



# Peer Social Support As a Moderator Between Anxiety and Alcohol Use During Adolescence



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## Abstract

Studies have shown that peer social support may act as a buffer against negative adolescent behaviors, such as alcohol use. However, studies have not examined the moderating impact of peer social support on the association between anxiety and alcohol use. Therefore, the objective of this study was to expand current research by exploring whether social support from a close friend moderates the association between anxiety and alcohol use over time during adolescence. The sample was comprised of 346 adolescents who were ages 15-17 at Time 1 and ages 16-18 at Time 2 (59 % girls, 71 % Caucasian, 18 % African American, and 11 % Hispanic). The adolescents completed self-report surveys, and were followed over a one year period of time as part of a longitudinal research project. Social support from a close friend was not found to moderate the relationship between anxiety and alcohol use over time.

## Measures

### Anxiety

The Screen for Child Anxiety Related Disorders (SCARED) was utilized to assess anxiety. The SCARED is a 41-item measure that is used to measure overall anxiety, as well as specific types of anxiety including social phobia, separation anxiety disorder, school phobia, panic disorder, and generalized anxiety disorder (Birmaher, Khetarpal, Cully, Brent, & McKenzie, 1995). A sample item is, "I worry about things that have already happened." In various research studies, the SCARED has been shown to have good internal consistency and discriminant validity (Linyan, Kai, Fang, Yi, & Xueping, 2008; Muris, Merckelback, Ollendick, King, & Bogie, 2002).

### Social Support From a Close Friend

Social support from a close friend was measured using the Self-Perception Profile for Adolescents (SPPA). The SPPA includes 6 items that examine social support from a close friend. A sample item is, "Some kids have a close friend who really understands them but other kids don't have a close friend who really understands them." The SPPA has been shown to have good reliability and internal consistency in numerous studies (Birman, 1998; Thomson and Zand, 2007).

### Alcohol Use Survey

A quantity x frequency index for alcohol consumption was used to indicate alcohol use. Both quantity and frequency of alcohol use were measured through the Alcohol Use Survey. As part of the survey, the adolescents in the sample were asked eleven questions related to the quantity and frequency of alcohol that they had used over the past six months. A sample item is, "When you had beer, on the average day, how much did you usually drink in the last 6 months?"

### Depression

Depression was entered as a covariate because it has been shown to be related to alcohol use and anxiety in adolescents (Essau, Conradt, & Petermann, 2000; Marmorstein, 2009). The Center for Epidemiologic Studies Depression Scale for Children (CES-DC) was utilized to assess depression. The CES-DC is a 20-item measure that includes items related to depression symptoms an individual may have experienced over the course of the past week (Weissman, Orvaschel, & Padian, 1980). A sample item is, "I felt like I couldn't pay attention to what I was doing." The CES-DC has been shown to have good reliability and concurrent validity in a variety of research studies (Faulstich, Carey, Ruggiero, Enyart, & Gresham, 1986; Ohannessian, 2009).

## Measures

### Parental Alcoholism

Maternal and paternal alcoholism was entered as covariates because they have been shown to be related to alcohol use and anxiety in adolescents (Essau, Conradt, & Petermann, 2000; Marmorstein, 2009). Maternal and paternal alcoholism were assessed through the Short Michigan Screening Test (SMAST). The SMAST is a 9-item version of the MAST (Michigan Alcoholism Screening Test). The SMAST includes items where adolescents report on the problem drinking behavior of their mothers and fathers (Crews & Sher, 1992). A sample item is, "Has your mother/father ever gone to anyone for help about his/her drinking?" Adolescents completed the SMAST for their mother (M-SMAST) and father (F-SMAST) separately. Both the M-SMAST and F-SMAST have been shown to have good reliability and validity (Crews & Sher, 1992; Ohannessian, 2010).

## Results

### Boys

For boys, the background variables of depression and maternal alcoholism made statistically significant contributions to the prediction of alcohol use  $F(3, 138) = 6.42, p < .001$ . Boys with higher levels of depressive symptomatology and problem drinking mothers reported a higher level of alcohol use. Significant main effects for anxiety and social support from a close friend were not observed. The interaction between anxiety and social support from a close friend also was not significant. See Table 1 for more information.

### Girls

For girls, the background variables of depression and parental alcoholism did not result in a statistically significant increase in the explained variance. Significant main effects for anxiety and social support from a close friend were not observed. The interaction between anxiety and social support from a close friend was not significant. See Table 2 for more information.

## Results

Table 1

Summary of Hierarchical Regression Analysis for Anxiety at Time 1, Social Support from a Close Friend, Social Support from a Close Friend x Anxiety at Time 1 Predicting Alcohol Use at Time 2 for Boys (n = 142)

Variable	B	SE B	B
Step 1			
Depression	.06	.02	.22*
Maternal Alcoholism	.92	.34	.22*
Paternal Alcoholism	.12	.17	.06
Step 2			
Anxiety at Time 1	-.02	.02	-.07
Social Support	.08	.06	.11
Step 3			
Social Support x Anxiety at Time 1	-.00	.00	-.17

Note.  $R^2 = .12$  for Step 1;  $\Delta R^2 = .01$  for Step 2,  $\Delta R^2 = .00$  for Step 3. \* $p < .01$ .

Table 2

Summary of Hierarchical Regression Analysis for Anxiety at Time 1, Social Support from a Close Friend, Social Support from a Close Friend x Anxiety at Time 1 Predicting Alcohol Use at Time 2 for Girls (n = 204)

Variable	B	SE B	B
Step 1			
Depression	.02	.02	.07
Maternal Alcoholism	.14	.23	.04
Paternal Alcoholism	.10	.13	.06
Step 2			
Anxiety at Time 1	-.00	.02	-.02
Social Support	.06	.06	.07
Step 3			
Social Support x Anxiety at Time 1	-.00	.01	-.20

Note.  $R^2 = .02$  for Step 1;  $\Delta R^2 = .01$  for Step 2,  $\Delta R^2 = .00$  for Step 3.

## Conclusions

This study explored whether social support from a close friend moderates the association between anxiety and alcohol use. The interaction term between anxiety and social support from a close friend was not significant for boys or girls. Of note, some studies that have observed a buffering impact of peer support have used multiple friends. The present study focused on social support from one close friend, not multiple friends. Thus, it would be important for future research to examine whether peer support from the larger peer group moderates the relationship between anxiety and alcohol use over time in adolescents.

## The Adolescent Adjustment Project

- The Adolescent Adjustment Project is a five year longitudinal study which utilized a community sample to examine the relationship between family dysfunction and adolescent adjustment
- Data for The Adolescent Adjustment Project were collected in four Waves beginning in the spring of 2006 and ending in the spring of 2009-This study utilized data from Waves 2 and 3 which were collected in the spring of 2007 and 2008
- Adolescents were recruited by contacting public high schools in Delaware, Pennsylvania, and Maryland and inviting them to participate

## Sample

- 346 adolescent boys and girls
- 71 % Caucasian, 18 % African American, 11 % Hispanic
- 59 % girls
- Age range = 15-17 years old Time 1; Mean age = 16.07 (SD = .67) and 16-18 years old Time 2; Mean age = 17.06 (SD = .68)
- All participants in the sample were in the 10<sup>th</sup> or 11<sup>th</sup> grade in a public high school in Delaware, Pennsylvania, or Maryland at Time 1

\*To obtain a copy of this poster, please visit [www.adolescentadjustmentproject.org](http://www.adolescentadjustmentproject.org)