Tough Love: Is it Sending your Children to their Room or to the Bar? A Look at Parental Bonding and Alcohol in College Students

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Abstract

The effects of alcohol consumption are far-reaching, as about a quarter of deaths globally affecting people aged 20 to 39 years are linked to alcohol misuse.[1] A number of factors influence college student drinking. For instance, parental bonding plays a large role on adolescents' mental health outcomes, such that those who grow up with high caring and low controlling parents tend to experience better health and well-being than those with low caring and high controlling parents.[2] These early life experiences oftentimes shape the way in which adolescents view the world and can later influence ideas regarding alcohol consumption and college life. One view that parenting might influence is how central alcohol is to the student's college experience. The College Life Alcohol Salience Scale (CLASS) has been used to measure these attitudes toward alcohol, while the Parental Bonding Instrument (PBI) measures the role that parents play in the manifestation of health outcomes. The purpose of this study is to establish the relationship between parenting style (PBI), the CLASS, and high risk alcohol consumption. The overall regression predicting high risk alcohol consumption from the CLASS, PBI Care for mothers, and PBI over protection for mothers was significant, $F(3,160) = 14.84$, $p < .001$, adjusted $R^2 = .20$. However, the only significant predictor was the CLASS ($\beta = .47$, $p < .001$; PBI care $\beta = .05$, $p = .58$; PBI Overprotection $\beta < .01$, $p > .99$). The overall regression predicting high risk alcohol consumption from the CLASS, PBI Care for fathers, and PBI overprotection for fathers was significant, $F(3, 160) = 15.79$, $p < .001$, adjusted $R^2 = .22$. However, the only significant predictor was the CLASS ($\beta = .48$, $p < .001$; PBI care $\beta = .06$, $p = .42$; PBI Overprotection $\beta = -.09$, $p = .27$). In a sample of college students, perceptions of parental bonding did not predict high risk alcohol consumption. However, how central alcohol was to the students' experience did predict high risk alcohol consumption.

Keywords: Alcohol, Parental Bonding, CLASS

1. Introduction

Drinking among college students has become a major health concern in recent years, particularly as it affects grades, relationships, and health status. Approximately 57.1 percent of young adults between the ages of 18 and 25 regularly used alcohol in 2016, with about 2 in 5 engaging in binge drinking behavior or high risk alcohol consumption.[3] There are many contributions to one's involvement with alcohol. The ways in which a parent raises his or her child can affect emotional and social development throughout the course of that individual's life, affecting mental health outcomes and the ways in which that individual views the world. As a young adult entering college, one is likely to have ideas about the role that alcohol will play in his or her life. These ideas foster drinking behaviors that oftentimes go on to negatively impact the individual. According to the National Institute on Alcohol Abuse and Alcoholism, about 25 percent of college students suffer academic consequences stemming from drinking and nearly 2,000 young adults between 18 and 24 die from injuries related to alcohol.[4] Therefore, the purpose of this study is to examine the effects of parental bonding on the role that alcohol plays in the lives of college students.

1.1 Parental Bonding

Attachment between a mother and child is a product of numerous instinctual behaviors that begin around six months and extend throughout development. These behaviors include, but are not limited to, crying, greeting, and facial expressions. This unique language helps the child to differentiate his or her mother from other people and allows the mother to respond in a way that is meaningful and personalized to the infant, particularly in situations of adversity. A disruption in, or lack of, early attachment may lead to the development of mental disorders in the child and affect his or her capacity for forming loving bonds with others. Furthermore, the more distanced one is from his or her parents, the greater likelihood that he or she will experience depressive and psychophysiological symptoms later in life.[5]

The Parental Bonding Instrument is a measure that was created in 1979 by Gordon Parker and his associates to better define the effects of parental relationships on mental health outcomes.[6] Previous studies have found several characteristics that account for parental bonds, or the relationship between a parent and his or her child, with the two most prominent variables being care versus rejection and control versus lenience.[7] Therefore, the PBI measures levels of care and protection that individuals remember their parents expressing up until age 16. A score indicating high care and low protection is considered 'optimal bonding,' while low care and high protection are considered 'affectionless control.'[8] Furthermore, high care and high protection is 'affectionate constraint,' while low care and low protection is 'weak/absent bonding.'[9] Several studies have been conducted over the years using this measure. Overall conclusions from these studies indicate that the PBI is insensitive to gender, social class, and age of respondents.[10] The latter is particularly important because it shows that as respondents continue to age, their views of their childhood do not change and that they do not fall victim to social desirability bias.[11] On the other hand, the PBI is susceptible to influence from cultural differences. Furthermore, mothers tend to receive higher caring and protective scores than do fathers.[12]

