
**Abstract**

Hierarchical linear models examined the success of the school-based Alcohol Misuse Prevention Study (AMPS) in altering normative trajectories of alcohol use, alcohol misuse, reasons to drink, and reasons not to drink across early to middle adolescence. The AMPS curriculum emphasized acquiring refusal skills, understanding normative pressures to drink, and learning about the negative effects of alcohol misuse. A randomized pre-post experimental control design was used. In this study, longitudinal data from 971 students (Level 2) across 5 occasions between 6<sup>th</sup> and 10<sup>th</sup> grade provided 4,178 person-time cases (Level 1). The significant main effect of the AMPS curriculum was moderated by prior drinking experience. Among prior unsupervised drinkers, exposure to AMPS was associated with a reduced rate of increase in alcohol misuse and a reduced rate of decrease in reasons not to drink across adolescence. A significant indirect effect of AMPS on alcohol misuse was observed through reasons not to drink for prior unsupervised drinkers. The discussion focuses on implications of motivational factors for prevention programs.