

# Do Parenting Styles Influence Alcohol Use and Binge Drinking During High School and College?

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## ABSTRACT

For many university students, alcohol use is as much a part of the campus experience as studying for examinations or attending campus sporting events. Parenting styles have been found to influence alcohol use prior to college. This study focuses on the role of parenting styles on students' high school and college drinking patterns. Participants were 376 undergraduates who were categorized into one of four parenting styles. Participants also answered several drinking behavior questions from various surveys and scores were analyzed according to each of the four parenting styles. The results of this study showed that students who perceived and reported their parents as authoritative had a lower usage of alcohol in high school and reported a significantly lower amount of binge drinking during college. Additional findings illustrated those students who perceived and reported their parents as authoritarian started drinking at an older age.

Excessive amounts of drinking in the college population has recently been a topic of growing interest and has been identified as a serious problem on a majority of college and university campuses. According to a national study that sampled almost 17,600 students at 140 four-year colleges and universities, at almost one third of the colleges, more than half of the students binge drank during the two weeks prior to the survey (Wechsler, Dowdall, Davenport, & DeJong, 1993). Binge drinking is of particular concern because it has been linked to health problems and legal complications (Wechsler et al., 1993). Binge drinking is defined as the consumption of five or more drinks in a row for men and four or more for women (Wechsler et al., 1993). Many variables have been found to affect the risk of excessive drinking including parenting practices and familial ties, use during childhood and high school, religion, involvement in conventional activities, and belief in a conventional value system (Durkin, Wolfe, & Clark, 1999). This proposed study focuses on the role of family of origin parenting styles on college students' drinking patterns. We hope to identify patterns that may lead to improvement of the focus and efficacy of alcohol interventions for the college population.

Binge drinking has become a major concern for universities across the nation with 44% of U.S. college students engaging in binge drinking (Wechsler et al., 1993). Half of those students admitting to frequent binge drinking have binge drank three or more times in the past

two weeks (Wechsler, et al., 1993). Of the frequent binge drinkers, 73% of the men and 68% of the women indicated "getting drunk" as an important reason for drinking (Wechsler et al.). In spite of these results, less than 1% of binge drinkers, including those who were frequent binge drinkers, said they had a problem (Wechsler et al., 1993). This behavior has been characterized as the foremost public health hazard for college students (Durkin et al., 1999). Besides the problematic health consequences of alcohol use ranging from minor hangovers to more severe blackouts, students also miss class often resulting in poor scholastic performance (Syre & Martino-McAllister, 1997). Binge drinkers also cause problems for others on campus including crimes such as vandalism, rape, and even fatal accidents (Wechsler et al.). Binge drinking by college students also has negative repercussions on the community surrounding the university including property damage.

The parenting style shown by a child's mother and/or father has been found to influence whether he or she will use alcohol. Students with strong emotional ties to family members are less likely to engage in deviant behavior (Durkin et al., 1999). Children whose parents do not set clear rules against or do not monitor alcohol use by children could be at greater risk for alcohol use (Jackson, Henricksen, & Dickenson, 1997). Parenting that is relatively low in warmth and high in hostility predicted greater risk of alcohol and other drug use by adolescents (Johnson & Padina, 1991). In contrast, positive feedback, encouragement, and physical affection from parents predicted lower risk of alcohol use by adolescents (Jackson et al., 1997). Currently, researchers represent parenting styles in four categories: authoritative, authoritarian, permissive, and neglecting (Cohen & Rice, 1997). Authoritative parents are controlling and demanding but also warm and receptive to the child's communication (Cohen & Rice, 1997). Authoritative parents have a specific combination of demanding behavior; setting and enforcing clear rules, monitoring the child's behavior, and making maturity demands consistent with the child's development, and responsive behavior patterns such as showing affection, providing comfort and support, being involved in the child's academic and social development, and recognizing achievements (Jackson, Henricksen, & Foshee, 1998). Authoritarian parents are defined as controlling and detached, less warm and often arbitrary in enforcing discipline. Permissive parents are non-controlling, non-demanding, and relatively warm, in other words, they do not play an active role in guiding or shaping the child's behavior (Cohen & Rice, 1997). Neglecting parents are characterized by being neither demanding nor responsive, they do not structure and monitor and are not supportive (Baumrind, 1991).

