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DIVERSITY IN ADDICTION RESEARCH TRAINING

Examining the Association Between Alcohol Demand and Alcohol-Related Consequences in

Adolescents

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Background: Adolescent alcohol use is common and associated with long-term risk for alcohol use disorder (AUD). Principles of behavioral economics suggests that hazardous alcohol use is, in part, a result of the overvaluation of alcohol. The Alcohol Purchase Task (APT) captures motivation for alcohol via demand as participants indicate the number of drinks they would consume at a range of prices. APT indices have been associated with negative consequences in adults, however, this has not been extensively explored among adolescents. This study aimed to examine the association between five APT demand indices and alcohol consequences within heavy drinking adolescents. **Methods:** Participants (*N*=45, ages 17-19) met criteria for heavy drinking (4-8 drinking occasions per month, ≥3 standard drinks per occasion) and completed: the 17-item APT, Timeline Follow Back (TLFB), Diagnostic and Statistical Manual of Mental Disorders (DSM-5) semi-structured interview, AUD Identification Test (AUDIT), and the Rutgers Alcohol Problem Index (RAPI). Five APT demand indices were computed: intensity (standard drinks at $0), O_{max} (maximum alcohol expenditure), P_{max} (price point associated with O_{max}), breakpoint (1st price point where consumption reaches zero), elasticity (rate of consumption decreasing as price increase). Univariable and multivariable linear regression assessed associations between demand indices and alcohol-related consequences (AUD symptoms, AUDIT score, RAPI). **Results:** Greater intensity predicted 1) greater number of AUD criteria endorsed (β=0.209, SE=0.083, p=0.016) after adjusting for age and drinking days (TLFB), and 2) AUDIT summary score (β=0.637, SE=0.194, p=0.002) after adjusting for age and socioeconomic status. Other demand indices were not significantly related to AUD or AUDIT; additionally, none of the five indices were related to RAPI (ps ≥ 0.25). **Conclusion:** Consistent with adult findings, intensity was associated with alcohol consequences. Greater motivation for alcohol was related to severity of AUD, suggesting the APT may be a valid marker of problematic alcohol use in adolescents.