

### 30 years of technology acceptance model: A systematic review for ICT use in old age

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Scheling et al. (2020). *Gerontechnology* 19(suppl); <https://doi.org/10.4017/gt.2020.19.s.69880.2>

**Purpose** Thirty years ago, it was postulated in the technology acceptance model that behavioral intention is the best predictor of technology use, which in turn is determined by perceived usefulness (PU) and perceived ease of use (PEOU) (Davis et al., 1989). Until today it is a widely used model due to its good validation in young to middle adulthood, especially in the work context (King & He, 2006; Turner et al., 2010). In the meantime, a large number of studies have also been carried out using the TAM in the context of information and communication technologies (ICT) among older people but so far no contribution has brought them together. The purpose of this systematic review is to close this gap by describing the current status of the research field. Important TAM factors for older adults are to be identified and the research field will be evaluated regarding the study designs used, the samples recruited, the type of ICT investigated and the references to established psychological and age-specific theories made. **Method** For systematic research, the platforms Web of Science and Ebscohost were used, which draw on 15 different databases (including PsycINFO, PSYINDEX, Library, Information Science & Technology Abstracts). The following inclusion criteria were applied: (1) peer-reviewed journals, (2) quantitative, qualitative or mixed-method study designs, (3) use of modern ICT (e.g. computers, smartphones, Internet applications), (4) older people over 50 years of age, (5) operationalisation of a core factor of the TAM (PU, PEOU or intention). **Results & Discussion** Out of 256, 27 articles were included. The results show that only after 2010 were substantial proportions of studies published in the chosen context. Various ICT domains were examined, with the use of the Internet dominating with the following focal points: social networks, search for health information and general Internet use. The findings are primarily based on cross-sectional study designs with a focus on people of the third age who already use the Internet. The associations between PU, PEOU and intention were most frequently analysed with clear evidence for the connection between PU and intention as well as PEOU and PU. The fundamental relationship between intention and actual use was only investigated in two studies. The TAM has been expanded by various variables like social relationships or self-efficacy, which embedding in classical lifespan theories is mostly missing. Directions for future research will be discussed.

#### References

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**Keywords:** technology acceptance model, systematic literature review, ICT, older adults

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