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Specific Parenting Practices Associated with Offspring Anxiety in Young Adulthood

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Running Head: Parenting and Offspring Anxiety in Young Adulthood

Specific Parenting Practices Associated With Offspring Anxiety in Young Adulthood

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Table of Contents

	Page
List of Tables	3
Abstract	5
Introduction	6
Method	17
Results	22
Discussion	40
References	46
Appendix A. Student Consent Form	
Appendix B. Parent Consent Form	
Appendix C. Children's Report of Parenting Inventory	
Appendix D. Children's Report of Parenting Inventory – Reworded for Parents	
Appendix E. Parental Bonding Instrument	
Appendix F. State Trait Anxiety Inventory – Trait Version	
Appendix G. Definitions of Terminology	

Lists of Tables

Table	Page
1. Descriptive Statistics and Paired Sample t-tests Results for Perceptions of Parenting Parent Trait Anxiety Variables	22
2. Descriptive Statistics for Trait Anxiety for Entire Sample of Students	23
3. Intercorrelations Between Perceptions of Parenting Variables and Student Anxiety on the CRPBI, PBI, and STAI	24
4. Intercorrelations Between Parents' Self – Reports on Their Own Parenting Practices and Student Anxiety	25
5. Summary of simultaneous Multiple Regression of Parental Acceptance and Control on Offspring Anxiety (Parental Anxiety not Included)	27
6. Summary of simultaneous multiple Regression of Parental Acceptance and Control on Offspring Anxiety (Parental Anxiety Included)	27
7. Summary of Hierarchical Regression of Parental Acceptance and Control on Student Anxiety (Paternal Variables Entered First)	29
8. Summary of Hiearchical Regression of Parental Acceptance and Control on Student Anxiety (Maternal Variables Entered First)	30
9. Descriptive Statistics and Paired Sample t-tests Results for Female Perceptions of Parenting and Parent Trait Anxiety Variables	31
10. Descriptive Statistics and Paired Sample t-tests Results for Male Perceptions of Parenting and Parent Trait Anxiety Variables	31
11. Intercorrelations Between Perceptions of Parenting Variables and Female Student Anxiety on the CRPBI, PBI, and STAI	33
12. Intercorrelations Between Perceptions of Parenting Variables and Male Student Anxiety on the CRPBI, PBI, and STAI	34
13. Summary of Simultaneous Multiple Regression of Parental Acceptance and Control on Female Student Anxiety (Parental anxiety not Included)	35
14. Summary of Simultaneous Multiple Regression of Parental Acceptance and Control on Female Student Anxiety (Parental Anxiety Included)	35

List of Tables con'td

Table	Page
15. Summary of Hierarchical Regression of Paternal Acceptance and Control on Female Student Anxiety (Paternal Variables Entered First)	37
16. Summary of Hierarchical Regression of Parental Acceptance and Control on Female Student Anxiety (Maternal Variables Entered First)	38
17. Summary of Simultaneous Multiple Regression of Parental Acceptance and Control on Male Student Anxiety	39

Abstract

Due to the severity of anxiety disorders and anxiety disorder symptomatology in general, investigations into the origin and development of anxiety symptoms warrant close examination. Utilizing a sample of young adults enrolled in an introductory psychology course, this study attempted to replicate findings that have repeatedly described parental control/autonomy granting and parental rejection/acceptance as significant variables in the development of child anxiety symptoms. Parental anxiety has also surfaced as a possible third parenting factor related to childhood anxiety, and this factor was also analyzed in this sample. According to prior research, two hypotheses were proposed. Hypothesis I predicted that parental control, rejection, and anxiety would have significant positive relationships with offspring anxiety, while parental autonomy granting and acceptance would have negative relationships with offspring anxiety. Hypothesis II asserted that maternal control/autonomy, rejection/acceptance, and anxiety would have significantly higher relationships with offspring anxiety than paternal control/autonomy, rejection/acceptance, and anxiety.

Two hundred students and 263 parents participated by filling out questionnaires on perceptions of parenting and a trait anxiety inventory. Results indicated that for the entire sample, perceptions of maternal control and paternal acceptance proved to have the most salient relationships with student anxiety. Large differences between males and females emerged in this model, with maternal control and paternal acceptance proving to be significant for females, but these perceptions of parenting variables did not significantly relate to male offspring anxiety. Parental anxiety did not prove to contribute significant individual variance as predicted. Implications of this model are discussed.

Specific Parenting Practices Associated With Offspring Anxiety in Young Adulthood

Anxiety in childhood is comprised of a wide array of symptoms including: thoughts of inadequacy, self-critical thoughts, difficulty concentrating, frequent acting out, and difficulty in the pursuit of personal and social goals and rewards. Anxiety is not only detrimental to normal development, but these symptoms have the potential to persist over a long periods of time. For example, criteria for Generalized Anxiety disorder (includes Overanxious disorder of Childhood) include a patient's experiences of excessive anxiety and worry more days than not for a period of at least 6 months (American Psychiatric Association DSM IV, 1994). Other evidence links severe childhood anxiety and depression, as well as Attention-Deficit/Hyperactivity disorder, Conduct Disorder, and Oppositional Defiant Disorder (Barrios and O'Dell, 1988). Due to the severity of anxiety disorders and anxiety symptomatology in general, investigations into the origin and development of anxiety symptoms warrant close examination.

