

IMPACT OF GREEN SPACE, AIR POLLUTION, AND WEATHER ON COGNITIVE FUNCTION IN MIDDLE AND OLD AGE IN CHINA

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Population aging will inevitably bring an increasing burden of poor cognitive function. The risk factors for cognitive decline have been widely studied. Even though environmental hazards have the greatest adverse impacts on older adults and the existing evidence has shown that green space, air pollution, and weather have an impact on cognitive function, most of the studies were conducted in developed countries and limited to cross-sectional analyses. China has the largest aging population in the world so the research evidence from it can offer an insight to the study in other developing countries facing similar issues and inform future public health policy and disease control. Using the data from a nationally representative sample of adults aged 45 years and older from the three waves of China Health and Retirement Longitudinal Study (CHARLS 2011-2015) and China City Statistical Yearbook, this study estimated multilevel growth curve models for the effects of green space coverage, air pollution, and weather conditions on cognitive function and cognitive decline. It showed that after controlling for sociodemographic characteristics, built area green coverage rate was positively associated with cognition score at baseline, and higher annual minimum temperature was associated with faster decline in cognitive function. These effects did not substantially change after weekly total hours of physical activities and levels of social engagement were added and the interaction effects were examined between environmental conditions with them, respectively. More research on the mechanisms of the effects of environmental factors on cognition is needed such as the subgroup analyses.

INCREASED SELF-EFFICACY AMONG OLDER ADULTS AGING-IN-PLACE DURING COVID-19.

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Self-efficacy is defined as a person's belief in their capacity to execute behaviors necessary to produce specific performance attainments. It also reflects confidence in the ability to exert control over motivation, behavior, and environment. During the COVID-19 pandemic, older adults were stressed with forced isolation, concerns over mortality, and finding alternate means of fulfilling their home-based needs. We sought to assess how COVID-19 pandemic affected the self-efficacy of a cohort of older adults aging-in-place. The LITCOG cohort is a group of community-dwelling older adults (65 years and older) who have had longitudinally assessment of

cognition, health literacy, and functional skills over the past 15 years. As part of a larger study of the LITCOG cohort assessing decision making for aging-in-place, we assessed self-efficacy using validated PROMIS (Patient-Reported Outcomes Measurement Information System) measures with older adults prior to COVID-19 and during the COVID-19 pandemic. Survey results were obtained from 214 subjects (n=66 pre-COVID and n=148 during COVID). Nearly half of the sample (48.2%) had either marginal (25.5%) or low health literacy (22.7%). PROMIS General Self Efficacy was higher among those assessed during the COVID-19 pandemic (45.8 (7.7) pre-COVID vs 43.7 (8.0), p=0.07). PROMIS Self Efficacy for managing social interactions was higher during the COVID pandemic (45.0 (6.1) pre-COVID-19 vs. 48.7 (8.3) during COVID-19, p=0.02). During the stress and social isolation of the COVID-19 pandemic, older adults exhibited increased levels of self-efficacy. Ongoing longitudinal follow-up will determine how this self-efficacy evolves after the COVID-19 pandemic and impacts the ability to age-in-place.

INTRINSIC, EXTRINSIC AND INTERACTION THEORIES ON FALLS AND AGING-IN-PLACE: A C-T-E SCOPING REVIEW

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As aging in place increases in popularity, it is important to understand potential negative outcomes related to the trend. For this presentation, the conceptual-theoretical-empirical (C-T-E) scoping review technique was used to organize research on in-home falls of community-dwelling older adults. Research and theory were included from the fields of social gerontology, disability, policy, social justice, medicine, rehabilitation, and housing. While research from these multiple fields overlaps, an overarching conceptual framework for organizing this literature was found to categorize the theories into three main conceptual areas. The three conceptual areas are: intrinsic (related to the person only), extrinsic (related to external factors only), and interaction between intrinsic and extrinsic (related to the interaction between the person and external factors). This conceptual framework shares similarities with work by others in use of the terms intrinsic and extrinsic, and it draws on the larger influence of Bronfenbrenner's socio-ecological model. However, this review extends previous work by providing a framework for organizing the contributions to falls research across multiple disciplines.

LIFE-SPACE CONSTRICTION IN AGING ADULTS

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Community-dwelling aging adults desire to maintain independence and prevent or delay a sequela of declining function and ultimate frailty. Early indicators of potential declines in function and frailty, such as life-space constriction (LSC), are important to identifying early. The purpose of this study was to examine factors associated with LSC and the influence of these factors and LSC on function and frailty. A cross-sectional study using a convenience sample of community dwelling persons 55 and older living in the South was conducted. Results indicated most participants (N = 72)