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PARENTING STYLES AND PRACTICES AS PREDICTORS OF ADJUSTMENT
AND DRINKING MOTIVES DURING THE FIRST YEAR OF COLLEGE

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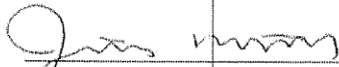
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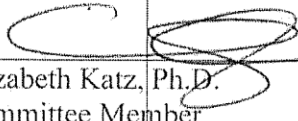
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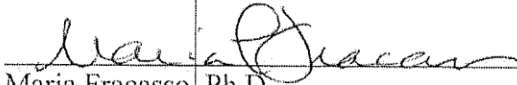
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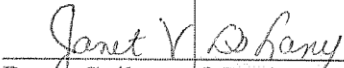
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Abstract

PARENTING STYLES AND PRACTICES AS PREDICTORS OF ADJUSTMENT
AND DRINKING MOTIVES DURING THE FIRST YEAR OF COLLEGE

Kristina Huber

For many students, the transition from high school to college is accompanied by a considerable amount of stress. Past research has examined factors that make this transition more or less stressful, and one area of focus has been the parent-child relationship. This study examined how parenting styles and practices predict a student's ability to adjust to college. First year college students ($N=182$) completed questionnaires that assessed parenting styles, parenting practices, adjustment to college, and drinking problems. Authoritative parenting predicted better adjustment and fewer alcohol problems. Homework involvement predicted better overall adjustment. Parenting practices were shown to play a mediating role between authoritative parenting and adjustment in some cases, and authoritative parenting moderated the relationship between parenting practices and drinking problems. Overall, these findings suggest that parenting continues to play an important role in students' lives during college, and further research is needed to better understand these interactions.

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Parenting Styles and Practices as Predictors of Adjustment and Drinking Motives During the First Year of College

Introduction

Research shows that the transition from high school to college creates a considerable amount of stress for students leaving home for the first time (Wintre & Yaffe, 2000). Traditionally, college is a time for identity exploration (Rice, FitzGerald, Whaley, & Gibbs, 1995). Often it is the first time a child is separated from his or her parents and family resources. Academically, college students may have more demanding academic regimens compared to high school, without the parental supervision to keep them on-task. Students also undergo a difficult social transition. Not only do students need to make new friends among an unfamiliar group of peers, but they also tend to have fewer friends than they did during high school, forcing them to depend more on family members for support (Larose & Boivin, 1998).

Research has dispelled the myth that parents are of little importance after students go to college, highlighting the need for active parental involvement as adolescents make the transition to college (Mounts, 2004; Mounts, Valentiner, Anderson, & Boswell, 2006). Many parents continue to support their children during the transitional period and even after their children have transitioned to college (Mounts, 2004). It is believed that parental behavior and the relationships parents have with their children have an effect on their children's ability to adjust to the college environment.

Darling and Steinberg (1993) stress the importance of understanding how parenting behavior affects children's development, but emphasize that a distinction must be made between two types of behaviors in order to adequately understand this process: parenting style and parenting practices. Parenting style is an overall way of parenting that

encompasses a parent's attitudes and behavior toward a child across multiple settings and situations, whereas parenting practices are goal-directed behaviors with specific content (Darling & Steinberg, 1993).

Parenting Style

Parenting style is a collection of attitudes that parents have towards their children that are in turn communicated to the children through the parents' behavior (Darling & Steinberg, 1993). Behaviors include goal-directed behaviors, which are performed specifically to carry out parental duties and non-goal-directed behaviors. Non-goal-directed behaviors convey an attitude to children but do not have a specific purpose, such as gestures, changes in tone of voice, and spontaneous expression of emotion (Darling & Steinberg, 1993).

Baumrind (1966; 1991) identified three parenting styles: permissive, authoritarian, and authoritative. Permissive parents make few demands of their children, and they allow children to be in charge of their own behavior. They avoid exercising control and discipline, and do not enforce rules. Permissive parents present themselves as resources for children to take advantage of, as opposed to models responsible for shaping future behavior. As a result of permissive parenting, children become free of restraint and unconcerned about the consequences of impulsive or careless behavior (Baumrind, 1966; 1991).

Authoritarian parents attempt to control their children according to a set belief of how their children should behave (Baumrind, 1966; 1991). This set belief tends to be absolute and formulated based on theology or a higher authority (e.g. the will of God.) Authoritarian parents believe in obedience, order, and traditional structure, and take

forceful disciplinary measures to control their children's attitudes or behaviors when they conflict with their own set beliefs. These parents restrict their children's autonomy and give the children household responsibilities in order to "keep the child in his place" (Baumrind, 1966; 1991). Authoritarian parents do not encourage verbal give and take, but instead believe that the children should accept their parent's word without question.

Authoritative parents direct their children's behavior using reason, power, and shaping by reinforcement (Baumrind, 1966; 1991). These parents encourage verbal give and take, explain the reasons for their rules or disciplinary action to their children, and listen to their children's concerns when they disagree. They encourage autonomy while still exerting firm control when the children do not follow their rules. Authoritative parents enforce developmentally appropriate expectations and set standards for future conduct, but recognize their children as individuals with unique interests, characteristics, and beliefs (Baumrind, 1966; 1991). The goal of authoritative parents is to teach their children to conform to the necessary standards set in place by society while still maintaining a unique personality and sense of pride (Darling & Steinberg, 1993).

The characteristics of parenting styles can be grouped into three dimensions: parental acceptance or warmth, behavioral supervision and strictness, and psychological autonomy granting (Steinberg, Lamborn, Dornbusch, & Darling, 1992). Other researchers give these constructs different names, but the concepts remain relatively unchanged. For example, some refer to warmth as support (Strage & Brandt, 1999) and some refer to behavioral supervision and strictness as demandingness (Ishak, Low, & Lau, 2012). Warmth is the extent to which parents are supportive, attuned to their child's needs, and responsive to those needs (Ishak et al., 2012). Demandingness is the efforts of parents to

monitor and set limits for their children, and the willingness to discipline their children when they disobey. Autonomy granting is the extent to which parents use discipline in a noncoercive and democratic manner, and encourage their children to express their unique characteristics (Steinberg et al., 1992).

The quantity and quality of warmth, demandingness, and autonomy granting indicates a caregiver's parenting style (Turner, Chandler, & Heffer, 2009). Low levels of warmth and autonomy granting with high levels of demandingness characterize an authoritarian parenting style. Parents with this parenting style tend to be highly controlling and directive, with high levels of restriction and rejection. On the opposite end of the spectrum, a permissive parenting style is high on warmth and autonomy granting, and low on demandingness (Turner et al., 2009). Researchers have labeled authoritarian and permissive styles as relatively ineffective and have contrast them with authoritative parenting, in which parents display high levels of responsiveness, demandingness, and autonomy granting (Steinberg et al., 1992).

A general consensus has emerged that authoritative parenting is the most effective parenting style (Darling & Steinberg, 1993; Ishak et al., 2012; McKinney & Renk, 2008; Turner et al., 2009). Research with pre-college age students has shown that children and adolescents with authoritative parents are most motivated, competent, and achievement oriented compared to their peers (Steinberg et al., 1992). These children also demonstrate better school performance (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Lamborn, Mounts, Steinberg, & Dornbusch, 1991). Beyond academic success, children with authoritative parents tend to be better socially adjusted and have better mental health (Gray & Steinberg, 1999).