Over the past 40 years, research into the etiology of childhood anxiety disorders has been steadily on the rise (Rapee, 1997). Consequently, the relationship of parenting practices to the development of anxiety in offspring is now a central topic in anxiety related studies, and interactions between parents and children have proven to be among the most salient "predictors" of childhood anxiety (Rapee, 1997). Findings have produced support for a moderate to strong relationship between specific parenting practices and the occurrence of elevated levels of trait anxiety and increased likelihood of an anxiety-related diagnosis among offspring. More specifically, children's perceptions of (a) parental control or parental granting of autonomy and (b) parental rejection or acceptance have been identified as the two factors most associated with the presence of

anxiety spectrum disorders. These two factors have consistently emerged in a variety of clinical and non-clinical populations as well as across the gender dimension. The conceptualizations of parental control/autonomy and rejection/acceptance have been somewhat ambiguous due to the variety of measures, methods (i.e. questionnaire vs. observational), and definitions of these terms. Despite the aforementioned problems, the results consistently show a relationship between parental control/autonomy, parental rejection/acceptance, and childhood anxiety disorders (Rapee, 1997).

Recent research has revealed a possible third parenting factor, parental anxiety, as related to childhood anxiety (Cobham, Dadds, and Spence, 1998; Ginsburg, Silverman, and Kurtines, 1995; Muris and Merckelbach, 1998). In other words, parents who experience high anxiety may have more anxious children, a topic of potential clinical significance. Research on parental anxiety is limited and has concentrated on maternal anxiety, warranting further examination into this topic. Because there is evidence that anxious children may vary in their perceptions of each parent, it is important to study both the mother and father. The present study attempted to replicate the findings of other researchers concerning parental control/autonomy and parental rejection/acceptance in a sample of young adults, while also examining the relationship of parental anxiety to child (offspring) anxiety. Perceptions of both maternal and paternal parenting practices were also investigated due to the paucity of research on this issue. With a better appreciation for etiological factors contributing to childhood anxiety problems, it may one day be possible to diminish the adverse effects of childhood anxiety disorders. The central objective of this study was to expand the set of variables known to be associated with childhood anxiety.

Parental Control/Autonomy and Offspring Anxiety

Parental control/autonomy has been repeatedly found to have a moderate to strong relationship with the presence of childhood anxiety in a growing number of studies (De Mann, 1986; Gruner, Muris, and Merckelbach, 1999; Siqueland, Kendall, and Steinberg, 1996; Whaley, Pinto, and Sigman, 1999). This variable, also termed as “overprotection” or in some cases “punishment,” has been defined in varying terminology, but it has also often been described in terms of behaviors designed to protect the child from harm (Rapee, 1997). Siqueland et al. (1996) defined psychological autonomy granting in family interaction as the “degree to which the parent constrains or encourages the child’s individuality through the use of inductive disciplinary techniques” (p. 229). In this aforementioned study, observers rated parent-child dyads with questions such as: “Does the parent solicit the child’s opinion, tolerate differences in opinion, or avoid judgmental or dismissive reactions to child’s views?” “Overprotection”, another term widely used to represent parental control, has been critiqued with such statements as, “Your parents want you to reveal all your secrets to them” (Gruner et al., 1999). Parental control/autonomy has also been defined in very general terms as simply “the controls and restrictions placed on the behavior of a child” (De Mann, 1986). In this study, parental control/autonomy was defined in terms of behaviors that impair/aid the child’s ability to develop as an individual apart from the parent, a general definition in accordance with previous research in this area.

Regardless of the specific definition used, there appears to be strong support for the hypothesis that excessive protection from a parent may provide information to a child that the world is a dangerous place and may also reduce the child’s opportunities for

learning otherwise (Rapee, 1997). For example, Dumas and Lafreniere (1993) reported a pattern of mother-child interactions marked by intrusive control, conflict, and aversive affect with anxious children, and these interactions interfered with an assigned task completion. In addition, Siqueland et al. (1996) reported that the families of 10- to 11-year-old boys and girls with anxiety disorders were rated as significantly less granting of autonomy than controls by independent observers. Utilizing the same observational code as Siqueland, Whaley et al. (1999) reported mothers with anxious children ranging from 7- to 14- years as significantly less granting of psychological autonomy than control mothers. This trend holds true in nonclinical subjects as well as for older adolescents. Utilizing a questionnaire method, Gruner et al.'s (1999) evaluation of normal school children showed that parental control accounted for a significant proportion of the variance ($r = .30$ for mothers and $r = .28$ for fathers) of children's anxiety symptoms. This trend has also been identified in populations of college students or late adolescents, suggesting that there is a relationship between experienced control and trait anxiety in young adults (De Mann, 1986). The current study attempted to replicate the findings relating perceived parental control/autonomy to offspring trait anxiety levels in one of the least studied populations, young adults.

Parental Rejection/Acceptance and Offspring Anxiety

The construct of parental rejection has been rated as equally, if not more important, than parental control. In his review, Rapee (1997) identified parental rejection as most related to childhood anxiety and describes it in terms of acceptance, warmth or in negative terms, rejection and criticism. Rapee also defined parental rejection as "negative or hostile feelings by the parent to the child." Siqueland et al. (1996) defined

“warmth in family interactions” as the affective or emotional qualities of the parent-child relationship and assessed observationally: “Does the parent express affection, show positive regard for the child, or laugh, smile or touch the child during interaction?” Similarly, Gruner et al. (1999) incorporated a detailed measure of parenting practices with separate scales for both emotional warmth (e.g., “Your parents not only tell you that they love you but they also hug and kiss you”) and rejection (e.g., “Your parents wish that you were like somebody else”) expressed by the parent. In this study, parental rejection/acceptance was defined as parents’ tendencies toward sharing, expressions of affection, support, and positive evaluation to their child.

