

December 2006

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Recommended Citation

(2006) "Effects of Family Factors on the Development of Alcohol-related Problems Among Males from Pre-adolescence to Adulthood," *Florida Public Health Review*: Vol. 3 , Article 4.

Available at: <https://digitalcommons.unf.edu/fphr/vol3/iss1/4>

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Effects of Family Factors on the Development of Alcohol-related Problems Among Males from Pre-adolescence to Adulthood

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Abstract

Alcohol use is a leading risk factor in suicides, homicides and unintentional injuries (including motor vehicle crashes and drownings) among adolescents, and is associated with adolescent health risk behaviors such as cigarette smoking, illicit drug use, and risky sexual behavior. The purpose of this study was to determine if family factors would predict alcohol-related problems as the study cohort transitioned into young adulthood, and to determine if early alcohol use remained a significant influence on the development of alcohol-related problems in young adulthood. Results of the analyses indicate that three of the family factors measured in mid-adolescence were statistically significant predictors of later problematic use of alcohol. Family alcohol problems both in early and mid-adolescence were associated with problematic alcohol use in young adulthood. This finding is consonant with previous research that has shown that parental modeling of substance use has a strong influence on adolescents' decision to use.

Florida Public Health Review, 2006; 3:26-34

Background

Alcohol use is a leading risk factor in suicides, homicides and accidental injuries (including motor vehicle crashes and drownings) among adolescents (National Center for Chronic Disease Prevention and Health Promotion, 2000), and is associated with adolescent health risk behaviors such as cigarette smoking, illicit drug use, and risky sexual behavior (Donovan & Jessor, 1985; Kulbok & Cox, 2002; Valois, Oeltman, Waller, & Hussey, 1999). Alcohol use can result in serious negative consequences for the developing adolescent that may persist into adulthood. Adolescents who engage in substance use are significantly more likely to eschew educational opportunities in favor of early entry into the workforce (Dishion, Kavanaugh, Schneiger, Nelson, & Kaufman, 2000). This decision can result in the early assumption of adult roles such as marriage and family that may prove unsatisfactory in adulthood. It may also result in reduced job opportunities, less job satisfaction and lower pay in adulthood (Newcomb & Bentler, 1989). Furthermore, early initiation of alcohol use has been associated with the development of alcohol-related disorders later in life that can affect performance and satisfaction on many levels (DeWitt, Adlaf, Offord, & Ogborne, 2000). It is therefore important to gain an understanding of factors present in early adolescence that contribute to the development of problematic alcohol use in young adulthood.

As children progress through adolescence and transition into young adulthood, they become more and more likely to experiment with alcohol, and become regular and/or problem users. For example, approximately 41% of eighth graders, 63% of tenth graders and 75% of high school seniors have tried alcohol at least once (Johnston, O'Malley, Bachman, & Schulenberg, 2006a). The lifetime prevalence rate for young adults (age 19-30) goes up to 84% (Johnston, O'Malley, Bachman, & Schulenberg,

2006b). A smaller proportion of adolescents and young adults who have experimented with alcohol go on to use more heavily. Almost 11% of eighth graders, 21% of tenth graders, and 28% of twelfth graders report having had five or more drinks in a row in the past two weeks (Johnston et al., 2006a). This proportion grows to 36% among young adults between the ages of 19 and 30 years (Johnston et al., 2006b). Although the proportion of males and females in both adolescence and young adulthood who have used alcohol is almost equal (Johnston et al., 2006a), a higher proportion of males begin to drink more heavily as they progress toward adulthood. Johnston et al. (2006a) reported that in eighth grade, 10% of both males and females reported having five or more drinks at one sitting in the past month. In tenth grade a gap developed, with 22% of males and 20% of females reporting heavy drinking. By twelfth grade, the gap widened to 33% among males and 23% among females. In young adulthood, 47% of the males compared to 28% of the females reported heavy drinking in the past two weeks (Johnston et al., 2006b).

Children in their middle school years (ages 13-15) are particularly vulnerable to the initiation of substance use (Johnston et al., 2006a). Those who begin using substances early in life tend to use more of the substances, to use them more persistently, and to use more dangerous substances than those who postpone initiation into substance use (Fleming, Kellam, & Brown, 1982; Guy, Smith, & Bentler, 1994). Furthermore, those who initiate substance use early in life are more likely to develop alcohol and drug problems when they reach adulthood (Anthony & Petronis, 1995; Newcomb & Bentler, 1989).