There are many significant reasons to examine the relationship between parenting behaviors, the parenting style used, and alcohol use by children. Many studies have shown a strong relationship between the quality of parenting and the development of relatively high levels of self-esteem, behavioral control, and resistance to peer pressure by children and adolescents (Jackson et al., 1997). Evidence has been found to suggest that initiation of alcohol use during childhood greatly increases the risk of use and abuse during adolescence and throughout life. Cohen, Richardson, and LaBree (1994) concluded that parental behaviors are significant precursors to disruptive behavior, vulnerability and succumbing to peer pressure, and substance use by children and adolescents. A study by Cohen and Rice (1997), found that students who smoke and drink perceive their parents as less authoritative than students who do not. The child's perception of the parents' demanding behavior, as associated with authoritative style parenting, was found to be a strong inverse predictor of the child's alcohol use (Jackson et al., 1997). In other words, children that perceives their parents as authoritative use alcohol less than other children.

While there is support for the relationship between parenting styles and high school drinkers, there is only a small amount of research literature on the relationship between parenting style and college drinking. Wechsler et al. (1993) found that one of the most important factors in determining binge drinking in college, is a student's binge drinking in high school. The initiation of alcohol use during childhood increases the risk of alcohol abuse during adolescence (Jackson et al., 1997), and increases the likelihood that those individuals will be binge drinkers in college. Students that fit this profile of binge drinkers are almost three times more likely to be binge drinkers in college (Wechsler et al., 1993). In relation to this finding, Jackson et al. (1998) found that parental nurturance, associated more highly with authoritative parenting, was inversely related to adolescents' reported susceptibility to peer pressure and deviant self-image, both which are significantly high risk factors for alcohol use and misuse.

We hypothesized that college students who perceive and report their parents as authoritative will have had lower usage of alcohol in high school and will have reported a significantly lower amount of binge drinking during college. We also expect to find that college students who perceive and report their parents as authoritarian will have started drinking at an older age and will be categorized as frequent binge drinkers.

If the hypotheses were supported, it would suggest that parenting practices are related to binge drinking in adolescents and college students. Understanding this relationship can facilitate development of comprehensive programs that involve parents directly in prevention efforts.

## METHOD

Participants: Three hundred and seventy-six participants were solicited from the General Psychology human participants pool and received course credit for their participation. Of the fully completed data collection instruments, 110 (30.2%) of the participants were male, while 254 (69.8%) were female; 70.3% ( $n=256$ ) were freshman, 21.4% ( $n=78$ ) were sophomores, 5.8% ( $n=21$ ) were juniors, and 2.5% ( $n=9$ ) were seniors. The participants were predominately European American ( $n=374$ ; 95.3%) and represented the overall distribution of majors at UW-La Crosse. The ages of participants ranged from 18 to 22 with the mean of females being 19.0 ( $SD=.93$ ) years and the mean age of males being 19.3 ( $SD=.83$ ) years. Students older than 22 years old were dropped from the analysis due to an increased period of time from their high school years to present. A large number of students were used because previous studies have shown that many students, as much as 50%, do not fit into one of the four defined parenting categories and therefore need to be dropped from the final analysis.