The findings concerning parental rejection and its relation to childhood anxiety are similar to those of parental control. Evidence indicates that rejection and hostility may help to convince a child that positive life events or interactions are difficult to obtain and are independent of the child’s actions, thus promoting increased offspring anxiety (Rapee, 1997). Siqueland et al.’s (1996) findings suggest that children with anxiety disorders rate both their mothers and fathers as less accepting than control children who rated their parents. Whaley et al. (1999) found similar results when investigating maternal warmth and positivity, finding that control mothers with non-anxious children showed significantly more warmth during their interactions than mothers of anxious children. Investigation into normal populations of children and adolescents has produced similar findings. Gruner et al. (1999), incorporating a scale containing measures for both parental rejection and warmth, found parental rejection to be the strongest predictor of anxiety symptoms in normal school children, while parental warmth did not prove to be significant. Other research, using the same methodology as

Gruner et al. (1999), found a small but significant relationship between emotional warmth of the father and anxiety disorder symptoms in offspring, with non-significant association for parental rejection (Muris and Merckelbach, 1998). Subtle differences in the results of these two studies may be due to a level of high inter-correlations between vaguely defined parenting variables, making them even more challenging to examine. Though there is an overall consensus on parental rejection/acceptance as a correlate of childhood anxiety, the specifics, especially concerning maternal and paternal roles, are unclear. This study attempted to replicate the results indicating a relationship between offspring's perceptions of parental rejection/acceptance and offspring anxiety in young adults.

Parental Anxiety and Offspring Anxiety

Recent research has investigated the relation of parental anxiety or, in some cases anxious child-rearing practices, to childhood anxiety. Though the amount of research on this topic remains limited, the existing literature generally reveals that children whose parents have an anxiety disorder or high levels of anxiety symptoms are at greater risk for developing an anxiety disorder themselves (Ginsburg et al., 1995). Whaley et al. (1999) attempted to identify the behaviors anxious mothers exhibit during interactions with their children in an effort to discover potential behavioral characteristics that may contribute to the development of anxiety in children. Their findings suggest maternal anxiety is a risk factor for the development of anxiety in children, with no report on father contribution. This study went on to suggest an interaction between variables, citing lower levels of maternal granting of autonomy and an increase in maternal catastrophizing behavior when both members of the mother-child dyad are anxious. In a normal population of school aged children, Muris and Merckelbach (1998) reported anxious rearing as a factor

relatively independent of other parental child-rearing dimensions and showed that the more these children perceived their parents' rearing behaviors as anxious, the higher their levels of anxiety symptomatology. In addition, parental anxiety has been shown to be an important factor in the treatment of children suffering from anxiety disorders. Cobham et al. (1998) reported that children being treated for an anxiety disorder who had one or more anxious parents responded less favorably to child-focused cognitive-behavioral therapy. The addition of a parental anxiety management component was found to enhance treatment. This study investigated the possible relationship between parental anxiety and offspring anxiety in young adults and sought to determine if this variable was independent of or related to other parenting dimensions. This study only examined trait levels of anxiety to assess a subject's general anxiety level, rather than state anxiety or anxiety experienced during testing. The anxiety levels recorded served as indicators of Generalized Anxiety Disorder (GAD) symptomatology, including excessive anxiety, worry (apprehensive expectation) about a number of events, occurring more days than not for a period of 6 months (A.P.A. DSM IV, 1994). An examination of more specific anxiety disorders was not performed.

Treatment Implications

Approaches to treating children with anxiety related problems are beginning to focus more attention to the role of parenting. Dadds, Holland, Barrett, Laurens, & Spence (1997) included parent sessions in their intervention for children meeting diagnostic criteria for anxiety disorder by: (a) introducing parents to skills to manage their child's anxiety, (b) explaining what the children were learning in the program and how parents could model and encourage the use of strategies learned, and (c) showing

parents how they could use the same strategies to manage their own anxiety. Here, the intervention produced reductions in preintervention severity symptoms and is in line with a new trend of directly involving parents in the treatment of their child's anxiety.

Ginsburg et al. (1995) elaborated on this idea by suggesting a "transfer of control" model of treatment for childhood anxiety, involving teaching parents to encourage the child's exposure to anxiety-provoking stimuli. In this model, parental control is faded while the child is taught to use self-control strategies. The goal of this approach is to identify maladaptive family contextual processes that may block the transfer of control and target them in treatment. Cobham et al. (1998) also experimentally examined the efficacy of adding a parent anxiety management component in treatment and found this addition to be significantly beneficial in treatment of anxious children with one or more anxious parents. This research is exemplary of the recent trend of parental involvement into child anxiety disorders treatment and heightens the need for a better understanding of the significance of parenting issues.

Comorbidity in Anxiety

The comorbidity of anxiety disorders warrants discussion due to the ongoing investigation into anxiety's connection to other disorders. The correlate receiving the most recent attention is clinical depression. There is evidence supporting the position that anxiety and depression, when measured by self-report, constitute one diagnostic entity in adolescents (Tannenbaum, Forehand, and Thomas, 1992). Cole, Peeke, Martin, Truglio, and Seroczynski (1998) found that the stability of self-reported and parent-reported anxiety predicted increases in self and parent reported depression over time. High levels of self and parent reported depression in children did not predict increases in

anxiety over time, suggesting anxiety may precede depression in young people. The notion that anxiety could be predictive of depression increases the need for early prevention and the study of parenting practices appears to be one of the most influential early factors to target.

Gender-Related Findings

In general, females tend to report higher anxiety and have higher levels of anxiety diagnosis than males (Rapee, 1991). This tendency does not seem to be tied to any specific anxiety disorder (i.e. separation anxiety or social phobia), but, rather, girls in general report higher levels of anxiety than boys (Gruner et al., 1999; Rapee, 1991). There is also evidence that females may differ from males in response to treatment. Dadds, Holland, Laurens, Mullins, Barrett, and Spence (1999) reported that girls were more likely than boys to have an anxiety disorder at posttreatment, after 12 months, and after 24 months. Cobham et al. (1998) also reported gender differences in their anxiety treatment program, with the addition of a parent anxiety management component proving statistically significant for girls only. This suggests that parental anxiety may be more influential in the development of female anxiety rather than male anxiety. Parental control and anxiety has also been significantly correlated with anxiety problems for college age women but not for men, suggesting that women experiencing high levels of parental control have a greater sense of powerlessness and higher levels of trait-anxiety (De Mann, 1986). Very little research has shown differences along the gender dimension in perceptions of parents in younger children, suggesting that this divergence in perception may take place in later childhood. Differences in male and female experiences of anxiety and differences in perceptions of parents are also important

clinical topics and separate analyses of male and female trends were performed and reported for this sample.

