

Trends and benefits of information and communications technology use for older adults in the United States

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Purpose In the United States, in 2019, still 25% of older adults (65+) are not online, and 47% of older adults do not own a smartphone, compared to near universal adoption of these technologies by younger cohorts (Pew Research Center, 2019). A variety of barriers exist that account for this digital divide, including age-related difference in cognition, attitudes, technology self-efficacy, experience, and proficiency (Charness & Boot, 2009; Czaja et al., 2006; Chen & Chan, 2014). This talk will examine factors related to this digital divide, methods through which it can be overcome, and how overcoming these barriers can enhance the lives of older adults in multiple domains. **Method** Data from the Pew Research Center's Internet & American Life Project, and other sources (RAND, CREATE Center), will be summarized to contextualize older adults' technology use and barriers to use in the United States. Then, an overview of design methods to overcome barriers will be provided. This will be followed by specific instances of how these methods have been applied to design technology, or train technology use, in ways that promote the successful adoption and use of technology in multiple domains, including health, social connectedness, and leisure. A special emphasis will be placed on issues surrounding newly emerging technologies, including virtual and augmented reality, as well as artificial intelligence. **Results and Discussion** With well-designed technology, and a design process that includes older adults, many of the barriers associated with technology use and adoption can be minimized. However, in many parts of the United States, additional barriers exist, including lack of sufficient infrastructure that can effectively support technology solutions.

References

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