The literature indicates that there are multiple risk factors in multiple domains associated with adolescent alcohol use. These risk factors include personality and genetic factors as well as sociodemographic, peer, behavioral and family

factors (Donovan, 2004; Hawkins, Catalano, & Miller, 1992; Swadi, 1999; Vakahali, 2001). Middle school is a time when children begin to make the transition out into the wider community and to prepare for adulthood. However, they are still firmly imbedded in their families at this time (Zucker & Fitzgerald, 1991). For the current study, then, it was decided to explore how family factors during this vulnerable developmental stage might affect the growth of problematic alcohol use later in life. Longitudinal research on the effects of family factors on the development of problematic alcohol use is needed so that intervention and treatment programming can be made more efficient and effective.

The literature on family factors and adolescent substance use indicates that parent-adolescent attachment and connectedness are protective factors against adolescent substance use, while parental substance use modeling, parental rejection, and number of parents in the home are risk factors (Donovan, 2004; Vakahali, 2001).

Another study (Horton & Gil, in press) utilized five family factors -- familism and parent-child communication (measures of attachment and connection), parent derogation (a measure of parental rejection), and family alcohol and drug problems (measures of substance use modeling) -- to explore the effects of the family factors on the intensity of alcohol use among a representative sample of middle school boys at the end of eighth grade. Family structure, socioeconomic status and level of alcohol use in sixth grade were used as control variables in that study. Results indicated that all of the family variables except family drug problems were statistically significant predictors of the dependent variable. However, the level of alcohol use in sixth grade was more strongly associated with the level of use at the end of eighth grade than were any of the family variables. The current study expanded on this earlier study to determine if the family factors would predict alcohol-related problems as the study cohort transitioned into young adulthood, and to determine if early alcohol use remained a significant influence on the development of alcohol-related problems in young adulthood. It was hypothesized that lower levels of familism and of parent-child communication (protective factors), and higher levels of parent derogation, family alcohol problems and family drug problems (risk factors) during early and mid-adolescence would predict a greater number of alcohol-related problems in young adulthood. It was also expected that the intensity of alcohol use in early adolescence would be related to the development of alcohol-related problems in young adulthood.

Method

Data Source

The data for this study were derived from a two-part longitudinal epidemiologic cohort study that examined variations in individual, social and psychosocial factors in relation to substance use, delinquency, and mental health among a sample of adolescents. The first phase of the study (the South Florida Youth Development Project [SFYD]) followed a cohort of middle school students from the sixth and seventh grades to the ninth grade. In the second phase (Transitions), a subset of the initial sample was interviewed as it transitioned into young adulthood. Data for this study were gathered during the fall semester of sixth grade (mean age 11.7) and the spring semester of the eighth grade (mean age 14.2), and again when subjects had left high school (mean age 20.1).

Participants

All male students entering the sixth grade in Miami-Dade County in southeastern Florida were asked to take part in the SFYD study. About 84% of their parents/guardians gave consent for their children's participation ($n=6,934$). Seventy percent ($n = 6,760$) of the participants in the first wave returned questionnaires to the researchers. Seventy-nine percent of the original sample ($n=5,370$) were contacted and completed the survey at the end of the eighth grade. The overall participation rate for the project was approximately 80%. Tests indicated that there were no significant differences between those who dropped out of the study and those who provided data at both data collection points.

A computer-generated random sample from the SFYD project provided a total of 956 subjects (75% success rate) for the Transitions phase. No systematic or significant differences between the groups, and no need for weighting to correct for attrition biases were found though tests conducted to determine representativeness of the sample. The current study examines the responses from a total of 451 African American and White non-Hispanic males (204 African American and 247 non-Hispanic White) who participated in all four waves of data collection.

Measures

Familism. This is a term that applies to the concepts of family pride, family cohesion, respect for family members, loyalty and trust in one's family. Familism was measured using the Family Pride scale, which was derived from the circumplex model of family systems (Olson, Russell, & Sprenkle, 1989). The scale has a Cronbach's α of .80 for sixth grade and .84 for eighth grade. Possible responses ranged from 1 to 4, with higher numbers indicating higher levels of familism.

Parent derogation. This refers to negative communications between parent and child in which the child feels disliked, put down or of little interest to the parent. This variable was measured using the Parent Derogation Scale developed by Kaplan and his associates (Kaplan, Martin, & Robins, 1984; Kaplan, Johnson, & Bailey, 1986; Kaplan, Johnson, & Bailey, 1987). The scale had Cronbach's α coefficients of .71 for sixth grade, and .80 for eighth grade. Possible responses ranged from 1 to 4, with higher numbers indicating greater parent derogation.