Perceptions of Mother verses Father

Research on parenting and childhood anxiety has rarely focused on individual members of the marital dyad, assuming that the combination of the two is most appropriate for analyses. Many times, differences between the perceptions of the mother and father are ignored, even though there is growing evidence indicating the importance of this distinction. Recent research examining these perceptions as connected to childhood anxiety emphasizes the mother's role. Muris et al. (1998) revealed that normal school children experiencing significantly high levels of anxiety symptoms perceived the rearing behaviors of their mother as more anxious, controlling, and rejecting than fathers. Mothers of anxious children appear to display higher levels of aversive behavior and negative affect as well as a consistent pattern of negative reciprocity when compared to mothers of competent, average, or aggressive children (Dumas and LaFreniere, 1993). Cobham, Dadds, and Spence (1999) examined anxious children's parents and their expectations, finding that mothers in the child-plus parent anxiety group reported more negative expectations, with no significant findings for fathers. Though the role of mothers is becoming clearer, almost no research has examined the father's role. One goal of this study was to distinguish between young adults' perceptions of the mother and father role to determine if noteworthy distinctions between the two exist.

To summarize, this study sought to examine the relationship of perceived parenting practices to the presence of anxiety symptoms in young adults. The

approach was correlational, with offspring trait anxiety level serving as the criterion variable. Parental anxiety, parental control/autonomy, and parental rejection/acceptance served as predictor variables. In addition, a specific examination of these variables along a mother versus father dimension was carried out, and the perceived practices of the mother and the father, along with maternal and paternal anxiety, served as separate predictor variables for offspring anxiety. This multivariate approach examined the relationships existing between these variables and offspring anxiety symptomatology. The major hypotheses that were assessed were that parental control, rejection, and anxiety each would have significant positive relationships with offspring anxiety, while parental autonomy granting, and acceptance were expected to have negative relationships with offspring anxiety. Secondly, maternal control/autonomy, rejection/acceptance, and anxiety were anticipated to have significantly higher relationships with offspring anxiety than paternal control/autonomy, rejection/acceptance, and anxiety. An examination of means and variances according to gender and a comparison of parents' perceptions of their own parenting to those of their child were also performed. The overall goal of this study was to address the relation of multiple factors of parenting to anxiety in the development of young adults.

Method

Participants

Two-hundred college students, ages 18 to 35 and their parents were recruited from an introductory psychology class to participate in a study involving questions on perceptions of parenting styles. Ninety-one males and 109 females consented to participate. The mean age of the sample was 19, but nearly half of the sample was 18 years of age (46.2%). The majority of the sample was white (81%), with African Americans (10%), Hispanics (4%), Asians (2%), and other (2%) comprising a small portion of the sample. The majority of students (67%) also reported their parents as married while 27% indicated that their parents were divorced. When asked to report on their home as they were growing up, 76% indicated they grew up in a two-parent environment, while 15% reported a single mother home and 2% a single father home.

Two hundred and sixty three parents (141 moms and 122 dads) responded, resulting in a 65% response rate for parents. The mean age for mothers was 45 and 48 for fathers. Eighty five percent of mothers identified themselves as white, 10% as African American, and Hispanic and Asian mothers made up less than 5% of all mothers. Eighty six percent of fathers identified themselves as white, 7% as African American, and Hispanic and Asian fathers represented less than 7% of all fathers. All mothers were naturally (by birth) related to their children, while 6% of fathers indicated they were “stepfathers”. The majority of parents in this population were affluent, with 56% of mother’s reporting an annual income of \$60,000 or above and 69% of fathers indicating a family income of \$60,000 or above. Thirty percent of mothers and fathers possessed a bachelor’s degree. Only 4% of mothers and 5% of fathers indicated that they had not

graduated high school or at least attained a high school level of education.

Students were notified beforehand that the study would require them to take home forms to be completed by their parents. Parents were given directions within their pamphlets, and instructed to refer any questions back to the psychology department. The students were compensated for their participation by receiving bonus points towards their psychology class. Participation required approximately 30 minutes for students and 15 minutes for parents, with testing in a classroom setting for students and within the home for parents.

Measures

The students completed all measures within a classroom, while measures pertaining to parents were sent home via the student to be completed and mailed back to the psychology department in a self-addressed stamped envelope included with the parents' forms.

The State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, and Lushene, 1970). This widely used self-report measurement contains two subscales based on a theoretical distinction between (a) state anxiety, a transitory condition of perceived tension, and (b) trait anxiety, a relatively stable condition of anxiety proneness. The STAI consists of 40 brief items, 20 assess "how you feel right now or at this moment" and 20 assess how you "generally" feel and are appropriate for use with grades 9-16 and adults. For the purposes of this study, only the trait version of this scale was used to measure anxiety symptoms. The trait version has been reported to have good alpha internal consistency for normative samples of high school to college students, with coefficient alphas ranging from .83 to .92. The STAI was administered to the students and parents,

allowing for a measure of both child and parent anxiety. Internal consistency scores for students on the STAI-T in this study proved to be high, with an alpha score of .92.

Maternal and paternal alpha coefficients on the STAI-T were good as well, reporting as .90 and .89 respectively.

