

Metacognition in older African American adults during the COVID-19 pandemic

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Abstract

Background: There is a critical need to identify older adults in the earliest stages of cognitive decline for targeted dementia reduction interventions. Subjective memory concerns often drive older adults to seek objective memory assessments. However, there is often poor agreement between subjective complaints and objective measures. Previous research suggests that self-appraised memory decline may be more sensitive to mild cognitive impairment than objective measures, but factors influencing the relationship between self-perceived and actual functioning are unclear. Subjective memory appraisal may be susceptible to negative affective perceptions such as anxiety. Anxiety has increased substantially during the pandemic, suggesting the heightened potential for it to distort subjective perceptions, thereby increasing demands for cognitive assessments. This study investigated whether the discrepancy between subjective cognitive concerns and objective cognitive performance is related to anxiety in a sample of older African American adults.

Method: Telephone screenings were administered to 206 older African Americans (aged 64-94 years) during the first year of the pandemic as part of a more extensive study. Demographic data, objective memory (Telephone Interview for Cognitive Status [TICS]), subjective memory (Cognitive Change Questionnaire [CCQ]), and anxiety (Generalized Anxiety Disorder-7 [GAD-7]) were measured, along with survey questions about affective and stress responses to COVID-19 experiences.

Result: Objective TICS scores were predictive of subjective CCQ executive function scores ($F(1, 197) = 4.37, p = .038, R^2 = .022$). Discrepancy scores were calculated as the standardized residual variance between objective and subjective measures. Discrepancy scores were correlated with anxiety ($r = .396, p < .001$), indicating that higher anxiety was related to an overestimation of cognitive difficulty relative to the level of objective cognitive resources.

Conclusion: Objective and subjective measures of cognition are related. However, discrepancies exist between objectively-measured and self-perceived cognition. Elevation in anxiety level is associated with greater overestimation of cognitive difficulties relative to one's objective level of cognition. As pandemic-related stressors have worsened anxiety for some, individuals with higher anxiety may also have depreciated their self-appraisal of cognitive abilities in the present climate. Clinicians should

consider anxiety as a possible contributing factor when assessing subjective cognitive difficulties.