

parks and trails using geospatial measurements as well as self-reported activity-friendliness of neighborhoods (ease of walking, biking, and recreating) in 1140 participants (ages 28-49 years) in the ongoing Colorado Adoption/Twin Study of Lifespan behavioral development and cognitive aging (CATSLife). Physical health indicators included BMI, resting heart rate, and mean arterial blood pressure. The relative similarity of siblings' accessibility was evaluated to consider self-selection; all models were adjusted for sociodemographics including education. BMI was associated with accessibility to parks, with each increasing log(mile) distance associated with 1.2 BMI unit increase ($se=.49$, $p<0.02$). Self-reported neighborhood activity-friendliness was comparable in prediction of BMI ($p<0.01$). Greater trail accessibility was associated with lower resting heart rate ($b=-.30$, $se=.14$, $p<0.04$) and mean arterial pressure ($b=-0.33$, $se=0.14$, $p<0.03$), whereas self-reported neighborhood activity-friendliness was not associated ($p>0.40$). Measures of park accessibility tended to be more similar among identical twins (median ICC = 0.30) than fraternal twins or siblings (median ICC = 0.15) or siblings in adoptive families (median ICC = 0.12), excluding siblings who live together. Measures of trail accessibility were consistent across sibling types (median ICCs = 0.25-0.27). Sibling similarity for park accessibility modestly increased with genetic relatedness suggesting potential heritable contributions, whereas comparable similarity was apparent for trail accessibility. Altogether, small associations were observed for park and trail access with physical health, with indications of environmental selection.

EVALUATING THE INTERNATIONAL CLASSIFICATION OF FUNCTIONING, HEALTH, AND DISABILITY MODEL AS AN AGING MODEL

Qiwei Li, and Becky Knight, *University of North Texas, Denton, Texas, United States*

The study provides a possible theoretical framework for future aging studies focusing on a comprehensive understanding of the relationship between physical functions, social participation, and context factors including environmental and personal variables. The International Classification of Functioning, Health, and Disability (ICF) model has received considerable studies in rehabilitation counseling fields as it bridges the gap between functional limitations and overall health status for social participation. The ICF model focuses beyond physical conditions and embraces social supports and personal coping styles. This study verifies the validity of the ICF model with a data set collected from a fall prevention program. For the methods, a structural equation modeling was estimated with latent variables including body structure, body functions, activities, and personal factors. The latent variables were suggested by the ICF framework. The results showed that the estimation outcome exhibited an acceptable goodness of fit, $\chi^2(11) = 30.401$, $p = .001$ (due to the large sample size of 691), $RMSEA = .051$ [.030, .072], $CFI = .968$, $TLI = .919$, $SRMR = .029$. The equation level good of fit also was great with an overall R squared of .828. In conclusion, the ICF model was valid and has been tested in the aging studies with the data set collected from a fall prevention program for older adults. As the ICF model includes more variables than medical models such as personal attributions, a holistic understanding regarding aging experience among

older adults from various backgrounds will become possible, which is an urgent need for diverse America.

TESTING THE MISSING MECHANISM OF DEMOGRAPHIC AND HEALTH VARIABLES IN THE HEALTH AND RETIREMENT STUDY

Peiyi Lu, and Mack Shelley, *Iowa State University, Ames, Iowa, United States*

Studies using data from longitudinal health survey of older adults usually assumed the data were missing completely at random (MCAR) or missing at random (MAR). Thus subsequent analyses used multiple imputation or likelihood-based method to handle missing data. However, little existing research actually examines whether the data met the MCAR/MAR assumptions before performing data analyses. This study first summarized the commonly used statistical methods to test missing mechanism and discussed their application conditions. Then using two-wave longitudinal data from the Health and Retirement Study (HRS; wave 2014-2015 and wave 2016-2017; $N=18,747$), this study applied different approaches to test the missing mechanism of several demographic and health variables. These approaches included Little's test, logistic regression method, nonparametric tests, false discovery rate, and others. Results indicated the data did not meet the MCAR assumption even though they had a very low rate of missing values. Demographic variables provided good auxiliary information for health variables. Health measures (e.g., self-reported health, activity of daily life, depressive symptoms) met the MAR assumptions. Older respondents could drop out and die in the longitudinal survey, but attrition did not significantly affect the MAR assumption. Our findings supported the MAR assumptions for the demographic and health variables in HRS, and therefore provided statistical justification to HRS researchers about using imputation or likelihood-based methods to deal with missing data. However, researchers are strongly encouraged to test the missing mechanism of the specific variables/data they choose when using a new dataset.