Researchers have questioned whether the benefits of growing up in an authoritative home continue after a child has left home to attend college. In a study by Strage and Brandt (1999), students reported that their adjustment to college was predicted by their parents' levels of authoritativeness and previous parenting behaviors. They also found that students were more confident and academically determined when parents continued to provide support, demand, and autonomy (the three characteristics of authoritative parenting). In other words, authoritative parenting continued to influence a student's adjustment to college and academic confidence even after they had moved away from home and were no longer living with their parents.

Parenting style and academic performance have been studied primarily in pre-college aged children; however, studies on academic performance in college have yielded inconsistent results. Researchers have found parenting styles to be unrelated to college grade point average (Joshi, Ferris, Otto, & Regan, 2003), and others have found that authoritative parenting predicts higher GPA (Turner et al., 2009).

Parenting Practices

Parenting practices are goal-oriented behaviors that parents perform that have a specific content (Darling & Steinberg, 1993). A study by Steinberg and colleagues (1992) described parenting practices as direct involvement with school activities, such as helping with homework and attending parent-teacher conferences. Darling and Steinberg (1993) argue that while parenting style is important, parenting practices are equally important because they are the means through which parents communicate their values.

Many policymakers, teachers, parents, and even students agree that parental involvement is a key factor for a child's successful development because the idea that

parenting practices (especially parental involvement) may have a positive effect on students seems like common sense (Fan & Chen, 2001). Research on parenting practices has shown that high school students with involved parents tend to earn higher grades than their peers, when controlling for outside factors (Steinberg et al., 1992). An area of particular focus has been parental encouragement to succeed, which is reflected in the parents' expectations for their child (e.g. academic performance) and in whether or not they show that they care about their student's achievements.

Relationship between parenting styles and parenting practices

While it is important to examine each parenting construct separately, it is also important to examine how parenting styles and practices interact to predict the outcome of student adjustment. Steinberg and colleagues (1992) conducted a study with high school students to determine whether parenting practices (measured as parental encouragement and educational involvement) mediated the relationship between authoritative parenting and student academic achievement. They also sought to determine whether authoritative parenting moderated the relationship between parenting practices and student academic achievement. Both hypotheses were confirmed in this study. In other words, they found that children from authoritative homes are successful in school because their parents engage in positive parenting practices, such as encouragement and educational involvement. They also found that while parenting practices predict academic success, this effect is higher in authoritative homes than in nonauthoritative homes. The argument for this finding is that authoritative parenting may make children more open to their parents' involvement, strengthening the impact of their involvement.

A longitudinal study examining the relationship between parental involvement, parenting styles, and school dropout yielded similar findings (Blondal & Adalbjarnardottir, 2009). This study found that 14-year-old students who perceived their parents to be authoritative were less likely to have dropped out of college by age 22. Furthermore, parenting style moderated the relationship between parental involvement and school dropout, suggesting that parental involvement decreased the likelihood of school dropout only in authoritative families.

Alcohol-related behavior and parenting constructs

In addition to the academic, social, and emotional changes that students encounter in college, many students experience a transition into a culture in which alcohol use is prominent. College students use more alcohol than their non-student peers, with behaviors that may result in emotional, physical, academic, sexual, or legal consequences (Abar, 2011; LaBrie, Ehret, Hummer, & Prenovost, 2012). College students may drink for any number of reasons, but researchers have identified four primary motives for alcohol use (Cox & Klinger, 1988). The motives are enhancement (drinking to enhance or obtain a positive emotion), social (drinking to obtain positive social rewards), coping (drinking to reduce or escape negative emotions), and conformity (drinking to fit in). These motives reflect both personal and environment influences, and individuals may drink either to obtain a positive outcome or avoid a negative outcome. Research by Cooper (1994) suggest that individuals who drink to conform or cope are more likely to experience drinking problems compared to those who have social or enhancement motives for drinking.

Peers play a significant role in college alcohol use. However, parents continue to influence student alcohol use despite the physical separation created by school (Abar, 2011). A variety of parenting practices during college have been shown to predict lower levels of college student alcohol use, including being responsive, setting limits, maintaining frequent communication, and monitoring student behavior (Abar, Abar, & Turrisi, 2009; Patock-Peckham & Morgan-Lopez, 2006; Turrisi, Wiersma, & Hughes, 2000; Wood, Read, Mitchell, & Brand, 2004). In addition to parenting practices, researchers have found authoritative parenting to be a protective factor against adolescent substance use (Mallet et al., 2011; Patock-Peckham & Morgan-Lopez, 2006; Piko & Balázs, 2012).

Hypotheses

The purpose of this study is to identify factors of the parent-child relationship that may facilitate students' transition to college. The following hypotheses are based on the concepts and research cited above:

Hypothesis 1: Parenting styles will predict adjustment to college, academic success, and drinking motives. Specifically, it is hypothesized that students who see their parents as authoritative will be better adjusted, perform better academically, and refrain from destructive drinking behavior.

Hypothesis 2: Parenting practices will predict adjustment to college, academic success, and drinking motives. Specifically, it is hypothesized that students whose families engage in positive parenting practices will be better adjusted, perform better academically, and refrain from destructive drinking behavior.

Hypothesis 3: It is hypothesized that parenting practices will act as a mediator between parenting style and adjustment to college.

Hypothesis 4: It is hypothesized that parenting style will moderate the relationship between parenting practices and adjustment to college.

Methods

Participants

Data was collected from 182 first-year students from Towson University, between the ages of 17 and 21 ($M=18.22$, $SD=.475$). Of these participants, 154 were female (84.6%) and 28 were male (15.4%). The majority of participants identified themselves as Caucasian (73.5%), versus Black/African-American (14.9%), Asian/Pacific Islander (7.7%), Hispanic/Latino (1.1%), Native American (.6%), or Other (2.2 %). All students (100%) lived on-campus with a roommate.

Procedures

The study was included in Towson University's research pool, and first-year students could sign up to receive research credit for their participation. In addition to receiving research credit, the participants received a small amount of monetary compensation (\$5.00) after the session. The self-report measures were completed by the participants on computers located in an on-campus laboratory during a single session. The measures took approximately 45 minutes to complete.

Definitions

Due to some inconsistencies with definitions in past studies, it is important to clarify the definitions for the purpose of this study. Authoritative parenting is defined as a

style of parenting that is high in warmth, demandingness, and autonomy granting.

Drinking problems are defined as negative consequences resulting from alcohol use.

Instruments

Home and Family Climate Questionnaire (HFCQ). The HFCQ is a 112-item questionnaire developed to assess home and family climate during two different time periods: a student's junior and senior years of high school and the time between coming to college and taking the survey (Huber & Mattanah, 2013). The measure was developed by reviewing other studies and questionnaires relevant to parenting styles and parenting practices. Some of the questions were original questions, and some were adapted from existing questionnaires (Louie, 2010; Mounts, 2004; Strage, 1998; Wintre, Yaffe, & Crowley, 1995). The full HFCQ can be found in Appendix A.

