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Editorial

# April 2023 Editorial

**Angela Rodrigues**
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Our second issue of 2023 includes various articles disseminating the activities undertaken by the different subdivisions of the EHPS, such as CREATE, roundtable summaries and reflections from the European Health Psychology Conference 2022. This issue also includes CREATE workshop announcement for 2023.

A brief overview of the articles included in this issue can be found below.

**Kok and ten Hoor** reflect on a personal history, in order to help the Health Psychology field grow. The article provides some insights on how to consider the influences of the (social) environments have on individual behaviour, such as interpersonal, organization, community, and society.

**Coyne and Edwards** reflect on attending the **2022 CREATE workshop**. This article also provides an account of key take home messages.

**Kwasnicka and colleagues** outline diverse healthcare professionals' practices and the perceived deficits in knowledge, skills and opportunity among colleagues in their respective fields to facilitate the translation of health psychology research evidence into clinical practice.

**Baird and colleagues** summarise a roundtable discussion at the European Health Psychology Conference 2022. The roundtable sought to increase awareness of how ontologies have and could be used by health psychologists to answer questions about behaviour.

**Western and colleagues** reflect on a roundtable discussion at the European Health Psychology Conference 2022. The discussion was intended to present contemporary evidence on the existence of a digital divide in health behaviour promotion. This article provides an overview on how the roundtable was implemented and which aspects were perceived to be most useful.

Finally, **Reidy and colleagues** announce the exciting plans for CREATE activities for 2023. This year on 'Communicating health psychology research to lay audiences'. See details on how to sign up in the main article.

Hope you enjoy reading this issue!
Angela Rodrigues

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Position Paper

# Health Psychology - A Moment of Reflection

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**Abstract**

**Background:** In every career, there are (or should be) moments of reflection. In this paper, an attempt is made to reflect on a personal history, in order to help the Health Psychology field grow.

**Concrete experiences:** Based on personal reflections and a series of unstructured discussions with professor emeritus Gerjo Kok, key experiences are identified based on input from both the Health Promotion field as well as the Applied Social Psychology field. His most prominent milestones are summarized to serve as potentially useful 'lessons learned' for the Health Psychology field.

**Reflective observation & concept formation**: Over the years, several lessons are learned from leading theories and a wide range of experts. Although these lessons are yet not always applied in practice, they include (but are not limited to): 1) how to systematically plan behaviour change interventions, 2) how to systematically apply theory and evidence, and, especially, 3) how to identify and involve the environment.

**Active application**: Health Psychology influences, and is influenced by many related fields. The current focus of Health Psychology on the individual level is excellent, but the contribution of theory, research and evidence at higher ecological levels could be improved. To help the Health Psychology field forward, the focus should not only be on the target population, but also on the influences on individual behaviour from the (social) environments: interpersonal, organization, community, and society. Moreover, more attention should be paid to the conditions under which evidence-based interventions work, especially by targeting the "agents" that are in charge of the identified change at the environmental levels.

## Background

In every career, there are (or should be) moments of reflection. Some of those moments lead to personal growth, some highlight lessons learned, and some of them purposefully help to (re)structure our thoughts while entering a next phase. Also within Health Psychology, moments of reflection are not uncommon. Regularly expert meetings are held, leading up to position statements, redoubled foci, or research agenda's (see for example Hagger et al., 2016; Kwasnicka et al., 2021; Presseau et al., 2022). However, attempts to reflect on the Health Psychology field as a whole are challenging, limited, and not always accessible (if available).

In the early years of the field, Health Psychology is broadly defined as "*the educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, the identification of etiologic and diagnostic correlates of health, illness, and related dysfunction, and the improvement of the health care system and health policy formation*" (Matarazzo, 1980, p. 815). Ten years later, Shelley Taylor (1990) managed to share some trends in Health Psychology as a field, arguing that the growing health care costs forced us (they used the words "nudged us"; p46) to focus on research

and (primary prevention) interventions, but also on the implementation into practice. That paper ended with the statement: "*(reflection) articles like this will gradually disappear from the literature*" (p47). "*Those of us who have regularly taken the temperature and pulse of the field and confidently offered diagnoses and prognoses will be out of business, for whatever trends could be culled from the myriad and diverse directions in the field will be dwarfed in significance by the divergence*".

Therefore, realizing that there are many perspectives and viewpoints on how Health Psychology has grown, this paper is an attempt to describe more than 45 years of personal experiences from two associated areas, Health Promotion and Applied Social Psychology, resulting in an integrated argument for broadening the scope of Health Psychology. We will roughly apply Kolb's model of reflection (Kolb, 1984): (1) Concrete experiences, (2) Reflective observation, (3) Concept formation, and (4) Active application. Steps 2 and 3 are combined in the presentation to clearly show the link between observation and concept formation.

## Concrete Experiences

Based on several unstructured, not-recorded, and sometimes spontaneous interviews with Gerjo Kok (professor emeritus in both Health Promotion & Applied Social Psychology; interviewer Gill ten Hoor), real-life case examples are collected and summarized. Gerjo Kok is one of those scientists who is still "in business and was there when Health Psychology as a field started to pop up all over the world (and therefore one of the few left who are able to take temperature and pulse - quoting Taylor, 1990). Based on countless discussions, we attempted to summarize how the expertise of one field was helpful to the other (and vice versa), and how several fields influenced Health Psychology. Acknowledging the diverse directions and perspectives in the health psychology field, this will be a one-sided reflection, but of course others are invited to share their reflections as well.

## Reflective Observations & Concept Formation

Over the past decades, the Health Psychology field has matured, and many milestones were reached, having significant contributions to society. In this section we describe how five of those milestones all lead to the following conclusions:

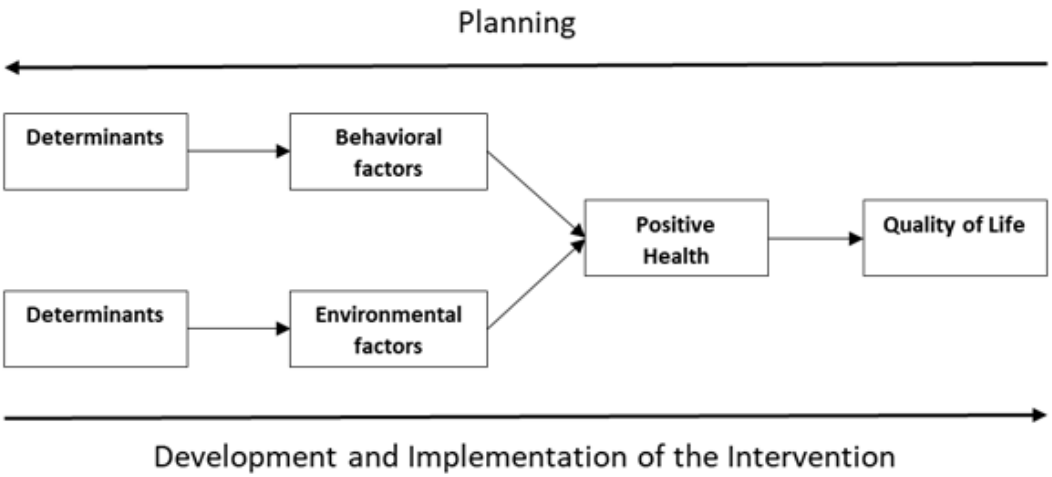
1)Health Psychology is important, but we do need to acknowledge expertise from other disciplines, specifically those in a specific field of health, such as health promotion, epidemiology, biology, accidents, sexuality, or other relevant expertise (see for example: ten Hoor et al., 2016; 2018).

2)The environment has a strong influence on an individual's health, next to the influences from the individual's behaviour. This should be targeted in our behaviour change interventions.

