Generation, inequality and technological competence in later life B. Pottharst

Purpose Almost everyone wants to maintain their independence in old age and live at home for as long as possible. The demographic change is significantly increasing the demand for elderly care in Germany. In this context, technological innovations can contribute directly and indirectly to improving the quality of life while maintaining autonomy, as well as supporting prevention and rehabilitation (Hoff/Pottharst 2023). However, social inequalities and consequences are often not taken into account in the development of digital technologies. Taking a participatory gerontological perspective, the question arises which factors influence the use of technology. The presentation based on my dissertation (Pottharst, 2022) combines theoretical approaches of technology generations (Sackmann/Winkler, 2013) with those of social inequality. This allows for conclusions to be drawn about the acceptance, competence and use of technology by older individuals. Methods The study investigates the influence of cohort membership and dimensions of social inequality on technology competence and use in later life. A regional sample of 269 individuals aged 60 and above was randomly surveyed in the district of Goerlitz (Saxony) between 2015 and 2017 as part of the project 'Trust in Assistance Technologies for Inclusion of the Elderly' (VATI). The survey was conducted in two waves, with the same individuals interviewed each time (VATI-AAL-Panel, $t_1 n =$ 269, t₂ n = 109). The sample was then divided into two focus groups using a mixed-methods approach. These groups were distinguished by their attitudes towards technology. Group differentiation was based on the technology commitment scale developed by Neyer et al. (2012). The qualitative results in 2019 (t₃) were triangulated using quantitative statistical methods and confirmed through multivariate analyses. Results and Discussion The findings suggest that the concept of technology generations should be reconsidered and used in conjunction with intersectional approaches. Today, new technologies seem to be developing faster than it takes generations to emerge. Technology generations seem to be gradually dissolving in the digital revolution (Gilleard 2018). Therefore, technology routines of older adults are likely influenced by imprints in the life course and current social situation. The multifactorial regressions on the right-hand side of Figure 1 reconfirm the well-known effects of social inequality with their main influencing variables. Additionally, a moderation analysis confirms a result discovered in the focus groups: A high level of self-perceived technological competence does not necessarily lead to an increased use of technology. Age is a moderating variable here (interaction effect). In some cases, awareness of the limitations of unreliable or inadequate digital technology can lead to rejection. Overall, it is important to ensure that older people have access to new technologies while also respecting their freedom to choose whether or not to use them.

References

Gilleard, C. (2018). The place of age in the digital revolution. In S. Taipale, T.-A. Wilska, & C. Gilleard (Eds.), *Digital Technologies and Generational Identity: ICT Usage Across the Life Course* (pp. 11-22). London: Routledge.

Hoff, A., & Pottharst, B. (2023). The role of assistive technologies in home care delivery in Germany between vision and reality. In K. Hamblin & M. Lariviere (Eds.), Care Technologies for Ageing Societies: An International Comparison of Care Systems. Bristol University Press. https://doi.org/10.51952/9781447364825.ch004

Neyer, F. J., Felber, J., & Gebhardt, C. (2012). Development and validation of a brief measure of technology commitment. *Diagnostica*, 58(2), 87-99. https://doi.org/10.1026/0012-1924/a000067

Pottharst, B. (2022). Generation, Ungleichheit, Technik. Technikkompetenz im höheren Lebensalter. Wiesbaden: Springer. https://doi.org/10.1007/978-3-658-38736-5

Sackmann, R., & Winkler, O. (2013). Technology generations revisited: The internet generation. *Gerontechnology*, 11(4), 493–503.

Keywords: technology generations, social inequality, intersectionality, technology competence, technology commitment **Address:** Faculty of Social Sciences, University of Applied Sciences and Arts Bielefeld, Germany **Email:** <u>bill.pottharst@hsbi.de</u>

Acknowledgement: This research was supported by University of Vechta, University of Applied Sciences Zittau/Goerlitz; HSBI: "Career@BI" of the Federal Ministry of Education and Research (BMBF) in the funding guideline "FH-Personal": 03FHP106

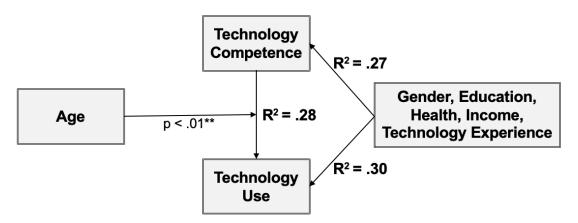


Figure 1. Moderation and multiple linear regression (R^2) of technological routines, Data set: VATI-AAL-Panel ($t_1 n = 269$)