The questionnaire consisted of three subscales designed to measure the three facets of authoritative parenting and six subscales designed to measure parenting practices. All items from the authoritative parenting subscales were answered on a five-point Likert scale. Scores on the high school and college questions were highly correlated for all scales, so we combined the items from high school and college into one summary variable for each subscale. Correlations for high school and college questions are listed in Table 1. Thirteen questions measured parental warmth. Examples of high school questions from the warmth subscale are *'My mother gave me a lot of care and attention'* and *'My mother often told me how much she loved me.'* Examples of college questions from the warmth subscale are *'I am able to discuss my problems with my mother when I want to'* and *'I am able to be myself with my father.'* Cronbach's alphas were .896 and .920 for mother's and father's warmth, respectively.

Eight questions measure parental demandingness. Examples of high school demandingness questions are '*My father expected me to graduate from high school,*' and '*My mother had fair rules and expectations for me.*' Examples of college demandingness questions are '*My mother expects me to graduate from college,*' and '*How high are your father's (or father figure's) expectations for your academic performance?*' Cronbach's alphas were .681 and .812 for mother's and father's demandingness, respectively.

Twelve questions measure parental autonomy granting. Examples of high school autonomy granting questions are '*My father was overbearing and intrusive*' (reverse coded) and '*My mother encouraged me to be independent.*' Examples of college autonomy granting questions are '*My mother expects too much from me,*' (reverse coded) and '*My father tells me how to live my life*' (reverse coded). Cronbach's alphas were .860 and .804 for mother's and father's autonomy granting. A total authoritativeness summary variable was created by finding the mean of the parenting style variables for each parent (*Total mother authoritativeness = [sum of 33 parenting style variables] / 33*). Cronbach's alphas for total authoritativeness were .868 for mother and .873 for father.

The four parenting practices subscales were mother's homework involvement, father's homework involvement, mother support of child activities, and father support of child activities. Questions included in the questionnaire that were not used in data analysis included questions about communication and financial support during college. All questions in the parenting practices subscales that were used for data analyses were answered on a five-point Likert scale.

The homework involvement subscales consisted of six questions that assessed how each parent helped with homework, who initiated the help, how satisfactory the help

was, how often the parent monitored schoolwork, and whether the parent discussed school with the student. Cronbach's alphas for mother's and father's homework support were .815 and .900, respectively.

Variables for parental support of child activities and family togetherness were created to encompass parental attendance at high school activities and the extent to which the student's family spent time together in high school, respectively. The parental support of child activities subscale was a two-question scale to assess parental involvement in the student's high school extracurricular activities. The questions included in this scale were *'How often did your mother/father attend your sporting events?'* and *'How often did your mother/father attend performances you were in?'* Students who were not involved in sports or performing arts could indicate that they were not involved in these activities, instead of answering on the five-point Likert scale that would not apply to them. Cronbach's alphas for mother and father's support of activities were .407 and .548, respectively. Because of these low reliability values, a total parental support of activities subscale was created across all four parent support variables, which was internally consistent ($\alpha = .740$). This overall parental support of activities scale will be used in analyses presented below. A summary of the Home & Family Climate Questionnaire reliability statistics is presented in Table 2.

Student Adaptation to College Questionnaire (SACQ) – Short Form. The SACQ is a 67-item self-report questionnaire that measures student adjustment to college (Baker & Siryk, 1984). This measure consists of four subscales: Academic Adjustment (24 items), Social Adjustment (20 items), Personal-Emotional Adjustment (15 items), and Goal Commitment-Institutional Attachment (15 items). Research has shown the SACQ to

be a valid and reliable measure of an individual's adjustment to college (Taylor & Pastor, 2007).

In order to reduce the number of questionnaire items to a more manageable number, a short form was devised. The short-form consists of 15 items: 5 Academic Adjustment questions, 6 Social Adjustment questions, and 4 Personal-Emotional Adjustment questions. The fourth subscale (Goal Commitment-Institutional Attachment) was left out as the information was not of interest to this study. Responses are in a 9-point Likert format from "*applies very closely to me*" to "*doesn't apply to me at all*" where higher scores indicate better adjustment. Internal reliabilities for the SACQ were good in this study. Cronbach's alphas were .823 for the Academic Adjustment subscale, .871 for the Social Adjustment subscale, and .780 for the Emotional Adjustment subscale. A total adjustment summary variable was created by finding the mean of the adjustment variables ($Total\ adjustment = [academic + social + emotional] / 15$). Cronbach's alpha for the total adjustment subscale was .847.

UCLA Loneliness Scale (UCLA). The UCLA Loneliness Scale is a 20-item self-report questionnaire that measures feelings of loneliness in personal relationships (Russell, Peplau, & Cutrona, 1980). Research has shown the UCLA Loneliness Scale to be a valid and reliable measure of an individual's loneliness in relationships. The measure had excellent internal reliability; Cronbach's alpha was .930 in the current study.

Center for Epidemiological Studies Depression Scale (CESD). The CESD is a 20-item self-report questionnaire that measures feelings of depression (Radloff, 1977). This measure is used frequently in studies of college adjustment and is regarded for its good psychometric properties. Cronbach's alpha for the current study was .908.

Social Interaction Anxiety Scale (SIAS). The SIAS is a 20-item self-report questionnaire that assess anxiety that an individual has when initiating or maintaining interactions in social situations (Osman, Gutierrez, Barrios, Kopper, & Chiro, 1998). Cronbach's alpha for this study was .871.

Social Phobia Scale (SPS). The SPS is a 20-item self-report questionnaire that assesses anxiety that an individual feels while being observed performing activities such as writing, drinking, or eating in public (Osman et al., 1998). Cronbach's alpha for this study was .911. Scores on the SIAS were highly correlated with scores on the SPS in this study ($r[179] = .676, p < .001$), so we decided to create one summary variable assessing overall social anxiety symptoms.

Drinking Motives Questionnaire (DMQ). The DMQ is a 20-item self-report questionnaire that assesses the student's reasons for drinking alcohol (Cooper, 1994). A student's motivations could be social (drink to socialize), coping (drink to deal with negative emotions), enhancement (drink to enhance or improve an event or feeling), or peer pressure (drink to conform). Each of the four drinking motives was measured on its own subscale consisting of five items. For the current study, Cronbach's alphas were .932 for the social subscale, .886 for the coping subscale, .950 for the enhancement subscale, and .859 for the peer pressure subscale.

Rutgers Alcohol Problem Index (RAPI). The RAPI is an 18-item self-report questionnaire that assesses the occurrence of negative consequences resulting from alcohol use (White & Labouvie, 1989). Cronbach's alpha for the current study was .910.

Grade point average (GPA). Participants were asked to report on their overall GPA as a measure of academic performance.

Results

Parenting Styles and Adjustment to College

In order to assess the first hypothesis, preliminary analyses were done to examine correlational relationships between parenting styles and each of the outcome variables. Correlation coefficients from this analysis are listed in Table 3. As expected, mother authoritativeness variables were correlated positively with adjustment variables and negatively with depression, loneliness, and social anxiety. Father authoritativeness variables were positively correlated with total adjustment, but not with individual subscales (with one exception; see Table 3.) Father warmth and overall authoritativeness were negatively correlated with depression and loneliness, but no father parenting style variables predicted social anxiety. Contrary to the hypothesis, no parenting styles were predictors of high school or college GPA.

