

The Effects of a Guided Mindful Walk on Stress, Mindfulness, and Physical Activity in University Students

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ABSTRACT

Creating effective resources on college campuses is needed to address low physical activity and low mental health in university students. **PURPOSE:** The purpose was to 1) measure changes in mental health (stress, mindfulness and anxiety) and 2) measure physical activity after participation in a guided mindful walk in a diverse student sample. **METHODS:** Students at the University of San Francisco were eligible if ≥ 18 years, able to read/write English, had access to a cell phone, able to stand/walk for 25 minutes. The mindful walking route included seven stops that asked participants to stop, reflect, notice their current surroundings and focus on the present moment. Guided walks took an average of 42 mins to complete (0.85 miles) and occurred on two occasions for two classes during the Spring 2021 semester. Validated surveys measuring state mental health constructs of mindfulness (Toronto Mindfulness Scale; TMS), anxiety (visual analogue scale), and stress (Short Stress State Questionnaire; SSSQ) were given pre and post participation in the guided walking trail. Physical activity was estimated via steps on a Yamax pedometer worn at the hip. Demographics such as race, age, sex, and mental health were self-reported. Changes in mindfulness, stress, and anxiety were explored using paired samples t-tests for normally distributed variables and wilcoxon signed-rank tests for non-normally distributed variables (anxiety). **RESULTS:** Undergraduate students ($n=44$) were 40% freshman/sophomore, 60% junior/senior, mean \pm SD age 20.9 \pm 3.8 years and 68% female. Race/ethnicity of the sample included 25% Asian, 25% White, 34% Hispanic. Students were 41% kinesiology majors and 25% reported diagnosed mental health issues. After the guided mindful walk, total mindfulness score significantly improved (pre: 27.5 \pm 8.2, post: 32.8 \pm 9.5; $p<0.001$); total stress score was reduced (pre: 66.1 \pm 10.7, post: 63.4 \pm 8.3; $p=0.03$); and anxiety significantly decreased (pre: 3.7 \pm 2.4, post: 2.4 \pm 2; $p<0.0001$). Physical activity during the walk averaged 1726 \pm 159 steps. **CONCLUSION:** Completion of a guided mindful walk can reduce anxiety and stress, while increasing mindfulness and physical activity among university students. Future studies should explore whether these effects are similar among university faculty/staff or with a self-guided trail option.