Parent-child communication. This variable was measured by one question asking about communication with family members and best friend. For this study, a continuous variable with possible scores of 0 to 3 was developed to measure responses about the Mother and the Father only. Higher numbers indicated greater importance of parent/child communication.

Family alcohol problems and family drug problems. The measures for family problems with alcohol and with drugs consisted of a single question for each: (1) Has your immediate family (the people you live with) had problems because someone in your family uses alcohol? and (2) Has your immediate family (the people you live with) had problems because someone in your family uses drugs? Possible responses were either "yes" or "no", with values of 0 and 1, respectively. These responses were recoded so that the higher number would reflect the existence of problems.

Family structure. Family structure was included as a control variable. It was a dichotomous variable consisting of "other" and "two-parent," with values of 0 and 1 respectively.

Socioeconomic status. SES was also chosen as a control variable to ensure that any differences in alcohol intensity were due to the family factors being studied, not to class. It was estimated in terms of parental education, income and occupational prestige, dimensions that have been used in previous research (Hollingshead & Redlich, 1958). Scores in these three status dimensions were standardized, summed, and divided by the number of status dimensions on which data were available.

Sixth-grade intensity of alcohol use. Intensity of use at the beginning of sixth grade was chosen as a control variable because use at this age could reasonably be expected to affect both intensity of use both later in adolescence and in young adulthood (Gil, Vega, & Biafora, 1998). A subscale contained in the SFYD questionnaire was used to measure alcohol use levels in sixth grade. The scale consisted of answers to 6 questions in the SFYD project survey that were designed to explore the frequency and level of alcohol use. The alpha coefficient was .78.

Post-high school alcohol-related problems. To measure the dependent variable, an index was constructed from 17 questions from the Comprehensive International Diagnostic interview (CIDI) (Wittchen et al., 1991). This instrument has been utilized in cross-cultural interviews and has been shown to have good inter-rater reliability (kappas ranging between .80 and .98 across diagnoses) (Wittchen et al., 1991). The index yielded possible scores ranging from 0 to 21, with higher numbers indicating more problems.

Data Analysis

To rule out the possibility of multicollinearity among the family and control variables, collinearity diagnostics were run in which tolerance was measured in multiple regressions with post-high school alcohol-related problems as the dependent variable, and entering all of the family and control variables in one block. The mean tolerance level was .757, ranging from .647 to .876. Since no tolerance level fell below the midrange, it was assumed for this study that levels were at least acceptable. More importantly, multicollinearity was minimized by conducting regression analyses for each family factor separately.

Data for the dependent variable were strongly right-skewed (ratio of skewness to std. error of skewness = 23.5). Therefore, it was decided to recode the continuous variable into a dichotomous variable consistent with DSM-IV diagnostic criteria for substance dependence (American Psychiatric Association, 1994) consisting of one group of respondents reporting between zero and two problems, and the other group reporting three or more problems.

The data were analyzed using a series of logistic regressions that examined the distal effects of the family factors (sixth grade), as well as the more proximal effects (eighth grade), and the developmental changes (sixth grade to eighth grade) on post-high school alcohol use problems. Family structure, SES and sixth-grade alcohol use were statistically controlled. The independent and control variables were entered into each analysis in sequence, one variable at a time, with the order determined in advance. The literature has shown that family structure could be expected to be less influential than SES (Gil et al., 1998) and so it was entered first in each equation, followed by SES. The family factors were then entered so that their influence could be partitioned out. Intensity of alcohol use in early adolescence has been shown to be more influential than family factors in predicting intensity of alcohol use in mid-adolescence (Horton & Gil, in press), and therefore it was entered after the family factors in the fourth equation. The incremental effect of each added

variable could then be determined by noting the change in the Chi-square after each addition. Conducting the regressions in this manner allows for the determination of the effects of the family variables at each developmental period, as well as determination of the differential impact of the developmental periods by controlling both periods, simultaneously.

Results

In Table 1, a summary of the results of the logistical regressions of post-high school alcohol-

related problems on familism is presented. The first equation (Eq. 1) consists of the sixth-grade familism variable and the two control variables, family structure and SES. As explained earlier, family structure was coded “0” for families other than two-parent, and “1” for two-parent. In the second equation (Eq. 2), sixth-grade familism was removed and eighth-grade familism entered. The third equation (Eq.3) contains both of the familism variables. The full model is then presented in the fourth equation (Eq. 4) with both familism variables along with sixth-grade alcohol use.

