

Subjective Response to a Social Stressor in Individuals with Mild Cognitive Impairment

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Objective: Because stress is a risk factor for Alzheimer's disease (AD), characterizing individual differences in the stress response could help identify those who might be targeted in risk-prevention efforts. Studies measuring the stress response in individuals with mild cognitive impairment (MCI), however, are lacking, in part due to concerns that doing so would be too distressing to these individuals. In this study, we aimed to characterize the subjective response to an acute stressor in individuals with mild cognitive impairment (MCI).

Method: This study consisted of 20 community-dwelling individuals (9 with MCI and 11 cognitively normal individuals; 11 women) 60 years and older (Mean=70.1, SD=5.6) who underwent the Trier Social Stress Test (TSST). Subjects rated their subjective distress using a standardized visual analog scale at prespecified intervals 3 points prior to, and 6 points following, the TSST. Data were subjected to repeated measures analysis with sex as a covariate.

Results: Subjects with MCI rated the TSST as less stressful than their cognitively normal peers ($p=.04$), due to group differences in both post-TSST ratings of subjective distress ($p=.013$) and an increase from pre-TSST to post-TSST ratings of subjective distress ($p=.04$). No individuals withdrew from the study while participating in the TSST.

Conclusion(s): Our finding that individuals with MCI reported experiencing lower distress than their cognitively normal peers in response to a laboratory-based stressor may help alleviate concerns regarding the risks of studying stress in this population. Future research with larger samples will be valuable in studying other determinants of the stress response in these individuals.