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**Article:**

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Alzheimer's Association International Conference 2023 Abstract:  
Dementia Care and Psychosocial Factors:

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TITLE: Designing new musical technologies for wellbeing – exploring the needs and preferences of those living with dementia

#### BACKGROUND

Music has been found to provide numerous health and wellbeing benefits for people living with dementia. It is also quite open in terms of the forms of engagement it affords, offering numerous different ways to listen, play and create. Although technology has the potential to reduce barriers that people with dementia face when attempting to engage with music, little has been designed with them in mind. This study seeks to understand: i) the needs, rewards, and barriers that people with dementia and their carers face when engaging with music in their daily lives, and ii) how any specifically designed future musical interfaces will look and react.

#### METHOD

A survey using a mixture of qualitative and quantitative questions was distributed online to people living with mild cognitive impairment or dementia and to those that provide care for them. Questions asked about motivations for engagement, contexts for engagement, barriers and enabling factors, the comparative importance of various musical activities, and the technologies people living with dementia currently use and why.

#### RESULTS

The main tools for listening include smartphone apps, radio, virtual assistants, and YouTube. Most participants listen to music on multiple devices, with its ease of use, accessibility, and convenience for their current listening environment frequently influencing their choice. They also presented a wide range of motivations for engaging with music, but a majority of participants agreed that "feeling like myself" is their most important motivator. Most participants thought it was very important for devices to offer choice. It should also have a simple way for them to turn it off or switch to a safe song if they hear a distressing song or it experiences signal loss.

#### CONCLUSIONS

The findings highlight that people living with dementia have diverse individual motivations for music, and they want it to perform different functions at different times (e.g. sometimes aiding in their relaxation and sometimes connecting them with others). The findings point to fruitful future directions for technology development: i) ready-to-use tools that can adapt to changing interests, and ii) tools that make it easy to access choice and variety while safeguarding against distress from unwanted or unexpected events.