Table 1. Logistic Regression of post-high school alcohol-related problems on 6th -grade and 8th-grade familism

Variables	Unstandardized regression coefficients			
	Eq. 1	Eq. 2	Eq. 3	Eq. 4
Family structure	-.563	-.439	-.616	-.592*
SES	.226	.238*	.207	.197
6 th -grade familism	-.602**		-.131	-.257
8 th -grade familism		-.863***	-.745**	-.716**
6 th -grade alcohol use				.159
Chi-square:	15.16***	22.05***	24.31***	25.28***

p*<.05. *p*<.01. ****p*<.001.

Equation 1 shows that, after controlling for family structure and SES, sixth-grade familism was inversely related to problematic alcohol use in young adulthood. In equation 2, eighth-grade familism was a highly significant predictor of alcohol-related problems in young adulthood. When both of the family variables were entered into the model in equation 3, only eighth-grade familism was statistically significant, indicating that proximal influences were more influential than distal. In the last equation (Eq. 4), eighth-grade familism remained a statistically significant predictor of post-high school alcohol-related problems after entering sixth-grade intensity of use. In contrast to the study by Horton and Gil (in press), sixth-grade alcohol use was not a significant predictor of post-high school alcohol use problems. These results suggest that the familism experienced in youth protects against problematic use into adulthood even when considering levels of use in

sixth grade, although the earlier experiences are apparently not as influential as the later experiences.

Table 2 presents the regressions for post-high school alcohol-related problems on parent derogation. The same hierarchical format used in Table 1 was again employed for the parent derogation variable. Sixth-grade parent derogation was entered into equation 1 after controlling for family structure and SES. Eighth-grade parent derogation was then entered into equation 2 after removing the sixth-grade family factor. In the third equation, both parent derogation variables were entered, followed by an equation adding sixth-grade intensity of use. The dependent variable in these equations was also post-high school alcohol-related problems, and all equations controlled for family structure and SES.

Table 2. Logistic Regression of post-high school alcohol-related problems on 6th-grade and eighth-grade parent derogation

Variable	Unstandardized regression coefficients			
	Eq. 1	Eq. 2	Eq. 3	Eq. 4
Family structure	-.328	-.345	-.362	-.340
SES	.245*	.253*	.227	.196
6 th -grade parent derogation	.038		.103	-.208
8 th -grade parent derogation		.531*	.527*	.485*
6 th -grade alcohol use				.271*
Chi-square:	6.45	13.00**	11.74*	15.91**

* $p < .05$. ** $p < .01$. *** $p < .001$.

Equation 1 in Table 2 indicates that early parent derogation was not a predictor of later alcohol-related problems after controlling for family structure and SES, while higher SES values were associated with more alcohol-related problems. However, in equation 2, eighth-grade parent derogation was statistically significant as well as SES. In the third equation, eighth-grade parent derogation remained significant while SES became non-significant, indicating that when the influence of the family variables was combined (even though sixth-grade parent derogation was not statistically significant), they were more influential than SES in predicting post-high school alcohol-related problems. In the last equation (Eq. 4), eighth-grade parent derogation remained statistically significant even after sixth-grade intensity of use was entered. In contrast to the analyses for familism, however, sixth-grade alcohol use was also a statistically significant predictor in the parent derogation model. Although higher levels of alcohol use in sixth grade were associated with later alcohol-related problems in this model, it probably reached significance because parent derogation was considerably less influential than was familism in the preceding analysis. Parent derogation in mid-adolescence was, however a statistically significant predictor of later alcohol-related problems, while this factor during early adolescence was not.

Results for the regressions for post-high school alcohol-related problems on family alcohol problems are found in Table 3. The same hierarchical analysis used in the previous two analyses was again employed. Sixth-grade family alcohol problems was entered into the first equation in the table (Eq. 1)

along with control variables family structure and SES. Equation 2 entered eighth-grade family alcohol problems after removing that family variable measured in sixth grade. In the third equation (Eq. 3), both family variables were entered, and in the last equation (Eq. 4), sixth-grade intensity of alcohol use was added. Again, family structure and SES were controlled in all equations.

