College Students' Perceived Stress in Relation to Physical Activity Behaviors During the COVID-19 Pandemic

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ABSTRACT

College students may experience heightened stress during a global pandemic. It is well known that psychological distress during times of uncertainty and sedentary behaviors may lead to adverse health outcomes such as morbidity and mortality. Physical activity (PA) has been shown to positively mediate distress and other mental health outcomes. PURPOSE: The aim of this study was to examine college students' perceived stress levels and PA behaviors during the COVID-19 pandemic and remote learning. METHODS: An Institutional Review Board approved online Qualtrics survey was used to collect data from eighty-four enrolled college students (mean age 24.4±5.79 years, 57.6% female) in Spring 2021, in Southern California (83.5% public four-year institution, 14.1% other). A 48-item Perceived Stress Inventory (PSI, categories: financial, family, academic, time management, and social stressors) scale using a 10-point Likert scale (1 = no stress and 10 = high stress), along with the Major Life Events Scale (MLES) assessing distressful life experiences, and the International Physical Activity Questionnaire-Short Form (IPAQ-SF), reporting PA behaviors from the last seven days were included. PSI, MLES, and IPAQ-SF responses were analyzed using the Statistical Package for Social Sciences (SPSS) v27. A Spearman Rank Order Correlation was used to assess the relationships with a p-value <0.05 for significance. RESULTS: Time management stress was significantly and negatively correlated (rho = -0.336, p = 0.004) to the total minutes spent sitting, based on IPAQ-SF data. Also, several PSI scores (various categories) trended toward significance with PA behaviors amongst the participants. CONCLUSION: Therefore, college students who had lower time management perceived stress levels also spent a greater amount of time being sedentary during their Spring 2021 semester amidst the COVID-19 Pandemic. Healthcare and fitness professionals should not rely solely on prescribing PA to minimize perceived stress levels and risk for comorbidity later in life, but compliment PA by providing students with the resources to acquire time management skills, especially during times of uncertainty and a global pandemic.