Procedure/Measures: Participants completed a questionnaire that assessed their current drinking patterns, their high school drinking patterns, and their perceptions of their parents' parenting style. Drinking behavior was assessed with questions from a variety of surveys including the American Drug and Alcohol Survey, The Prevention Planning Survey, and the Core Alcohol and Drug Survey used by the UW-L Alcohol Task Force. Parenting style was assessed with a measure developed by Lamborn, Mounts, Steinberg, and Dornbusch (1991). Participants were categorized into one of the four parenting styles on two dimensions: strictness/supervision and acceptance/involvement. The strictness/supervision factor assesses parental monitoring and supervision of the adolescent, and has an alpha reliability of .76 (Lamborn et al., 1991). The acceptance/involvement scale measures the extent to which the adolescent perceives his or her parents as loving and responsive, and has reliability alpha of

.72. The following is a sample question regarding parental warmth and involvement: When you get a poor grade in school, how often do your parents or guardians encourage you to try harder? (Response categories are never, sometimes, and usually). The students completed the survey for both parents in two-parent households (in which ratings for the mother and father will be averaged) and for one parent in single-family homes. Baumrind (1991) reports that there is considerable convergence between mothers' and fathers' ratings. The Lamborn et al. measure was chosen because other measure in the literature tends to assess only three parenting styles by failing to differentiate between permissive and neglectful styles (Baumrind, 1971; Macoby & Martin, 1983).

## RESULTS

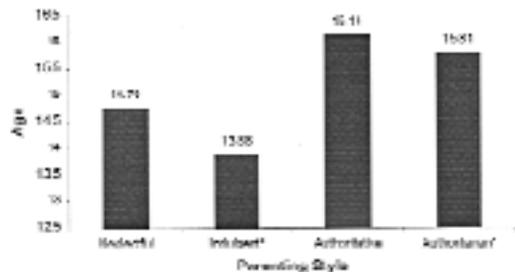
The data were collected for all 376 participants in which parenting style and responses to a variety of drinking questions were recorded. The mean age students started drinking, their perception of own alcohol consumption during high school, perception of current alcohol use, and current binge drinking habits in college were assessed. Each of these measures was examined across parenting style using a one-way ANOVA.

Significant differences were found for parenting style and age of first time drinking,  $F(3, 154) = 4.73, p < .01$ . Participants who started drinking earlier were raised according to indulgent ( $M = 13.88$ ;  $SD = 3.87$ ) or neglectful ( $M = 14.76$ ;  $SD = 2.67$ ) parenting styles while children who began drinking at an older age were raised by authoritarian ( $M = 15.81$ ;  $SD = 4.70$ ) or authoritative ( $M = 16.14$ ;  $SD = 1.73$ ) parents (Figure 1).

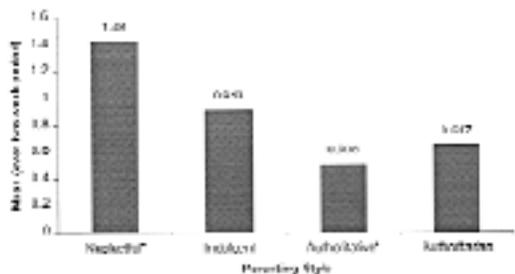
For the frequency of binge drinking within a two-week period during high school, there were differences noted as well,  $F(3, 163) = 3.45, p < .05$ . Students with authoritative parents were found to have engaged in binge drinking less frequently ( $M = 0.508$  times/ two weeks;  $SD = 1.42$ ) than students with neglectful parents ( $M = 1.43$  times/ two weeks;  $SD = 1.95$ ).

Further analysis of reported high school alcohol use concluded that students who consumed a lower number of drinks per week were raised by authoritative ( $M = 1.3$  drinks;  $SD = 1.58$ ) or authoritarian ( $M = 0.912$  drinks;  $SD = 0.82$ ) parents, while students with neglectful parents reported having a higher number of drinks per week ( $M = 4.65$  drinks;  $SD = 6.60$ ),  $F(3, 152) = 5.43, p < .001$  (see Figure 3).