Equation 1 in Table 3 shows that family alcohol problems in early adolescence was a highly significant predictor of alcohol-related problems in young adulthood, as was eighth-grade family alcohol problems in equation 2. Both family variables were statistically significant when entered into the same equation, indicating that not only were both variables predictors of later problematic alcohol use, but changes in family alcohol problems between early and mid-adolescence also predicted later problems. That is, youths living in families where family members' alcohol use became worse during the course of the study were more likely to develop alcohol-related problems in young adulthood. In equation 4, both family variables remained statistically significant even after sixth-grade alcohol use was entered into the equation. This outcome was somewhat different from the previous two family variables. In those analyses, the effects of the family variable diminished between early and mid-adolescence so that only the more proximal factors were statistically significant. In this analysis, it appears that early influences were just as significant as later ones – the effects of early family alcohol problems did not diminish as the child proceeded through adolescence and into young adulthood.

Moreover, these results indicate that the level of problematic alcohol use by family members during early adolescence was more important than the level of familism during that time in predicting later alcohol problems for the adolescent. However, family alcohol problems in late adolescence were less important in predicting later problems than was familism at that time.

Analyses for parent-child communication's relationship with post-high school alcohol-related problems were conducted in the same fashion as the

three family variables above. The only significant finding in these analyses was for eighth-grade parent-child communication. When both family factors were entered, and when the full model was entered containing both family factors and all controls, no variable was a significant predictor of post-high school alcohol-related problems.

Family drug problems was not significant at any data point. These results are somewhat surprising, and possible explanations are discussed below.

Table 3. Logistic regression of post-high school alcohol-related problems on 6th-grade and eighth-grade family alcohol problems

Variable	Unstandardized regression coefficients			
	Eq. 1	Eq. 2	Eq. 3	Eq. 4
Family structure	-.542	-.488	-.617	-.592
SES	.249*	.300*	.276*	.272*
6 th -grade family alcohol Problems	1.18***		.888*	.836*
8 th -grade family alcohol Problems		1.19 ***	.808*	.777*
6 th -grade alcohol use				.202
Chi-square:	18.85***	19.38***	23.74***	26.29***

* $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

The purpose of this study was to explore the effects of five family factors on the development of alcohol-related problems among a sample of males as they transitioned from adolescence to young adulthood. The study also examined the relationship between levels of alcohol use in sixth grade on the number of alcohol-related problems later in life. Results of the analyses indicate that three of the family factors measured in mid-adolescence were statistically significant predictors of later problematic use of alcohol. Family alcohol problems both in early and mid-adolescence were associated with problematic alcohol use in young adulthood. This finding is consonant with previous research that has shown that parental modeling of substance use has a strong influence on adolescents' decision to use (Donovan, 2004; Hawkins et al., 1992; Vakahali, 2001). It was surprising, however, that family drug

problems was not also found to be a significant predictor since research has shown that parental use of specific substances not only to influences children to use the same substances used by their parents, but also to generalize use to other substances as well (Andrews, Hops, Ary, Tildesley & Harris, 1993; Fawzy, Coombs & Gerber, 1983; Johnson, Shontz, and Locke, 1984).

Mid-adolescent levels of familism were also shown to predict the development of post-high school alcohol-related problems. This finding was also consonant with the many studies that have found that adolescents' feelings of closeness to their families are protective against substance use (Brook, Lukoff & Whiteman, 1980; Hundelby & Mercer, 1987; Selnow, 1987). It is interesting to note that the more distal sixth-grade familism was not as significant a predictor as the more proximal mid-adolescent familism. This would suggest perhaps that extra-

familial factors gain in importance during middle school and reduce the influence of early family experiences without completely outweighing familism's influence over time.

Parent derogation in mid-adolescence was also significant in predicting alcohol-related problems in young adulthood, although considerably weaker than either family alcohol problems or familism. As with familism, the more distal early adolescent experience of being put down by parents did not affect the adolescent's development of problematic alcohol use as he entered adulthood.

Although it was expected that intensity of alcohol use in sixth grade would influence the development of alcohol-related problems in young adulthood, this was not the case. In contrast to the study by Horton and Gil (in press) in which intensity of alcohol use in sixth grade was a more powerful predictor of alcohol use levels at the end of eighth grade than were family factors, this study found that the family factors were better predictors of later alcohol-related problems than early alcohol use levels. This suggests that early experimentation with alcohol does not inevitably result in escalating and/or problematic use, and that family factors present during adolescence remain an important influence into adulthood.

