

Personal social networks play a fundamental role in the daily lives of older adults. Although many studies examine how life course factors and personal preferences shape network formation, fewer consider how the places in which older adults live present opportunities and obstacles to cultivate social relationships. In the present study, we explore how geographic context is associated with the ability to interact with non-overlapping social groups within one's personal network (i.e., network bridging). This unique network formation offers older adults access to diverse social stimuli, non-redundant information, and social autonomy. By analyzing data from the Person-to-Person Health Interview Survey (N=709), we found that a minority of respondents reported the ability to bridge social groups within their networks. Respondents residing in rural and semi-rural counties engaged in fewer non-overlapping social groups compared to those residing in urban counties. These findings suggest that the communities in which older adults live condition opportunities for accessing unique social resources. Identifying the link between geographic residence and personal network structure has important implications for how individuals navigate the uncertainty and elevated support needs of later life. Additional research adopting a social network perspective is needed to provide insight into geographic health disparities occurring among the older population.

#### RACE DIFFERENCES IN TRAJECTORIES OF HOPELESSNESS AMONG U.S. OLDER ADULTS: DO SOCIAL CONDITIONS MATTER?

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Despite being a risk factor for cardiovascular disease, suicidal ideation, and mortality among U.S. older adults, research on hopelessness and how it changes over time are lacking. Although hopelessness generally increases with age, levels of hopelessness may be influenced by race/ethnicity and social or economic factors. This study uses longitudinal data from 8,359 individuals from the Health and Retirement Study to examine race differences in trajectories of hopelessness from 2006 to 2018. We used linear mixed models to estimate trajectories of hopelessness for blacks, whites and Hispanics age 51 and older. The model was fit with a natural spline cubic function to model changes in time trends of hopelessness and the interaction between time and race. Models controlled for demographic characteristics, socioeconomic status, health status, and psychosocial factors that influence hopelessness. We found that older Hispanics have the highest levels of hopelessness, followed by non-Hispanic blacks and non-Hispanic whites. Trajectories of hopelessness were non-linear and differed by race. For older whites, hopelessness increased from 2006-2010 and then decreased until 2018. For older blacks, it decreased the entire time period but did so at a decreasing rate; and, for older Hispanics, hopelessness decreased from 2006-2012 and then increased thereafter. Our study shows that hopelessness generally decreased over time among older adults between 2006

and 2018 in race-specific ways, despite generally increasing with age. These findings suggest that race, age and period effects differentially influence trajectories of hopelessness. Factors contributing to these differences may be related to concurrent social and economic conditions.

#### TEMPORAL TRENDS IN THE PREVALENCE OF DEMENTIA IN SOUTH KOREA

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Background. Secular decreases in the prevalence of cognitive impairment and dementia have been observed in several Western countries, however, few systematic investigations of temporal trends in dementia have been conducted in South Korea. Method. Data came from N=8,006 individuals (N=2,110 assessed twice) aged 65 years and older participating in the Korean Longitudinal Study of Aging 2008 and 2018. Dementia was indicated by a score  $\leq 17$  on the Korean Mini-Mental State Examination (K-MMSE). Dementia was regressed on the year of survey, adjusting for multiple demographic and socio-economic confounders, and, in additional models, also chronic diseases and lifestyle factors related to health, social, and religious activities. Results. Across waves, the share of individuals with low socio-economic status decreased. The prevalence of chronic diseases, including diabetes, heart diseases, stroke, and psychiatric diseases, increased over time. Alcohol consumption increased, whereas smoking rates, religious affiliation, and participation in religious activities decreased. Controlling for all covariates and compared to 2008, we observe decreases in dementia prevalence in 2018 by 52% (2018: OR 0.48, CI 0.42, 0.56). Women's MMSE scores were more than two times as likely as men's to indicate dementia (OR 2.59, CI 2.15, 3.14). Discussion. Decreases in dementia prevalence in Korea are partly attributable to improved socio-economic conditions and can be observed despite the increased prevalence of chronic conditions. However, secular trends were not fully explained by these and lifestyle factors. We discuss further individual-level and contextual-level mechanisms that may have contributed to these findings.