### *Milestone 1: Systematic Planning of Health Promotion*

In the early 80's, the standard planning model in the USA was Green & Kreuter's Precede-Proceed Model (Green et al., 1980; Green & Kreuter, 2005; Green et al., 2022), which represented the scientific approach to planned Health Promotion at that time. Green & colleagues distinguish a planning phase and a development and implementation phase, and, from the start, they do not only focus on the individual, but on (the people in) the environment of this individual as well; see Figure 1 for a simplified representation in social-psychological terms (Kok, et al., 1996;

**Figure 1: Precede/Proceed Planning Model (Bartholomew et al., 2016**



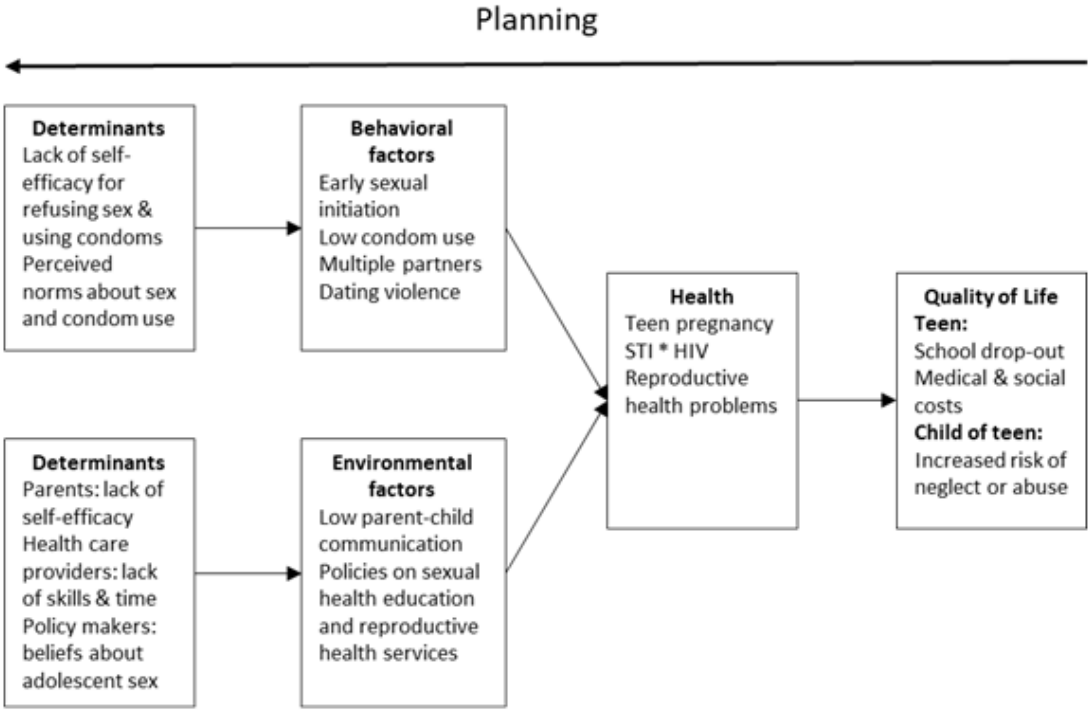

Bartholomew et al., 2016). In the *planning phase*, in Figure 1 from right to left, the planner answers questions such as: what is the problem; who has it; what quality of life effects occur; what behaviours may cause the problem; what environmental factors contribute to the problem; why (determinants) do people in the priority group do the behaviour and why (determinants) do people in charge of the environment create conditions that contribute to the problem directly or through the behaviour of the priority population?

In *the development and implementation phase*, in Figure 1 from left to right, the order is reversed: by targeting the determinants of the behavioural and the environmental outcomes, those will change in the intended direction, leading to improved health and quality of life.

This logical planning phase (including the focus on the environment) is of utmost importance (but often forgotten or not fully executed). An example that shows the elaborate planning phase is the "*It's Your Game … Keep It Real*" program: a sexual-health education program for middle school students (Peskin et al., 2014, see also Figure 2). For the needs assessment, the planners first reviewed the literature and surveillance data. They then held focus groups with youth and parents from the priority population, conducted interviews with school district personnel, attended school district meetings, and led discussions with the planning group. They described quality of life and health problems of the teens, the behaviour of the at-risk individuals, and the determinants of those sexual risk behaviours; then the environmental factors and agents, and finally the determinants of the environmental factors. In this case: determinants of the behaviour of the parents, e.g. monitoring seen as being too strict; determinants of the health care providers' counseling, such as lack of skills for communicating about sexual health; and determinants of the policy makers who are responsible for school-based sexual health education and minors' access to sexual and reproductive health services, who may be more guided by religious or moral beliefs than by evidence and recommendations of professional medical organizations. All elements that were necessary and identified in the planning phase, are taken into account in the development and implementation phase.

*Lessons learned*: Planning is essential, not only when it comes to individual factors but also when it comes to the broader environment. In health promotion, the environment is not represented in terms of perceptions of the target group, but as a real target that should become the focus of Health

**Figure 2: Precede logic model "It's Your Game" (Bartholomew et al., 2016, p. 250; selected examples)**




Promotion interventions directly through the relevant agents. Health psychologist should not only focus on the individual but also on parents, teachers, managers, and not leave those to remedial educationalists, educators or managers (that it's more pragmatic to only focus on the individual is not a good reason to ignore the environment). Health psychologists need to include higher ecological levels in their research as well as in their collaborations, such as the availability of health care for all people, or the implementation of laws protecting workers from health threatening substances.

As helpful planning tools, the Precede-Proceed model, has a clear focus on the "agents" who are responsible for the environment and who often become the target of interventions directed at the environment (instead of at the individual). For implementation (which is also a planned activity with its own environmental agent: the implementer) frameworks like Implementation Mapping (Fernandez et al., 2019) are helpful.

## *Milestone 2: Systematically Applying Theories & Evidence*

Psychology is not only a basic behavioural science but also an applied discipline that is used to solve societal problems (Veen, 1985). The processes of brainstorming, literature review, theory selection & application, and data collection are the "*Core Processes*" which can be used in different phases/steps of intervention planning, from needs assessment to intervention design to program implementation and evaluation, and within different planning frameworks. By using these "*Core Processes*", planners are provided with expert, empirical and theoretical guidance, from problem definition to problem solution. Specific emphasis is put on finding theories that are potentially useful in providing answers to planning questions using a combination of approaches to access and select theories (i.e., the topic, concept, and general theories approaches). Furthermore, emphasis is put on the logic of answering (1)

planning questions by (2) first brainstorming, before (3) consulting the literature, then (4) applying theories, and finally (5) collecting additional data (Ruiter & Crutzen, 2021). Doing the tasks in this specific order is crucial. Some intervention developers have a tendency to not report the development process, or they jump too fast to doing their own research/planning their own intervention without careful consideration of earlier research and/or theoretical input. This is a waste of essential knowledge that is already available.

Ruiter & Crutzen (2020) describe in detail a student project in which the core processes were used; focusing on preventing the transmission of HIV and other Sexual Transmitted Infections (STI's), and pregnancy among urban adolescents. As example, Nalukwago et al. (2018) reported applying the core processes for an intervention directed at multiple concurrent sexual partnerships among adolescents in Uganda. They concluded that adolescent health programs in Uganda should incorporate comprehensive sexual health education on HIV and teenage pregnancy risk-reduction strategies. These programs should strengthen parental and community support through enhanced collaborative training on communication with and for adolescents. Forming strategic partnerships with various stakeholders (agents) for concerted efforts to address this problem among adolescents is thereby critical.

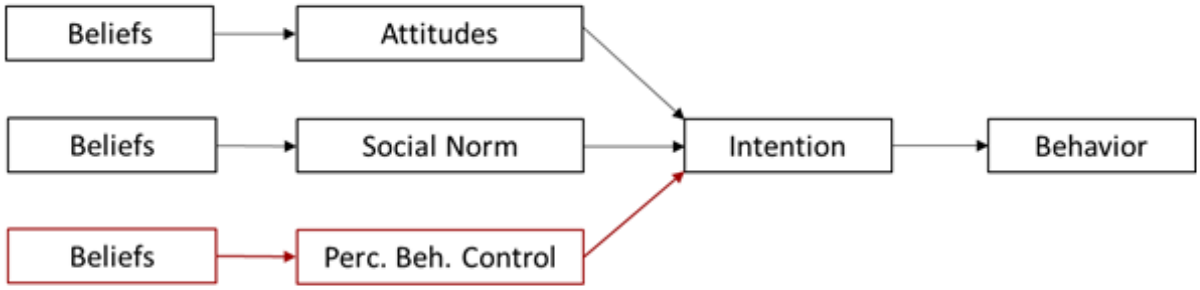
*Lessons learned:* Although it can be appealing to jump right into program development, the chances for success are higher with careful planning. The essential elements of planning are summarized in the *Core Processes*, which are a practical tool that helps the planner with the complex and time-consuming process of developing an intervention, appropriately based on theory and evidence. Applying theory and evidence is often a challenging task – in need of behavioural expertise - and these core processes will help the planner to make better choices in all steps of intervention development, at all levels, not just at the individual level but also at the environmental levels. The core processes of planning interventions are comparable between the individual level and environmental levels.

## *Milestone 3: Evolving Theoretical Perspectives - Reasoned Action/ Planned Behaviour versus Social Cognitive Theory*

Before we can try to change behaviour, we need to understand the determinants, including personal and environmental influences. For that, health psychologists make use of a wide range of theories. For many researchers in Europe, the original standard theoretical approach for finding the determinants of behaviour was the Theory of Reasoned Action of Fishbein & Ajzen (1975): Beliefs, Attitude, Intentions and Behaviour. Later, Ajzen (1991) presented his revised Theory of Planned Behaviour (TPB, see Figure 3) with perceived behavioural control (PBC) as an addition, followed by an integration, the Reasoned Action Approach (Fishbein & Ajzen, 2010). Godin & Kok (1996) reviewed at that time the efficiency of the TPB to explain and predict health-related behaviours and concluded that the theory's efficiency is "quite good" for explaining intentions.