Bivariate correlational analyses on the relationships between parenting style and drinking outcomes yielded mixed results. Correlation coefficients from this analysis are summarized in Table 4. As expected, mother's authoritativeness variables predicted fewer alcohol problems and less drinking for coping and conformity motives, which are conceptualized as being problematic (Cooper, 1994). Authoritativeness variables for mothers were also negative predictors of socialization motives. Father's authoritativeness variables predicted fewer alcohol problems but did not support the hypothesis that father's authoritativeness would be correlated with less destructive drinking motives. Interestingly, father's autonomy granting was the only variable that predicted less coping and conformity motives.

Parenting Practices and Adjustment to College

In order to assess the second hypothesis, bivariate correlation analyses were done to examine the relationships between parenting practices and the outcome variables. Correlation coefficients are listed in Table 5. Support for the second hypothesis was mixed. Mother's involvement with homework was strongly associated with better adjustment and fewer emotional problems. However, father's involvement with homework correlated only with overall adjustment and academic adjustment scores. Parental support of child activities was associated with better social adjustment and lower levels of loneliness. No parenting practice variables were correlated with high school or college GPA.

Table 6 displays the correlations between parenting practices and drinking variables. Parental support of child activities was modestly associated with the outcome variables, but not in the predicted direction. According to the bivariate correlations, parental involvement was associated with more alcohol problems and more destructive motives (coping and conformity), as well as enhancement and social motives. The unanticipated nature of these findings is addressed further in the moderation analyses below.

Parenting Practices as a Mediator

The third hypothesis was that parenting practices would be a mediator between parenting style and college adjustment. In order to test this hypothesis, a series of multiple regression equations were run with authoritative parenting as the predictor variable, adjustment and drinking variables as the outcome variables, and parenting practice variables as the mediators. Mediation models are commonly tested using a four-

step model described by Baron and Kenny (1986). According to this model, four steps determine whether there is mediation. First, the predictor variable must be correlated with the outcome variable. Second, the predictor variable must be correlated with the mediator. Third, the mediator must be correlated with the outcome variable when controlling for the shared variance of the predictor variable. Finally, the correlation between the predictor and the outcome variables must be less than it was in the first step while controlling for the mediator. According to Hayes & Preacher (in press), this model is underpowered and there are more efficient ways of testing for mediation. In Hayes' model, a bootstrapping resampling procedure provides bootstrap estimates with bias corrected confidence intervals of the indirect effects. The computational tool for path analysis-based mediation and moderation analysis created by Hayes and Preacher (in press) was used for the following analyses.

First, mother and father authoritativeness variables were used for the predictor variables and total adjustment was used for the outcome variable. Each of the three parenting practice summary variables was entered as a mediator (mother and father's homework involvement and parental support of child activities). Based on these analyses, mother's homework involvement emerged as a mediator for the relationship between mother's authoritativeness and total adjustment. This model was significant (Total $R^2 = .13$, $p < .001$), and the indirect effect of mother's authoritativeness on adjustment through homework involvement was significantly different from zero (effect = .1692, 95% CI: [.0602, .3402]). This suggests that first-year college students with authoritative mothers adjust better to college because their mothers were involved with their schoolwork in high school.

Next, the outcome variable was changed to alcohol problems. During this analysis, parental support of child activities was shown to mediate the relationship between parental authoritativeness (using a combined mother and father authoritativeness variable) and drinking problems in college. This model was significant (Total $R^2 = .23$, $p < .001$), and the indirect effect of authoritativeness on alcohol problems through parental support of child activities was significant (effect = .0631, 95% CI: [.0244, .1208]). As with the bivariate correlation analyses, parental support of high school activities positively predicted alcohol problems, which was in the opposite direction as predicted. This is addressed in the moderator analyses below.

Parenting Style as a Moderator

In order to address the fourth hypothesis that parenting style would moderate the relationship between parenting practices and outcome variables, the computational tool created by Hayes & Preacher (in press) was used to test for moderation. First, parent authoritativeness was entered as the moderator, total adjustment was entered as the outcome variable, and each of the three parenting practices were entered separately as predictor variables. None of these models were significant. Next, the outcome variable was changed to drinking problems. During this analysis, parental authoritativeness moderated the relationship between parental support of activities and drinking problems (R^2 change for the interaction effect = .033, $p < .01$). The moderation analysis reports effects of the predictor (in this case parental support for child activities) on alcohol problems for values of the quantitative moderator (authoritative parenting) at five percentiles: 10th (effect = .14, $p < .0001$), 25th (effect = .11, $p < .0001$), 50th (effect = .07, $p < .001$), 75th (effect = .05, $p = .01$), and 90th (effect = .03, $p = .11$). These results

suggest that as authoritative parenting increases, the positive relationship between parental involvement in activities and drinking problems decreases in strength and eventually becomes non-significant when authoritative parenting is at the 90th percentile.

Discussion

The results of this study built upon past research to provide further evidence of the characteristics and practices that parents can demonstrate to help their first-year college students succeed throughout the often challenging transition to college. Overall, bivariate correlation analyses supported the hypothesis that authoritative parenting would be associated with better adjustment to college and less destructive alcohol use. The only exception was that father's authoritativeness was not associated with drinking motives, however father's autonomy granting was correlated negatively with coping and conformity motives, the two drinking motives considered to be most problematic. The hypothesis that positive parenting practices would be associated with better adjustment to college was partially supported by bivariate correlation analyses; however, parenting practices did not predict alcohol use in the predicted direction. The third hypothesis was partially supported in that parenting practices were found to mediate the relationship between authoritative parenting and adjustment to college; they also mediated the relationship between authoritative parenting and alcohol, but in the opposite direction as predicted. The fourth hypothesis was also partially supported in that authoritative parenting moderated the relationship between parenting practices and alcohol use. This study successfully replicated findings from previous studies that have found authoritative parenting to predict better overall adjustment and fewer emotional problems and alcohol

problems in college. These findings further strengthen the argument that parenting style plays an important role in the lives of college students.

The associations between parenting practices and the outcome variables, however, were not as straightforward. As predicted, mother's and father's homework involvement was positively correlated with overall adjustment to college. Mother's homework involvement was also associated with fewer emotional problems, but this was not the case for fathers. Furthermore, parental involvement with high school activities was associated only with better social adjustment (not overall adjustment) and less loneliness.

Results suggested differences between maternal and paternal parenting styles and practices. Mother's authoritativeness was associated with less destructive drinking motives (coping and conformity) as predicted, however father's authoritativeness was not. The only authoritativeness variable that predicted fewer destructive drinking motives for fathers was autonomy granting. Mother's homework involvement was associated with better social, emotional, and overall adjustment to college and lower levels of depression and loneliness, but father's homework involvement was associated only with better academic and overall adjustment to college.

Past research on differential parenting styles has shown that there are differences between how mothers and fathers treat their children. In one study, mothers used more authoritative parenting than fathers (Smetana, 1995). The results of another study led to the conclusion that maternal parenting was more salient to the adjustment outcomes of college students than paternal parenting (McKinney, Donnelly, & Renk, 2008). Based on this research, the results of this study could be due to mothers having more of an impact on the outcome variables, or because mothers tend to be perceived as more authoritative

than fathers. These results demonstrate the importance of exploring the effects of parenting in the context of the parents' sex.

