Abstract

Substance use and exercise participation among young adults: Parallel trajectories in a national cohort-sequential study.

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AIMS:

This study examined the extent to which the trajectory of participation in sports, athletics or exercising (PSAE) covaried with substance use in early adulthood controlling for team sports participation using parallel process latent growth curve modeling.

DESIGN, SETTING AND PARTICIPANTS:

Analysis of data collected from a series of panel studies using a cohort-sequential design. Specifically, the analyses used longitudinal data from 11 741 individuals from the graduating classes of 1986-2001, first surveyed as seniors in American high schools. Up to four additional follow-up surveys were administered to age 26 years. Data were collected using in-school and mailed self-administered questionnaires.

MEASUREMENTS:

Level of PSAE, past-30-day alcohol, cigarette and marijuana use frequency and any past-30-day use of illicit drugs other than marijuana (IOTM) were the main processes of interest. Self-reported race/ethnicity, college status at age 19/20 years, parental education, gender and team sports participation during high school were included as covariates.

FINDINGS:

Results indicate that higher initial levels of PSAE related to lower initial substance use prevalence rates other than alcohol, and lower initial prevalence rates of substance use then corresponded with lower substance use rates throughout early adulthood. Further, as individuals increased PSAE levels throughout early adulthood, the frequency of their use of cigarettes, marijuana and IOTM correspondingly decreased.

CONCLUSIONS:

Increased participation in sports, athletics or exercising (PSAE) is related to significantly lower substance use frequency at modal age 18 and through significantly and negatively correlated growth trajectories through early adulthood. Encouraging PSAE among adolescents and early adults may relate to lower substance use levels throughout early adulthood.