht University - Netherlands), Emilia Knop (Maastricht University - Netherlands), Hanne Zimmermann (Maastricht University - Netherlands), Kai Jonas (Maastricht University - Netherlands)

Presenter: Haoyi Wang

Abstract

Background. Oral pre-exposure prophylaxis (PrEP) can substantially prevent HIV infections when used with high adherence. Men-who-have-sex-with-men (MSM) face an elevated risk of HIV infection after discontinuing PrEP, particularly when high-risk behaviour continues. This systematic review synthesised the determinants of PrEP discontinuation among MSM globally, aiming to inform interventions that promote optimal PrEP use on a global scale.

Methods. We systematically searched for literature describing PrEP discontinuation and its determinants among MSM globally up until June 2023. The included studies were synthesised using a narrative approach using a socio-ecological model.

Findings. We included 51 studies in this systematic review, where PrEP discontinuation rates ranged widely (4%-74%). Factors influencing discontinuation included intrapersonal determinants like younger age, unemployment, lower education, financial insecurity, bisexuality, substance use, changes in sexual behaviours (e.g., fewer partners, entering monogamous relationships), lower perceived HIV-risk, and experiences of side-effects or mental health problems. Interpersonally, recommendations from family, friends, or partners to stop PrEP were associated with higher discontinuation rates. Community-level determinants included lacking PrEP access and health insurance. Societal determinants like PrEP and HIV-related stigma and COVID-19-induced restrictions also contributed to discontinuation.

Discussion and conclusion. PrEP discontinuation is not consistently related to less risky sexual behaviour alone, suggesting continued HIV-risk after discontinuation among MSM. Global interventions are warranted and should target PrEP-discontinued MSM, encouraging re-initiation or other forms of prevention, especially for those still at high-risk. Practitioners should recognise these determinants to ensure lower discontinuation and higher retention of PrEP among MSM with high-risk behaviours, facilitating ending the HIV epidemic.

Building bridges. This research can inform public health authorities and decision-makers on the determinants of PrEP discontinuation among MSM, guiding strategies for re-initiation or retention. Consequently, MSM can be better protected, contributing to the global ending of the HIV epidemics.

Why try? Understanding the processes of weight-stigma internalisation and its impact on mental and physical well-being: A qualitative study

Evelien Thieme Groen (Open Universiteit - Netherlands), Roy A. Willems (Open Universiteit - Netherlands), Lilian Lechner (Open Universiteit - Netherlands)

Presenter: Roy A. Willems

Abstract

Background:

Overweight and obese people face high levels of prejudice and discrimination because of their size or weight. Such weight stigma plays an important role in the development of mental and physical health problems in this group. While theory explains how public stigma is related to stigma internalisation, there is little understanding of how processes of weight-stigma internalization manifest and how this may impact on lifestyle and well-being.

Methods:

Nine semi-structured interviews with adult overweight and obese people were conducted. The stage model of self-stigma provided the primary theoretical framework of the topic list.

Findings:

The results of the thematic analysis suggest that weight stigma is a serious, persistent, and complex problem that manifests in multiple life domains of the participants. Stages of the internalisation process (awareness, agreement, application, and harm) were clearly identified in the experiences participants shared. These stages of internalisation were linked to reduced self-esteem and self-efficacy, which can trigger ineffective control and avoidance strategies. These strategies may on its turn affect feelings of self-worth and result in a negative spiral. Furthermore, anticipated stigma may also negatively impact health and well-being, for example by avoiding interpersonal contact or integrating a healthy lifestyle.

Conclusions:

The stage model of self-stigma is a useful framework to explain weight-stigma internalisation. Further, the results suggest that the paradox of weight stigma should be considered when developing lifestyle interventions, where the focus should be on removing weight stigma and promoting basic psychological needs and skills to effectively promote long-term healthy lifestyle behaviours.

The association between Mediterranean diet, fruit and vegetable consumption, mental well-being, and quality of life in Dutch adults.

Inge Inge van der Wurff (Open Universiteit - Netherlands)

Presenter: Inge Inge van der Wurff

Abstract

The Mediterranean diet and fruit and vegetable consumption both have been associated with multiple health benefits including a beneficial association with depression and anxiety outcomes.

However, whether there is also a link between the Mediterranean diet and fruit and vegetable consumption and mental well-being is understudied, especially in non-Mediterranean communities.

The results of a survey study investigating the relationship between Mediterranean diet adherence, fruit and vegetable consumption and mental well-being in Dutch adults will be presented.

Investigating pain-related cognitive biases using ABIB-VR paradigm

Jiaojing Xu (Maastricht University, Maastricht - Netherlands), Linda Vancleef (Maastricht University, Maastricht - Netherlands), Dimitri van Ryckeghem (Maastricht University, Maastricht - Netherlands)

Presenter: Jiaojing Xu

Abstract

Background: In contemporary pain theories, pain-related cognitive biases, often referred to attention bias (AB) and interpretation bias (IB), are postulated to interactively influence pain outcomes.