(Fig. 1) Parenting Style and Age Started Drinking



(Fig. 2) Parenting Style and Binge Drinking in High School

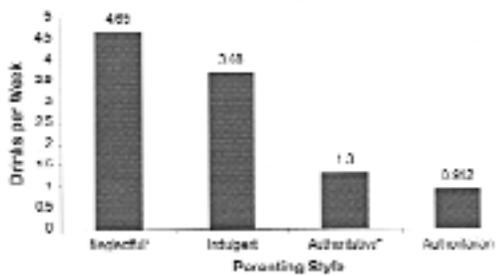


Analysis of current use on a scale from 1 (non-user) to 10 (very heavy user) revealed that students who classified themselves as significantly lower users were raised by authoritarian parents ( $M$  use = 3.94;  $SD=2.72$ ), while students with neglectful ( $M$  use = 8.05;  $SD=2.64$ ) or indulgent ( $M$  use = 7.35;  $SD=2.70$ ) parents were shown to have higher levels of alcohol use,  $F(3, 163) = 8.48, p < .001$ .

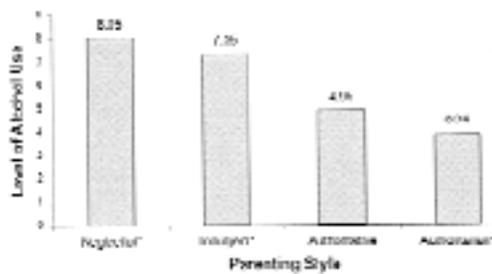
Results for frequency of binge drinking in college during a two-week period during college, was also significant  $F(3, 163) = 4.86, p < .01$ . Analysis concluded that students who engaged in binge drinking less frequently during college years reported their parents as authoritarian ( $M = 0.35$  times in a two week period) or authoritative ( $M = 0.89$  times in a two week period;  $SD=1.18$ ), while students who binge drank more frequently reported their parents as neglectful ( $M = 1.59$  times in a two week period;  $SD=1.01$ ) or indulgent ( $M = 1.91$  times in a two week period;  $SD=1.68$ ).

Scores from the frequency of alcohol use question, in high school, during a one-year period were used to define subjects as non-users, light-users, moderate-users, or heavy-users of alcohol. Frequency analyses were used to examine the percentage of students from the various parenting styles that fell into each of these categories. The four categories were defined as follows: did not use ( $n = 52$ ), light use was defined as once a year through six times per year ( $n = 46$ ), moderate use was defined as once per month through twice per month ( $n = 34$ ), and heavy use was defined as once per week through everyday use of alcohol ( $n = 32$ ). Of the students who were categorized as non-users, 19.2% ( $n = 10$ ) had neglectful parents, 5.8% ( $n = 3$ ) had indulgent parents, 53.8% ( $n = 28$ ) had authoritative parents, and 21.2% ( $n = 11$ ) had authoritarian parents. Of the students classified as low-users, 26.1% ( $n = 12$ ) had neglectful parents, 19.6% ( $n = 9$ ) had indulgent parents, 50.0% ( $n = 23$ ) had authoritative parents, and 4.3% ( $n = 2$ ) had authoritarian parents. Of the students classified as medium-users, 55.9% ( $n = 19$ ) had neglectful parents, 14.7% ( $n = 5$ ) had indulgent parents, 23.5% ( $n = 8$ ) had authori-

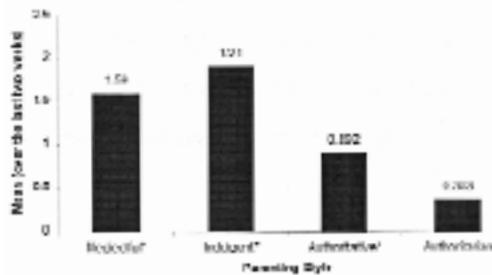
(Fig. 3) Parenting Style and High School Alcohol Use



(Fig. 4) Parenting Style and Current Alcohol Use



(Fig. 5) Parenting Style and Binge Drinking During College



tative parents, and 5.9% ( $n = 2$ ) had authoritarian parents. Of the students classified as high-users, 56.3% ( $n = 18$ ) had neglectful parents, 18.8% ( $n = 6$ ) had indulgent parents, 18.8% ( $n = 6$ ) had authoritative parents, and 6.3% ( $n = 2$ ) had authoritarian parents (see Figure 6).

