

*Addressing the challenges of assessing
doctor competence with innovative
solutions: reflections from our own
research and the collective learning at the
Division of Health Psychology (DHP)
annual conference 2023*

Article

Accepted Version

Hodgson, K., Lamport, D. ORCID: <https://orcid.org/0000-0002-4592-0439> and Laville, A. (2024) Addressing the challenges of assessing doctor competence with innovative solutions: reflections from our own research and the collective learning at the Division of Health Psychology (DHP) annual conference 2023. *Healthy Psychology Update*, 33 (1). ISSN 2396-8729 doi: <https://doi.org/10.53841/bpshpu.2024.33.1.27> Available at <https://centaur.reading.ac.uk/116801/>

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Identification Number/DOI: <https://doi.org/10.53841/bpshpu.2024.33.1.27>
<<https://doi.org/10.53841/bpshpu.2024.33.1.27>>

Publisher: British Psychological Society

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Event Review Article

*Addressing the challenges of assessing doctor competence with innovative solutions:
Reflections from our own research and the collective learning at the Division of Health
Psychology (DHP) Annual Conference 2023*

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The British Psychological Society (BPS) Division of Health Psychology (DHP) Conference is pivotal in advancing research and evidence-based practices. It supports health psychologists' professional development to maintain currency and meaningful impact.

The Division of Health Psychology (DHP) Annual Conference 2023

The DHP Annual Conference 2023 was a remarkable immersion in the current health psychology landscape. The event featured original oral and poster research presentations and workshops covering a breadth of topics, pushing the boundaries of our professional understanding, from the recent Covid-19 challenges to supporting resettlement of refugees (Dr Mike Wells). Keynote speakers addressed diverse topics, including behavioural interventions in clinical trials (Dr Harbinder Sandhy), public health responsibilities (Dr Greg Fell), and Professor Felix Naughton's engaging presentation on considering individual differences. These presentations encouraged attendees to contemplate the evolving field of health psychology. Workshops and unstructured discussions explored the impact of implementation (Dr Julie Bayley), intervention sustainability (Professor Richard Cooke), and roles in work and wellbeing (Dr Julie Denning and Dr Anuska Randolph-Stephens). Valuable networking opportunities fostered idea exchange, experience sharing, connections and potential collaborations.

Current challenges and innovative solutions

The theme of the 2023 conference was 'Health Psychology: Current Challenges and Innovative Solutions'. Health psychology is a field that continually faces challenges as it pursues improved practice, which it addresses through research, reflection and innovation. An overview of the key challenges and innovative solutions that we identified across the conference are presented in Table 1. The conference highlighted that health psychology is a dynamic field that

continuously evolves, adapts and responds to new challenges, harnessing innovative approaches. Health psychology's future will likely be influenced by various factors, including global health challenges such as infectious disease outbreaks and climate-related health issues, which must be addressed through research and evidence-based practice. Key aspects discussed at the conference that may shape the future of health psychology include increased emphasis on preventive healthcare, greater prominence of patient-centred care models and increasing use of technological digital health interventions.

[TABLE 1 HERE]

Doctor competence - our research contributions at the conference

We were honoured to present a conference poster and an oral presentation on the challenges and solutions identified at the University of Reading's Psychology Department in our research on health-mediated effects on competence in doctors.

Our conference poster, titled '*Bridging research and practice: The role of health psychology in evaluating doctors' competence*', addressed the challenges and solutions in measuring competence. Our prior systematic review of 153 competence assessment measures (Hodgson et al., 2021) identified that few studies explicitly defined or operationalised the construct, with no consensus regarding conceptualisation nor assessment standardisation. Whilst clinical assessment measures emphasised knowledge and procedural skills, research conceptualisations prioritised interpersonal, psychological, and ethical competencies. We also sought to conceptualise competence by understanding the psychosystemic context in delineating competence, qualitatively exploring a critical-case-expert perspective from a Senior Manager of the Investigation Team in the Risk Assessment Directorate from The General Medical Council which regulates the competence standards necessary for patient safety in the UK. The

