

**Categories:** MCI (Mild Cognitive Impairment)

**Keyword 1:** neuropsychological assessment

**Keyword 2:** aging (normal)

**Keyword 3:** dementia - Alzheimer's disease

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### 93 Impact of Childhood Socioeconomic Status on Subjective Cognitive Decline

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**Objective:** Subjective cognitive decline (SCD) is increasingly being considered one of the earliest clinical signs of Alzheimer's Disease (AD). Certain characteristics of early life, such as childhood socioeconomic status (SES), have been associated with late life cognitive performance. Here we examine the extent to which childhood SES predicts SCD.

**Participants and Methods:** The current sample consisted of 55 healthy older adults (17 Male, 39 Female), aged 51 to 88 (M=73.14, SD=6.23) with a mean education of 16 years (SD=2.1 years). 21.5% of the sample self-reported as race/ethnic minorities (e.g., Hispanic or Non-Hispanic African American, Asian, Other.) Participants completed a 20-item SCD questionnaire assessing perceived cognitive difficulties in comparison to same aged peers, and objective cognitive testing. Childhood SES was assessed using two items. The first item asked the participant to utilize a modified MacArthur Scale of Subjective Social Status to identify where on the ladder they felt their family would have been placed during their childhood relative to others in the United States. This ladder has 10 rungs, with rung 1 associated with being the "worst off" and rung 10 associated with being the "best off". The second item asked the participant to rate their family's difficulty paying bills during their childhood. Linear regression models were used to examine the extent to

which childhood SES predicted SCD. Models were adjusted for education, referral source (clinical versus non-clinical), and objective cognitive testing. Age and gender were not associated with childhood SES or SCD, and as a result were not adjusted for in these models.

**Results:** On the MacArthur Scale, 20% of participants placed their family at rung 5, 38.2% placed their families at a rung lower than 5, and 41.8% placed their family at a rung higher than 5. When rating the difficulty their family faced paying bills, 3.6% of participants responded "extremely difficult", 16.4% responded "very difficult", 20% responded "somewhat difficult", 23.6% responded "slightly difficult", and 36.4% responded "not difficult". Linear regression models revealed a significant effect of childhood SES on SCD ( $\beta=-.29$ ,  $p=.045$ ,  $SE=.90$ ;  $\beta=-.35$ ,  $p=.015$ ,  $SE=1.68$ ).

**Conclusions:** Childhood SES, measured by subjective social status and family's difficulty paying the bills in childhood, was predictive of SCD in this study of cognitively healthy adults. This result highlights another characteristic of early life that may shape the path of cognitive aging. The predictive utility of childhood SES for SCD may also provide clinicians and researchers with further insight into the populations that may be more susceptible to experiencing SCD in later life. Future studies should utilize a larger sample size among a population with a greater range of childhood SES, to most accurately capture the effectiveness of childhood SES to predict SCD.

**Categories:** MCI (Mild Cognitive Impairment)

**Keyword 1:** memory complaints

**Keyword 2:** demographic effects on test performance

**Keyword 3:** quality of life

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### 94 Physical Activity, Emotional Functioning, and Cognitive Concerns During the COVID-19 Pandemic Among Older Adults in the US

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**Objective:** Physical inactivity is associated with a greater risk of frailty, neuropsychiatric symptoms, worse quality of life, and increased risk for Alzheimer's disease. Little is known about how physical activity engagement of older adults during the COVID-19 pandemic relates to subjective cognitive concerns and management of emotional distress. This study aimed to examine whether there were changes in physical activity during the pandemic in older adults at baseline and 3 months compared to before the pandemic and whether these changes varied based on age, sex, income level, and employment status. Further, we examined whether individuals who reported engaging in less physical activity experienced greater subjective cognitive difficulties and symptoms of depression and anxiety than those who maintained or increased their physical activity levels.

**Participants and Methods:** 301 participants (73% non-Hispanic whites) completed an online survey in either English or Spanish between May and October 2020 and 3 months later. The Everyday Cognition Scale was used to measure subjective cognitive decline, the CES-D-R-10 scale to measure depressive symptoms, and the GAD-7 scale to measure anxiety symptoms. Changes in physical activity were measured with the question "Since the coronavirus disease pandemic began, what has changed for you or your family in regard to physical activity or exercise levels?" with options "less physical activity," "increase in physical activity," or "same activity level." Income was self-reported as high, middle, or low. Analyses of chi-squared tests were used to examine differences in physical

activity maintenance by age, income level, sex, and employment status.

**Results:** Most individuals (60%) reported having decreased their physical activity levels during the pandemic, at baseline and 3-month follow-up. There were differences in physical activity levels based on income and age: participants with a high income reported engaging in more physical activity than those with low income ( $X^2=4.78, p=.029$ ). At the 3-month follow-up, middle-income participants reported being less active than the high-income earners ( $X^2=8.92, p=.003$ ), and younger participants (55-65 years, approximately) reported being less active than older participants ( $X^2=5.28, p=.022$ ). Those who reported an increase in their physical activity levels had fewer cognitive concerns compared to those who were less active at baseline, but this difference was not seen in the 3-month follow-up. Participants of all ages who reported having maintained or increased their physical activity levels had fewer depressive symptoms than those who were less active ( $p \leq 0.0001$ ). Those who reported maintaining their physical activity levels exhibited fewer anxiety symptoms than those who were less active ( $p \leq 0.01$ ).

**Conclusions:** Older adults reported changes in physical activity levels during the pandemic and some of these changes varied by sociodemographic factors. Further, maintaining physical activity levels was associated with lower symptoms of depression, anxiety, and cognitive concerns. Encouraging individuals and providing resources for increasing physical activity may be an effective way to mitigate some of the pandemic's adverse effects on psychological wellbeing and may potentially help reduce the risk for cognitive decline. Alternately, it is possible that improving emotional distress could lead to an increase in physical activity levels and cognitive health.

**Categories:** Other

**Keyword 1:** aging (normal)

**Keyword 2:** depression

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**95 Fear of Falling Associated with Decreased Attention and Executive Functioning in Caregivers**