An important finding of this study was the mediating effects of parenting practices, which adds to the growing research on the pathways through which authoritative parenting influences the college transition. Mother's homework mediated the relationship between authoritative parenting and adjustment to college. This suggests that authoritative mothers are more likely to be involved in their children's homework, which in turn predicts better adjustment to college. This is an important finding because it demonstrates that a mother's behavior even before her child goes to school can aid the child in a smoother transition into a well-adjusted college career.

There are several possible explanations for the finding that parental involvement in high school activities is associated with more alcohol problems in college. One possibility is that students who were involved in extracurricular activities in high school are more likely to be the students who drink in college due to their outgoing and social nature. If this is true, then it is possible that this subscale is not an accurate indicator of how involved parents are in their children's lives in high school because it would instead be indicating the extent to which the student was involved in activities.

A second problem with this scale is that there are only two questions asking about each parent's involvement on the parental involvement subscale, so more questions should be asked. The other subscales ask questions from high school and college, so it could be good to add questions about college. An example of a college involvement question would be '*My parents attended orientation*' (Mounts, 2004). Also, this variable was created with the intention of measuring behavior usually displayed by authoritative

parents. However, it is possible that instead it measured behavior displayed by authoritarian parents, and it is actually a measure of over-involvement. To check this theory, a bivariate correlation was run between each of the parental support variables and the parental authoritativeness variables. The results indicated that the two variables are associated as intended: mother's support of child activities was positively correlated with mother's authoritativeness ($r[180]=.178, p<.05$), and father's support of child activities was positively correlated with father's authoritativeness ($r[181]=.355, p<.001$). Despite the statistical confirmation that parental involvement was positively correlated with authoritativeness, an improved parental involvement subscale may yield richer results in future studies.

The positive association between parental involvement and drinking problems, as well as destructive drinking motives, may be partially explained by the moderation analyses we conducted. Authoritative parenting was found to moderate the relationship between parental involvement and drinking problems, suggesting that as authoritative parenting increases, this positive relationship becomes less significant. The implication of this result is that parental involvement may be a protective factor against drinking problems for college students with authoritative parents, but it may be a risk factor for students with less-authoritative parents. Put simply, when less-authoritative parents get involved in their children's activities, it may do more harm than good. More research should be done to examine the moderating effect that parenting style plays on the relationship between parental involvement and drinking problems.

Part of the hypotheses was that authoritative parenting and parenting practices would predict academic success, which was measured as self-reported grade point

average (GPA). Contrary to expectations, grade point average was not correlated with any predictor in this study. It is important to note that past research has found that self-reported grades are not the most valid measure of academic performance (Kuncel, Credé, & Thomas, 2005). A study by Bahrnick and colleagues (1996) found that the ability to accurately remember grades declines with academic ability. In other words, self-reported grades may be fairly accurate for students who actually do have high GPAs, but less accurate for students who have lower GPAs. Future research would benefit from obtaining objectively reported grades, such as those from a student's school. However, many problems arise with this method such as confidentiality and complexity in contacting the many different high schools to obtain high school GPAs.

Limitations and suggestions for future research

There were also limitations with the study's design. This was a cross-sectional design and is therefore open to causal interpretations. For example, based on the bivariate correlations it appears that parental involvement in high school predicts better adjustment to college, however it is possible that students who successfully adjust to college possess qualities that elicit more involvement from their parents. Future research should apply a longitudinal design to eliminate this limitation.

Although the Home and Family Climate Questionnaire demonstrated various strengths, most notably being reliable authoritative parenting subscales, there were also weaknesses to this measure that should be improved for future research. The numbers of items on subscales were unbalanced and should be evened out before it is used again in the future. For example, the warmth and autonomy subscales consisted of 13 and 12 items, respectively, but the demandingness subscale consisted only of 8 items. Another

issue with the demandingness subscale is that only 2 of the questions were about college parenting. The homework involvement subscales displayed good internal consistency with only 6 items, but the need to add items to the other parenting practice variables has been stressed above.

Of particular importance is asking parenting practices questions about practices during college, as the only ones that were used for data analysis were high school questions. There were some college questions on the questionnaire, such as questions about communication practices or visiting their child at school, but the questions either did not load onto a subscale as planned or did not yield any findings. A particular problem with many of these items, especially questions about financial support, is that it is unclear what is a “good” score. For example, regarding the item *‘My parents pay for my credit card bills,’* there is some question as to whether paying for a child’s credit card bills as a freshman constitutes support (warmth construct of authoritativeness) or lack of demandingness and structure (indicative of permissive parenting). The Home & Family Climate Questionnaire shows potential as a useful tool in measuring parenting styles and practices in college populations, however these issues should be addressed before it is used in future research.

Another limitation of this study was the lack of diversity in the participants. Although the ethnic breakdown closely resembled that of the university where the study was conducted, the participants consisted mostly of Caucasian female students. Based on past research citing the differences on parenting style and practices across ethnic groups, future studies should make an attempt to collect data from a more ethnically diverse sample.

Any time a questionnaire is used to collect data from a time in the past, there is the potential for hindsight bias. Students were asked to recall their interactions with their parents from high school, and the accuracy of their answers may not be as good as it is on questions that ask about the current time period. An attempt to minimize this potential for bias was made by wording the instructions for the high school questions: “think back to your junior and senior years of high school...” All of the high school questions were asked during the first half of the HFCQ. By specifying a specific time period and asking the students to imagine that time, as well as separating the high school and college questions into two separate groups, we hope the risk for inaccurate self-report was reduced as much as possible. Despite these attempts to minimize the risk for hindsight bias, the reality is that there is no way to completely eliminate this risk when asking for information about past experiences.

Clinical Implications of These Results

In addition to the research implications already discussed, this study has a number of clinical implications. These findings should be used to inform parents about how an authoritative parenting style will benefit their children. Further, this study has shown specific parenting practices that parents can do to help their child during the college transition (e.g. help with homework). The parenting practice findings are especially useful to parents because they showed what parents can do while their children are still in high school to help their children have a more successful first year of college. These findings should also be used to inform substance abuse prevention and treatment efforts on college campuses. College is a setting where students can use alcohol with minimal adult supervision, and many students learn to escape negative emotions through alcohol

use. Therefore, college is an important setting in which to help students develop healthy, alternative ways of coping. Furthermore, these findings should be used to inform mental health programs for college students.

Conclusion

This study reviewed the parent-child relationship and how it affected first-year college students in terms of adjustment, emotional problems, and drinking problems. Furthermore, it examined the pathways through which parenting styles and practices influenced first-year college students' ability to transition from high school to college. Building upon research with younger adolescents and past research with college students, the results of this study reinforced the importance of authoritative parenting and positive parenting practices.