Back then, for other researchers, the standard theoretical approach for finding the determinants of behaviour was the Social Cognitive Theory of Bandura (SCT; Baranowski et al., 2002; Gottlieb et al., 1990; Parcel et al., 1995; see Figure 4). SCT addresses both the psychosocial dynamics influencing health behaviour and the methods for promoting behavioural change. Within SCT, human behaviour is explained in terms of a triadic, dynamic, and reciprocal model in which behaviour, personal factors and environmental influences all

**Figure 3: The Theory of Planned Behaviour (Ajzen, 1991; 2020)**




interact. Among the crucial personal factors are the individual's capabilities to anticipate the outcomes of behaviour, to learn by observing others, and to have confidence in performing a behaviour (self-efficacy). A clear dividing line between Ajzen-followers and Bandura-followers shaped the field of social psychology for a long time. However, Ajzen (2020) explicitly indicated that there is no fundamental difference between perceived behavioural control and self-efficacy, except that both concepts are usually measured differently, in effect suggesting an integration of both theories in practice.

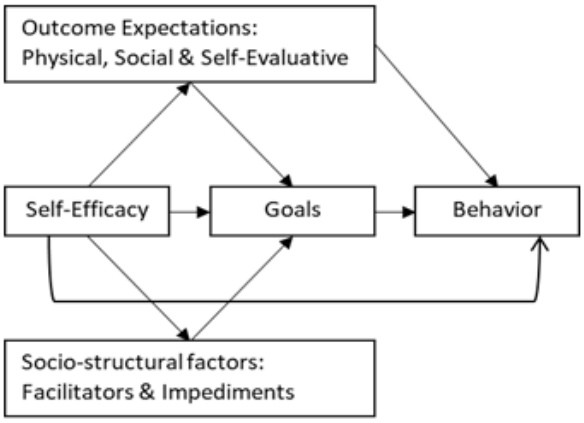
*Lessons learned*: To understand and change behaviour, it is important to make use of multiple theories. In the described Bandura vs. Fishbein & Ajzen case, both theories were relatively new to the other party. Over time, those discussions contributed to a better understanding of the other theory, and also to a wider perspective on multiple theories to understand and measure behavioural and environmental factors. Plus, the relevant determinants of behaviour and environmental agents. The specific TPB-procedures taught us to find and measure the beliefs behind the main determinants. The SCT provided a more challenging insight in the broad range of psychosocial dynamics provided by SCT, including the essential role of socio-structural factors and therefore the potential of the SCT to study the behavioural determinants of the target individuals as well as the target environments. The social environment was not just a given, but also a target for change next to, or even more important than, individual change.

Finally, our health psychology discipline is a practice discipline and no single theory is adequate for developing effective programs to promote health and neither is there a magic bullet that solves all problems. We need intrapersonal, interpersonal, organizational, community and policy theories: for understanding behaviour, developing interventions that change behaviour, and making sure those intervention are implemented successfully (McLeroy et al., 1993).

## *Milestone 4: How to identify and involve the environment - Ecological Systems Theories*

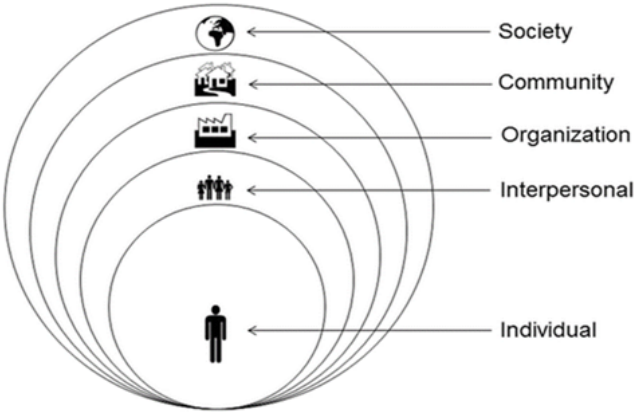
The last 40 years taught us that there should be a continuous and self-evident focus on ecological systems (Bronfenbrenner, 1979) in all planning, process and theory. In the social ecological model, health is a function of individuals and the environments in which they live, including family, social networks, organizations, communities and societies (Simons-Morton et al., 1988; see figure 5: Ruiter et al., 2020).

**Figure 4: Social Cognitive Theory (Bandura, 2004)**




One consequence of this perspective is that all Health Promotion programs' development, implementation and evaluation should be based on broad participation of community members (Wallerstein & Duran, 2006). Within that perspective, other theories became relevant that could be applied at those environmental levels (Bartholomew et al., 2016; Ruiter et al., 2020). At the interpersonal level, next to SCT, for example: social networks and social support theories; at the organizational level: organizational change, organizational development and stakeholder theories; at the community level: coalition, social capital, and community organization theories; and at the societal level: theories of public policy such as multiple streams theory and the advocacy coalition framework (De Leeuw, 1989).

**Figure 5: The Socio-Ecological Approach to Health Promotion (Ruiter et al., 2020)**




At the organizational level, for example, stakeholder theory may help health promoters to make change (Kok et al., 2015). Health Promotion applications of stakeholder theory require, foremost, a good understanding of the stakeholders' *salience* (their power, legitimacy, and urgency), *interest* (support and opposition) as well as the stakeholders' *position* within a network. For example, health promotors working in obesity prevention target policy change in the food industry, fast food companies, schools, and federal nutrition programs for women, infants, and children. To do this, they need to understand the importance of each stakeholder, to strengthen key relationships through communicative and compromise strategies, and to recognize the possibility of taking coercive actions itself or through allies with high salience for the focal organization.

One logical consequence of the socio-ecological model is the realization that the actual implementation of Health Promotion interventions is often located at the organizational, community or society level: e.g. schools, neighborhoods or national programs (Fernandez et al., 2019). This suggests that health psychologist already know how to involve the agents in the socio-ecological environment of the target group.

*Lessons learned*: The most important lesson here (again) is that the main focus of health behaviour change should not be limited to the individual level, but certainly also be on the social-ecological system in which the individual is embedded. Ultimately, that agent is – of course - also an individual. The important and subtle difference here is that behavioural science has many more ways to change agents than to change the target

population – which will be explained in the next paragraph. Changing the individual without changing the environment may, sometimes, be a form of victim-blaming: individuals are held accountable for what happened to them while in some cases the real causes lie in the environment, and are under control of the environmental agent(s).

## *Milestone 5: Exchange of theoretical perspectives - Intervention Methods, Practical Strategies and Parameters for Effectiveness*

After we know what we want to change in terms of determinants of individual behaviours and those of the behaviours of agents in the environment, the next task is to find the appropriate theory- & evidence-based methods, or techniques, and translate those into practical strategies. A large diversity of researchers had experience with that process, but from different perspectives: Health Promotion versus Applied Social Psychology. However, it was not too difficult to find each other in a common language, probably because all those involved were trained as (social) psychologist.

A *theory-based method* is a general technique or process for influencing changes in determinants of behaviours and environmental conditions, in that last case the behaviours of agents. *Practical applications* are ways in which the theory-based methods are presented and delivered in an intervention appropriate to the population and the context. Methods and applications form a continuum from abstract theoretical method to practical applications to organized programs with specified scope, sequence, and support materials. Translating methods into applications demands a sufficient understanding of the theory behind the method, especially the theoretical parameters that are necessary for the effectiveness of the theoretical process (Bartholomew et al., 2016; Kok et al., 2016). For example, modeling can be effective, but only when the participant pays attention, remembers, has certain skills, and is reinforced (Kelder et al., 2015). *Goal setting* can be a very effective method to enhance performance but only when the goal is challenging as well as acceptable for the actor (Latham & Locke, 2007). Fear appeals are popular but are only effective when the at-risk population has high self-efficacy, and they may be counterproductive when self-efficacy is low (Kok et al., 2018). At the environmental level, *using lay-health workers* will only work when these natural helpers in the community have opinion leader status and are available to volunteer for training (Tolli, 2012). *Increasing stakeholder influence* can only succeed when the focal organization sees the external group as one of its stakeholders (Kok et al., 2015). As a final example (but many more behaviour change methods and its parameters can be found in Bartholomew et al., 2016 or Kok, et al., 2016), trying to use *media advocacy* requires those media to approve the news value of the message and to accept the message without changing its content (Dorfman & Krasnow, 2014).

