

ORAL PAPER PRESENTATION 1: HOUSING AND DAILY LIVING

Multi-criteria evaluation of senior housing, based on their future needs

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Purpose As the quality of life (QoL) is influenced by the global challenges of the 21st century, such as aging societies, especially in highly developed countries, there is an increasing interest in measuring liveability. The quality of the built environment has a strong impact on the quality of life of its inhabitants (Abousaeidi et al., 2020), and the dwelling is a spatial unit that is particularly important in supporting the health and well-being of ageing people (Feng et al., 2018). The idea of age-proof houses is not a brand new concept, but needs to be developed, based on new trends and sociodemographic conditions. Evaluation of existing housing areas must be complementary with new spatial needs of seniors and evolving knowledge, their capacities and abilities (Spence, 2020). Re-defining criteria of quality of housing spaces for seniors is a key for creating future tools and solutions for new recommendations for housing architecture. Especially the Digital Assistive Technologies (DAT) must be considered. As the QoL is a complex structure, including both objective and subjective indicators, the perceptual quality of older users of space should be considered as one of the key elements of the assessment. **Method** Based on the comparative analysis and synthesis of assessment models developed by scholars, the new set of criteria have been developed (see Figure 1). Each criteria includes the perceptual quality of older people. The group of experts prioritized criteria in pair-wise comparisons and acquired their weights relatively. The model can be applied to compare and measure the effectiveness of housing design in terms of age-friendliness. The research will be preceded by an overview of housing typology for older people. **Results and Discussion** Consequently, research presents a new set of criteria based on literature studies, including aspects of accessibility, functionality/robustness, aesthetic, personalisation, and sensory comfort/ richness (Bentley et al., 2005; Feng et al., 2018), extended with affordability, innovation & technology, and environmental friendliness, that can significantly increase the quality of senior citizens' life. Aforementioned criteria combine subcriteria related to inclusive design and ageing in place with assistive technologies. Thus, they are highly relevant to the field of gerontechnology. On the basis of such a multi-criteria model the recommendations for architects and communities on how to adapt and improve existing housing areas for older adults and what characteristics are crucial to consider during the design process, will be developed. The role of technology in improving diagnosed gaps in housing for older people may turn out to be essential.

References

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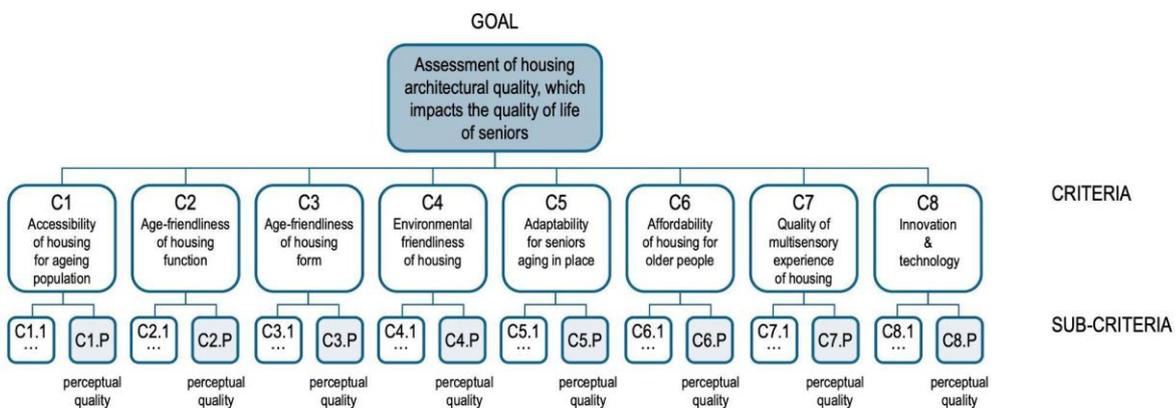


Figure 1. Multi-criteria model for the assessment of housing architectural quality, which impacts the quality of life of seniors