Table 1

Correlations between high school and college parenting styles

Mother warmth	.723**
Mother demandingness	.443**
Mother intrusiveness	.656**
Father warmth	.813**
Father demandingness	.695**
Father intrusiveness	.572**

** $p < .01$.

Table 2

Reliability statistics of the Home and Family Climate Questionnaire

	Number of items	α
Parenting styles		
Mother warmth	13	.889
Mother demandingness	8	.681
Mother intrusiveness	12	.860
Father warmth	13	.911
Father demandingness	8	.812
Father intrusiveness	12	.804
Total Mother Authoritativeness	33	.714
Total Father Authoritativeness	33	.859
Parenting practices		
Mother homework involvement	6	.815
Father homework involvement	6	.900
Parental support of child activities	4	.740

Table 3

Correlations between parenting styles and adjustment outcome variables

	Acad. Adjust.	Social Adjust.	Emot. Adjust.	Total Adjust.	Depress.	Lonely	Social Anx.
Mother							
Warmth	.284***	.128	.170*	.259***	-.344***	-.317***	-.213**
Demand	.063	.200**	.193**	.216**	-.202**	-.166*	-.094
Autonom.	.173*	.053	.109	.143	-.224**	-.194**	-.179*
Authorit.	.284***	.159*	.216**	.293***	-.388***	-.340***	-.250**
Father							
Warmth	.129	.112	.108	.161*	-.170*	-.193**	-.093
Demand	.229	.094	.213	.146*	-.126	-.123	.013
Autonom.	.073	-.027	.058	.036	-.090	-.090	-.040
Authorit.	.152*	.098	.117	.165*	-.184*	-.201**	-.073

Mother variables ($N = 180$); father variables ($N = 181$)* $p < .05$ ** $p < .01$ *** $p < .001$

Table 4

Correlations between parenting styles and drinking outcome variables

	Alcohol problems	Enhancement motives	Coping motives	Conformity motives	Social motives
Mother					
Warmth	-.296***	-.050	-.138	-.261***	-.127
Demand	-.119	-.091	-.099	-.102	-.153*
Autonom.	-.373***	-.063	-.198**	-.224**	-.072
Authorit.	-.423***	-.085	-.222**	-.309***	-.154*
Father					
Warmth	-.066	.134	-.008	-.064	.107
Demand	.043	.148*	.078	.017	.141
Autonom.	-.373***	-.134	-.225**	-.227**	-.134
Authorit.	-.185*	.089	-.070	-.132	.064

Mother variables ($N = 177$); father variables ($N = 178$)

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

Table 5

Correlations between parenting practices and adjustment outcome variables

	Acad. Adjust.	Social Adjust.	Emot. Adjust.	Total Adjust.	Depress.	Lonely	Social Anxiety
Mother homework ^a	.138	.232**	.263***	.290***	-.341***	-.266***	-.099
Father homework ^b	.168*	.110	.112	.177*	-.130	-.127	.023
Parent support ^c	.020	.208**	-.049	.106	-.014	-.180*	-.019

^a N=179; ^b N=180; ^c N=182; ^d N=181

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

Table 6

Correlations between parenting practices and drinking outcome variables

	Alcohol problems	Enhancement motives	Coping motives	Conformity motives	Social motives
Mother homework ^a	-.097	.055	.004	-.077	-.017
Father homework ^b	.050	.141	.079	.076	.160*
Parent support ^c	.243**	.294***	.210**	.202**	.280***

^a N=179; ^b N=180; ^c N=182; ^d N=181

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

Appendix

Appendix A. Home and Family Climate Questionnaire

Home and Family Climate Questionnaire

(Huber & Mattanah, 2013)

For the following questions, think back to your JUNIOR AND SENIOR YEARS OF HIGH SCHOOL and answer within that time frame.

1. On average, how many nights per week did you sit down at the table to eat dinner as a family? (Think back to your junior and senior years of HIGH SCHOOL.)

0 1 2 3 4 5 6 7

2. How often did you go on family outings, such as go to the movies, go to museums, go to dinner, or any other activity that involved just the members of your family? (Think back to your junior and senior years of HIGH SCHOOL.)

Never

Once a year

Twice a year

Once every 2-3 months

Once a month

2-3 times a month

At least once a week

3. Rate the following statement. (Think back to your junior and senior years of HIGH SCHOOL.)

My family was emotionally close.

Not at all true Slightly true Moderately true Very true Extremely true

If you did not have a mother (or mother figure) or father (or father figure) during your junior and/or senior years of high school, leave any questions that do not apply to your experiences blank. Please answer all questions that you are able to answer.

4. Did you have a mother (or mother figure) during your junior and/or senior years of high school?

Yes No

5. Did you have a father (or father figure) during your junior and/or senior years of high school?

Yes No

6. During your junior and senior years of HIGH SCHOOL...

How often did your MOTHER (or mother figure) attend your sporting events?

Never Sometimes Half of the time Much of the time

Most or all of the time I did not participate in this activity

How often did your MOTHER (or mother figure) attend performances you were in?

(Examples: band and choir concerts, dance recitals, etc.)

Never Sometimes Half of the time Much of the time

Most or all of the time I did not participate in this activity

How often did your FATHER (or father figure) attend your sporting events?

Never Sometimes Half of the time Much of the time

Most or all of the time I did not participate in this activity

How often did your FATHER (or father figure) attend performances you were in?

(Examples: band and choir concerts, dance recitals, etc.)

Never Sometimes Half of the time Much of the time

Most or all of the time I did not participate in this activity

7. Did you have a curfew during your junior and senior years of HIGH SCHOOL?

Yes No

8. If you did have a curfew, how often was the curfew enforced?

Never Sometimes Half of the time Much of the time

Most or all of the time I did not have a curfew

9. Answer the following questions about your relationship and experiences with your MOTHER (or mother figure) during your junior and senior years of high school.

How often did your mother offer to help you with your homework?

Never Rarely Some of the time Much of the time Most or all of the time

If your mother helped you with your homework, how often did your mother initiate the help? (Answer "Never" if she never helped you with your homework.)

Never Rarely Some of the time Much of the time Most or all of the time

How often did you ask your mother for help with your homework?

Never Rarely Some of the time Much of the time Most or all of the time

If your mother helped you with your homework, how often were you satisfied with her help? (Answer "Never" if she never helped you with your homework.)

Never Rarely Some of the time Much of the time Most or all of the time

How often did your mother monitor your schoolwork? (Check that you had homework, check whether you had completed your homework, etc.)

Never Rarely Some of the time Much of the time Most or all of the time

How often did your mother talk about school with you? (How you were doing, what you were learning, etc.)

Never Rarely Some of the time Much of the time Most or all of the time

10. Give a rating for the following question thinking back to your junior and senior years of high school.

How high were your mother's (or mother figure's) expectations for your academic performance? (Grades, homework, extracurricular involvement, etc.)

No expectations Below average expectations Average expectations
Above average expectations Above and beyond average expectations

11. How true are the following statements of your relationship and experiences with your MOTHER (or mother figure) during your junior and senior years of HIGH SCHOOL?

My mother expected me to graduate from high school.

Not at all true Slightly true Moderately true Very true Extremely true

My mother placed a great deal of importance on school.

Not at all true Slightly true Moderately true Very true Extremely true

My mother expected me to follow her orders.

Not at all true Slightly true Moderately true Very true Extremely true

My mother had fair rules and expectations for me.

Not at all true Slightly true Moderately true Very true Extremely true

My mother was very strict.

Not at all true Slightly true Moderately true Very true Extremely true

My mother was overbearing and intrusive.

Not at all true Slightly true Moderately true Very true Extremely true

My mother was proud of me.

Not at all true Slightly true Moderately true Very true Extremely true

My mother wanted to know exactly where I was and what I was doing.

Not at all true Slightly true Moderately true Very true Extremely true

My mother didn't spend very much time with me.