It is important to distinguish between actual parental characteristics and perceived characteristics. Due to its self-report nature, the PBI measures perceived characteristics. However, studies that compare responses from children to responses from parents, studies comparing responses from twins, and studies where responses are derived from interviews of the parents indicate that the PBI may in fact be accurate at labeling actual parental characteristics. Longitudinal cohort studies would be necessary to further explore this idea to perhaps broaden the implications of the PBI. Concerns regarding the PBI include biased scoring as a result of the respondent's current mood or depressive symptoms. However, studies have failed to find valid evidence that this produces a response bias.[13] Furthermore, personality traits of respondents have not dictated bonding scores in previous studies.[14]

Aligning with it's initial intended use, the PBI has successfully found relationships between psychiatric symptoms and PBI scores. For example, those who suffer from neurosis such as social phobia, obsessive compulsions, and anxiety, just to name a few, tend to score parents as exhibiting affectionless control. Additionally, individuals who rate parents as caring and overprotecting (affectionate constraint) often experience developmental issues which manifest into asthma, panic disorder, or hypochondria.[15] Additionally, children of parents who display lenience and are uninvolved are most likely to suffer socially, academically, and emotionally, exhibiting hostility and deviant behaviors such as criminal acts, sexual misconduct, alcohol abuse, and drug misuse.[16]

Using the PBI, measures of parental bonding can predict certain mental disorders that one may suffer from later in life. Data has shown that there is much overlap between mental disorders and drug and alcohol use, typically in the form of an addictive disorder. These associations point to either a biological factor that makes an individual susceptible to both, or it shows that there is a causal link from one disorder to the other. Scientifically, the comorbidity of such disorders is likely attributable to similar neurological dysfunctions, such as the irregular production of neurotransmitters like dopamine and serotonin.[17] Therefore, it is likely that the PBI would have merit in predicting those who are at a greater risk for developing an alcohol or drug dependency. For instance, 37% of people who display an alcohol use disorder also suffer from a mental disorder.[18] Ultimately, the PBI is very valuable in identifying mental disorders, and it has broader implications that can help early detection of substance abuse disorders as well. Furthermore, it is likely that the PBI could draw out relationships that exist between parental bonding and attitudes toward alcohol and its centrality to college life.

Parental bonding has been indicated to influence drinking patterns, as alcohol is often used as a coping mechanism or 'medication' to deal with harsh life circumstances. A study conducted by Patock-Peckham looked at parenting style, parental bonds, and drinking in offspring. In those with an optimal parental bond, alcohol-related problems were reduced as a result of lesser or nonexistent depressive symptoms. Furthermore, when negative bonding was displayed from fathers, there was a greater occurrence of alcohol-related problems in college students than when

negative bonding was displayed from mothers. Similar results regarding alcohol use, drinking-problems, and parental bonding were found between males and females.[19]

1.2 CLASS

In 2016, it was estimated that about 2 in 5 young adults engaged in binge drinking, which adds up to about 13.3 million people aged 18 to 25.[20] There are many reasons as to why individuals partake in such behaviors. For instance, college students can be influenced by expectations about college life that they have been forming all throughout adolescence.

The College Life Alcohol Salience Scale is a measure that was developed to better understand and quantify attitudes toward alcohol, specifically among the population of college students. This measure takes into account students' beliefs about how fundamental alcohol is or should be to the college experience.[21] For instance, most students enter college with an idea of the role that alcohol will have in their lives. Perhaps they see themselves going to bars and parties on the weekend, participating in drinking games, skipping class every now and then from a hangover, or even blacking out.[22] Today's culture emphasizes one's twenty-first birthday as an entrance into the adult world, with drinking being a rite of passage. Adopting these beliefs puts one at a greater risk of developing alcohol related problems and makes it more challenging for him or her to succeed with intervention.[23] Studies conducted among college students have indicated that a student with a higher CLASS score is more likely to drink a greater number of alcoholic drinks on one occasion.[24]

Beck and Lockhart examined the relationship between parental influences, perceived social norms, and drinking behavior in adolescents. They theorized that parents who employed persistent monitoring and implementation of rules reduce chances for alcohol abuse among adolescents. Surprisingly however, parental influences as perceived by adolescents were not predictive of drinking behavior and therefore could not distinguish between those who drink heavily and those who do not. Beck and Lockhart contributed these findings to the nature of responses of perceived influence rather than responses of actual influence.[25] While this study looked at parental influences on drinking behavior, the current study examines the parental role in the development of attitudes toward drinking among college students.

