PAPER

Big Issues in Gerontechnology

T. KADYLAK, R.V. RIKARD, S.R. COTTEN. Older adults' willingness to use emerging technologies. Gerontechnology 2018;17(Suppl):64s; https://doi.org/10.4017/gt.2018.17.s.064.00 **Purpose** As the older adult population continues to grow it is important to investigate how emerging technologies can be used to help older adults manage chronic health issues, age in place and maintain independence[1,2]. In this study, we assess older adults' intentions to use six distinct emerging technologies (e.g., autonomous vehicles, assistive robots, Smart Home technology), which could allow older adults to better manage their health and maintain independence. **Method** Data were collected from a representative sample of tech savvy US Internet users, age 65 and older (N = 1,148). Participants completed an Internet based survey on their attitudes and use of the Internet and information and communication technologies (ICTs), as well as health and psychosocial indicators. A series of nested binary logistic regression models were used to assess intentions to use each type of emerging technology. **Results & Discussion** Our descriptive findings suggested that 19% of participants were willing to use autonomous vehicles, 24% were willing to use assistive robots, 37% were willing to use Internet connected home appliances, 48% were willing to use Internet connected cameras for home monitoring, 29% were willing to use a Smart Home with a built-in personal digital assistant (e.g., Siri), and 15% were willing to use virtual reality. Our binary logistic results indicated that health variables (e.g., IADLs and self-reported health status) had statistically significant associations with intentions to use some emerging technologies, such as assistive robots and autonomous vehicles. For example, participants with more limitations with IADLs and poorer self-reported health status were more likely to be willing to use assistive robots than those with better health. Though we observed few demographic differences, participants with higher annual incomes and levels of educational attainment were more likely to use certain emerging technologies. For example, participants with lower annual incomes were less willing to use Internet connected cameras for home monitoring, Internet connect home appliances, as well as a Smart Home with a built-in personal digital assistant compared to participants with higher annual income. However, participants' Internet habit and attitude towards new technologies tended to account for the bulk of the variance in each binary logistic regression model. Our findings set the stage for future research as they highlight which older adults are most likely to adopt and potentially benefit from using specific emerging technologies.

References
1. Hall AK, Stellefson M, Bernhardt, JM. Preventing Chronic Disease. 2012;9(E67)
2. Beach SR, Schulz R, Matthews JT, Courtney K, Dabbs AD. Disability and Rehabilitation: Assistive Technology. 2014; 9(6):474-486