Methods: The ABIB-VR paradigm was developed to allow the combined assessment of AB and IB, pain outcomes and their relations within one dynamic and real pain context by utilizing VR technology, and meanwhile eye tracking was used to record eye gaze and pupil dilation. A sample of 87 students (74 female, 13 males; $M \pm SD$ age = 21.02 ± 5.43 years) in Maastricht University were recruited. During this paradigm, participants were engaged in pain interference task (i.e., 2-back task), while being approached by floating balls of seven different color shades from light to dark blue. Crucially, light blue balls were linked to an electrocutaneous pain stimulus (CS+) whereas dark blue balls were linked to no pain (CS-) (50% reinforcement rate; counterbalanced). The other mid-blue balls were in color shades ranging between light and dark blue, which were considered as ambiguous cues (CSA).

Findings: Results showed that 1) participants differently interpreted the pain threatening cues: higher pain expectancy for CSA than CS- cues, and higher threat rating for CSA than CS- cues. Furthermore, 2-back task performance was slowed during presentation of the CS+ cues, compared to CSA or CS- cues. Finally, the IB index (i.e., pain expectancy) is positively correlated with pain interference index (i.e., RTs).

Conclusions: In sum, these results revealed an interpretation bias toward ambiguous pain information, being predictive for task interference by the presence of pain-related information.

The interrelationship between cognitive biases for pain: An experimental study

Ting Xu (Maastricht university - Netherlands), Linda Vancleef (Maastricht university - Netherlands), Dimitri Ryckeghem (Maastricht university - Netherlands)

Presenter: Ting Xu

Abstract

Theories have contended that pain-related cognitive biases (CB), including attention bias (AB), interpretation bias (IB) and memory bias (MB), might interact and work together to contribute to patients' chronic pain. However, few empirical studies examined all three forms of combined CB, and crucially, the results so far are inconsistent.

Additionally, it is not obvious how CB relates to its theoretically proposed antecedents, such as attentional control (AC), anxiety, and depression, and how CB exerts its combined effects on pain consequences. Therefore, the main objective of the current study was to examine the interrelationships between combined CB. Secondly, we explored the associations between CB, experimental pain outcomes and individual difference variables.

Eighty-four healthy college students were recruited and all of them completed the AIM task, which is a newly developed task to assess the three types of biases (e.g., AB, IB and MB) for identical and personal relevant cues of pain. Then a sound detection task combined with cold water was followed to assess the pain-related outcomes (i.e. task performance, affective and sensory pain ratings). All participants two weeks later completed a survey regarding the AIM task's memory part.

The results demonstrated that participants showed AB, IB, and MB for information about pain and ambiguity, and AB positively related to MB. There is a correlation between CB and AC, pain-related anxiety, depression, pain catastrophizing, and emotional stability. However, no relationship was found between CB and the pain outcomes. Findings provide certain support that CB interacts with each other and is influenced by individual characteristics.

Keywords: Attentional bias, Interpretation bias, Memory bias, Cognitive biases, Individual differences, Pain outcomes

Understanding and improving access to healthcare among trans and gender-diverse migrants: Reflections on the community-based participatory research approach

Hanne Zimmermann (GGD Amsterdam - Netherlands), Alex von Vaupel-Klein (GGD Amsterdam - Netherlands), Luella Smith Jr. (Colored Qollective Utrecht - Netherlands), Eline Wijstma (GGD Amsterdam - Netherlands), Camiel Welling (GGD Amsterdam - Netherlands), Ali Jawad (Trans United Europe, Amsterdam - Netherlands), Sabrina Sanchez (European Sex Workers' Rights Alliance, Amsterdam - Netherlands), Raagini Bora (GGD Amsterdam - Netherlands), Chiarli Vredeveld (GGD Amsterdam - Netherlands), Annelies van Dijk (GGD Amsterdam - Netherlands), Joël Illidge (GGD Amsterdam - Netherlands), Udi Davidovich (GGD Amsterdam - Netherlands), Elske Hoornenborg (GGD Amsterdam - Netherlands)

Presenter: Hanne Zimmermann

Abstract

Community-based participatory research (CBPR) aims for a collaborative approach between researchers and communities in all steps of the research. CBPR starts with a topic of importance to the community, and aims for translation of knowledge into action to eliminate disparities. In this abstract, we describe the opportunities and challenges to implement this in a qualitative study to identify barriers to access care for migrant gender-diverse (mTGD) people.

Our approach comprised of involving four persons closely connected to the mTGD community, who conducted interviews, and were involved in recruitment, data interpretation and validation, community dissemination, and identifying action points. Reflecting on the CBPR phases, the research question was not community-initiated, but was a direct response to the observation that mTGD persons were often not seen in regular care, which led to this study's goal to be able to advocate for change. The involvement of the mTGD community was prominent in data collection and led to a diverse representation of 32 mTGD in terms of age, gender, migration-background, and legal and socio-economic position. Power imbalances, however, affected the extent to which community members could be equally involved in all steps and showed we lacked equitable partnership in the analysis, dissemination and follow-up phases.

Volunteer contracts with lacking means for remuneration for structural involvement exacerbated this inequity. This requires a change of mindset in research setup, funding and organizational efforts for a fair payment so that all individuals are fairly compensated throughout the research cycle (e.g., money or trainings), and that structural involvement of communities is not limited to single studies (e.g., paid advisory boards).