Using Linear Mixed-Effects Models to Examine Correlates of stress, anxiety, depression to find the factors affecting psychosocial attributes.

Caffeine is the most widely used psychoactive drug in the world. One objective of this study was to see what effects, if any, caffeine consumption had on depression, state anxiety, and stress levels of Clarkson students. A second objective was to examine the relationship between the previously listed psychosocial attributes and the participants' reported average hours of sleep and quality of rest. In Phase one of this study, cross-sectional data was collected via survey from participating students in an Introductory Psychology course at Clarkson University. Phase two of this study examined longitudinal data on sleep, caffeine consumption, and psychosocial factors over an 8 week period of time from a subset of students from Phase one. Mixed effects models were used to determine the association between predictor variables of caffeine consumption, average hours of sleep, how rested the participant felt, age of the participant, and sex of the participant, and response variables of stress, anxiety, and depression. Data analysis showed a stronger correlation with stress, anxiety, and depression for average hours of sleep or how rested the participants felt versus the amount of caffeine consumed. (Received September 22, 2011)