



THE COGNITION ROOM: Identity Building in an Extended Reality to Support Workforce Re-alignment

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Understanding the human system

The cognitive experience of a human being is not an isolated occurrence taking place solely in the brain. A person's unique physiological characteristics form part of an intricate, complex system that extends into and is impacted by their environment. In the nursing profession, a number of studies describe exhaustion and burnout, leading to the design of, for example, such innovative wellbeing approaches as a health workplace toolkit (RCN, 2023). Additional research suggests supportive work designs and scheduling interventions, to promote rest-time and offer pause for reflection (Persolja, 2023). Workforce related fatigue in nurses who are practicing students as well as those on the front line can be impacted through a series of events that often present as contributors to stress, but don't always reveal a full story. Additionally, nurses might navigate in and out of the profession seeking any form of respite to unburden the emotional weight.

An holistic self-identity

Gaining understanding of a person's whole self, in relation to socio-positioning in life, their experiences, the impact of stressors on the multi-functional nervous system, as well as how they view themselves existentially, is not a straightforward task. Particularly in a conventional scenario, it is a challenge to enter discussion in a single therapeutic session based on multidimensional facets of a person's wellbeing. Additionally, the environment or setting may not always be conducive to a person making sense of their reality. Technologies of varying descriptions can play a critical role, where information and health management can become available literally at the click of a button. Part of the NHS priorities and operational planning guidance describes putting the required digital tools in place to support those in need with high quality information equipping them to take control over their health and care (NHS, 2023). What this offers in a context of nurses who might feel depleted, is an opportunity to become actively involved in working toward solutions instead of procrastination that could lead to further issues. An emerging study called: The Cognition Room, will seek to address this. It will support an urgent need of the NHS to recruit more than 100,000 nurses, by ensuring the needs of those currently transitioning

in and out of active service, are fully met. A key focus of this innovative platform is to provide a rejuvenating, walk-in setting where nurses can access a range of virtual rooms through immersive technology. The interactive content will specifically link to experiential identity-building based on mental health, physical health, wellbeing and mindfulness.

The critical importance of environment

The aesthetics of an environment play a key role in how a person behaves in any particular setting; such as its shape, mood and the architecture of its features. The impact of the built environment on mental health outcomes is a neglected area (Liddicoat, Badcock, Killackey, 2020), and there have been pleas for a specific focus on mental health settings and outcomes associated with physical and social environments (Curtis, 2010). Environmental qualities such as visual imagery of nature settings can impact on temperament, improve satisfaction and attitudes, as well as an environment having visual access to nature, being deinstitutionalised and organised (McCuskey Shepley et al. 2017). A study by Sui et al. explored the impact of physical environments on individuals receiving mental health treatment, with views reflecting impact across the following dimensions: sensory elements, engagement, social relational including privacy and connection and affective experiences, including feeling safe, calm and in control (Sui et al., 2023). This indicates that ongoing studies could explore co-production of the design of mental healthcare environments, through direct input by potential service users. Further studies and reviews linked to mental health and architecture point towards the physical space being a contributor to stress, where more humanistic considerations could alleviate these issues (Connellan et al., 2013; Mazuch, Stephen, 2005).

A digital therapeutic approach in extended reality

The Cognition Room study will begin with a scoping review and build towards demonstrating the validity of a proof-of-concept prototype, co-designed with up to 180 nursing professionals from all ranks, including up to 70 who have chosen to work within the Nursing and Midwifery Competence Test Centre (CTC) at Northumbria University. Of these, most have worked across acute services in senior clinical posts as nurses and midwives, where, for a variety of reasons they have chosen to continue their careers as examiners of overseas graduate nurses seeking to work in the NHS. Many have become weary of the constant demands of acute service delivery and as clinical staff have a wealth of knowledge, experience and support the international nurse agenda. What an approach such as The Cognition Room represents here, is an emerging way to reimagine healthcare support in a context of supporting the needs of the UK's vital services. Here, nurses who might feel disillusioned with a lack of autonomy in one reality, can embody a space designed to nurture them back to restoring faith, starting with themselves.

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