information and services. Despite increases in technology uptake among older people, an age-related digital divide remains. Drawing from research conducted by the Center for Research and Education on Aging and Technology Enhancement (CREATE), this symposium will discuss the acceptance and uptake of technology among older adults and factors influencing technology adoption. S. Czaja will discuss recent technology trends and how they vary according to technology type and subgroups of older adults. Based on CREATE findings, she will also discuss age group and cohort differences in interest in and comfort with technology. W. Boot will present findings from a study that examined adherence to a technology-based cognitive training program and how individual difference factors shaped adherence. N. Charness will present findings regarding whether advanced driver assistance systems (ADAS) can improve older adult driving performance, and older adults' acceptance and perceptions of value of ADAS systems. M. Harris will discuss health related technology interventions and how integration of technology acceptance and behavior change models can provide insights for the design of health behavior interventions aimed at older adults. J. Sharit will provide findings from a study, which examined the willingness of older adults to adopt a variety of technologies and factors influencing willingness to adopt. Bo Xie will lead a discussion of these issues and outline areas for future research.

OLDER ADULTS' ADHERENCE TO TECHNOLOGY-BASED INTERVENTION: THE ROLE OF MESSAGING AND INDIVIDUAL DIFFERENCES

Walter Boot,[1] Nelson Roque,[2] Erin Harrell,[3] and Neil Charness,[1] *1. Florida State University, Tallahassee, Florida, United States, 2. Pennsylvania State University, University Park, Pennsylvania, United States, 3. University of Alabama, Tuscaloosa, Tuscaloosa, Alabama, United States*

Adherence to health behaviors is often poor, including adherence to at-home technology-based interventions. This study (N=120) explored adherence to a cognitive training intervention delivered via computer tablet, assessed adherence over a 4.5 month period, explored how individual difference factors shaped adherence, and tested the efficacy of message framing manipulations (positive vs. negative framing) in boosting adherence. Individual difference factors predicted adherence, including variations in self-efficacy and belief in the efficacy of cognitive training. Overall message framing had little impact. However, during the final portion of the study in which participants were asked to play as much or as little as they wanted instead of following a schedule, participants who received positively framed messages engaged with the intervention more. Implications for predicting and boosting adherence to home delivered technology-based interventions will be discussed.

ACCEPTANCE OF TRANSPORTATION TECHNOLOGIES BY AGING ADULTS

Neil Charness,[1] Dustin Souders,[2] Ryan Best,[3] Nelson Roque,[4] JongSung Yoon,[5] and Cary Stothart,[6] *1. Florida State University, Tallahassee, Florida, United States, 2. Purdue University, West Lafayette, Indiana, United States, 3. Rand Corporation, Santa Monica,*

California, United States, 4. Pennsylvania State University, University Park, Pennsylvania, United States, 5. University of South Dakota, Vermillion, South Dakota, United States, 6. U.S. Army Research Institute for the Behavioral and Social Sciences., Fort Leavenworth, Kansas, United States

Older adults are at greater risk of death and serious injury in transportation crashes which have been increasing in older adult cohorts relative to younger cohorts. Can technology provide a safer road environment? Even if technology can mitigate crash risk, is it acceptable to older road users? We outline the results from several studies that tested 1) whether advanced driver assistance systems (ADAS) can improve older adult driving performance, 2) older adults' acceptance of ADAS and Autonomous Vehicle (AV) systems, and 3) perceptions of value for ADAS systems, particularly for blind-spot detection systems. We found that collision avoidance warning systems improved older adult simulator driving performance, but not lane departure warning systems. In a young to middle-aged sample the factor "concern with AV" showed age effects with older drivers less favorable. Older drivers, however, valued an active blind spot detection system more than younger drivers.

INTEGRATING TECHNOLOGY ACCEPTANCE AND BEHAVIOR CHANGE THEORIES TO GUIDE TECHNOLOGY INTERVENTIONS

Maurita Harris, and Wendy Rogers, *University of Illinois at Urbana-Champaign, Champaign, Illinois, United States*

Technology interventions are commonly proposed as an effective means to support health self-management in older adults. For such interventions to be successful, we must identify individuals who are willing to adopt and adhere to these technologies. The general Technology Acceptance Model (TAM; Davis 1989) has been widely used to predict intentions to adopt technology in a variety of contexts. Likewise, the Theory of Planned Behavior (Azjen, 1991) has long been used to provide insights about health behaviors. These theories share three common stages: attitudes, behavior intentions, and acceptance. However, neither perspective provides insight into continued utilization of a technology tool (i.e., long-term adoption). Our goal is to integrate these models with the Transtheoretic Model of Behavior Change (Prochaska & Velicer, 1997) to provide insights that can help design technological interventions for older adults who want to change a health behavior and maintain that change over time.

OLDER ADULTS' WILLINGNESS TO ADOPT TECHNOLOGIES

Joseph Sharit,[1] Sara Czaja,[2] and Jerad Moxley,[2] *1. University of Miami, Miami, Florida, United States, 2. Weill Cornell Medicine, New York, New York, United States*

Willingness to adopt technology is an important precursor to technology adoption. This talk will present findings from a study which examined 187 older adults' willingness to adopt a variety of mobile technologies supporting domains such as transportation, health/wellness, and lifelong learning. Participants aged 65 years and older, including 144 females, were presented with Power Point slides describing each of five technologies, and subsequently rated each technology on their