The Children's Report of Parenting Behavior Inventory (CRPBI; Schaefer, 1965; Schluderman and Schluderman, 1970). This questionnaire consists of 30-items designed to assess children's perceptions of their parents' childrearing style. It features a 3 point Likert scale where respondents rate each item as "like," "somewhat like," or "not like" the parent. Factor analysis with Schaefer's 1965 version yielded three factors including (a) Psychological Control versus Psychological Autonomy (b) Acceptance versus Rejection and (c) Firm versus Lax Control. The factor structure of the CRPBI has been replicated in a wide variety of populations, including subjects from different cultures, children, and adults (Gerlsma, 1990), and has been reported as one of the most widely used questionnaires assessing the relation of parenting practices to childhood anxiety (Rapee, 1997). Schwarz et al. (1985) also demonstrated adequate internal consistency using this measure, reporting a mean alpha of .71 across ratings made by mothers, fathers, children and siblings. For the purposes of this study, only the Psychological Control and Acceptance subscales were analyzed. Psychological Control versus Autonomy served as a measure of parental control and was defined as behaviors that impair the child's ability to develop as an individual apart from the parent. The Acceptance versus Rejection subscale served as a measure of parental rejection and indicated sharing, expression of affection, support, and positive evaluation to the child from the parent. These definitions are in accordance with Schaefer's original

descriptions and the definitions used in a myriad of studies. All students completed a CRPBI form for both mothers and fathers, while parents completed a self-report version to assess perceptions of their own parenting practices. Internal consistency coefficients were high for this sample on the CRPBI subscales, and alphas were as follows: maternal acceptance (.91), maternal control (.82), paternal acceptance (.93), and paternal control (.83).

The Parental Bonding Instrument (PBI; Parker, Tupling, and Brown, 1979). This self-report instrument consists of 25 items scored on a 4-point Likert scale with subjects asked to answer questions about their parents based on the first 16 years of their lives (Gerlsma et al., 1990). Research involving this instrument has consistently yielded two bi-polar principal source variables, a “care/indifference” dimension and an “overprotection/allowance of autonomy and independence” dimension. These factors were initially described in terms of care, affection, sensitivity, cooperation, accessibility, indifference, strictness, punitiveness, rejection, interference, control, overprotection, and encouragement of autonomy and independence (Parker, Tupling, and Brown, 1979). Reliability and internal consistency for this scale have generally been well within the acceptable range. The PBI has been shown to possess test-retest reliability of .76 for the “care” scale and .62 for the “overprotection” scale. Inter-rater reliability for this measurement has been reported as .85 for the “care” subscale and .68 on the “overprotection” subscale (Parker et al., 1979). The “care” dimension on this scale served as a measurement of parental rejection/acceptance while the “overprotection” dimension will function as a measurement of parental control/granting of autonomy. This scale served as a second measure of perceptions of parenting practices and was

administered to students only. As seen with the STAI and CRPBI, internal consistency was adequate here for all the PBI subscales, and alpha coefficients were as follows: maternal care (.91), maternal protection (.84), paternal care (.92), and paternal protection (.86).

Procedure

Students were recruited through extra credit offered in the context of an introductory psychology course. Students completed the forms during class under the direction of a professor and two assistants. The students were informed beforehand of an additional aspect of the study requiring them to take home questionnaires to be filled out by their parents. Brief instructions were given prior to the participants filling out the forms to ensure proper completion. At this time, the students were asked if they had any questions regarding the task before completing the questionnaires. Upon completion, students were given questionnaire packets, one for the mother and one for the father if applicable. The student was instructed to allow each parent to complete the forms on their own (with any questions to be referred to the psychology department rather than the student) and reminded that their parents must mail the packets back to the department before a specified deadline two weeks later. The students were asked if they had any questions regarding the study, and the professor provided a short debriefing session. All students were then thanked for their participation. A consent form and instructional letter were enclosed in both mother and father packets, notifying them that they were to mail the packet back to the psychology department with the stamped envelope provided in the packet. Upon the return of the parent packets to the psychology department, the student received the predetermined extra credit.

Results

Table 1 provides means and standard deviations for all measures and results from paired sample t-tests for perceptions of parenting variables and parental anxiety. T-tests revealed that these students perceived their mothers as more accepting, caring, and protective than their fathers. T-tests, however, revealed no significant differences in perceptions of maternal and paternal control or between maternal and paternal anxiety in this sample. Table 2 contains trait anxiety means and standard deviations for the full student sample, as well as for females and males separately. Independent t-tests for males and females revealed no significant differences in trait anxiety along gender lines ($t = -1.24, p = .22$).

Table 1.

Descriptive Statistics and Paired Sample t-tests Results for Perceptions of Parenting and Parent Trait Anxiety Variables

<i>Variables</i>	<i>Mother</i>			<i>Father</i>			<i>t-test</i>	<i>sig.</i>
	<u>X</u>	SD	N	<u>X</u>	SD	N		
<u>CRPBI</u>								
ACCEP	25.34	4.68	188	21.93	5.92	188	8.24	.0001****
CONTR	16.01	4.38	188	15.55	4.67	188	1.21	ns
<u>PBI</u>								
CARE	29.04	6.79	188	24.35	8.31	188	8.00	.0001****
PROT	14.37	7.30	188	12.49	7.55	188	3.20	.01**
<u>STAI-T</u>								
ANX	35.50	8.10	104	34.83	8.40	104	.62	ns

Note. CRPBI = Children's Report of Parenting Behavior Inventory Variables: ACCEP = acceptance,

CONTR = control; PBI = Parental Bonding Instrument Variables: Care = care, PROT = protection;

STAI-T: State Trait Anxiety Inventory – Trait Version: ANX = anxiety.

**** $p < .0001$. ** $p < .01$.

Table 2.

