financial exploitation, neglect, and abandonment. Forms often co-occur in a variety of settings. This presentation explores key ethical conundrums emerging when different professions address elder abuse. Specifically examined is how the ethical principles of autonomy and non-maleficence conflict with mandatory reporting laws, for example, if their purpose is to incarcerate older offenders who are ill and vulnerable serving lengthy mandated prison terms. The presentation also explores the rights of perpetrators, including how rights of crime victims are weighed against those of perpetrators in a just society.

SESSION 1270 (SYMPOSIUM)

INTEREST GROUP SESSION—TECHNOLOGY AND AGING: THE POTENTIAL AND PITFALLS OF EXTENDED REALITY SOLUTIONS FOR SUPPORTING AND ASSESSING OLDER ADULTS

Chair: Neil Charness, *Florida State University, Tallahassee, Florida, United States*
Discussant: Balaji Narasimhan, *Iowa State University, Ames, Iowa, United States*

Extended Reality (XR), which encompasses Virtual Reality (VR) and Augmented Reality (AR), holds a great deal of promise for improving the health and well-being of older adults. These opportunities include providing rehabilitation, physical exercise, skills training, leisure opportunities, and support for instrumental activities of daily living. Further, XR presents novel assessment opportunities. This session will explore the potential of XR solutions, and also crucial barriers to XR implementation, adoption, and engagement, particularly with respect to the "digital divide." Some older adults, for a number of reasons, experience greater challenges adopting and using newer technologies. This session will start with a broad overview of issues related to XR solutions and will identify critical research needs, with an emphasis on the needs of older adults. This will be followed by a presentation of older adults' perceptions of XR using data derived from a large, nationally representative sample. While some older adults reported not being ready for XR solutions, many older adults reported being willing to accept them to support optimal aging. Next, a study is presented that directly compares older adults' perceptions of presence and immersion in virtual spaces. Using VR to assess wayfinding and navigation abilities of older adults is discussed next. The final talk will present VR usability issues derived from interview and focus group data. The session discussant will bring an interdisciplinary perspective to these important issues.

PERSONALIZED AND ADAPTIVE VR/AR FOR OLDER ADULTS: EIGHT CRITICAL NEEDS

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In the past decade there has been considerable progress in the technology associated with virtual reality and augmented reality, along with decreased costs. But with these advances come a new set of research questions. In July 2017, the National Science Foundation hosted a VR/AR visioning workshop to explore these challenges. The workshop focused on the research needed to achieve individual personalization

and adaptation in the areas of visual, auditory and tactile perception, as well as the social, behavioral and cognitive patterns key to adaptation. These discussions yielded eight priorities for upcoming research for VR/AR. In this paper, we will describe these eight priorities from the perspective of the gerontology community, looking at the research gaps that must be addressed to apply VR/AR successfully with older adults.

GERONTECHNOLOGY PERCEPTIONS AND POTENTIAL ROLE OF VR/AR IN OPTIMAL AGING

Jennifer Margrett,[1] Wally Boot,[2] Neil Charness,[2] Christopher Hertzog,[3] Mack Shelley,[1] and Balaji Narasimhan[1], *1. Iowa State University, Ames, Iowa, United States, 2. Florida State University, Tallahassee, Florida, United States, 3. Georgia Institute of Technology, Atlanta, Georgia, United States*

Technology presents opportunities to optimize whole person wellness and functioning. To understand tech readiness and the potential role of virtual (VR) and augmented reality (AR) to support optimal aging, we surveyed 604 participants from the nationally representative RAND American Life Panel. Participant age ranged from 50-90+, 51.5% were female, and 50% reported bachelor's education or higher. Overall, 8% of the sample identified as Hispanic, with 15% of individuals also identifying as Black, Asian, or Asian Indian or Alaskan Native. Males reported greater optimism and technology innovation and adults aged 50-64 were the most optimistic. Overall, 80% of the sample reported VR familiarity compared to 33% AR. Regarding future needs, 75% of the participants expressed specific concerns about future ADL ability. Almost half of the respondents indicated willingness to use VR and AR to maintain or improve functioning with age and increased personalization of optimal aging emerged as a significant predictor.

EXPLORING OLDER ADULTS' PERCEPTIONS OF PRESENCE AND IMMERSION IN DIVERSE VIRTUAL ENVIRONMENTS

Walter R. Boot,[1] Andrew Dilanchian,[1] and Ronald Andringa[1], *1. Florida State University, Tallahassee, Florida, United States*

Virtual Reality (VR) holds great promise for enhancing the health, well-being, and skills of older adults. However, VR solutions must consider the age-related "digital divide;" many older adults have less experience and proficiency with a number of newer technologies, which may serve as a barrier. Older adults especially have less experience with virtual environments, an experience many younger adults have acquired through video gaming. This study compared younger and older adults' perceptions of immersion and presence in a series of diverse virtual environments using the HTC Vive. Participants experienced a VR meditation task, "indoor" and "outdoor" navigation tasks, and a fast-paced action game. Importantly, younger and older adults reported similarly high experiences of immersion and presence within virtual environments, and contrary to expectations, older adults reported fewer symptoms of cybersickness. Results suggest VR as a promising tool to promote the health and well-being of older adults.