*Lessons learned*: The relevant issue here is that behaviour change methods, or behaviour change techniques, are not universally effective but need to be applied with careful consideration of the determinant they target, and their *parameters for effectiveness*. Operationalizing a change method is a first step; making sure that this method is applied within the parameters involved, is an essential next step (Kok et al., 2016).

## Active Application

For us, reflecting on Health Psychology as a field, the major enlightening insight concerned the pivotal role of the *socio-ecological environment*.

Psychologist, including health psychologists, tend to look at the environment in terms of how the target group perceives the environment, for example the perceived behaviour of others or the perceived expectations from others. In addition, (perceived) self-efficacy, and perceived behavioural control, are seen as relevant targets for interventions in terms of skills training, but often without serious considering, or trying to change, the environment itself (as example: in the extremely helpful book by Hagger et al. (2020) on behaviour change theories, almost all chapters on theories focus on changing individuals). Additionally, we do need to acknowledge expertise from other disciplines, in specific fields of health, such as health promotion, epidemiology, biology, accidents, sexuality, or other relevant expertise. Already in 1993, McLeroy and colleagues argued there is an important need "to expose more of our students to issues and theories from other disciplines, such as the social network, organizational and community development, and public policy literature".

Combining our two main conclusions (focus on environment, and acknowledgment of scientific insights from other disciplines), a systems perspective can certainly increase the effectiveness of planning when developing an intervention. Interventions at the various environmental levels will then focus on agents in positions to exercise control over the relevant environments. Those agents can be seen as targets for promoting real changes at all relevant ecological levels: interpersonal, organization, community, and society. In addition, interventions at one level can influence causal factors at other levels. Moreover, behaviour change interventions and health promotion program development, implementation and evaluation should be based on broad participation of the community. The current focus of Health Psychology on the individual level is excellent, but not enough to contribute optimally with theory, research and evidence to the health of the people.

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Report

# Reflections from the 2022 CREATE Workshop

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As we approached the impressive main building of Comenius University Bratislava for the first day of the 2022 EHPS Collaborative Research and Training in the EHPS (CREATE) Workshop, the historical significance of Šafárikovo Square, the area of the city in which the university is situated, became immediately apparent. Freshly laid wreaths beside a nearby memorial plaque commemorated the 54th anniversary of the occupation of Czechoslovakia by Warsaw Pact troops and represented a small part of wider activities across the city during the week of the EHPS conference to remember the events and hear the stories of those affected by the legacy of August 1968. At the CREATE orientation dinner and subsequent drinks the previous night, we had encountered nothing but welcoming and friendly people. Our university hosts were no exception as they cheerfully greeted us in the lobby and guided us to the room in which the two-day workshop would be held.

The focus of the workshop facilitated by Professor Felix Naughton and Dr Olga Perski, was on digital health interventions for behaviour change. Digital health relates to the use of digital technology to improve health and healthcare, and comes with several benefits, including cost-effectiveness, versatility, and inclusivity. Recent technological advancements have expanded the potential for digital health tools to transform the experiences of patients and clinicians in managing a vast range of health outcomes. The importance of using digital technology for health is recognised in the World Health Organisation's Global strategy on digital health 2020-2025. Given all this, there was great interest from both authors of this report going into the CREATE workshop. The workshop's theme was also highly relevant to Rory's PhD topic, so it promised to be a highly useful learning experience that could be applied to his research.

Professor Naughton and Dr Perski delivered an engaging and comprehensive workshop that focused on digital health intervention design, development, evaluation and implementation. Prior to the workshop, we had been asked to use one health behaviour change or wellbeing app to change something in our lives for at least week. On the morning of the first day, we were asked to reflect on both our experience with the app, and how engaging we found it to be. This reflection exercise served as the springboard for a discussion on the use of apps for health behaviour change, in terms of their applications and limitations.

Another key learning outcome from Day 1 was the concept of programme theory and the logic model. A programme theory explains how an intervention contributes to a chain of results that produces actual impacts, while a logic model is a diagram used to represent a programme theory, demonstrating the logic of how an intervention functions. We were shown several examples of a logic model, which was helpful in understanding the multi-stage process of intervention

development and implementation. Next, we spent time on the topic of measurement. We learned about ecological momentary assessment (EMA), which can be defined as real-time assessments of phenomena over time in a naturalistic setting (Stone & Shiffman, 1994). EMA methods can be used in a variety of contexts, such as in smartphone apps, wearable devices, and SMS messages, depending on the phenomena of interest.

Another key learning outcome from day 1 concerned user-centred intervention design. User-centred design means ensuring that the needs and values of both end users and stakeholders are considered, and it involves mutual learning and collaboration among users and designers. Next, we learned about the differences between using an existing health behaviour change app, versus creating a new one from scratch, versus a collaborative approach. The 'off-the-shelf' approach is easy to set up, and comes without development costs, but the researcher has no control over the content of the app. In the collaborative approach, the researcher has an opportunity to influence the content, but they may not always be able to influence how much (or what kind of) data is being collected. Finally, the 'make your own' approach affords a high degree of control over both the content and measures, but comes with a greater cost, and may face additional barriers to user experience and compatibility with devices than other, readily available apps.

The final key learning outcome from the first day was in relation to just-in-time adaptive interventions, or JITAIs (which is a fun acronym to say out loud). This is an intervention that can provide the right type and amount of support, at the right time, dependent upon a user's variable internal, contextual and environmental state. A key component of JITAIs is tailoring: when some kind of input informs how and/or when the intervention is provided to the individual. The effectiveness of JITAIs can be assessed using proximal (momentary) or distal (longer-term) outcomes. Identifying which tailoring variables to consider is also critical – tailoring variables can be based on either theory or empirical research. Newly emerging techniques, such as the use of machine learning algorithms, could enhance JITAIs by aiding in the selection of tailoring variables and predicting proximal outcomes.

Following a short recap of the previous day's learning, the second CREATE Facilitator, Dr Olga Perski, began the day two session by guiding us through research methods to optimise and evaluate adaptive interventions. It was highlighted that while classical randomised controlled trial approaches allow for determining whether an intervention performs better overall than a control or comparison group, this approach may not always be optimal for digital health interventions due to not allowing researchers to easily distil which components of multicomponent interventions are causing the behaviour change (Peters et al., 2015). Therefore, alternative frameworks for the development, optimisation, and evaluation of multicomponent behavioural, biobehavioural, and biomedical interventions such as the Multiphase Optimisation Strategy (MOST; Collins et al., 2005), may enable researchers and practitioners to make interventions more effective, efficient, and scalable.

Next, we explored a range of methodologies to optimise and evaluate adaptive interventions, including Sequential Multiple Assignment Randomised Controlled Trials (SMARTs), Micro-Randomised Trials (MRTs), and intensive longitudinal designs. Throughout the workshop, we were introduced to relevant research which applied such theoretical frameworks and methodological approaches. We found this particularly useful, as we could better understand how to implement different designs within various contexts, including how novel technology-mediated measurement approaches like SMS reminders could assist data collection.

Throughout the two days of the workshop, we were tasked with developing a programme theory for a digital health behaviour change intervention. In groups, we had to initially identify a problem that we were interested in, and the determinants of the behaviour of interest. Marc's group presented 'Joint Effort', an educational and digital behaviour change mobile app for individuals with osteoarthritis. Rory's group developed a digital intervention to improve sleep hygiene among adolescents. Both of our apps would be codesigned with health professionals and would provide patients with personalised behaviour change activities which would fit with users' requirements and goals to improve both proximal and distal health outcomes.

Using a logic model, we had applied some of what we had learned about user engagement and overcoming the 'engagement crisis', something which we discovered was a major issue for digital interventions due to low engagement being associated with unsuccessful behaviour change. We had considered how to collect data and monitor the long-term effectiveness of the intervention, in addition to the quality, user satisfaction, and effectiveness evidence thresholds we would need to adhere to for the app to be regulated and accredited on a curated app portal. It was interesting to hear the ideas from the other groups and enhanced our understanding of the workshop content overall. We left the CREATE workshop feeling like we had learned and achieved a great deal, and were looking forward to attending the conference in the coming days.

The CREATE workshop was a tremendously valuable prelude to the EHPS Conference itself. For many attendees of this fantastic workshop, including ourselves, it was the first post-covid opportunity to meet with fellow students and academics. The fantastic networking events facilitated by the CREATE committee and meant that workshop attendees recognised lots of familiar faces throughout the rest of the week. Furthermore, the content of the workshop was highly complementary to both Rory's MSc in Health Psychology training and Marc's postdoctoral research and linked foundational training with emerging and innovative concepts.

