

IC - (20796) - DEVELOPING A NOVEL AUGMENTED REALITY TOOL FOR ASSESSING HOME ACCESSIBILITY FOR AGING IN PLACE

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Background and objectives

Home modification interventions can remedy deficiencies in the home environments of the growing number of older adults that want to age in place. Conceptualized as biopsychosocial in nature, these interventions are most often informed by systematic assessment and delivered by skilled occupational therapy practitioners employed in the home health care setting. However, a shortage of the occupational therapy workforce hinders this approach, especially in rural areas. Furthermore, on a structural level, this health care approach inhibits systematic documentation and dissemination of architectural information that can favorably affect the functional independence and safety of older adults at home at a larger scale.

Process and methods (for empirical research)

To address these gaps in practice, we used an iterative co-design process to develop **a first prototype of a novel augmented reality home assessment tool (ARHAT) that can be utilized more rapidly by both individuals in and outside of health care, as well as performed either on or off-site**. The ARHAT is theoretically based on the tripartite model of person-environment-activities (Law et al., 1996), and draws from regional accessibility guidelines and multiple established home environment assessment tools, such as the Housing Enabler (Iwarsson et al., 1996), I-HOPE (Stark et al., 2010), HESTIA (Burns et al. 2017), and CASPAR (Sanford et al., 2002).

Main results (or main arguments in the case of critical reviews)

As a result, the tool includes four different approaches to home assessment: (1) by disability types, (2) by spaces, (3) by activity types, and (4) the whole house. Our next steps include content validation and usability and acceptability testing by an interprofessional panel of experts. Information gleaned from the expert panel will be used to further refine the ARHAT.

Implications for research and practice/policy | Importance and originality of the contribution

Ultimately, it is our hope that ARHAT will have a transformative impact for major stakeholders involved in supporting housing design and aging in place, thereby reaching and **making a difference in the lives of more older adults**