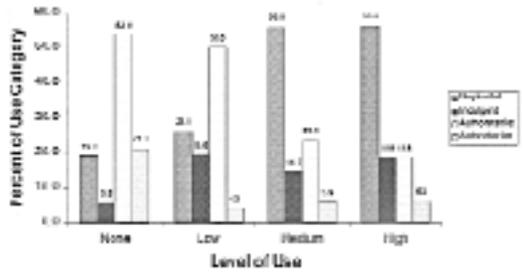
Post hoc analysis between gender and parenting style found that males were more likely to perceive their parents as neglectful and females were more likely to classified their parents as authoritative (see Figure 7).

Due to these results, this would lead to the assumption that gender has an impact on drinking behaviors rather than parenting styles. While controlling for gender, significant differences were still found in the following areas as related to parenting style. For age at which participants first drank, students of neglectful parents reported earlier onset of alcohol use ( $M$  age = 13.4;  $SD=1.75$ ) than those of authoritative parents ( $M$  age = 16.1;  $SD=2.06$ ),  $F(1, 122) = 1.41, p < .05$ .

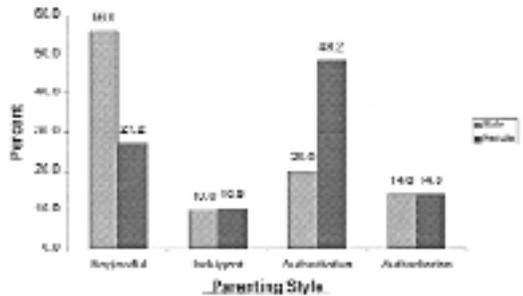
In terms of overall current use, as noted before, students of indulgent ( $M = 8.78$ ;  $SD=3.71$ ) and neglectful ( $M = 8.22$ ;  $SD=3.64$ ) parents reported higher levels than those with authoritative ( $M = 5.72$ ;  $SD=3.66$ ) and authoritarian ( $M = 5.91$ ;  $SD=3.71$ ) parents,  $F(1, 122) = 1.60, p < .05$ . And with regard to high school alcohol use, students of indulgent ( $M = 3.22$ ;  $SD=1.89$ ) and neglectful ( $M = 3.07$ ;  $SD=1.94$ ) parents reported higher levels than those with authoritative ( $M = 1.56$ ;  $SD=1.56$ ) and authoritarian ( $M = 2.00$ ;  $SD=2.14$ ) parents,  $F(1, 122) = 8.21, p < .001$ .

Although the hypotheses were supported, there were no significant differences between authoritative and authoritarian or between neglectful and indulgent. Therefore, the level of warmth a parent has did not relate to a student's drinking behavior. Parenting style was collapsed based on level of strictness. Post hoc analysis showed significant differences in a student's drinking behavior due to their parent's level of strictness. Students with parents classified as low strict started drinking earlier ( $M=14.05$ ;  $SD=2.99$ ) than students with high strict parents ( $M=15.77$ ;  $SD=2.39$ )  $F(1,126) = 7.58, p < .01$ . When students were asked to classify their current alcohol use on a scale from 1 to 10 (1= non-user to 10 = very heavy user), students with low strict parents reported lower use ( $M=8.62$ ;  $SD=4.06$ ) than students with high strict parents ( $M=5.70$ ,  $SD=4.06$ )  $F(1, 126) = 12.89, p < .001$ . Students with low strict parents reported drinking more drinks per week during high school ( $M = 4.69$ ;  $SD=2.74$ ), than students with high strict parents ( $M = 1.47$ ;  $SD=2.88$ ),  $F(1, 126) = 7.28, p < .01$ .

