

depressive symptoms. Information for neighborhood characteristics will come from the 2000 Mexican Census that has been linked with the 2001 MHAS wave. Older Mexican adult's exposure to multidimensional poverty at the locality (city/town) level will be measured by the proportion of the population aged 15 and older with low education; the proportion of the population with low access to health care services; the percentage of homes with inferior construction materials; and the proportion of the population without sewage and running water. A multivariable logistic regression will be used to model the association between older Mexican adult's neighborhood and community characteristics in 2001 on depression in 2012. The expected findings will inform government policies to increase access to affordable housing, the availability of health care services, educational and employment opportunities, and public infrastructures such as transportation, water, and sanitation services, and energy services to reduce mental health burden.

SESSION 10380 (LATE BREAKING POSTER)

SOCIAL ISOLATION AND LONELINESS

LONELINESS, ISOLATION AND LIVING ALONE ASSOCIATE WITH PSYCHOLOGICAL WELL-BEING AMONG THE OLDER ADULTS IN TAIPEI

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Purpose: The purpose of this study was to examine the clustering of loneliness, isolation, and living alone, the risk factors and the associations with psychological wellbeing. **Methods:** The data were from the 2019 Taipei City Senior Citizen Condition Survey collected by face-to-face interviews, which included aged 60 and above community-based and institution-based samples. The completed sample was 3,853 persons. Loneliness, isolation, and living arrangement were analysed by cluster analysis to define the Loneliness-Isolation-Living Alone clusters. Multinomial logistic regression was used to examine the related factors to LIL clusters. **Results:** Four clusters of the older adults were identified and named as following: Connected (44.1%), Alone/Institutionalized (9.2%); Lonely (10.7%); and Isolated (22.0%). Compared with the Connected cluster, the Alone/Institutionalized cluster was more likely to have higher education, more IADL difficulties, more diseases, lower economic satisfaction, more likely to be males, having no spouse, and no children; the Lonely cluster was more likely to poor self-rated health, lower financial satisfaction, feeling less age-friendliness, more likely to be older, female, and no spouse; the Isolated cluster was more likely to have lower education, reported poorer self-rated health, lower economic satisfaction, and being older. The Alone/Institutionalized cluster and the Lonely cluster had higher depressive symptoms; the Alone/Institutionalized, Lonely, and Isolated clusters reported lower life satisfaction and had higher risks of cognitive impairment. **Discussion:** Loneliness, isolation, and living alone jointly associate with psychological health and well-being. High risk older populations may need social care

and encourage social participation to promote health and wellbeing.

OWNERS' PERCEPTIONS OF PET INFLUENCE: RELATION TO HEALTH OUTCOMES & PET ATTACHMENT IN COMMUNITY-LIVING OLDER ADULTS

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Pet ownership (PO) has been linked to better health outcomes in older adults, particularly those with chronic health conditions. It is suggested that pets influence their owners lives both by encouraging social interaction and by interfering with owners' willingness or ability to seek care for themselves. We use data from 6 questions about the positive and negative influence of pets on community dwelling older adults' administered to pet owners (N=223, age >=50 years) in the Baltimore Longitudinal Study of Aging. We use principal components analysis (oblique rotation) to extract dimensions of owner's perceptions of pet influences (PPI) and examine the relationship of these dimensions to owners' cognitive, physical functional, and psychological status. Three dimensions of PPI include: fiscal/health challenges (F1: 3 items, alpha=0.70), wellness promotion (F2: 2 items, alpha=0.80); and reason for social/travel constraints (F3: 1 item). In regression analysis with all factors entered simultaneously, after controlling for age, higher magnitude of F1 significantly independently predicted poor physical quality of life (p=.0007), greater perceived stress (p=0.041), and lower happiness (p=0.014); F2 did not independently predict any health outcome; higher F3 significantly independently predicted lower emotional vitality (p=0.048). Controlling for age, all three factors were independent predictors of pet attachment (p's=0.001, 0.010, 0.047, respectively). F1 and F3 were positively and F2 was negatively correlated with attachment. PPI was associated with owners' physical and mental health. Perhaps older adults with higher attachment to pets are more likely to keep them despite higher challenges.

