OPP: HEALTHY INCLUSIVE ENVIRONMENTS & HEALING ARCHITECTURE

Senior involvement to validate criteria and metrics for assessing the quality of urban space A. Ptak-Woiciechowska & A. Gawlak

Purpose The research is a continuation of studies carried out in 2020 at the Faculty of Architecture at Poznan University of Technology in the field of creating architectural spaces that support the aging process. Assessing the urban quality of life (QoL) and the concept of age-friendly cities is not a new idea, but it requires further development to address new challenges and sociodemographic conditions (Ptak-Wojciechowska et al., 2022). Many publications devoted to the QoL assessment and the role of the built environment have been already published. However, the aspect of the quality of spatial structure concerning the health and well-being of ageing societies has been underestimated. In gerontological studies, there are insightful publications on the influence of the Person-Environment Fit on the residential satisfaction of older people (Kahana et al., 2003; Lawton, 1982). Yet, existing assessment frameworks are insufficient to comprehensively measure the spatial structure of a city on a neighbourhood level and its impact on the QoL of older individuals (Gawlak et al., 2021; Ptak-Wojciechowska et al., 2021). Moreover, to the best of the authors' knowledge, there is no study where architects and seniors are involved as groups of decision-makers in the process of formulating criteria and metrics for a city's spatial structure assessment. The following research questions were formulated: In what way the proposed criteria, sub-criteria and metrics could be validated? What does the validated questionnaire for seniors, measuring their perception of a city's spatial structure, look like? Which aspects of the spatial structure of the city are significant for seniors? Method This study aims to validate the criteria, sub-criteria and metrics for assessing the quality of architectural and urban space, formulated as part of the research for the doctoral thesis (Ptak-Wojciechowska, 2023). The survey is carried out in the form of a workshop among 25 seniors, assisted by the students from the Faculty of Architecture. The first phase of our method includes proposing metrics (for assessing the quality of architectural and urban spaces) by describing them on sticky notes and attaching them to a 100x70 cm board within a specific evaluation sub-criterion. The second phase is the selection of the 3 most important criteria and sub-criteria for the final prioritisation by elderly participants. The last phase is the improvement of the evaluation framework and questionnaire for measuring seniors' perceptions by researchers, based on added/ reformulated sub-criteria and metrics. Results and Discussion Among the metrics formulated by seniors, some relate to universal design principles (e.g. wheelchair accessible housing, absence of obstacles, non-slip floors) and assistive technologies (air conditioning, temperature control, automatic lighting, voice signals at pedestrian crossings). The new framework is more precise and pragmatic from the point of view of its use in creating a QoL in the city and shall be used directly by seniors to assess the friendliness of their neighbourhood. Additionally, a method corresponds to the scale of the city and its neighbourhoods. The next phase will be to validate the evaluation framework with experts, architects and urban planners, extend the introductory section of the questionnaire to include information on personal preferences and conduct a questionnaire survey among older people.

References

Gawlak, A., Matuszewska, M., & Ptak, A. (2021). Inclusiveness of Urban Space and Tools for the Assessment of the Quality of Urban Life—A Critical Approach. *International Journal of Environmental Research and Public Health*, 18(9), 4519. https://doi.org/10.3390/ijerph18094519

Kahana, E., Lovegreen, L., Kahana, B., & Kahana, M. (2003). Person, Environment, and Person-Environment Fit as Influences on Residential Satisfaction of Elders. *Environment and Behavior, 35,* 434–453. https://doi.org/10.1177/0013916503035003007

Lawton, M. P. (1982). Competence, environmental press, and the adaptation of older people. In M. P. Lawton, P. G. Windley, & T. O. Byerts (Eds.), *Aging and the environment: Theoretical approaches (pp.33-59)*. New York: Springer.

Ptak-Wojciechowska, A., Januchta-Szostak, A., Gawlak, A., & Matuszewska, M. (2021). The Importance of Water and Climate-Related Aspects in the Quality of Urban Life Assessment. Sustainability, 13(12), Article 12. https://doi.org/10.3390/su13126573

Ptak-Wojciechowska, A., Kort, H., Kasraian, D., & Gawlak, A. (2022). Multi-criteria evaluation of senior housing, based on their future needs. *Gerontechnology*, 21(s), 1–1. https://doi.org/10.4017/gt.2022.21.s.649.opp1

Ptak-Wojciechowska, A. (n.d.). *Analiza wybranych narzędzi do ewaluacji jakości życia w mieście w kontekście zmian społeczno-demograficznych (The analyses of selected appraisal instruments for assessing the quality of life in city taking into account the socio-demographic context)* [Doctoral thesis]. Poznan University of Technology.

Keywords: urban quality of life of older people, perceptual quality, workshops, urban design, healthy inclusive environments

Affiliation: Faculty of Architecture, Poznan University of Technology, Poland

Email: agnieszka.ptak-wojciechowska@put.poznan.pl

Authors' ORCID iDs: 0000-0002-4833-905X, 0000-0002-6234-7953



Figure 1. Overview of the proposal