(Fig. 6) Parenting Style & High School Alcohol Use



(Fig. 7) Gender and Parenting Style



## DISCUSSION

The findings support our hypothesis in that students who perceived and reported their parents as authoritative had a lower usage of alcohol in high school and reported a significantly lower amount of binge drinking during college. Additional findings confirmed the hypothesis that students who perceived and reported their parents as authoritarian started drinking at an older age, but were not categorized as frequent binge drinkers.

In addition to supporting the hypotheses of this study, the findings also concur with findings of other studies. Jackson et al. (1998) found that parenting behaviors are significant precursors to adolescent vulnerability to peer pressure and alcohol use. Cohen and Rice (1997) found that students who perceived and reported their parents as neglectful or indulgent were found to engage in smoking and drinking more frequently. Although the hypotheses suggest that one style of parenting would result in specified drinking behaviors, the results showed that there were no significant differences between authoritative and authoritarian styles in any statistical analyses. This suggests a common theme between authoritarian and authoritative parenting styles, parental strictness, leading to lower usage of alcohol by students.

In relation to drinking behaviors in college, Wechsler et al. (1993) found that binge drinking in high school often leads to an increase in college binge drinking behavior. Similar to the results of Wechsler, the current study also found a link between high school and college drinking behaviors. In comparison to other studies in the current body of literature, our study has a unique focus on college drinking behaviors as influenced by parenting styles.

In general, the number of participants surveyed by the current study was consistent with the amount of participants used in other studies; however, the current study used self-report by college students while other studies only used children or high school-age participants.

On a broader note, parents providing positive feedback through praise, encouragement, and physical affection would seem to characterize a positive parent-child relationship. Positive relations appear to be a direct consequence of parents spending time with their children. Given the tremendous influence parents have over their children during their formative years, more effort should be directed toward helping parents with child-rearing issues. For optimum results, interventions must be targeted both before adolescents and throughout a child's adolescent years. Understanding this relationship can facilitate development of comprehensive programs that involve parents directly in prevention efforts. Due to the lack of investigation regarding the continuing influence of parenting styles over college behaviors, there is a need for further exploration that will help increase our understanding of this relationship.

## LIMITATIONS

The most significant limitation of this study is that the procedure used to categorize the participants' parenting styles is relative to the sample responses. For example, a person categorized as having neglectful parents, had responses counted in the bottom third of the sample on both the warmth and strictness scales. The responses may have been low in comparison to other scores in the sample, but not necessarily qualifying the parents as having "low warmth" and "low strictness." Another limitation that might have affected the results of this study is the number of students in each a parenting style category. There was a large range of individuals in the parenting style categories (from  $n=11$  to  $n=65$ ), and those with a lower number of subjects may be more affected by outliers. Due to the self-report format of the survey, report-

ed drinking behaviors may not be entirely accurate for many reasons. Many of the students surveyed were not 21, which is the legal drinking age in Wisconsin, and may have been worried to report their current behavior honestly for fear of legal repercussions. The sample was taken from students attending the University of Wisconsin- LaCrosse and a 95.3% white and 4.7% non-white distribution was obtained, which is not very representative of a population of college students as a whole in the area of ethnicity. The average age of male participants ( $M = 19.3$  years) was also found to be significantly higher than that of female participants ( $M = 19.0$  years) and could have impacted the outcome of the results (see Fig. 7). Further study with a more representative sample and a more even age distribution would be beneficial to support the findings of this study. Additional analyses found gender to be a possible confounding variable. Figure 8 shows that 48.2% of females reported their parents as authoritative, and 56.0% of males reported their parents to be neglectful. The unbalanced gender distribution (69.8% female, 30.2% male) in combination with the difference in reported parenting style between males and females, may have skewed the results.

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