domains identified by the expert in order of importance were; patient care, knowledge, communication, professionalism, and practice-based-learning. Notably, no health-related risk factors impacting competence were identified. Although doctors' health is imperative for their wellbeing, employment retention, and competent practice (Shapiro et al., 2019), biopsychosocial mediators of doctors' competence are often overlooked. Therefore, we developed a comprehensive, evidence-based 12-domain framework and bank of measures that enabled us to better understand competence by developing perceptible, operational, and measurable conceptualisation frameworks that incorporated the biopsychosocial mediating factors. A summary of the key challenges in our research and identified solutions are summarised in Table 2.

[TABLE 2 HERE]

Our oral presentation entitled '*The challenges associated with health behaviour interventions to augment doctor competence*' was delivered in the grand but somewhat intimidating ballroom; however, the chair, Dr Wendy Maltinsky and the delegates were supportively engaged. This presentation reviewed the learning from designing a health behaviour intervention to augment competence during the pandemic through exploratory and experimental methodologies adapted from the 'Step-by-Step Method for Designing Behaviour Change Interventions' (Michie et al., 2016).

Phase one examined values, attitudes and beliefs that influence health protective behaviours amongst doctors through participatory social action research to leverage change through Health Belief Model-driven enquiry methods (Rosenstock et al., 1988) in individual depth interviews, focus groups, and an occupational context survey. Concerningly, over 60% of doctors reported that they were rarely able to attend to their on-shift health needs, with over 80% stating that

this situation had worsened during the pandemic due to increased patient throughput, Covid-19-related staff absences, and increased PPE use (creating elevated body temperature, barriers to nutrition and toileting).

Phase two applied a biopsychosocial formulation approach using synthesised risk modelling of factors to understand the predisposing, precipitating, perpetuating and protective health behaviour mechanisms mediating competence, thus informing the intervention target. The formulation identified that doctors are prone to on-shift dehydration, which can impair cognitive function (El-Sharkawy et al., 2016). We assessed the prevalence of on-shift dehydration and its impact on measures of competence (Hodgson et al., 2022) in a study conducted during the pandemic, including 61 National Health Service (NHS) doctors. Concerningly, a significant number of doctors did not hydrate or eat sufficiently before or during their shift (evidenced by urine specific gravity and ketones) and reduced urinary pH indicative of psychophysiological stress. Despite a very high prevalence of on-shift dehydration, doctors perceived their competence as unimpaired in self-assessment.

Paradoxically, a health service promoting wellbeing rewards diminished self-care. Challenging this demands individual and systemic transmutation to collapse the dichotomy between the health needs of doctors and patients. Based on these results, in phase three, we designed novel interventions to motivate on-shift hydration as a health behaviour targeted at state-based competence in a mechanism of action exploration to establish the potential examining hydration as a dynamic biological buffer for competence. Acknowledging that failure to hydrate is one aspect of a broader problem; our interventions considered the functional, psychosocial and psychosystemic barriers and facilitators. This was evaluated as a mechanism of change conceptual test that considered beliefs, attitudes, and values, utilising transtheoretical

model as leverage and applying the 12-domain framework approach to competence evaluation. The benefits and challenges of this approach were discussed. Health psychology can play an important role in designing and evaluating the impact of interventions applied to improve aspects of doctors' on-shift health behaviour that directly augment state-based competence, improving doctors' health and protecting patient safety.

How can we learn from the challenges and solutions?

Despite our challenges researching doctors during a pandemic, applying established health psychology frameworks navigated a progressive and responsive approach. We have yet to pinpoint a single best solution, but the exciting aspect of identifying challenges is that they invite solutions. One of the critical strengths of health psychology is understanding the complex interacting factors which influence health improvement that will subsequently benefit individuals, those around them and the health of the wider population. A commendable disciplinary humility exists in the DHP, that professionals can explore the challenges and embrace experimentation of responsive, innovative solutions.