CREATE provided all attendees with a welcoming and supportive space in which to learn, exchange ideas, and make professional and social connections that will last a lifetime. It was fascinating but unsurprising to learn that both Felix and Olga had also attended CREATE as early career researchers and have remained collaborators ever since. Both Rory and Marc, too, have since developed a good working relationship, culminating in our own collaboration to write this report. Whilst we are at different stages of our academic journeys (with Rory being a PhD candidate and Marc being a post-doc), we both gained a valuable insight into the application of and challenges to behaviour change research using digital health technology.

We would like to thank everyone involved in organising the CREATE workshop and we are thoroughly looking forward to attending again next year.

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Original Article

# Healthcare practitioners' perspective on how to best apply health psychology evidence in practice.

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## Introduction

One of the key overarching aims of the health psychology discipline is to generate evidence that is implemented in clinical practice and effectively communicated to healthcare practitioners who can benefit from applying it in their day-to-day practice (Presseau et al., 2022). The EHPS Practical Health Psychology Blog provides short summaries and practical recommendations based on cutting edge health psychology research to inform health practitioners and intervention providers worldwide (www.practicalhealthpsychology.com). The National Editors translate and disseminate the posts to the practitioners in 30 languages across more than 50 countries.

In this article, following a Roundtable discussion at the European Health Psychology Society (EHPS) Conference 2022, four healthcare practitioners of various professions (applied health psychology, cardiology, and general practice) were invited from various countries (UK, Russia, Norway, and Australia) to discuss how to best apply health psychology evidence in practice. The main objective of our Roundtable was to give an overview how healthcare practitioners use health psychology evidence to inform their practice. Learning from their experience, new strategies for disseminating our science are generated to facilitate cross-disciplinary knowledge transfer.

In this article, the overall purpose was to outline diverse healthcare professionals' practices and the perceived deficits in knowledge, skills and opportunity among colleagues in their respective fields to facilitate the translation of health psychology research evidence into clinical practice. Each of the contributors discussed how their own discipline can best benefit from behavioural science, particularly focusing on the country where they practice; key points from the discussion are outlined below.

## Perspective 1

Dr Ainslea Cross, the Lead Health Psychologist of the Health Psychology Cardiovascular Diseases Service in the UK talked about embedding health psychology research into practice within a multidisciplinary specialist hospital hypertension and lipids service. The aim of the service is to support patients with blood pressure control, optimizing quality of life and reducing future cardiovascular risk. The Behaviour Change Wheel (BCW) model was used to assess how health psychology research could be used to inform

practice (Michie et al., 2011). Clinical needs were assessed through case study review, multidisciplinary team discussions and clinical guideline review. Priority areas for implementing research into routine hypertension self-management care included supporting dietary changes, increasing physical activity, promoting medication adherence and regular blood pressure monitoring. Key intervention functions included environmental restructuring and training/education. This was implemented through designing a health behaviour change manual for hypertension self-management for use in patient consultations and the design of bespoke training.

Dr Cross concluded that the most fundamental change that we need to see in health psychology research, is to identify the practitioners and patients who will most benefit from health psychology research and to involve them at all stages of research projects, from idea generation, execution, to report and then the implementation stage. She further suggested that we need to create opportunities, processes and incentives that bring together scientists, patients and practitioners to co-create and develop research (Cross, 2022). This will help us to carry out research that will have the maximum benefit for clinical health populations, health care services, and raise the profile of health psychology research.

## Perspective 2

Dr Evgeny Taratukhin who works as a cardiologist in a Medical Hospital in Russia, emphasized that it is important to note the conceptual nature of the meaning of evidence itself. For clinical medicine, evidence is biological, based on statistics, with almost no qualitative data. For psychology, evidence is grounded upon self-report by subjects, or behaviour observation, or interpretation. For biomedicine, there is no singularity, any patient is a representation of some overlapping averages. On the other hand, phenomenologically, every person is unique. That is why evidence cannot be applied to another person blindly.

An example of a patient, a 37-year-old male, was given, with suspected essential hypertension. Secondary hypertension was ruled out and quite severe raise of blood pressure up to 160/115 mmHg was seen for several years. The hypertension guidelines did not address "unhealthy" behaviour, and behaviour change interventions were not seen as potential solution. Yet, when his personal issues (professional identity and occupation) were solved, a normal blood pressure was reached without drug treatment or additional behaviour change. This suggests that cardiology would benefit from enhancing healthcare professionals communication skills and personalized health communication, and self-help skills for a patient to deal with daily life, i.e., more of partnership between the clinician and patient, than a paternalistic approach that medical professional is superior to the patient.

Dr Tarathukin reflected that clinicians prefer exact and strict outlines of the concepts they must deal with. The best way to approach practicing cardiologists is to provide them with schematic and algorithmic instructions that show actions – results – further actions – outcomes. The clinicians are trained to have a "normalizing eye" with the need to see clear distinction of what is normal and what is not, though for psychology it is probably not a straightforward task.

## Perspective 3

Dr Torgeir Gilje Lid, a general practitioner (GP) and researcher at Center for Alcohol and Drug Research in Norway, talked about addressing alcohol in general practice, and a pilot study of a strategy to improve addressing alcohol in primary health care. Screening and brief interventions (SBI) for risky or harmful alcohol consumption are

effective, but not widely implemented in primary care. In a previous qualitative study exploring how and why primary care physicians address alcohol (Malterud & Lid, 2012), it was found that they did so mainly based on potential clinical relevance of alcohol for the patient's health problem, and sometimes as routine (e.g., health certificates). This is called *pragmatic case finding* (PCF) (Lid & Malterud, 2012).

Informed by the BCW and the Capabilities, Opportunities, Motivation - Behaviour (COM-B) Model (Michie et al., 2011), the clinical significance of PCF with stakeholders were explored, and whether it could be a foundation for strategies to improve practice. This involved: initial discussions with GPs and patients; four focus groups with 25 GPs, and a COM-B questionnaire with free text answers from 55 young GPs. The needs identified in this process were matched with intervention functions, in planning a four-session clinical seminar for GPs. The sessions were delivered in clinics, focusing on PCF, case examples, clinical evidence, and a toolbox of strategies (e-health intervention, motivational interviewing, medications, follow-up strategies, and collaborators). The sessions were run by an experienced GP, assisted by a motivational interviewing specialist, a patient and collaborators from primary and secondary care. The study demonstrated important improvements in GPs' self-reported capabilities, opportunities, and motivations to address alcohol when clinically relevant. Qualitative data indicated that GPs' perceived a shift in how they were addressing alcohol with their patients. Conversations had shifted from a prescriptive approach, focusing on addiction and alcohol as a taboo topic to a more normalized conversation in which GPs and patients could make shared decisions about how alcohol impacts on the patient's wider health.

## Perspective 4

Dr Rita McMorrow, a General Practitioner and a PhD student at the Department of General Practice, University of Melbourne (Australia) who works part time as a GP in a clinic in Melbourne discussed her role of caring for people living with multiple medical conditions, including type 2 diabetes, and her research interests that align with her clinical work. Dr McMorrow discussed the design and implementation of a solution to support assessment of diabetes distress using the Problem Areas In Diabetes (PAID) scale in Australian general practice. Despite diabetes guidelines recommending routine assessment of diabetes distress, general practitioners and people with type 2 diabetes report infrequent assessment using the PAID scale (McMorrow et al, 2022a, 2022b).

Dr McMorrow presented findings from virtual workshops with Australian general practice healthcare professionals to design the key features and requirements of a digital tool to support the use of the PAID scale. The key features identified to support the implementation of the PAID scale included 1) awareness of the person with diabetes emotions, 2) flexibility within the tool, and 3) the narrative surrounding the tool. During the design sessions, a prototype digital tool, 'PROM-GP' was developed. The PROM-GP tool allows the person with diabetes to complete the PAID scale electronically, receive a summary of their PAID responses, and sends the PAID response to the general practice electronically using secure messaging. PROM-GP has recently been implemented in three Australian general practices. Dr McMorrow suggested health psychologists consider involving a general practitioner on a research team if research is based in general practice.

## Summary

The four perspectives provided by the healthcare practitioners have common narratives. They all emphasize the need for cross-disciplinary collaboration and involving not only health psychologists in the clinical practice but also drawing upon talent and skills of practitioners from several disciplines. Knowledge co-creation is important and involving consumers, healthcare professionals, and health psychologists (as well as other practitioners) is crucial to provide complex and comprehensive care (Janamian, Crossland & Wells, 2016). In terms of evidence generation, we need to consider the nature of evidence. Psychological science is rigorous but it is often based on different principles of knowledge generation as compared to medical science. Health psychology often focuses on 'soft skills' (effective communication, empathy), and, in addition to quantitative outcomes, also builds on qualitative outcomes. To holistically understand the patient and condition that they have at the time or are living with, it is important to explore what are the other psycho-social factors that impact patients' lives or even predetermine the condition. Healthcare professionals can gain a lot of insights from psychological science but they need to work collaboratively gathering evidence, implementing, and evaluating useful knowledge and treatments. We see the *Practical Health Psychology Blog* as a developing platform where cross-disciplinary conversations and knowledge exchange happens to facilitate better translation of health psychology research into improved patient health.