The fact that the relationship between these family factors and later alcohol-related problems was not as robust as we had expected was somewhat puzzling. It is, of course, possible that future longitudinal studies may reach conclusions similar to those reached in this study since most studies of adolescent alcohol use are cross sectional and do not control for SES or earlier levels of alcohol use. That is, future research may show that, while family environmental factors may impact alcohol use problems, their longitudinal impact may not be as great as we have thought. However, alternative explanations should be considered. First, this was a preliminary study that explored the *direct* influence of early family factors on later alcohol-related problems. It is quite possible that over time, and through the developmental trajectory of early adolescence to early adulthood, the influence of family factors on alcohol use may be *indirect* through other factors occurring contemporaneously with substance use during early adulthood. For example, family patterns of communication and familism may have an impact on peer and other social relations during late adolescence and early adulthood, which in turn may have the strongest relation to alcohol use. Furthermore, since this study was intended to be a preliminary look at family effects, it took into consideration neither the personal biological (genetic) and personality make-up of the respondents, nor

broader community influences (extended family, peers, school, significant extra-familial relationships).

Second, it is possible that the effects of early family factors on later problematic alcohol use begin to be seen later than the age of the respondents of this study in early adulthood. The major issue in this case is that it is likely that there would be an extended period of alcohol use prior to the development of alcohol-related problems. Moreover, the length of time between excessive use and development of problems may vary by race and gender. While there is no clear evidence in the literature regarding ethnic variations in progression from substance use to abuse and dependence, it is clear that African Americans tend to initiate substance use late in adolescence (Werner, Kessler, Hughes & Anthony, 1995). This "delayed" developmental trajectory for African Americans is reflected in lower lifetime prevalence of substance abuse or dependence (Werner et al., 1995) and is also reflected in the weaker effects of traditional risk factors, including family factors, during early and middle adolescence (Gil, Vega & Turner, 2002).

The results of this study should be viewed with some caution. Results presented here cannot be generalized to other populations since data from only African American and White non-Hispanic males from South Florida were examined. Furthermore, selection bias could also be a limitation in this study since all of the respondents had to have participated in each waves of the SFYD project to be included in the current study, and had to be located after they had left high school.

Implications for Research and Practice

The results of this study point to several areas worthy of future research. First, a study designed to explore the mediating effects of family factors on genetic, intrapersonal, peer and community factors would help to clarify the indirect effects not addressed here. Second, research following this same cohort of students as they enter middle age may show stronger relationships between early family life and later development of problematic alcohol use. Future research should also develop a model that would incorporate scales such as those used for the familism and parent derogation variables that would include more dimensions of communication and family substance use problems, perhaps resulting in more robust relationships between early family factors and later problematic use. Lastly, research on these family factors should be conducted using females and other ethnic groupings to ascertain how family factors may influence the development of alcohol-related problems in other populations.

The results of this study also provide useful information for social work and other mental health

practitioners. The findings suggest that children who live in families where there are problems associated with alcohol use are at higher risk of developing problematic alcohol use themselves when they reach adulthood. Moreover, families in which alcohol-related problems intensify or become more noticeable while their children are going through middle school place the child at higher risk. Therefore, identifying these children, and offering them support and individual and/or family intervention could help them avoid negative outcomes later in life.

Results here also suggest that adolescents' perception of family pride and loyalty may protect them from developing alcohol-related problems once they leave the protection and supervision of family and transition into the freedom of adulthood. Thus, the identification of children who are not strongly connected to their families and subsequent strengthening of family relationships could have an impact on functioning in early adulthood including establishment of healthy marital and work relationships and reduction of the possibility of intergenerational transmission of problematic alcohol use.

Adolescence is a time in which children begin developing a sense of self. Results of this study suggest that, if parents put their children down during this developmental stage, there may be long-term negative effects. Although the mechanism that promotes this relationship between parent derogation and an increased likelihood of later alcohol-related problems is not clear from this study, it is possible that, when children internalize a sense of being inadequate or defective because of comments by their parents, they may develop increased levels of depression or anxiety, and form peer relationships with other disturbed in a search for acceptance, factors that are associated with substance abuse and dependency (Hawkins et al., 1992)) that could continue to affect relationships and self-concept as they enter adulthood. Therefore, practitioners who work with parents who tend to put their children down during middle school need to encourage them to learn more positive ways of communicating with their children, and find ways to counteract any negative effects parental communications may have on their children.

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