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Special Edition: Social-emotional Factors related to Substance Misuse in Adolescents. Guest Editor: Nathaniel R. Riggs, University of Southern California, USA

List of Abstracts

1) **Emotional Distress May Increase Risk for Self-Medication and Lower Risk for Mood-related Drinking Consequences in Adolescents**

Laura Feagans Gould, Andrea M. Hussong, and Matthew A. Hersh

The current study examines indicators of emotional distress and coping that may define sub-populations of adolescents at risk for two potential affect-related mechanisms underlying substance misuse: self-medication and mood-related drinking consequences. Although theory and empirical evidence point to the salience of affect-related drinking to current and future psychopathology, we have little knowledge of whether or for whom such mood-related processes exist in adolescents because few studies have used methods that optimally match the phenomenon to the level of analysis. Consequently, the current study uses multi-level modeling in which daily reports of negative mood and alcohol use are nested within individuals to examine whether adolescents with more emotional distress and poorer coping skills are more likely to evidence self-medication and mood-related drinking consequences. Seventy-five adolescents participated in a multi-method, multi-reporter study in which they completed a 21-day experience sampling protocol assessing thrice daily measures of mood and daily measures of alcohol use. Results indicate that adolescents reporting greater anger are more likely to evidence self-medication. Conversely, adolescents displaying lower emotional distress and more active coping are more likely to evidence mood-related drinking consequences. Implications for identifying vulnerable sub-populations of adolescents at risk for these mechanisms of problematic alcohol use are discussed.

2) **Effects of parent-child affective quality during high school years on subsequent substance use.**

Ekaterina S. Ralston, Linda S. Trudeau, and Richard Spoth

The literature indicates that the quality of affective relationships between youth and parents is associated with lower levels of a range of problem behaviors during childhood, early and late adolescence. While the protective effect of parental monitoring on substance use in the high school and post high school years has been demonstrated, there is a knowledge gap concerning effects of parent-child affective quality (PCAQ) during the same periods. We tested a conceptual theoretical model to examine the effects of PCAQ on substance use following high school. The sample was from a RCT that assessed adolescents in rural Iowa from the seventh grade through two years after high school (N=456). We specified direct effects of PCAQ in 12th grade on drunkenness, smoking and illicit drug use during the two years immediately following high school graduation. We also specified the effects of early substance use initiation (alcohol,

tobacco and marijuana use reported at baseline) on later use. The direct effect of PCAQ in 12th grade on substance use was significant for all substances during at least one of the two years past graduation (ypg). Results were: drunkenness 1 ypg, $\beta = -.126$, $p < .05$; smoking 1 ypg, $\beta = -.119$, $p < .05$; 2 ypg, $\beta = -.146$, $p < .05$; illicit drug use 2 ypg, $\beta = -.165$, $p < .05$. Some significant indirect effects of PCAQ at baseline, via PCAQ at 12th grade, were found. Results also indicated significant direct effects of early initiation on two of the three substances, albeit with a different pattern of effects over time for each substance by years post high school. Importantly, while early initiation remains the strongest predictor of long-term tobacco and illicit drug use, results show how PCAQ might reduce its harmful effects.

3) **The role of social and emotional competence on risk behaviors in adolescence**

Mafalda Ferreira, Celeste Simões, Margarida Gaspar Matos, Lúcia Ramiro, José Alves Diniz and Social Adventure Team

The purpose of this study was to investigate the relation between social and emotional competence and substance use in adolescence, including tobacco, alcohol and illicit drugs. The sample included 3,494 students, mean age 15 years old, in the 8th and 10th grades of the public school system from Portugal. Data were collected using the Health Behavior in School-aged Children (HBSC) survey. For the purpose of this specific study, the questionnaire included questions about social and emotional competence and risk behavior, specifically past 30-day tobacco use, drunkenness, and illicit drugs use. Results showed that adolescent social and emotional competence was negatively related to substance use. All social-emotional competence subscales were significantly associated with illicit drug use. In addition empathy, cooperation and communication, and goals and aspirations subscales were significantly associated with tobacco use. Results demonstrate the potential importance of social and emotional competence in levels of substance use among Portuguese adolescents, and may be used to inform the development of Portuguese substance use prevention programs

4) **Direct and Mediated Effects of a Social-Emotional and Character Development Program on Adolescent Substance Use**

Kendra M. Lewis, Niloofer Bavarian, Frank J. Snyder, Alan Acock, Joseph Day, David L. DuBois, Peter Ji, Marc B. Schure, Naida Silverthorn, Samuel Vuchinich, and Brian R. Flay

Mitigating and preventing substance use among adolescents requires approaches that address the multitude of factors that influence this behavior. Such approaches must be tested, not only for evidence of empirical effectiveness, but also to determine the mechanisms by which they are successful. The aims of the present study were twofold: 1) To determine the effectiveness of a school-based social-emotional and character development (SECD) program, Positive Action (PA), in reducing substance use (SU) among a sample of U.S. youth living in a low-income, urban environment, and 2) to test one mechanism by which the program achieves its success. We used longitudinal mediation analysis to test the hypotheses that: 1) students attending PA intervention schools engage in significantly less SU than students attending control schools, 2) students attending PA intervention schools show significantly better change in SECD than students attending control schools, and 3) the effect of the PA intervention on SU is mediated by the change in SECD. Analyses revealed program effects on both SECD and SU, a relationship between SECD and SU, and the effects of PA on SU were completely mediated by changes in SECD. Future research directions and implications for school-based social-emotional and character development efforts and substance use prevention are addressed.