Descriptive Statistics for Trait Anxiety for Entire Sample of Students

<i>Variable</i>	<i>Students</i>			<i>Females</i>			<i>Males</i>		
	<u>X</u>	SD	N	<u>X</u>	SD	N	<u>X</u>	SD	N
<u>STAI-T</u>									
ANX	40.70	10.70	200	41.55	10.09	109	39.68	11.36	91

Note. STAI-T = State Trait Anxiety Inventory: ANX = anxiety.

Table 3 displays intercorrelations between perceptions of parenting variables on the CRPBI and PBI completed by students and self-reports of anxiety for both parents and students. All parenting variables proved to be significantly related to student anxiety, with the exception of paternal anxiety ($r = .14$). The directions of these significant relations were as predicted, with parental control/protection yielding positive relationships to student anxiety, and parental acceptance/care yielding negative correlations to student anxiety. Correlations between perceptions of maternal and paternal control/protection and acceptance/care and student anxiety did not vary greatly in size (Pearson r ranges from .26 - .36). Maternal control and maternal care yielded the highest correlations with student anxiety in the bivariate analyses. In general, student perceptions of maternal variables possessed slightly higher correlations with offspring anxiety (r ranges from .30 - .36) than student perceptions of paternal variables (r ranges from .26 - .33), though not substantially so. Maternal anxiety proved to be significantly related to offspring anxiety, while father anxiety did not reach statistical significance. This correlational matrix in table 3 also displays a high level of correlation between mother father constructs, indicating that there may be some similarities in how students view their mothers and fathers.

Table 3.

Intercorrelations Between Perceptions of Parenting Variables and Student Anxiety on the CRPBI, PBI, and STAI

Variables	1	2	3	4	5	6	7	8	9	10	11
<u>STAI-T</u>											
1. S-ANX											
<u>CRPBI</u>											
2. M-ACCEP	-.30**										
3. F-ACCEP	-.27**	.45**									
4. M-CONTR	.32**	-.48**	-.16*								
5. F-CONTR	.26**	-.19*	-.41**	.31**							
<u>PBI</u>											
6. M-CARE	-.36**	.83**	.40**	-.55**	-.22**						
7. F-CARE	-.33**	.37**	.83**	-.14	-.53**	.45**					
8. M-PROT	.31**	-.39**	-.13	.63**	.15*	-.49**	-.17*				
9. F-PROT	.30**	-.25**	-.29	.24**	.61**	-.25**	-.37**	.42**			
<u>STAI-T</u>											
10. M-ANX	.22**	-.17	-.15	.19*	.16	-.13	-.12	.08	.11		
11. F-ANX	.14	-.23*	-.22*	.24*	.27**	-.18	-.19*	.10	.18	.11	

Note. STAI-T = State Trait Anxiety Inventory – Trait version variables: S-ANX = Student Anxiety, M-

ANX = Maternal Anxiety, F-ANX = Paternal Anxiety; CRPBI = Children's Report of Parenting Behavior

Inventory Variables: M-ACCEP = Maternal Acceptance, F-ACCEP = Paternal Acceptance, M-CONTR =

Maternal Control, F-CONTR = Paternal Control; PBI = Parental Bonding Instrument Variables: M-CARE

= Maternal Care, F-CARE = Paternal Care, M-PROT = Maternal Protection, F-PROT = Paternal

Protection.

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

Several other noteworthy relationships surfaced in these analyses. There were significant correlations between CRPBI and PBI subscales, especially on the acceptance/care construct. Maternal acceptance and care, mother control and protection, father acceptance and care, and father control and protection all correlated highly and significantly as shown in Table 3. This study also sought to examine the relationship between parents' perceptions of their own parenting practices and students' perceptions

of those same practices. Table 4 presents the correlations between parents' perceptions of their own practices on the self-report (reworded) version of the CRPBI and all other variables within the study. All of the student's responses to the perceptions of parenting scales correlated significantly with student anxiety, while parent's responses on the same constructs on the CRPBI yielded no significant correlations with student anxiety. On the other hand, parent and student responses did correlate significantly on individual subscales of the CRPBI. Maternal acceptance and maternal self-reported acceptance, paternal acceptance and paternal self-reported acceptance, maternal control and maternal self-reported control, and paternal control and paternal self-reported control were all found to share significant relationships. This pattern of relation suggests that the perceptions reported by students were at least partially confirmed by parents.

Table 4.

Intercorrelations Between Parents' Self-Reports on Their Own Parenting Practices and Student Anxiety

Variables	1	2	3	4	5	6	7	8	9	10	11
<u>STAI-T</u>											
1. S-ANX											
<u>CRPBI</u>											
2. M-ACCEP	-.30**										
3. M-ACCEPSR	-.13	.47**									
4. F-ACCEP	-.27**	.45**	.28**								
5. F-ACCEPSR	-.13	.18	.32**	.49**							
6. M-CONTR	.32**	-.48**	-.27**	-.16*	-.16						
7. M-CONTRSR	.16	-.36**	-.47**	-.26**	-.14	.50**					
8. F-CONTR	.26**	-.19*	-.18*	-.41**	-.23*	.31**	.28**				
9. F-CONTRSR	.09	-.07	-.16	-.18	-.25**	.28*	.33**	.38**			
<u>STAI-T</u>											
10. M-ANX	.22**	-.17	-.29**	-.15	-.05	.19*	.43**	.16	.15		
11. F-ANX	.14	-.23*	-.06	-.22*	-.23*	.27**	.15	.27**	.33**	.11	

Note. STAI-T = State Trait Anxiety Inventory Variables: S-ANX = Student Anxiety, M-ANX = Maternal

Anxiety, F-ANX = Paternal Anxiety; CRPBI = Children's Report of Parenting Behavior Inventory