SENSORY LOSS AND COGNITIVE DECLINE AMONG OLDER ADULTS: AN ANALYSIS OF MEDIATION AND MODERATION EFFECTS OF LONELINESS

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Multiple studies have reported that hearing and vision loss are linked to cognitive decline. Yet little is known about factors that may influence the association between sensory loss and cognitive decline. This study examined if loneliness mediates or moderates the impact of sensory loss on

cognitive decline as individuals age. This was a longitudinal study using data (N = 243) from the Health and Retirement Study (HRS) (2006 – 2014) and its supplement: The Aging, Demographics, and Memory Study (ADAMS) (Wave C). Hearing loss was defined by an inability to hear pure-tone stimuli of 25 dB at frequencies between 0.5 – 4.0 kHz in either ear. Vision loss was defined as having corrected binocular vision worse than 20/40. Loneliness was measured by the 3-item UCLA Loneliness Scale. Longitudinal parallel-process (LPP) analysis was conducted at a significance level of $\alpha = .05$ (one-tailed). Loneliness moderated but did not mediate the associations between vision loss and the rate of cognitive decline (standardized $\beta = -.108$, $p < .05$). No moderation or mediation effect of loneliness was found for the association between hearing loss and cognitive decline. Both hearing and vision loss were significantly associated with increased severity of loneliness. Vision loss combined with an elevated level of loneliness may produce a more synergistic, deleterious impact on older adults' cognitive function than vision loss alone. This study highlights the importance of promoting a healthy social and psychological status for older adults with vision loss.

THE EFFECT OF TECHNOLOGY USE IN REDUCING SOCIAL ISOLATION OR LONELINESS IN OLDER ADULTS: A SYSTEMATIC REVIEW

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The US population over 65 is projected to increase to 21% by 2050. Given mobility issues arising from health concerns, economic status changes, loss of friends and partners, older people are at a higher risk for social isolation and loneliness. Since the declaration of national emergency for COVID-19 on March 13, 2020, many older adults have not been able to connect with others in traditional ways. Instead, activities and contacts have been facilitated virtually via videoconferencing or phone calls to maintain physical and social distance. Amidst COVID-19, the transition to using technologies to connect socially and reduce loneliness has been a critical factor in preventing social isolation and loneliness. Identifying effective strategies involving the use of technology, designing new ways to deliver services virtually, and developing educational programs to promote technology is vitally necessary. This systematic review explored the relationship between technology use and social isolation or loneliness, and examined interventions that reduced social isolation in older adults. A unified strategy was used to systematically search seven databases (MEDLINE, PubMed, Embase, CINAHL, Web of Science, PsycInfo, and AgeLine) to examine qualitative and quantitative studies published in English between 2010 and 2020. Preliminary results indicate that technology can alleviate social isolation and loneliness in older adults despite some mixed results. The findings of this study will provide a foundation for policymakers and practitioners to shape policies and design programs that help older adults to alleviate social isolation and loneliness, particularly amidst the COVID-19 pandemic.

THE ROLE OF MEASUREMENTS TOOLS IN THE ASSOCIATION BETWEEN LONELINESS AND COGNITIVE DECLINE

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Previous findings on the association between loneliness and cognitive decline are mixed, with some studies indicating a significant association and others finding no statistical relationship. Since studies have used various inequivalent measurement tools, this might explain inconsistent findings on the relationship between loneliness and cognitive decline. This systematic review aims to 1) summarize the relationship between loneliness and cognitive decline and 2) examine whether the association varies depending on the measurement tools. This review's inclusion criteria were studies with key terms loneliness as a predictor and global cognitive function as an outcome, peer-reviewed articles, written in English, involving community-dwelling older adults of ages 65 and older, and published since August 2013. Six out of ten studies showed that the relationship between loneliness and cognitive decline was statistically significant. Three reciprocal studies found that cognitive decline was a predictor of loneliness. Those studies that had nonsignificant findings used a single question to measure loneliness. Studies using the 23 item MMSE also reported non-significant association, whereas those using the 30 item MMSE had significant results. The findings indicate a bidirectional relationship derived from the studies with inconsistent results and the reciprocal studies and the potential role of measurement tools on the association's change. This poster will conclude with the research implication that a systematic review of reciprocal studies is needed to clarify the bidirectional relationship of variables. Comparison studies of various measurement tools are needed to confirm the role of measurement tools on the result.

SESSION 10390 (LATE BREAKING POSTER)

TECHNOLOGY

A PILOT STUDY OF AN INNOVATIVE MODEL OF CARE DELIVERY: SERVICE ROBOT FOR OLDER PEOPLE WITH DEMENTIA IN A RURAL COMMUNITY

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Background: The telehealth approach offers enhanced service delivery for older patients living in rural areas. Purpose: We conducted a pilot study to evaluate the feasibility of using the Zenbo robot to improve the quality of care of elderly individuals with dementia. Methodology: In this study, we developed a digital solution on service robots and smart devices, which can leverage the capacity of the user-friendly interactive interface and digital dialog system. A group of eleven volunteered older adults was selected for this study. To assess the likability and acceptance of the Zenbo, we conducted a one-on-one (robot vs human) pilot study in our long-term care stations. Each participant engaged in conversational interactions for five consecutive days and completed