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Original Article

# Ontologies of behaviour: Current perspectives and future potential in health psychology

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This article is based on a roundtable discussion at the European Health Psychology Conference in Bratislava in August 2022. The roundtable sought to increase awareness of how ontologies have and could be used by health psychologists to answer questions about behaviour.

## What are ontologies?

To advance behavioural science, we need to improve our methods for specifying the things that we study, including behaviour, and the relationships between them. As a recent report by the National Academies of Sciences, Engineering, and Medicine noted: "Progress in the behavioural sciences has been hindered by the use of different terms or descriptions for the same underlying entity or condition; the use of the same term for different entities or concepts; the use of different, poorly correlated measures for the same entity; and the use of measures whose relationship to the phenomena they are measuring is not well understood." (NASEM, 2022, p. 2).

Taxonomies provide a starting point for addressing this issue. In the social sciences, taxonomies are classification systems that group entities (e.g., concepts, objects, processes, and their attributes) by similarity, typically using data (Bailey, 1994). Several taxonomies related to behaviours exist, such as the Behaviour Change Techniques Taxonomy v1 (Michie et al., 2013), the Health Behaviour Taxonomy (Nudelman & Shiloh, 2015) and the International Classification (IC)-Behaviour (Larsen et al., 2021). However, "taxonomic definition is not the same as an adequate description, explanation or analysis of a class of types" (Hodgson, 2019, p. 213); in part because taxonomies rarely delineate the various relations between classes and may lack a logical basis.

Ontologies go beyond taxonomies. They are ways of representing the world that include definitions of uniquely specified categories or classes of entity and their properties, which are characterised as relationships with other classes of entity (Hastings, 2017). Thus, each class of entity in an ontology has: (1) a unique and unambiguous identifier, (2) a label that indicates what the class encompasses, (3) a definition of the class, and (4) a set of defined relationships with other classes of entity. Ontologies are typically hierarchically arranged networks of classes, with some classes being the 'children' of 'parent' classes (e.g., the behaviour 'waltzing' might be a child of the parent class

'dancing'). The formal structure of ontologies allows computerized searching and integration of data, as well as automated inference. For this purpose, a logic-based language for encoding ontologies has been developed, the Web Ontology Language (OWL, W3C, 2012).

## What is the added value of using ontologies?

Ontologies are widely used in many areas of science, notably the Gene Ontology in biology (Ashburner et al., 2000). Ontologies have the potential to address issues that are central to health psychology, including uniting different disciplines, languages, and users (e.g., lay vs. expert) by mapping different terms to describe the same idea (referred to as the 'Jangle fallacy', Kelley, 1927). Ontologies allow different users to agree on the same semantic-free identifier (or unique ID), while allowing for different labels in different namespaces to reflect different practices of usage. OWL even has built-in support for language tags, meaning that it is possible to track how different languages refer to the same concept.

Ontologies can help conceptualise behaviour, interventions, and outcomes, understand the relationships between behaviours, and organise and integrate evidence. Ontologies enable more precise specification of behavioural outcomes and their measurement and provide a way to represent behavioural attributes that can elucidate relationships between them. Ontologies can also facilitate the interpretation and use of evidence by allowing data and evidence to be inspected and interpreted at different hierarchical 'levels'. This enables studies with diverse assessments of behaviour to be aggregated by aligning their outcome measures at an appropriate level.

Ontologies also help identify gaps in evidence (in one sense, ontologies act as maps from which to find unchartered territory), facilitate clear reporting through the use of precisely defined shared concepts, and generate testable hypotheses. For example, using an ontology as a structure for investigating how behaviours are related could help to identify 'core' or 'central' behaviours (behaviours that are likely to co-occur with others and potentially influence them, Nudelman et al., 2019) that can offer targets for interventions.

## Use of ontologies to characterise behaviours

Several ontologies cover behaviours with varying levels of detail and scope (see reviews by Baird et al., 2022, and Braun et al., 2022). However, many ontologies to date do not adhere to principles of good ontology practice (as defined by the Open Biological and Biomedical Ontology (OBO) Foundry, Smith et al., 2007) (Braun et al, 2022). For example, only three of the 28 ontologies identified by Baird et al. (2022) included definitions. It is, however, fair to note that the development and use of ontologies in the social sciences – and health psychology in particular – is still in the early days and new projects are addressing the limitations of past approaches. Below, we describe two examples discussed during the roundtable.

The Human Behaviour-Change Project (HBCP) has developed the Behaviour Change Intervention Ontology (or BCIO), which seeks to provide a comprehensive, systematic framework for representing behaviour change interventions, target populations, settings, target behaviours, and mechanisms of action. It also provides a way to describe intervention evaluations, including study design and study features that affect risk of bias. For example, Encantado et al. (2022) used the BCIO to code features of digital behaviour change interventions for weight loss (e.g., tailoring) and how they were delivered (using the Mode of Delivery ontology v1, Marques et al., 2020).

The TURBBO Project uses ontologies of behaviour

as a framework for examining the relationships between behaviours (Scott et al., 2022). The project has developed an upper ontology that specifies the attributes of behaviour (e.g., that behaviours can be habitual, effortful) that will be linked to existing ontologies that classify and distinguish behaviours. Online tools are being developed that will enable the community to provide information on the relation between specific concepts within the ontology (e.g., a researcher who conducts a study that measures consumption of fruit, vegetables, and alcohol will be able to add the correlation between these behaviours). Further tools will then enable users to query the knowledge base to estimate the relationship between behaviours at different levels (e.g., between physical activity and diet, or more specifically, between walking and carbohydrate intake), similar to tools for conducting dynamic meta-analysis (Shackelford et al., 2021) in other fields (e.g., Röseler, Körner, & Schütz, 2021).

## Challenges to developing ontologies of behaviour

Developing and maintaining ontologies presents challenges, including whether to take a top-down approach to development (e.g., drawing on theory, expert consensus) or bottom-up approach (e.g., statistical clustering of data), how to manage overlap between ontologies, how to map and combine ontologies, and how to update and maintain ontologies. Some of these challenges are addressed below in the section on recommendations (e.g., we suggest that ontologies be built on a common foundational layer, that unique IDs are assigned to concepts), but we start with some conceptual challenges – specifically, that the precise specification that is the strength of ontologies can pose fundamental questions to those working in a discipline about the ideas that they study and work with.

To take a specific example, developing an ontology of behaviour needs to address several challenges: (1) Researchers and practitioners may want to classify behaviours in different ways depending on the purpose of the classification (e.g., 'walking' could be a 'health behaviour', a form of 'physical activity', 'locomotive behaviour', 'commuting behaviour', or even 'expressive behaviour'). (2) Behaviours need to be represented at multiple levels (e.g., 'smoking' can refer to a single episode or repeated episodes over years). (3) We often want to treat not doing things as behaviours (e.g., 'stopping smoking' or 'abstinence from smoking'). (4) Fully characterising behaviours requires more than saying what class they belong to; accurate descriptions of behaviour involve specifying multiple attributes (e.g., a start point, an end-point, intensity, patterning). To address these challenges, the Human Behaviour Ontology as part of the BCIO uses a hierarchy of behaviour classes based on parent classes to which the behaviour will always belong, together with the opportunity to create 'logically defined classes' for specific uses that combine class membership and attributes (e.g., the class 'walking' is always a locomotive behaviour; while a class 'walking for health' is a logical combination of 'walking' and 'health-promoting behaviour').

## Recommendations for health psychologists using and working with ontologies of behaviour, including consideration of methods for developing ontologies

It is clear that ontologies have great potential in the behavioural sciences. However, behavioural scientists will need help to engage with ontologies, particularly if they are not working in collaboration with computer scientists or ontology experts. Shared tools for compiling and working with

ontologies dedicated to the behavioural and social sciences community will help in this regard and this work is underway in the form of the Behavioural and Social Sciences Ontologies (BSSO) Foundry (http://www.bssofoundry.org/): If you are interested in joining this 'community of practice' do sign up and get involved with activities that will be developed over time. Tools for using ontologies are also being developed by the TURBBO and HBCP teams, such as the Ontology Visualisation tool for BSSO ontologies (http://vis.tools.bssofoundry.org/).

