

## SWACSM Abstract

---

### ***Effect of a University Physical Activity Challenge on Levels of Anxiety, Depression, Stress, and Perceived Dependency of Wearing a Physical Activity Tracker***

EMILY M. JACKSON, SARAH M. CAMHI, FACSM, & STEPHANIE L. COOPER

Department of Kinesiology; University of San Francisco; San Francisco, CA

---

*Category: Undergraduate*

*Advisor / Mentor: Cooper, Stephanie (slcooper@usfca.edu)*

#### ABSTRACT

Many studies have researched the benefits of physical activity (PA) and well-being, leading many universities to promote PA on campus. There is limited research on how university-based PA promotion impacts mental health, as well as the impact of wearing a physical activity tracker (PAT) and its potential to create dependency on wearing the device. **PURPOSE:** To understand the effects of a 4-week campus-wide PA challenge on levels of anxiety, depression, and stress in college students, and the potential dependency effects of wearing a PAT. **METHODS:** For the duration of the 4-week challenge, 44 undergraduate and 6 graduate students ( $\mu = 21.4$  years) wore a PAT with limited feedback, and answered questionnaires regarding their anxiety, depression, stress, and their perceived PAT dependency at the beginning, middle, end, and two weeks post-challenge. **RESULTS:** The results indicate that anxiety, depression, and stress did not change across time. Interestingly, significant interactions were revealed, such that individuals who wore a PAT (PAT Users) before the study differed in their perceived dependency on wearing an activity tracker compared to those who did not wear one prior to the study (PAT Non-users). Differences between PAT Users and PAT Non-users occurred when asked if they would modify their behavior due to the absence of the tracker, and the degree to which they attributed their PA engagement to be driven by needing it to be counted on the PAT. **CONCLUSION:** Further analyses need to be conducted to determine if the challenge led to changes in PA behavior, and explore if those changes were related to changes in anxiety, depression, and stress, as well as PAT dependency. Future research should continue to explore the psychological consequences of wearing a PAT to better understand the potential dependence effects that can occur.