

# *Exercise Science*

## **Academics, Athletics, Exercise and Sleep in College Students**

Sponsoring Faculty Member: Dr. Chris Bailey

Jennifer Kreulen

Stress in college students is very prevalent in today's society. As a result, it is important to understand its causes and influences on other aspects of student life. The purpose of this study was to create and validate a weekly questionnaire for college students that assessed daily stressors and performance in activities. Specifically, the questionnaire will seek information on exercise, sleep quality, academic and athletic workloads, time management, as well as other stressors. Students from several Exercise Science courses completed an online questionnaire over the course of a 5-week period resulting in 119 complete responses. The original questionnaire consisted of 24 questions with multiple response choices. Face validity was completed by consulting with experts in specific question areas and reliability of responses was evaluated with Chronbach's alpha. Question reduction was accomplished by completing a principle component analysis and a confirmatory factor analysis. Factor number was selected based on visual inspection of the scree plot and factors that contributed to a minimum of 5% of the variance and questions that did not load on any factors were removed. The appropriateness of the factor model was evaluated with Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy and KMO values above 0.5 were considered statistically significant (Kaiser, 1970). Factor analysis revealed 9 factors and confirmatory factor analysis revealed that 9 factors are sufficient ( $p = 0.863$ ). The KMO for this model was 0.630, indicating its appropriateness. This study concluded that physiological measures, sleep, academics, fatigue, stress levels, athletics, injury, illness, and time management are stress related factors of a college students' life. Future researchers may wish to determine how the magnitude of exercise affects stress levels.

### **References**

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