Not at all true Slightly true Moderately true Very true Extremely true

My mother often told me how much she loved me.

Not at all true Slightly true Moderately true Very true Extremely true

My mother was always checking on what I was doing in school.

Not at all true Slightly true Moderately true Very true Extremely true

My mother gave me a lot of care and attention.

Not at all true Slightly true Moderately true Very true Extremely true

I was able to discuss my problems with my mother when I wanted to.

Not at all true Slightly true Moderately true Very true Extremely true

I was able to be myself with my mother.

Not at all true Slightly true Moderately true Very true Extremely true

My mother was critical of me and my decisions.

Not at all true Slightly true Moderately true Very true Extremely true

My mother encouraged me to be independent.

Not at all true Slightly true Moderately true Very true Extremely true

12. Answer the following questions about your relationship and experiences with your FATHER (or father figure) during your junior and senior years of high school.

How often did your father offer to help you with your homework?

Never Rarely Some of the time Much of the time Most or all of the time

If your father helped you with your homework, how often did your father initiate the help? (Answer "Never" if he never helped you with your homework.)

Never Rarely Some of the time Much of the time Most or all of the time

How often did you ask your father for help with your homework?

Never Rarely Some of the time Much of the time Most or all of the time

If your father helped you with your homework, how often were you satisfied with his help? (Answer "Never" if he never helped you with your homework.)

Never Rarely Some of the time Much of the time Most or all of the time

How often did your father monitor your schoolwork? (Check that you had homework, check whether you had completed your homework, etc.)

Never Rarely Some of the time Much of the time Most or all of the time

How often did your father talk about school with you? (How you were doing, what you were learning, etc.)

Never Rarely Some of the time Much of the time Most or all of the time

13. Give a rating for the following question thinking back to your junior and senior years of high school.

How high were your father's (or father figure's) expectations for your academic performance? (Grades, homework, extracurricular involvement, etc.)

No expectations Below average expectations Average expectations

Above average expectations Above and beyond average expectations

14. How true are the following statements of your relationship and experiences with your FATHER (or father figure) during your junior and senior years of HIGH SCHOOL?

My father expected me to graduate from high school.

Not at all true Slightly true Moderately true Very true Extremely true

My father placed a great deal of importance on school.

Not at all true Slightly true Moderately true Very true Extremely true

My father expected me to follow his orders.

Not at all true Slightly true Moderately true Very true Extremely true

My father had fair rules and expectations for me.

Not at all true Slightly true Moderately true Very true Extremely true

My father was very strict.

Not at all true Slightly true Moderately true Very true Extremely true

My father was overbearing and intrusive.

Not at all true Slightly true Moderately true Very true Extremely true

My father was proud of me.

Not at all true Slightly true Moderately true Very true Extremely true

My father wanted to know exactly where I was and what I was doing.

Not at all true Slightly true Moderately true Very true Extremely true

My father didn't spend very much time with me.

Not at all true Slightly true Moderately true Very true Extremely true

My father often told me how much he loved me.

Not at all true Slightly true Moderately true Very true Extremely true

My father was always checking on what I was doing in school.

Not at all true Slightly true Moderately true Very true Extremely true

My father gave me a lot of care and attention.

Not at all true Slightly true Moderately true Very true Extremely true

I was able to discuss my problems with my father when I wanted to.

Not at all true Slightly true Moderately true Very true Extremely true

I was able to be myself with my father.

Not at all true Slightly true Moderately true Very true Extremely true

My father was critical of me and my decisions.

Not at all true Slightly true Moderately true Very true Extremely true

My father encouraged me to be independent.

Not at all true Slightly true Moderately true Very true Extremely true

Answer the following questions about your experiences SINCE YOU CAME TO COLLEGE.

If you do not currently have a mother (or mother figure) or father (or father figure), leave any questions that do not apply to your experiences blank. Please answer all questions that you are able to answer.

15. Do you currently have a mother (or mother figure)?

Yes No

16. Do you currently have a father (or father figure)?

Yes No

18. Rank the following in order of preferred method for communicating with your MOTHER (or mother figure).

(You may not use every method listed, so rank any that you do not use in the order that you would prefer. For example, you may not use letters or text messaging to communicate with your mother, but you would prefer text messaging over letters so you would rank text messaging higher.)

	1 st preferred	2 nd preferred	3 rd preferred	4 th preferred	5 th preferred	6 th preferred
Phone						

Text						
Email						
Facebook						
Other social website						
Letters						

19. IN THE LAST MONTH, how often did you communicate with your MOTHER (or mother figure) by the following methods?

	Never	Once a month	A few times a month	Once a week	A few times a week	Once a day	More than once a day
Phone							
Text messaging							
Email							
Facebook							
Other social website							

Letters							
---------	--	--	--	--	--	--	--

20. When you communicated with your mother (or mother figure) by the following methods in the last month, how satisfied were you with the communication?

	Not at all satisfied	Somewhat satisfied	Moderately satisfied	Very satisfied	Extremely satisfied	I did not use this form of communication
Phone						
Text messaging						
Email						
Facebook						
Other social website						
Letters						

21. Rate the frequency for the following questions in the LAST MONTH.

When I communicated with my mother (in any form), I told her I love her.

Never Rarely Some of the time Much of the time Most or all of the time

When I communicated with my mother (in any form), she told me she loves me.

Never Rarely Some of the time Much of the time Most or all of the time

22. Rank the following in order of preferred method for communicating with your

FATHER (or father figure).

(You may not use every method listed, so rank any that you do not use in the order that you would prefer. For example, you may not use letters or text messaging to communicate with your father, but you would prefer text messaging over letters so you would rank text messaging higher.)

	1 st preferred	2 nd preferred	3 rd preferred	4 th preferred	5 th preferred	6 th preferred
Phone						
Text						
Email						
Facebook						
Other social website						
Letters						

19. IN THE LAST MONTH, how often did you communicate with your FATHER (or father figure) by the following methods?

	Never	Once a month	A few times a month	Once a week	A few times a week	Once a day	More than once a day

Phone							
Text messaging							
Email							
Facebook							
Other social website							
Letters							

20. When you communicated with your father (or father figure) by the following methods in the last month, how satisfied were you with the communication?

	Not at all satisfied	Somewhat satisfied	Moderately satisfied	Very satisfied	Extremely satisfied	I did not use this form of communication
Phone						
Text messaging						
Email						

Facebook						
Other social website						
Letters						

21. Rate the frequency for the following questions in the LAST MONTH.

When I communicated with my father (in any form), I told him I love him.

Never Rarely Some of the time Much of the time Most or all of the time

When I communicated with my father (in any form), he told me he loves me.

Never Rarely Some of the time Much of the time Most or all of the time

22. In an average week, how often do YOU INITIATE communication with your parents, and how often do YOUR PARENTS INITIATE communication with you? Answer with two percentages.

(The two numbers should add up to 100%. For example: If you call your parents around once a week and they call you around three times a week, you initiate communication 25% of the time and they initiate communication 75% of the time.) Please make your best guess.

I initiate communication with my parents _____% of the time.

My parents initiate communication with me _____% of the time.

23. Rate the following question about your relationship with your family.

My family is emotionally close.

