Family Functioning and Adolescent Alcohol Use: A Moderated Mediation Analysis

Christine McCauley Ohannessian1,2, Kaitlin M. Flannery23, Emily Simpson23, Beth Russell3
University of Connecticut School of Medicine1, Connecticut Children’s Medical Center2, University of Connecticut3

INTRODUCTION

• Alcohol use in adolescence may have acute consequences and lasting negative impacts, including dysfunctional patterns leading to adult substance use disorders (CDC, 2015; Marshall, 2014).
• Family systems theory highlights the role of emotional connection and support in explaining individual adolescent outcomes (Pesola et al., 2015).
• Furthermore, open communication has been reported to buffer against maladaptive outcomes, including substance use and depression (Yu et al., 2006; Ohannessian, 2013).
• More broadly, family satisfaction, perceived happiness with autonomy, support, and closeness have been found to relate negatively to adolescent drinking (Laghí, Baiocco, Lonigo, Capacchione, & Baumgartner, 2012).
• Research examining adolescents consistently has found that depressed mood predicts substance use (King, Iacono, & McGue, 2004; Sihvola et al., 2008).

Research questions: (a) Is family functioning (family satisfaction, and adolescent-parent communication) associated with adolescent alcohol use? (b) Is family functioning associated with adolescent depressed mood? (c) Does adolescent depressed mood mediate the relationship between family functioning and alcohol use during adolescence (Chan et al., 2013). More broadly, family satisfaction, perceived happiness with autonomy, support, and closeness have been found to relate negatively to adolescent drinking (Laghí, Baiocco, Lonigo, Capacchione, & Baumgartner, 2012).

SAMPLE

• 1,036 adolescents (52% girls) from DE, MD, and PA
• At Time 1, all adolescents were in 10th or 11th grade and were attending a high school
• The cohort had a mean age of 16.15 (SD = .75)
• Fairly diverse: 58% Caucasian, 23% African American, 12% Hispanic, 2% Asian

PROCEDURE

During the spring of 2007 (Time 1), 2008 (Time 2), and 2009 (Time 3), research project staff (all of whom were certified with human subjects training) administered surveys to consenting adolescents who attended one of seven public high schools in Delaware, Maryland, and Pennsylvania. All participants had parental consent to participate. The surveys took approximately 40 minutes to complete. Throughout the study, the adolescents were assured that their responses would be kept confidential, and were made aware of their option to withdraw from the study at any time. Participating adolescents were given a movie pass as compensation for their time.

RESULTS

• Path analysis (by gender) was used to examine whether adolescent-mother communication, adolescent-father communication, and family satisfaction at Time 1 predicted depressed mood one year later (Time 2), and whether depressed mood, in turn, predicted alcohol use and binge drinking the following year (Time 3). Alcohol use and binge drinking were included as covariates in the models.
• Race/ethnicity, age, parent education, family structure, and baseline levels of alcohol use and binge drinking were included as covariates in the models.
• As shown in Figure 1, for girls, adolescent-mother communication and adolescent family satisfaction negatively predicted depressed mood (β = -.16, p < .01; β = -.28, p < .001 respectively). Depressed mood, in turn, negatively predicted alcohol use (β = -.19, p < .05). Results from a Sobel test indicated that depressed mood significantly mediated the path between adolescent family satisfaction and adolescent alcohol use (c = -2.05, p = .04). A direct path was observed between adolescent-father communication and adolescent alcohol use (β = -.29, p < .001).
• For boys, the only significant path that emerged suggested that greater depressed mood at Time 2 significantly predicted less alcohol use at Time 3 (β = -.32, p < .05).

CONCLUSIONS

• Results echo the novel findings from Chan et al. (2013), suggesting indicators of family functioning and depressed mood are significant predictors of adolescent alcohol use.
• Whereas the Chan et al. sample included Australian adolescents (aged 12-14), this study presents data from U.S. adolescents (aged 15-18).
• In Chan et al.‘s study of early adolescents, depressed mood positively predicted later alcohol use, whereas in our study of older adolescents, depressed mood negatively predicted later alcohol use.
• Adolescent social drinking is commonplace, hence as depression is associated with social withdrawal, impaired social functioning, decreased peer support, and uneasiness in group situations - it is not surprising that adolescents reporting depressed mood reported less alcohol use (Hankin, 2006; Jaycox et al., 2009; O’Hara, et al., 2015; Weissman et al., 1980).
• Family may play a more salient role for girls than boys given that they tend to be more enmeshed in the family, more likely to experience family stress, and more sensitive to disruptions and conflict in their family environments (Chan et al., 2013; Gore, Aseltine, & Colten, 1993; Kort-Butler, 2009; Davies & Lindsay, 2004; Unger, Brown, Tressel, & McLeod, 2000).