Variables: M-ACCEP = Student Perceptions of Maternal Acceptance,

Table 4.cont'd

M-ACCEPSR = Acceptance Self Report by Mother, F-ACCEP = Student Perceptions of Paternal Acceptance, F-ACCEPSR = Acceptance Self Report by Father, M-CONTR = Student Perceptions of Maternal Control, M-CONTRSR = Control Self Report by Mother, F-CONTR = Student Perceptions of Paternal Control, F-CONTRSR = Control Self Report by Father

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

Regression analyses were performed with and without the parental anxiety factor because the inclusion of parental anxiety substantially attenuated sample sizes for the analyses. Regression analyses were also only performed on the CRPBI variables (parental control and acceptance) due to initially high correlations between the CRPBI and PBI subscales (see Table 2), indicating that almost identical constructs were being measured. All regression analyses were performed with student trait level of anxiety as measured by the STAI-T serving as the dependent variable. Results for the simultaneous multiple regression on student anxiety with and without the inclusion of parental self-reported anxiety included in the regression equation are displayed in tables 5 and 6. Simultaneous multiple regression of the CRPBI variables, parental control and acceptance, explained approximately 13% (adjusted $R^2 = .13$) of the variance in student anxiety and the variable set yielded an overall statistically significant relationship ($R = .39$, $R^2 = .15$, $F(4, 183) = 8.25$, $p < .0001$). Only maternal control, however, explained a statistically significant proportion of the variance in a positive direction when examined individually, while paternal acceptance approached statistical significance with a negative trend in this analysis. With the addition of parental anxiety to the equation, paternal acceptance was negatively and significantly associated with student anxiety, while

maternal control was positively correlated with a trend towards significance. The full variable set (student perceptions of parental acceptance and control, and parental self-reported anxiety) from the CRPBI and STAI were significantly related to offspring anxiety ($R = .48$, $R^2 = .23$, $F(6, 97) = 4.91$, $p < .0001$), explaining approximately 19% (adjusted $R^2 = .18$) of the variance.

Table 5.

Summary of Simultaneous Multiple Regression of Parental Acceptance and Control on Student Anxiety (Parental Anxiety not included) (N = 188)

<i>Variable</i>	<i>b</i>	<i>sr²</i>	<i>t value</i>	<i>p <</i>
M-ACCEP	-.09	-.07	-1.09	.28
F-ACCEP	-.14	-.12	-1.71	.09
M-CONTR	.19	.16	2.33	.02*
F-CONTR	.13	.11	1.64	.10

Note. M-ACCEP = Maternal Acceptance, F-ACCEP = Paternal Acceptance, M-CONTR = Maternal

Control, F-CONTR = Paternal Control.

Adjusted $R^2 = .13$

$R = .39$

* $p < .05$.

Table 6.

Summary of Simultaneous Multiple Regression of Parental Acceptance and Control on Offspring Anxiety (Parental Anxiety included in regression) (N = 104)

<i>Variable</i>	<i>b</i>	<i>sr²</i>	<i>t value</i>	<i>p <</i>
M-ACCEP	-.11	-.08	-.94	.35
F-ACCEP	-.24	-.20	-2.21	.03*
M-CONTR	.21	.15	1.75	.08
F-CONTR	.07	.06	.61	.54
M-ANX	.03	.03	.31	.75
F-ANX	-.05	-.04	-.49	.63

Table 6. cont'd

Note. M-ACCEP = Maternal Acceptance, F-ACCEP = Paternal Acceptance, M-CONTR = Maternal Control, F-CONTR = Paternal Control, M-ANX = Maternal Anxiety, F-ANX = Paternal Anxiety.

Adjusted $R^2 = .19$

$R = .48$

* $p < .05$.

Table 7 displays the data from the CRPBI hierarchical regression, with student trait anxiety level serving as the dependent variable in each analysis. Hierarchical regression analysis was performed to assess the relative importance of student perceptions of maternal and paternal parenting practices in explaining variance in student anxiety. Parental anxiety was not included in the hierarchical regression analyses due to its initial low correlation with student anxiety and its failure to contribute any significant individual variance when entered into the simultaneous multiple regression equation. Paternal variables declared 9% (adjusted $R^2 = .09$) of the variance when entered into the equation first, while maternal variables contributed significant variance above that explained by father variables (sig. F change = .01). The full variable set explained an overall 13% (adjusted $R^2 = .13$) of student anxiety variance. Specifically, maternal control uniquely explained additional student anxiety variance in a positive direction while paternal control negatively approached significance.

Table 7.

Summary of Hierarchical Regression of Parental Acceptance and Control on Student Anxiety (Paternal Variables Entered First) (N = 188)

<i>Variable</i>	<i>b</i>	<i>sr²</i>	<i>t value</i>	<i>p <</i>
STEP 1				
F-ACCEP	-.19	-.18	-2.53	.01**
F-CONTR	.18	.17	2.41	.02*
STEP 2				
F-ACCEP	-1.14	-.12	-1.71	.08
F-CONTR	.13	.11	1.64	.10
M-ACCEP	-.09	-.07	-1.09	.28
M-CONTR	.19	.16	2.33	.02*

Note. F-ACCEP = Paternal Acceptance, F-CONTR = Paternal Control, M-ACCEP = Maternal

Acceptance, M-CONTR = Maternal Control.

Adjusted $R^2 = .13$

$R = .39$

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

To better examine the separate roles of mothers and fathers, the order of entry in the hierarchical regression was reversed to assess the paternal relationship with student anxiety over and above the maternal relationship. Results from these analyses are presented in table 8. Just as when father variables were entered first into the equation, maternal and paternal variables accounted for 13% of student anxiety variance. Hierarchical regression resulted in paternal variables contributing significant variance over and above maternal variables (sig. F change = .01), indicating the importance of paternal variables. Here again, maternal control proved to be positively and significantly related to student anxiety and paternal acceptance approached significance in a negative direction in individual variable analysis.

Table 8.

