Music and dementia care: Future directions for AgeTech. A. Sixsmith, D. Hepdogan, M. Fang, A. Clements-Cortes, K. Overy. *Gerontechnology* 25(s)

Purpose Cognitive decline and dementia have a significant impact on individuals, families, communities, and economies. Although no effective cures exist, modifiable risk factors provide an opportunity to delay or prevent cognitive decline through lifestyle interventions [1}. Music is important in the everyday lives of people with dementia and their caregivers, both therapeutically and recreationally [2]. Music-based interventions (MBIs) show [promise for improving cognitive function, overall health, and well-being in ageing populations [3]. This paper presents work carried out in a joint Canada/UK collaboration to examine the potential of music-based interventions in the area of cognitive health. **Method** This early-stage visioning project aimed to identify priorities for future research and innovation at the intersection of cognitive health and MBIs. Interdisciplinary research teams from Canada and Scotland engaged in in-person workshops and virtual dialogues to review evidence and explore future directions for MBIs and cognitive health. The Primary Investigators, faculty, and graduate students involved in the project were drawn from the fields of gerontology, music, music therapy, cognitive health, and dementia, with strong connections and partnerships with community-based organizations. To facilitate collaboration, a series of online meetings, workshops, and offline working were convened to brainstorm, reflect, foster critical thinking and develop ideas for future research. Participants provided a short text on what they felt were key areas for future research in music and dementia care. These were thematically analyzed and then discussed and agreed in subsequent workshop meetings. **Results and discussion** Music technologies emerged as a key theme in this dialogue, highlighting their potential to advance dementia care. Technology-based solutions offer scalable, and accessible alternatives to support and expand music use in dementia care [4] and for promoting cognitive health generally and can take different forms including music listening devices and music-making tools adapted to the needs of different users. Future research can leverage technologies such as music streaming, interactive large language models, and online platforms for social music-making to augment the role of music in dementia care and music therapy. A major limitation is that technologies are typically designed by individuals with limited experience of the everyday challenges faced by older people, particularly those with dementia, often limiting accessibility and usability [5]. Technologies need to be aligned with lived contexts of people with dementia, caregivers, and care environments, demanding participatory approaches to design and development. Further research is required to evaluate outcomes and impact in order to provide a strong evidence base for adoption and implementation.

References

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