The strength and form of a parent-child relationship can have far-reaching consequences on the health outcomes of the child later in life. An intermediate between parenting and these outcomes is the formation of one's view of the world. The purpose of the current study is to expand the current knowledge on the relationship between parental bonding and attitudes toward drinking. Solidifying a link between these variables may prove to be valuable in the synthesis of effective alcohol intervention programs that target both parent and child.

2. Methodology

2.1 Participants

The sample for this study was composed of 273 undergraduate students at a midsize, Midwestern university. Fifty-nine participants were male and 204 were female. Juniors were the largest group sampled (32.2%), while freshman, sophomores, and seniors made up 17.2%, 23.4%, and 20.5% of the sample, respectively. The average age was 20 years. The majority of students (89.0%) identified as being white (Caucasian). Other groups sampled include African American (5.5%) and Asian/ Asian American (4.8%). Hispanic or Latino/a students comprised 6.2% of the sample.

2.2 Procedure

Data was collected through an online survey housed by Qualtrics using a snowball sampling method. The survey was preapproved by the Institutional Review Board. Participants were incentivized to participate with a chance at winning a $50 gift card.

2.3 Measures

2.3.1 alcohol consumption

The survey began with questioning students of their amount and frequency of drinking. Peak drinking within the past month, number of drinks on an average drinking occasion, and number of days drinking in a week were all assessed.

2.3.2 Parental Bonding Instrument (PBI)

The PBI was used to measure bonding between students and their parents. Instructions asked students to rate 25 statements based on how they remember their mother during their first 16 years. They were then asked to rate the same statements about their fathers. The scale had 4 points ranging from "very unlike" to "very like." Scoring was determined based on the individual statement. Twelve of the statements are classified as "care" items with the remaining labeled as "overprotection" items. Examples of "care" items include "Spoke to me in a warm and friendly voice" and "Appeared to understand my problems and worries." "Overprotection" items included "Let me dress in any way I pleased" and "Felt I could not look after myself unless she/he was around." According to the literature, the mean overprotection scores are 11.45 (SD = 6.89) and 10.08 (SD = 6.80) for mothers and fathers, respectively. Furthermore, the mean care scores are 29.71 (SD = 6.66) for mothers and 25.55 (SD = 8.98) for fathers.[26]

2.3.3 College Life Alcohol Salience Scale (CLASS)

The CLASS was used to measure the centrality of alcohol to each student's life. The measure consists of a set of 15 statements regarding beliefs about drinking in college. Students were asked to rate these statements using a 5 point Likert scale ranging from "strongly disagree" at 1 to "strongly agree" at 5. Just to name a few, students were asked to rate the statements, "A college party is not a true college party without alcohol," "The reward at the end of a hard week of studying should be a weekend of heavy drinking," and "It is okay to drink in college, even if you are under age." The measure has internal consistency (Cronbach alpha= 0.90). The scale has a mean score of 43.37 (SD=8.78).[27]

3. Results

3.1 Alcohol Consumption

An overwhelming majority (89.4%) of participants acknowledged ever having an alcoholic beverage in the past. The average number of days per weeks that participants consumed at least one drink was 1.72 (SD=1.26). On a typical day of drinking, participants averaged 3.42 drinks (SD=2.20). Peak drinking, or the highest number of drinks consumed on one occasion within the last 30 days, was 5.46 (SD=3.95).

3.2 Parental Bonding

The Cronbach's alphas for the 12 caring items were computed to be α=0.95 for the mother-caring dimension and α=0.94 for the father-caring dimension. The Cronbach's alphas for the 13 overprotection items were found to be α=0.89 for the mother-overprotection dimension, and α=0.85 for the father-overprotection dimension. The average total score for the mother-caring dimension was 29.74 (SD=7.75) and 27.50 (SD=8.16) for the father-caring dimension. The average total score for the mother-overprotection dimension was 13.47 (SD=7.49) and 10.90 (SD=6.47) for the father-overprotection dimension. The individual item scores were relatively consistent between mothers and fathers across both care and overprotection dimensions (Figure 1).
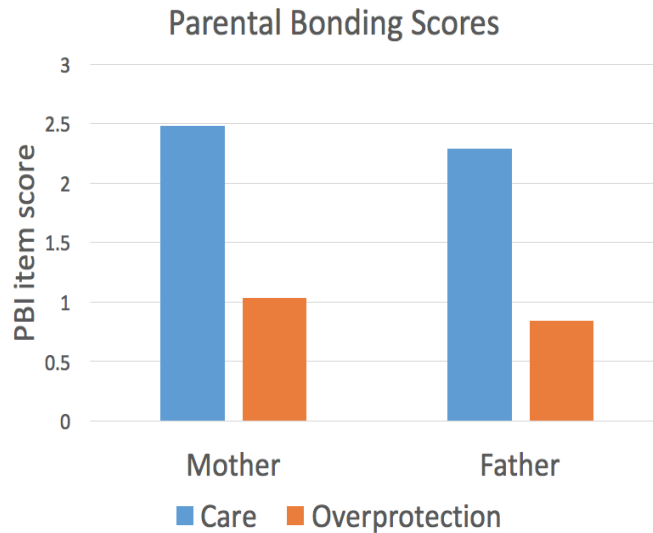
Figure 1. Parental Bonding Instrument item scores for mothers and fathers broken up between the care and overprotection dimensions.