#### THE INTERACTION OF LIFE COURSE SOCIOECONOMIC STATUS AND LEISURE ACTIVITIES ON COGNITIVE PERFORMANCE IN OLD AGE

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While the separate effects of socioeconomic status and engaging in leisure activities on cognition have been well documented, their interaction effect has rarely been examined. After examining life course socioeconomic status (SES) on cognitive impairment in old age, this paper is focused on exploring the interaction effects between life course SES and leisure activities. We use data from the Chinese Longitudinal Healthy Longevity Survey, which covers five waves of interviews of adults aged 65 or older between 2002 and 2014. Cognitive impairment is measured by the Chinese version

of Mini-Mental Status Examination. Two sets of variables are used to reflect an older person's life course SES in childhood and adulthood, respectively. Seven leisure activities are included in this analysis. We adopt the lagged independent variable approach and a Generalized Linear Mixed Model to examine the association between leisure activity and cognitive impairment over time. Results show that there is an independent impact of SES in both childhood and adulthood on cognitive decline in Chinese older population. Furthermore, as the focus of this study, there are substantial interactions between life course SES and engaging in leisure activities with a consistent pattern: those of higher life course SES enjoy extra benefits from engaging in leisure activities. The interactions between life course SES and leisure activities promise a competing approach accounting for cognitive health inequality among older adults.

## Session 2485 (Paper)

### Technology and Older Adults

#### DETERMINANTS OF INTENTION TO USE DIGITAL TECHNOLOGY FOR OLDER ADULTS BY ENVIRONMENTAL DIMENSIONS

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Due to the COVID-19 pandemic, it is common to hear news of older adults being socially isolated due to difficulties in purchasing or accessing online services and in interacting with family or friends through video calling apps. Despite an increasing ease of access to digital devices, such access far from universal. Thus, digital inequality has become a serious problem for older adults. To understand why digital inequality issues are so relevant for older adults, we must understand older adults' entire life contexts and the potential of digital technologies in their lives. With these understandings, the purpose of this study was to explore the technology acceptance process and identify key precursors to acceptance of digital technology using the Technology Acceptance Model (TAM) 3 as a framework. This study used data from the 2018 Digital Divide Survey of the Ministry of Science and ICT. A total of 1,662 older adults (aged 55+) were analyzed using structural equation modeling with bootstrap sampling. Model fit indices (CFI = .928; SRMR = .074; RMSEA = .044) suggested an acceptable fit. Results indicated that two environmental dimensions, personal environment (self-efficacy and value recognition) and social environment (social norms and social support systems), had a significant impact on the intention to use technology both directly and indirectly. Furthermore, perceived usefulness and perceived ease of use mediated between environmental domains and the intention. This study indicates that providing appropriate digital support for older adults is important to achieve greater digital inclusion.

#### DIGITAL DEVELOPMENTS IN SOCIETY THAT PERSONS 75 YEARS AND OLDER HAVE BEEN PART OF: A SCOPING REVIEW

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The population in Europe is ageing and people are becoming more than ever dependent on digital technologies. The present study aims to map relevant evidence about digital developments in society involving people aged 75 and over in European countries. It focuses on their experiences and the main barriers to, and facilitators of, societal digital demands. Scoping reviews can be used when the purpose is to identify types of available evidence and clarify concepts, this process was guided by a framework proposed by Arksey and O'Malley. The studies included in the review covered digital technology, digital devices and telehealth, and the context covered participants' own home or surroundings. A comprehensive search was made on CINAHL, Embase, Pubmed/MEDLINE, Scopus and Open Grey. Out of 727 identified citations, 13 sources which met the inclusion criteria (9 original study articles, 2 theses, 1 letter about a product and 1 project report). The studies included varied in their focus, design and location. Older European citizens have experienced technology making life easier and the opposite. The outstanding facilitator found was that technology should be easy to use. Interestingly, both social support and lack of social support were found as facilitators of using new technology and difficulty in remembering the instructions was seen as an important barrier. As technology develops rapidly, there is a need for new and additional research among older European citizens. Future research should cover participants' access to the devices, social support and the technical solutions most relevant to older people today.

#### PRIVACY AND SMART SPEAKERS IN RESEARCH WITH OLDER ADULTS

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Advances in artificial intelligence and computational linguistics have made smart speakers, such as Amazon Alexa<sup>TM</sup> and Google Home<sup>TM</sup>, economical and widely available. For older adults particularly, devices with voice interfaces can help to overcome accessibility challenges that often accompany interaction with today's technologies. However, voice-activation also requires devices to be in a continuous state of ambient listening, which can create a significant privacy risk for the user, one that is often amplified as smart speakers are placed in highly personal home spaces to facilitate their utility. Deployment of these devices in research settings poses additional risk, as traces of data filter through research teams, app developers, and third-party services that support research efforts. This presentation addresses the privacy aspects of deploying Google Home Mini<sup>TM</sup> speakers in research that examined their