

Investigating How Socioeconomic Status Influences Response to Acute Stress

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Socioeconomic status (SES) is an important predictor of health and potential illness outcomes. Previous research has identified stress as a link between SES and aversive outcomes (Baum et al., 1999) showcasing how disparities in social class and income persist in education and health (Lantz et al., 2010). In our research, we hope to test how measures of parental SES (education), subjective social status, and other demographic variables will influence levels of stress reactivity when participants undergo the Trier Social Stress Task (TSST). Using electrocardiogram (ECG) measurements of impedance, we are able to examine the activity of the sympathetic nervous system at baseline and during the task to see if SES affects the size of the observed difference in cardiac impedance measures. Based on prior research, it is expected that those with lower parental SES and perceived social status will have greater stress reactivity throughout the TSST. Additionally, participants may vary in baseline cortisol levels; however, we expect individuals of lower SES to be at a perpetually higher resting level (Ursache et al., 2016). With heart rate as the dependent variable, we expect to see the average heart rates of those with low parental status to be higher than the high SES counterparts, indicating higher stress reactivity during the TSST. Future research would involve completing analysis of all ECG data and directly searching for differences via statistical analysis.