

B23

Moyouri Bhattacharjee

Advisor(s): Rose Calixte Calixte

Analysis of Screen Time Sedentary Behavior and Cannabis Use Among US Adolescents: Results from a National Representative Survey

Background: Sedentary behavior, specifically related to screen time, is increasingly linked to health risks that extend beyond the impact of physical activity measures and is further correlated with substance use and abuse. However, the link between sedentary behavior and substance use remains an understudied area.

Objective: The purpose of this study was to investigate the association between high screen time (5 or more hours) and current cannabis use among US high school students, using data from 16,496 students from the 2021 Youth Risk Behavior Surveillance System (YRBS).

Methods: Survey-weighted bivariate analysis and Poisson regression modelling explored unadjusted associations between high screen time (5 or more hours) and current cannabis use among US high school students and constructed a model to assess the adjusted prevalence ratio of current cannabis use in teens with high levels of screen time. Analysis was carried out in R.

Results: While unadjusted bivariate analysis indicated a significant association between high screen time levels and current cannabis use (p -value $< .0001$), adjusted Poisson modeling showed that high screentime use was correlated with only a 0.2% increase in prevalence of cannabis use (APR = 1.002, 95% CI: 0.99-1.02) after adjusting for age, sex, race and ethnicity, current mental health, and illicit drug usage (including alcohol, smoking and vaping).

Conclusions: Findings suggest that screen time sedentary behavior alone may not be a significant predictor of the observed outcome, and further research should explore other potential factors that influence the current pathway to cannabis use and its prevention in US adolescents.