

COVID-19 and physical activity within a university population: Multiple measures

Andrew R. Dotterweich, East Tennessee State University
Brandi M. Eveland-Sayer, East Tennessee State University
Maggie Johnson, East Tennessee State University

The WHO declared COVID a pandemic in 2020 and many governments enacted lockdowns. While these helped minimize virus spread, they created opportunities for sedentary behaviors leading to weight gain and other issues. Lack of physical activity (PA) is a significant factor in weight gain. This study explored PA levels and behaviors on a college campus associated with COVID. Surveys distributed across campus included: PA Vital Sign, Behavioral Regulation in Exercise Questionnaire, Sedentary Behavior Questionnaire, and Lifestyle-Related Behavioral Questionnaire. After IRB approval, recruitment letters, informed consent, and surveys were emailed to qualifying campus members with a two-week follow-up. Survey construction/analysis was completed using QualtricsXM. Over half the university population was overweight or obese (56.5%). PAVS results indicated significant differences ($F(3,1226)=10.053$; $p<.001$) between both healthy ($M=262.5$) and overweight individuals and those who were obese ($M=116.5$). BREQ-3 results revealed significant differences ($F(3,1187)=40.04$; $p<.001$) between multiple BMI groups. SBQ illustrated significant differences ($F(3,1161)=11.427$; $p<.001$) between both healthy ($M=63.2$) and overweight ($M=67.4$) with those who were obese ($M=75.3$). LRBQ results also revealed significant differences ($F(3,1356)=12.816$; $p<.001$) between healthy ($M=-3.8$) and overweight ($M=-3.6$) with obese ($M=-6.7$). Results indicate BMI increases with age in the campus population. Underweight and healthy individuals spend the most time exercising. Underweight and obese spend the most time in sedentary behaviors. Healthy individuals had the most motivation for healthy behaviors, and overweight individuals had more motivation than obese or underweight. A difference from previous studies is the inclusion of faculty and staff, who demonstrated similar patterns. The findings are useful in creating a culture of wellness and PA through various campus entities.