THE EFFECT OF LONG-TERM CHANGES IN DAILY STRESS PROCESSES ON PROSPECTIVE HEALTH: AN APPLICATION OF THREE-LEVEL SEM

Jonathan Rush,¹ Emily Willroth,² Eileen Graham,³ Daniel Mroczek,³ and David Almeida,⁴ 1. *University of Victoria, Victoria, British Columbia, Canada*, 2. *Northwestern University Feinberg School of Medicine, Evanston, Illinois, United States*, 3. *Northwestern University, Chicago, Illinois, United States*, 4. *Pennsylvania State University, University Park, Pennsylvania, United States*

The study of change over time, contexts, cohorts, and people is influenced by the sampling of observations within longitudinal studies. Intensive measurement designs, embedded within long-term longitudinal studies, provide new opportunities to understand changes in dynamic processes, as well as determinants and consequences of these changes over time. The present investigation examined whether short-term dynamic associations accounted for individual differences in prospective health functioning. We used measurement burst data from the National Study of Daily Experiences subsample ($N = 2485$) embedded within the Midlife in the United States

longitudinal study. Two measurement bursts were separated by ten years, with each containing daily measures of stress and affect across eight consecutive days. Functional health was measured by basic and instrumental activities of daily living at three measurement waves spanning 20 years. Three-level structural equation models were fit to simultaneously model short-term within-person associations between stress and affect (i.e., stress reactivity) and long-term changes in these associations over the ten year period. Individual differences in long-term changes of the short-term dynamic association predicted both basic and instrumental activities of daily living at 20 year follow-up (estimate = 5.26, SE = 2.54, $p < .01$; and estimate = 5.48, SE = 2.81, $p < .01$, respectively). These effects were present after adjusting for mean levels of both stress and affect. We highlight how characterizing individuals based on the strength of their within-person associations across multiple time scales can be informative in predicting distal health outcomes.

SESSION 3012 (PAPER)

INTERGENERATIONAL CAREGIVING AND RELATIONSHIPS

GENDER AND THE GRANDFATHER CAREGIVER EXPERIENCE

AviElle Raymore, *West Virginia University, Point Pleasant, West Virginia, United States*

In the United States, 2.7 million grandparents are responsible for a grandchild in their home. Grandfathers are present in the majority of grandparent caregiver households, but their contributions and voices are often overlooked. The aim of this study was to explore how grandfathers experience caregiving as men. Twelve grandfathers from the age of 50-76 years participated in the study. Two face-to-face, semi-structured interviews were conducted with eleven grandfather caregivers while a telephone interview was conducted with one grandfather. Interviews focused on their life story, experiences as grandfather caregivers, and views on male caregiving. Data were analyzed using coding and thematic analysis. Gender was important throughout grandfather's caregiving experiences. Grandfathers discussed their attitudes towards caregiving using language that reflected traditional gender norms. To them, women were nurturing caregivers while men were supposed to provide for their families as caregivers. Grandfathers appeared to stay connected to notions of traditional masculinities through participation in sports and physical play with their grandchildren and through their emphasis on men as responsible and providers. Grandfathers were aware that others may view them as incompetent caregivers, but they did not allow these stereotypes to affect how they viewed themselves as caregivers. These findings can improve the understanding of this population for service providers who work with grandparent caregivers. Providing better outreach for grandfather caregivers, strengthening programs and supports for them, and confronting attitudes or views towards male caregiving are important practice implications.

GRANDPARENT RESILIENCE: IMPROVING SELF-EFFICACY IN GRANDPARENTS RAISING GRANDCHILDREN

Aimee Fox,¹ Nathaniel Riggs,¹ Lorieana Yancura,² and Christine Fruhauf,¹ *1. Colorado State University, Fort Collins, Colorado, United States, 2. University of Hawai'i, Honolulu, Hawaii, United States*

Grandparents often protect against childhood trauma and promote resilience through their nurturance, love, and support when raising grandchildren. Despite the beneficial role grandparents have on their grandchildren, grandparents may experience challenges of their own, including physical, mental, and emotional health issues, lack of resources, and social isolation. Few interventions exist to help grandparents successfully adapt to the challenges they face as primary parenting figures. The purpose of this study was to test preliminary efficacy of a strengths-based intervention for grandparents raising grandchildren aimed at increasing self-care behaviors, managing emotions, and connecting to community resources. Grandparents (N = 137) providing primary care to grandchildren were recruited to participate in a single-group, pre- and post-test design, 6-week intervention. Self-efficacy was assessed at baseline, post-intervention, and at a 6-month follow-up. To evaluate who the intervention might be most beneficial for, grandparents' service knowledge, perceived support from others, and length of care provided, measured at baseline, were analyzed for moderating effects. Results of paired-samples t-tests reveal significant increases in self-efficacy ($p = .013$) from baseline to post-test, which were maintained at the 6-month follow-up ($p = .010$). Hierarchical multiple regression showed interaction effects of the hypothesized moderators were not significant, indicating improvements in self-efficacy regardless of individual variability at baseline. As demonstrated, interventions can be effective at increasing self-efficacy in grandparents raising grandchildren and strengths-based approaches have the potential to provide universal benefits to grandparents, thus improving functioning in grandfamilies and promoting the health and well-being of grandparents and their grandchildren.

INTERGENERATIONAL CAREGIVING PATTERNS, BMI, AND GENDER GAPS AMONG THE SANDWICH GENERATION IN CHINA

Jingwen Liu,¹ and Feinian Chen,² *1. University of Maryland, college park, college park, Maryland, United States, 2. University of Maryland, College Park, College Park, Maryland, United States*

Existing literatures yield established evidence about the heightened stress brought by multiple roles and potential role overload across work-family context, but little is known about the BMI levels of the "sandwich" caregivers within families and the associated gender inequalities. Indeed, the Chinese pivotal generations are exposed to unshared stress and higher health risks considering that intergenerational support still predominates the caregiving patterns for the oldest old and dependent children under current socioeconomic backgrounds. Using 2011 and 2013 waves of China Health and Retirement Longitudinal Study (CHARLS, N = 12186),