

Parental Limit Setting As a Moderator Between Anxiety and Alcohol Use During Adolescence



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<u>Abstract</u>

Studies have shown that parental limit setting acts as a buffer against negative adolescent behaviors, such as risky sexual practices, and alcohol use. However, studies have not examined the moderating impact of parental limit setting on the association between anxiety and alcohol use. Therefore, the objective of this study was to expand current research by exploring whether parental limit setting moderates the association between anxiety and alcohol use over time during adolescence. The sample was comprised of 329 adolescents who were ages 15-17 at Time 1 and ages 16-18 at Time 2 (59 % girls, 72 % Caucasian, 17 % African American, and 11 % Hispanic). The adolescents were followed over a one year period of time as part of a longitudinal research project. Parental limit setting was not found to moderate the relationship between anxiety and alcohol use over time, but fewer parental limits predicted more alcohol use in boys.

The Adolescent Adjustment Project

- A five year longitudinal study designed to examine the factors that contribute to the differences in adjustment among adolescents with alcoholic parents
- 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

- 329 adolescent girls and boys
- 72 % Caucasian, 17 % African American, 11 % Hispanic
- 59 % girls
- •. Age range = 15-17 years old Time 1; Mean age = 16 (SD = .67) and 16-18 years old Time 2; Mean age = 17 (SD = .68)
- All participants in the sample were in the 10th or 11th grade in a public high school in Delaware, Pennsylvania, or Maryland at Time 1

<u>Measures</u>

<u>Anxiety</u>

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). 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).

Parental Limit Setting

Parental limit setting was measured using the Parental Limit Setting Measure (PLSM). The PLSM is a 16-item measure used to assess how much freedom parents/guardians give to adolescents for different activities. The PLSM has response choices of 1 ="yes" and 2 = "no", and has two statement stems. The PLSM has been shown to have good reliability (Walsh, Shulma, Bar-on, & Tsur, 2006).

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.

Depression

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). 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).

Parental Alcoholism

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 that evaluate the problem drinking of an adolescent's mother and father (Crews & Sher, 1992). 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

For boys, the background variables of depression and paternal alcoholism were significant F(3, 131) = 6.806, p < .001. In addition, anxiety and lower parental limit setting explained a statistically significant increase in alcohol use for boys, $\Delta R^2 = .046$, F(2, 129) = 3.652, p < .05. However, only parental limit setting made a statistically significant, unique contribution to the prediction of alcohol use (β = .25, p=.01). The interaction term between anxiety and parental limit setting was not significant for boys. For girls, no significant findings were observed.

Table 1

Summary of Hierarchical Regression Analysis for Depression, Maternal/Paternal Alcoholism, Anxiety at Time 1, Parental Limit Setting, Parental Limit Setting x Anxiety at Time 1 Predicting Alcohol Use at Time 2 for Overall Sample (N = 329)

Variable	В	SE B	В	
Step 1				
Depression Maternal Alcoholism Paternal Alcoholism	.02 .21 .11	.01 .19 .11	.09 .06 .06	
Step 2				
Anxiety at Time 1 Parental Limit Setting	01 .27	.01 .06	05 .24*	
Step 3				
Parental Limit Setting x Anxiety at Time 1	.01	.00	.34	

Note. R^2 = .02 for Step 1; ΔR^2 = .06 for Step 2, ΔR^2 = .00 for Step 3. *p < .001.

Results

Table 2					
Summary of Hierarchical Regression Analysis for Depression, Maternal/Paternal Alcoholism, Anxiety at Time 1, Parental Limit Setting, Parental Limit Setting x Anxiety at Time 1 Predicting Alcohol Use at Time 2 for Boys $(n = 135)$					
Variable	В	SE B	В		

variable	В	SE B	В	
Step 1				
Depression Maternal Alcoholism Paternal Alcoholism	.07 .84 .27	.02 .34 .17	.23** .21 .13*	
Step 2				
Anxiety at Time 1 Parental Limit Setting	01 .25	.02 .10	05 .21*	
Step 3				
Parental Limit Setting x Anxiety at Time 1	.01	.00	.36	

Note. R^2 = .14 for Step 1; ΔR^2 = .15 for Step 2, ΔR^2 = .00 for Step 3. *p < .05, **p<.01.

Table 3

Summary of Hierarchical Regression Analysis for Depression, Maternal/Paternal Alcoholism, Anxiety at Time 1, Parental Limit Setting, Parental Limit Setting x Anxiety at Time 1 Predicting Alcohol Use at Time 2 for Girls (n = 194)

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Variable	В	SE B	В		
Step 1					
Depression Maternal Alcoholism	.01 07	.02 .22	.07 02		
Paternal Alcoholism	.10	.13	.06		
Step 2					
Anxiety at Time 1 Parental Limit Setting	00 .27	.02 .07	02 .26*		
Step 3					
Parental Limit Setting x Anxiety at Time 1	.01	.00	.42		

Note. R^2 = .01 for Step 1; ΔR^2 = .07 for Step 2, ΔR^2 = .01 for Step 3. *p < .001. Conclusions

This study examined whether parental limit setting moderates the association between anxiety and alcohol use. The interaction term between anxiety and parental limit setting was not significant for boys or girls. However, fewer parental limits were found to predict more alcohol use in boys but not girls. This gender difference may be the result of differential sex-role stereotypes. Sex-role

stereotypes encourage girls to be obedient, and dependent on their families, whereas boys are encouraged to be more autonomous. Thus, even with fewer parental limits, girls may be less inclined to engage in behaviors that their parents would not approve of in order to maintain these stereotypes. Future research should further examine the gender differences observed in this study.