Another recommendation is to build ontologies that share the same foundational layer (or 'upper level ontology'), to ensure that they are interoperable, yet can each focus on a different aspect of the overall domain as needed. One suggestion is that this be the Basic Formal Ontology (BFO, https://basic-formal-ontology.org/), which is widely used and serves as the recommended upper level for the OBO Foundry collection of ontologies, facilitating interoperability across domains. It is also used by the BCIO.

Finally, we will need ways to handle the constantly changing, dynamic nature of ontologies. That is, ontologies need to be responsive to improvements and edits, yet provide people with a specific and stable way to refer to entities. This is achieved by strict principles for the evolution of the content: Unique IDs are assigned to entities (such as BCIO:036000 for 'individual human behaviour' in the BCIO). If subsequently refined or subdivided, then new entities are created with new unique IDs that refer back to the original entity, while preserving the original (legacy) entity and ID. For example, the upper ontology in the TURBBO project modelled DOI (digital object identifier) as a class with a new URI (https://purl.org/turbbo/upper_0000149), but added a link to its original URI in the DataCite ontology (http://purl.org/spar/datacite), where it was used as an instance of a class (http://purl.org/spar/datacite/doi). Unique IDs therefore provide a way to refer to entities unambiguously, and link entities between ontologies.

There are plans to establish a Special Interest Group within the European Health Psychology Society for health psychologists working with, or interested in, ontologies. Readers are invited to contact Alison Wright (alison.j.wright@ucl.ac.uk) if they are interested in joining this group.

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Position Paper

# Charting New Territories in Health Psychology: A reflection on the EHPS 2022 'Digital Divide' hybrid roundtable by Chairs, Presenters, and Participants.

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This paper reflects on the roundtable session at the 36th annual conference of the European Health Psychology Society titled *'Mind the digital divide: How to reduce social inequalities in digital health promotion?'*, *chaired by Dr Laura M König and Dr Max J Western*. The session was intended to present contemporary evidence on the existence of a digital divide in health behaviour promotion via two brief presentations of recent evidence syntheses by Dr Eline Smit and Dr Max Western, followed by two short talks on potential underlying mechanisms of the digital divide by Professors Efrat Neter and Falko Sniehotta. Finally, we aimed to explore through a panel discussion and an audience workshop how we, the health psychology community, could focus our research on better understanding and addressing this phenomenon.

In the following, we will discuss how the roundtable was implemented and which aspects were perceived to be most useful from the perspectives of the organising chairs, presenters and participants, to provide input for roundtable organisers at future conferences.

## Mind the digital divide

A review published [by Dr Western and colleagues] in the International Journal of Behavioural Nutrition and Physical Activity was used to set the scene for the round table session. This presented the key, consistent, finding that digital interventions targeting physical activity were of no benefit to people of low socioeconomic status (SES) but were effective for people of high SES who received the same intervention. Using these results as a catalyst, the session, we hoped, would bring expertise from with the European health psychology community to help us unpack the digital divide through proposing psychological or methodological mechanisms that might contribute to this divide, and crucially develop key research questions that health psychologists should pursue to support people of lower SES not be left behind in digital health.

The review presented by Dr Eline Smit was a first attempt at doing so, as it studied 'mHealth' interventions as one specific type of digital interventions, but moved beyond a sole focus on effectiveness to a focus also on uptake and engagement of these interventions, and on whether uptake, engagement and effectiveness differed by a range of inequality indicators, including, but not limited to, SES. The most important conclusion from the review was that evidence for a digital divide in mHealth interventions is limited and mixed, and that some inequality indicators (e.g., the 'usual suspects' of age, gender and education) were more often reported on than others (e.g.,

location). Moreover, there was only one study reporting on the uptake of mHealth interventions.

The following two presentations then focused on underlying mechanisms of the digital divide. Professor Efrat Neter introduced the audience to relevant theoretical constructs from sociology and related disciplines. Most importantly, she highlighted that the 3 digital divides: (1) disadvantaged populations lack access to digital technology including devices and internet; (2) there is a knowledge gap related to constructs such as digital and eHealth literacy (Neter & Brainin, 2012); and (3) the resulting discrepancy in engagement and effectiveness that were addressed in the previous two presentations. Health literacy thus is both one of the major culprits for a digital divide in the health domain, but also a potentially powerful intervention target to move the 'have nots' into the 'haves' side.

Finally, Professor Falko Sniehotta made a few critical remarks on the study of the digital divide. Most importantly, he reminded the audience about the important distinction between the digital divide and social inequalities in health more broadly, that arises independent of the digital context. Furthermore, he pointed out that digital interventions are no *silver bullet*, and that individual patient preferences, including those for analogue instead of digital interventions, need to be respected.

After these four brief presentations, presenters and audience engaged in a panel discussion, getting everyone warmed up for the audience workshop we had lined up, in order to generate an overview of 1) the key methodological challenges of studying the digital divide (from a health psychology perspective), and 2) what research questions should be addressed by health psychologists to better understand the reasons for/ mechanisms of, and reduce social inequalities in digital health. The results of these discussions will be summarized in a white paper to stimulate further discussions and action in the field.

## Reflections on organising and participating in a hybrid roundtable

## Chairs of the roundtable, Dr Laura M König and Dr Max Western:

"The idea for this roundtable arose when we discovered at the virtual EHPS conference in 2021 that we had both embarked upon similar projects reviewing evidence on the equality of benefit from digital interventions targeting weight loss and physical activity (Szinay et al., 2022; Western et al., 2021). Our motives for these respective projects stemmed from our own interest in the growing field of *digital health psychology* and a recognition that digital technologies were rapidly infiltrating many aspects of health promotion and care. There had also been an apparent favourable portrayal of the benefits of digital technologies in this context, both in evaluations of technologies' efficacy and cost-effectiveness for supporting efforts to change health behaviours and as a means to reduce health inequalities given the ubiquitous access to computers, the internet, smartphones etc. - even in rural areas. Knowing what we know about publication and selection bias in research, our respective projects sought to determine if this projected reduction in health inequalities that digital interventions may afford, was supported by the published literature."

Reflecting on the session, we were extremely buoyed by the attendance of over 50 delegates who so willingly engaged in the small group discussions that took place following the presenter talks. We were also delighted to receive such thought-provoking questions from delegates during the panel discussion section of the session, which suggested that our presenters had sufficiently inflamed the imagination of our 'eHealth'

researching contemporaries. Indeed, such eager participation left us longing for more time for discussion. As chairs we took delight that the session closed with a collective determination to ensure the inquiry did not stop in the room, and that the future would bring opportunities to tackle the digital divide head on."

## Presenter at the roundtable, Dr Eline Smit:

"After the talks and initial Q&A, all four presenters were asked to facilitate a break-out discussion, in which a smaller group of attendees aimed to provide an answer to these two questions. As someone that facilitated one such break-out discussion, I was excited to learn how knowledgeable, how willing to share their ideas and experiences, and how motivated attendees were to further understand, but even more so to reduce, the digital divide.

Our discussion was very focussed, and with a wonderful note-taker by my side, it was not difficult for me to summarize our discussion and present that summary to the audience at the end of the session. With the research agenda taking form, I am myself even more motivated than before to continue to pay attention to digital inequalities in my research, and to focus some of my research explicitly on further understanding - and ultimately reducing - this phenomenon."

## Participants Dr Heide Busse (online) and Dr Ben Ainsworth (in person)

"With clear instructions from the session chairs, the group discussions had little of the tentative discussion that often typifies academics from different areas searching for common ground. Instead, both in-person and online groups were quickly engaged, drawing on examples from their own research in health interventions and reflecting on whether the speakers had highlighted opportunities to critique and improve our work.

In most of the other talks throughout the conference it had been hard to connect with other participants and speakers, both online and in person. However, this was not the case in this session, with its specific design to facilitate discussion and interaction. From both of our perspectives, online [Heide Busse] and in person [Ben Ainsworth], we enjoyed hugely the opportunity for a structured discussion with other participants - and for the online participants, it was actually the only chance throughout the whole conference to actively speak with other online participants beyond the (very limited) Zoom chat.

Despite being entirely separate - one spanning an entire continent, the other based in a small circle of chairs in a hotel room in Bratislava - the online and in-person discussions had almost identical perspectives. After initial introductions and reflections on how our own work might have been impacted by the digital divide, we shared concerns about using digital interventions as a definitive solution for a whole range of topics and populations, considering that we felt that 'one size does not fit all' and that further research is needed to understand when digital interventions should be supported by face-to-face elements.

Of course, there were some practical differences between the on-line and in-person groups. Whilst the speakers were able to join the in-person talk, their ability to touch base with virtual attendees was limited. Future roundtables might consider a hybrid panel, with online facilitators to match the in-person experience. Nevertheless, both of us left the roundtable session feeling well connected to both in-person and online delegates, and motivated to further our own research armed with the knowledge generated from the discussions."