3.3 CLASS

The scale was found to be very reliable with a Cronbach's alpha of $\alpha = 0.90$ for 15 items. The mean of the scale was 40.13 (SD=10.81). The item that received the highest average rating (3.42) was, "Parties with alcohol are an integral part of college life," (SD = 1.19). The item that had the lowest average score (1.65) was, "Missing class due to a hangover is part of being a true college student," (SD = 0.83).

3.4 Parental Bonding, CLASS, And Alcohol Consumption

A multiple regression predicted the participant's peak drinking episode from the CLASS, PBI Care for mothers, and PBI Overprotection for mothers. The overall regression was significant, $F(3,160) = 14.84$, $p < .001$, adjusted $R^2 = .20$. However, the only significant predictor was the CLASS ($\beta = .47$, $p < .001$; PBI care $\beta = .05$, $p = .58$; PBI Overprotection $\beta < .01$, $p > .99$). A multiple regression also predicted the participant's peak drinking episode from the CLASS, PBI Care for fathers, and PBI Overprotection for fathers. The overall regression was significant, F(3, 160) = 15.79, p < .001, adjusted $R^2 = .22$. However, the only significant predictor was the CLASS ($\beta = .48$, p < .001; PBI care $\beta = .06$, p = .42; PBI Overprotection $\beta = -.09$, p = .27).

4. Discussion

Multiple regression analyses were run on the survey data, showing that the CLASS is a significant predictor of peak drinking after adjusting for PBI. PBI care for mother and fathers and PBI overprotection for mothers and fathers do not significantly predict peak or high risk drinking after adjusting for CLASS.

It is not surprising that CLASS predicted peak drinking, given the initial findings using the scale by Osberg, and subsequent studies, including that done by Ziegman.[28,29] Regarding the PBI, different levels of caring and protection have been linked to the development of different mental health outcomes. Furthermore, higher levels of drinking have been seen among those with nonoptimal parental bonding, oftentimes as a way of coping with symptoms of depression.[30] Therefore, it was believed that optimal bonding, or high care and low protection, would be related to a decrease in drinking behavior, while affectionless control, or low care and high protection, would be related to an increase in drinking behavior. However, genetics may also play a role in the development of such behaviors, increasing the complexity when drawing conclusions about the how an individual's environment affects his or her behavior.[31]

There are many limitations that could help explain the unexpected results of this study. First, since the sample was conveniently taken from just one midwestern university, it was largely homogenous, lacking both racial and ethnic diversity. Males were also underrepresented. It has been shown that females are more likely to respond to voluntary online surveys than males are, which could have accounted for some of this selection bias. Therefore, these results cannot be generalized to all college students. Furthermore, the self-report nature of the survey may point to a response bias among participants. Since many of the questions refer to drinking, some may have underreported the number of drinks given the deviant nature of excessive drinking, particularly among those who are underage. Furthermore, drinking may impair their ability to remember exactly how much they drank, leading to estimations as responses rather than accurate numbers. Lastly, the scale used in this study to measure parental bonding, the PBI, measures bonding up until age 16. However, with the average age of participants in this study being 20 years, it is possible that child-parent relations have shifted within the past few years, which may affect one's retrospective view of how he or she was parented. These are all factors to consider when further researching this topic.

Despite the lack of association found between parental bonding and the centrality of alcohol to college life, this study has implications for future research on the these topics. Given the research that has connected parental bonding with the development of certain mental conditions, and the association of certain mental statuses with drinking tendencies, it is likely that parents may indirectly influence the drinking attitudes and behaviors of their children. Future research should continue to look into how parents can shape their child's view of deviant behaviors such as binge drinking. While this study used the PBI and looked into the level of care and overprotection displayed by parents, future research should look into other dimensions of parenting as well which may have been overlooked by previous studies. Ultimately, heavy drinking is a major concern among college students and possible causes, such as levels of parental bonding, should continue to be investigated in order to develop interventions to reduce the number of injuries, deaths, and other problems associated with alcohol consumption.

5. Acknowledgements

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