The Evolving Landscape of Gamification for Older Adults: Evidence From a Systematic Review W. Hong, M. Choi. *Gerontechnology* 25(s)

Purpose As societies age and digital technologies increasingly mediate access to services, information, and social participation, it is critical to identify strategies that can support older adults' engagement and digital competence. Gamification—the application of game-like elements to non-game contexts—has been recognized as an effective technique for enhancing engagement and participation. However, most gamification research has focused on younger populations, and its effectiveness is highly context-dependent [1]. Accordingly, this paper aims to systematically review and synthesize existing empirical research on gamification for adults aged 55 years and older to better understand its effectiveness, design considerations, and limitations. **Method** This systematic literature review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. A comprehensive literature search was conducted across four major databases: PubMed, Scopus, Web of Science, and the ACM Digital Library. The search strategy was adapted from a prior review to ensure comparability [2]. Studies were included if they examined gamified or game-based interventions involving adults aged 55 years or older and reported outcome measures. Two researchers independently screened and assessed studies across the identification, screening, eligibility, and inclusion phases. From 844 initial records, 75 peer-reviewed studies met the inclusion criteria and were analyzed. **Results and Discussion** The review shows that gamification is generally effective in increasing engagement and adherence among older adults, supporting its potential as an intervention strategy beyond younger populations. However, evidence remains mixed for other outcomes, including performance, health, and behavior change. Key factors influencing effectiveness include usability, enjoyment, digital device familiarity, anxiety, and self-perception. Notably, smartphones have emerged as the dominant delivery platform, replacing tablets identified in earlier reviews, with increasing use of wearable devices in physical activity interventions. Artificial intelligence shows promise in supporting self-guided interaction for older adults but remains underutilized, appearing in only four studies. Future research needs to focus on theory-driven design, longitudinal evaluation of outcomes, and inclusive approaches that address heterogeneity in older adults' abilities and digital experiences.

References

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