Not at all true Slightly true Moderately true Very true Extremely true

24. How often do you go home to visit your parents?

Never Once a year Two or three times a year Once every few months
Once a month A few times a month Once a week A few times a week
Once a day More than once a day

25. How far do you live from home IN MILES? (Make your best guess if you don't know exactly.)

26. When you go home to visit your parents, how satisfied are you with your visit?

Not at all satisfied Somewhat satisfied Moderately satisfied
Very satisfied Extremely satisfied I don't go home

27. When you go home to visit your parents, how much time do you spend arguing with your parents?

None of the time Some of the time Half of the time A lot of the time
Most or all of the time I don't go home

28. When you go home to visit your parents, how much time do you spend with your parents (as opposed to with friends, at work, or anywhere else)?

None of the time Some of the time Half of the time A lot of the time
Most or all of the time I don't go home

29. How often do your parents visit you at school?

Never Once a year Two or three times a year Once every few months
Once a month A few times a month Once a week A few times a week
Once a day More than once a day

30. Answer the following questions about your relationship and experiences with your parents since you came to college.

How often do you tell your MOTHER (or mother figure) when you have a big assignment or exam coming up?

Never Rarely Some of the time Much of the time Most or all of the time

How often do you tell your MOTHER (or mother figure) the results of a big assignment or exam?

Never Rarely Some of the time Much of the time Most or all of the time

How often do you tell your FATHER (or father figure) when you have a big assignment or exam coming up?

Never Rarely Some of the time Much of the time Most or all of the time

How often do you tell your FATHER (or father figure) the results of a big assignment or exam?

Never Rarely Some of the time Much of the time Most or all of the time

31. Did you tell your mother (or mother figure) your final grades from last semester?

Yes No

32. How high are your mother's (or mother figure's) expectations for your academic performance? (Grades, class attendance, etc.)

No expectations Below average expectations Average expectations

Above average expectations Above and beyond average expectations

33. Did you tell your father (or father figure) your final grades from last semester?

Yes No

34. How high are your father's (or father figure's) expectations for your academic performance? (Grades, class attendance, etc.)

No expectations Below average expectations Average expectations

Above average expectations Above and beyond average expectations

35. Answer the following questions about your relationship and experiences with your MOTHER (or mother figure) since coming to college.

I am able to discuss my problems with my mother when I want to.

Not at all true Slightly true Moderately true Very true Extremely true

My mother expects too much from me.

Not at all true Slightly true Moderately true Very true Extremely true

My mother expects me to graduate from college.

Not at all true Slightly true Moderately true Very true Extremely true

My mother is too intrusive or overbearing.

Not at all true Slightly true Moderately true Very true Extremely true

I would like for my mother to initiate more involvement in my life.

Not at all true Slightly true Moderately true Very true Extremely true

My mother tells me how to live my life.

Not at all true Slightly true Moderately true Very true Extremely true

My mother thinks she knows better than me when it comes to who I should date.

Not at all true Slightly true Moderately true Very true Extremely true

My mother thinks she knows better than me when it comes to what I should major in.

Not at all true Slightly true Moderately true Very true Extremely true

I am able to be myself with my mother.

Not at all true Slightly true Moderately true Very true Extremely true

My mother is critical of me and my decisions.

Not at all true Slightly true Moderately true Very true Extremely true

My mother encourages me to be independent.

Not at all true Slightly true Moderately true Very true Extremely true

36. Answer the following questions about your relationship and experiences with your
FATHER (or father figure) since coming to college.

I am able to discuss my problems with my father when I want to.

Not at all true Slightly true Moderately true Very true Extremely true

My father expects too much from me.

Not at all true Slightly true Moderately true Very true Extremely true

My father expects me to graduate from college.

Not at all true Slightly true Moderately true Very true Extremely true

My father is too intrusive or overbearing.

Not at all true Slightly true Moderately true Very true Extremely true

I would like for my father to initiate more involvement in my life.

Not at all true Slightly true Moderately true Very true Extremely true

My father tells me how to live my life.

Not at all true Slightly true Moderately true Very true Extremely true

My father thinks he knows better than me when it comes to who I should date.

Not at all true Slightly true Moderately true Very true Extremely true

My father thinks he knows better than me when it comes to what I should major in.

Not at all true Slightly true Moderately true Very true Extremely true

I am able to be myself with my father.

Not at all true Slightly true Moderately true Very true Extremely true

My father is critical of me and my decisions.

Not at all true Slightly true Moderately true Very true Extremely true

My father encourages me to be independent.

Not at all true Slightly true Moderately true Very true Extremely true

37. Approximately what percentage of your school costs (tuition, fees, books, room and board) are paid for by:

Your parents _____

Yourself (from a job or savings) _____

Scholarships _____

Grants _____

Loans _____

Other family _____

Other _____

38. How do your parents support you financially (not including tuition and other college expenses)? This would include things such as entertainment, food, and clothing expenses.

They do not give me any money at all.

I have a set allowance or budget for how much money they give me for a certain time period (for example: \$100 each month, \$400 per semester, etc.)

They give me money when I ask for it, but there is a set limit to how much they will give me.

They give me money whenever I ask for it, and they very rarely say no.

Other (please specify) _____

39. Do your parents pay for your credit card bills?

Yes No I do not have a credit card

40. My parents are in control of my finances.

Not at all true Slightly true Moderately true Very true Extremely true

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PRESENTATIONS

Huber, K. L., Mattanah, J., Bonesteel, J., Boualavong, J., Clemente, M. Krakoff, T. & Lomash, E.F. (2013, April). *Parenting styles and practices predict academic adjustment among college freshmen*. Paper symposium presented at the 2013 biennial meeting of the Society for Research in Child Development, Seattle, WA.

Kelsey, K. M., Chevalier, N., Huber, K. L., Wiebe, S. A., & Espy, K. A. (2012, April). *Neurophysiological correlates of emotion regulation in preschoolers: An examination of the effects of socio-economic status*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Chicago, IL.

Chevalier, N., Wiebe, S. A., Huber, K. L., & Espy, K. A. (2011, April). *The role of switch detection in task switching at preschool age*. Poster presented at the 2011 biennial meeting of the Society for Research in Child Development, Montréal, Canada.

Heiden, L., Huber, K. L., Chevalier, N., Clark, Caron A. C., Nelson, J. M., Johnson, C., Wiebe, S. A., & Espy, K. A. (2011, March.) *Prenatal tobacco exposure and inhibition at age 3*. Talk presented at the 2011 Annual Southeastern Psychological Association: 57th Annual Meeting, Jacksonville, FL.

Huber, K. L., Heiden, L., Nelson, J. M., Chevalier, N., Johnson, C., Wiebe, S. A., & Espy, K. A. (2010, October). *Cognitive assessment of inhibitory control among 3-year-olds: Relations with sadness in a prenatally-tobacco-exposed sample*. Poster presented at the Kansas Conference in Clinical Child and Adolescent Psychology: Translating Research into Practice, Lawrence, KS.

Heiden, L., Huber, K. L., Chevalier, N., Nelson, J. M., Johnson, C., Wiebe, S. A., & Espy, K. A. (2010, October). *Prenatal tobacco exposure and assessment of effects on working memory in preschool*. Poster presented at the Kansas Conference in Clinical Child and Adolescent Psychology: Translating Research into Practice, Lawrence, KS.

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