## Next steps

Following on from the session, the chairs, presenters and participants who have elected to stay involved are working on a White Paper that will summarise the key session content along with a narrative review of extent literature. A principal aim of this paper will be to translate the insightful discussions into an agenda of essential directions and research questions for health psychologists and behavioural scientists to investigate - and so hopefully also provide input for EHPS conferences in the future and a starting point for future collaborations among the society's attendees.

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Report

# CREATE activities for early career researchers 2023

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The *Collaborative Research And Training in the EHPS* (CREATE) network is a sub-group of the European Health Psychology Society (EHPS), which aims to connect and support European and international researchers from the start of their academic careers, through to further progression. We host a number of activities throughout the year, to help achieve our goals of supporting early career researchers (ECRs). Each year we adapt our activities and respond to what we hear from ECRs to ensure we are improving and supporting different needs.

We are excited to announce our plans and opportunities for this year in this article. We have some of our usual activities planned, as well as new ones! We would also like to use this opportunity to introduce ourselves as the CREATE Executive Committee (EC) 2023, and to reach and connect with as many ECRs in health psychology as possible.

## Firstly, who are we?

CREATE is a network of and for health psychology ECRs that offers networking and learning opportunities. CREATE's activities are organised by the CREATE EC, who are elected to their posts. Our EC consists of six members. At the beginning of this year, we said farewell to our former Secretary, Niki Warner, and said hello to our new Secretary Alea Ruf (Goethe University Frankfurt, Germany)! We warmly welcome Alea and send our very best wishes to Niki, and thank her for her time as Secretary. Alea joins:

-Chairperson, Dr Claire Reidy (University of Oxford, UK),

-Treasurer, Dr Louise Foley (University of Limerick, Ireland),

-Application Manager and Communications Officer, Dr Maria Blöchl (Charité Berlin, Germany),

-Webmaster, Maya Braun (Ghent University, Belgium), and

-Grant Master and Liaison Officer, Dr Daniella Watson (King's College London, UK).

For details of the Executive Committee and their roles, visit our website.

## What do we do?

To support ECRs in their health psychology research and in fostering international relationships and collaborations, we plan a range of training and networking opportunities. Two of our key events are organised around the EHPS annual conference, including a **pre-conference CREATE workshop**, and **'Meet the Expert'** sessions with the conference keynote speakers. We also offer **grants** to support attendance at the pre-conference CREATE workshop. Since 2020, we have organised additional **webinars** to support and share knowledge between CREATE members in a virtual space. EC members are also actively involved in or

**Image 1: The CREATE Executive Committee at our hybrid Winter meeting in Bremen, Germany, January 2023 (L-R, top row, Claire Reidy, Daniella Watson, bottom row, Louise Foley, Niki Warner, Maria Blöchl, Maya Braun)**

collaborate with a number of committees and groups (for example, conference planning, conference tracks, sessions and special interest groups). In addition, we connect ECRs and share opportunities via **social media** throughout the year.

## Our annual CREATE workshop

CREATE organises a 2-day workshop each year, which takes place immediately prior to the annual EHPS conference. These workshops are led by experts within the field of health psychology, providing opportunities and support to enhance knowledge and skills. The workshop also provides key networking opportunities to familiarise ECRs with peers, and to create strong, long-lasting connections before the conference even begins.

Topics vary every year and are chosen through discussions with fellow ECRs during workshops and other engagements.

The CREATE workshop also offers great opportunities for networking outside of the educational components, including a CREATE dinner, a city tour and a pre-workshop networking event. Workshop participants often continue to strengthen new social and professional connections over the course of the conference.

Last summer, we conducted the first face-to-face workshop since 2019, which was on *'Digitalising Health Psychology research to enhance our science: Opening the doors to innovative measurement, design and intervention approaches'*. The workshop was facilitated by the fantastic Prof Felix Naughton and Dr OIga Perski.

This year, we are excited to announce another exciting and very interactive face-to-face workshop on 'Communicating health psychology research to lay audiences'. The workshop will take place on Sunday 3rd and Monday 4th September (all day), with a social networking activity on Saturday 2nd September (afternoon).

This workshop will be focused on communicating your research to people outside of the research world, where you will have a chance to delve into the topic of science communication! Professor Dr Laura König (University of Bayreuth, Germany) and Dr Heide Busse (BIPS Bremen, Germany) will discuss why engaging in science communication is rewarding for health psychology researchers at all career stages, explore how to develop and plan a science communication activity, discover different avenues for the implementation of such activities, and look at examples for do's and don'ts in science communication.

The deadline for applications for this year's workshop is Friday 2nd June 2023. The registration


**Image 2: CREATE Workshop Flyer 2023**

fees are as follows: full registration fee: €135; reduced fee for eligible countries: €100. You can check whether you are eligible for the reduced fee here. The registration fee includes the two-day workshop, lunch and dinner on the first day of the workshop, coffee breaks, and a networking event including a guided city tour. Applications for the workshop are now open.

For more information on current and past CREATE workshops, check our website. You can also hear more about this workshop and our fantastic workshop facilitators through our Twitter account - @EHPSCreaters.

## Funding

CREATE also offers funding opportunities for CREATE workshop registration, EHPS conference registration, accommodation and travel. Find out more about eligibility and the selection process here. This year, CREATE workshop grant applications are open until Monday 22nd May.

## Meet the Expert Sessions 2023!

We also organise smaller group sessions with keynote speakers of the EHPS annual conference during the conference. These sessions are an exciting opportunity for a group of ECRs to meet, discuss, and network with a senior researcher in health psychology in a friendly and relaxed atmosphere. We will be announcing our Meet the Expert (MTE) sessions shortly!

**Keep an eye on our Twitter page, mailing list, or our webpage for the opening of applications for the MTE sessions!**

## Webinars 2023

At CREATE, we also aim to host webinars relevant to ECRs in the domain of health psychology. This year we have already held our first webinar, on 24th April about 'Conference grants for EHPS and beyond: possibilities and how to successfully apply'. This was a fantastic session, which was run by our EC members, Daniella, Maria and Alea. We covered what grants are available in the EHPS, what the criteria are for grants, when the deadlines are, and what the process is for applying. We also explored how to improve your chances of being successful in writing a conference grant application, including an example from a past grant awardee!

**We also have one more webinar coming up** before the next EHPS conference. This will focus on how to make the most out of the EHPS conference and will be hosted by Maya Braun (CREATE) and Dr Lauren Gatting (Synergy) on 29th June at 4 pm (CEST). This webinar will cover **all you need to know before, during, and after the conference**, including, how to prepare for the conference (e.g., what to bring, the scientific program), how to get involved in the EHPS (e.g., the subdivisions and special interest groups), and what to do during the conference (e.g., choosing sessions, networking tips and opportunities, and sightseeing). If you are keen to know more, check out our webinars page and keep an eye on our Twitter feed, mailing list, or webpage.

## Involvement in this year's EHPS conference and Flashlight Talks

For the upcoming EHPS conference in Bremen, we were also delighted to be actively involved in the Scientific Committee. Together with Julia Koller (the ECR representative of the Health Psychology Division of the German Association for Psychology), our EC member Dr Maria Blöchl has been representing the interests of ECRs in the development of the Scientific Programme. As part of this endeavour, we are happy to announce that CREATE has been co-organising a new presentation format to foster ECRs' contribution to the conference: Flashlight Talk sessions. In these sessions, up to 8 ECRs will give 5-minute talks about their work. We received many submissions for the Flashlight Talks and will be announcing the speakers soon. We look forward to all the exciting talks as well as connecting with you in the Flashlight Talk sessions in Bremen!

## Opportunities to get involved in the CREATE EC

If you are interested in getting more involved in the EHPS, and like the look of the work that we do, please do consider applying for a position in our CREATE EC. Three of the CREATE committee members will be stepping down after the 2023 Workshop, and so there will be an opportunity for you to apply for a role. While Dr Claire Reidy will be stepping down as Chair, Maya Braun will be taking on this role. This will leave the positon of Webmaster open. The roles of Application Manager and Communications Officer, and Grant Master and Liaison Officer will also be available with Dr Maria Blöch and Dr Daniella Watson stepping down from these roles. Applications will open during the EHPS conference 2023. Please do consider applying and do ask us any questions you may have.

## Participating in CREATE activities

The activities of the CREATE network are open to all ECRs working in the field of health psychology. To attend the workshop organised by CREATE, you are required to have EHPS membership. For more information about what activities we are running,

and how to take part, check out our website.

To keep informed about the latest CREATE activities, follow us on Twitter@EHPSCreaters, Facebook @CreateEhps and LinkedIn, check out our website or email us at create@ehps.net.

To join the CREATE mailing list, please subscribe here.

We look forward to connecting with you soon, online and in Bremen!

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