The importance of DHP conferences in a dynamic and evolving field

DHP conferences are vital in advancing the field, facilitating collaboration, and ensuring that professionals can access the latest research and best practices, providing a concentrated opportunity to discuss, debate, clarify new concepts, adopt innovative approaches, challenge assumptions, and stimulate critical thinking. In conclusion, the conference was an enriching experience that surpassed expectations and was a testament to the dynamism and significance of the field. It was a reminder of the pivotal role of health psychology and the importance of staying at the forefront of this evolving discipline. It inspired and equipped with new

knowledge and perspectives that will enhance best practice and contribute to advancing the field of health psychology.

Word count (excluding tables and figures): 1267

Acknowledgements

Writing an article for BPS publication *Health Psychology Update* is an honour. We are grateful for the dedicated efforts of the editorial team, who provide a space for health psychologists to share research findings, insights, and expertise. They facilitate the publication of articles, encompassing diverse disciplines within health psychology, and feature experiences, challenges, successes, and division updates, ensuring members are informed about developments within the division.

The conference was impeccably organised with a responsive organising committee (including Dr Makinder Chahal and Dr Atiya Kamal), and the well-planned organisation and diligence by Sophie Lancaster and the Redactive events team was evident. We thank the DHP for the opportunity to present the learning from our research.

Kirsty Hodgson expresses profound gratitude for the conference bursary awarded by DHP: This generous support has supported my attendance and contribution to the Annual Conference 2023 and has enriched my professional development. I attended thought-provoking sessions during the conference, engaged in insightful discussions and connected with professionals whose work has inspired me for years. The support I received from DHP has motivated me to pursue excellence and affirmed my dedication to making a meaningful impact in the field. I am committed to using the knowledge and insights gained during the conference to contribute positively to advancing health psychology.

Thanks to the General Medical Council and all the NHS doctors who generously offered their time, insight, and support in our research.

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Tables

Table 1.

Summary of the critical challenges and innovative solutions identified at the conference

Challenges	Innovative Solutions
Health behaviour change can be challenging, and many people need help.	Personalised interventions leveraging technology to monitor health, track progress and provide real-time feedback can enhance engagement with behaviour change. Applying behavioural economics principles encourages healthy behaviours through incentives, prompts, and choice architecture .
Health stigma can prevent help-seeking, resulting in untreated health conditions.	Anti-stigma campaigns and telehealth services provide anonymity and accessibility, reducing barriers to seeking help. Positive psychology interventions focusing on strengths, resilience, and wellbeing can enhance health and quality of life.
Demographic-related health disparities hinder fair healthcare access, leading to poorer health outcomes.	Community-based interventions can address social determinants of health and reduce disparities. Implementing culturally tailored interventions and addressing social determinants of health can reduce inequities. Tailoring precision health behaviour interventions based on biopsychosocial factors can improve outcomes.
Chronic ill health requires complex and overwhelming self-care regimens.	Coordinating integrated healthcare that includes shared decision-making and support can improve patient outcomes, particularly for individuals with comorbid and chronic conditions.
Professional burnout affects staff wellbeing and care quality.	Implementing wellness programs and supporting healthcare professionals can mitigate burnout and improve patient care.

Table 2.

Summary of the key challenges and recommended solutions identified in our conference poster

Key Identified Challenges	Recommended Solutions
There is no consistent conceptualisation of competence in doctors or their assessors	A broader biopsychosocial conceptual framework of state-based determinants of competence and associated measures.
The lack of standardised doctor competence measurement, inconsistent, diverse measures, and assessor bias pose challenges for reliable and valid assessments.	To establish a battery of instruments that provide a detailed assessment of competence in doctors that has the potential to be adaptable to varied research and assessment contexts
The systemic culture promotes state-based competence impairment by encouraging poor on-shift health-protective behaviours.	To comprehensively grasp the systemic landscape and identify mechanisms that may improve wellbeing and augment competence