Summary of Hierarchical Regression of Parental Acceptance and Control on Student Anxiety (Maternal Variables Entered First) (N = 188)

<i>Variables</i>	<i>b</i>	<i>sr²</i>	<i>t value</i>	<i>p <</i>
STEP1				
M-ACCEP	-.17	.15	-2.15	.03*
M-CONTR	.22	.19	2.76	.01**
STEP 2				
M-ACCEP	-.09	.07	-1.09	.28
M-CONTR	.19	.16	2.33	.02*
F-ACCEP	-.14	.12	-1.71	.09
F-CONTR	.13	.11	1.64	.10

Note. M-ACCEP = Maternal Acceptance, M-CONTR = Maternal Control, F-ACCEP = Paternal

Acceptance, F-CONTR = Paternal Control.

Adjusted R² = .13

R = .39

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

Results From Analysis Within Genders

All descriptive statistics for perceptions of parenting variables, parental anxiety, and results from paired sample t-tests for males and females are displayed in tables 9 and 10. T-tests revealed that females from this sample perceived their mothers as more accepting and more caring than their fathers, with no significant differences observed between maternal and paternal control, protection, or anxiety. Males in this sample perceived their mothers as more accepting, caring, and protective than their fathers, with no significant differences observed between maternal and paternal control and anxiety.

Table 9.

Descriptive Statistics and Paired Sample t-tests Results for Female Perceptions of Parenting and Parent Trait Anxiety Variables.

<i>Variables</i>	<i>Mother</i>			<i>Father</i>			<i>t</i>	<i>Sig.</i>
	<u>X</u>	SD	N	<u>X</u>	SD	N		
<u>CRPBI</u>								
ACCEP	25.45	4.99	103	22.68	6.07	103	4.95	.001***
CONTR	15.95	4.41	103	15.16	4.50	103	1.56	ns
<u>PBI</u>								
CARE	28.95	7.34	103	25.24	8.14	103	4.48	.001***
PROT	14.26	7.99	103	13.75	8.09	103	.63	ns
<u>STAI-T</u>								
ANX	36.15	7.57	55	33.69	8.96	55	1.54	ns

Note. CRPBI = Children's Report of Parenting Behavior Inventory Variables: ACCEP = Acceptance, CONTR = Control; PBI = Parental Bonding Instrument Variables: CARE = Care, PROT = Protection; STAI-T = State Trait Anxiety Inventory – Trait Version: ANX = Anxiety.

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

Table 10.

Descriptive Statistics and Paired Sample t-tests Results for Male Perceptions of Parenting and Parent Trait Anxiety Variables.

<i>Variables</i>	<i>Mother</i>			<i>Father</i>			<i>t</i>	<i>sig.</i>
	<u>X</u>	SD	N	<u>X</u>	SD	N		
<u>CRPBI</u>								
ACCEP	25.02	4.31	85	21.04	5.60	85	7.72	.001**
CONTR	16.09	4.38	85	16.02	4.85	85	.13	Ns
<u>PBI</u>								
CARE	29.15	6.07	85	23.27	8.43	85	7.20	.001**
PROT	14.50	6.43	85	10.99	6.58	85	4.37	.001**
<u>STAI-T</u>								
ANX	34.77	8.67	49	36.12	7.62	49	-.97	ns

Note. CRPBI = Children's Report of Parenting Behavior Inventory Variables: ACCEP = Acceptance, CONTR = Control; PBI = Parental Bonding Instrument Variables: CARE = Care, PROT = Protection;

STAI-T = State Trait Anxiety Inventory – Trait Version: ANX = Anxiety.

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

When analyses were performed separately within both genders, perceptions of parenting appeared to be more significant in relation to female than male trait anxiety. All intercorrelations for males and females on the CRPBI, PBI, and STAI are represented in tables 11 and 12. In the initial bivariate analyses, all student perceptions of parenting variables were related in the predicted directions to female offspring anxiety at the .01 level, though neither maternal nor paternal anxiety proved to be significant for females. These correlations between perceptions of parenting constructs and female trait anxiety were all moderate to high (r ranging from .28 - .45). In contrast, only maternal acceptance and paternal control on the CRPBI and maternal care, paternal care, and paternal protection on the PBI proved to be significantly related to male offspring anxiety. The correlations for males were considerably lower than those of females (r ranging from .17 to .33), with the exception of maternal care ($r = .44$). The only variable from the parent self-reported perceptions of their own parenting that significantly correlated with female anxiety was maternal control ($r = .259$, $p < .05$), while no parent self-reported perceptions of their own parenting significantly correlated with male anxiety.

Table 11.

Intercorrelations Between Perceptions of Perceptions of Parenting Variables and Female Student Anxiety on the CRPBI, PBI, and STAI

Variables	1	2	3	4	5	6	7	8	9	10	11
<u>STAI-T</u>											
1. S-ANX											
<u>CRPBI</u>											
2. M-ACCEP	-.34**										
3. F-ACCEP	-.35**	.40**									
4. M-CONTR	.45**	-.54**	-.17								
5. F-CONTR	.28**	-.23*	-.42**	.33**							
<u>PBI</u>											
6. M-CARE	-.31**	.86**	.39**	-.56**	-.23*						
7. F-CARE	-.36**	.32**	.86**	-.13	-.53**	.42**					
8. M-PROT	.41**	-.41**	-.08	.65**	.19	-.50**	-.12				
9. F-PROT	.31**	-.23*	-.29**	.35**	.68**	-.24*	-.40**	.47**			
<u>STAI-T</u>											
10. M-ANX	.22	-.12	-.07	.09	-.02	-.08	.03	.00	.06		
11. F-ANX	.21	-.32*	-.24	.21	.34**	-.21	-.21	.10	.20	-.03	

Note. STAI-T = State Trait Anxiety Inventory - Trait Version Variables: S-ANX = Student Anxiety,

M-ANX = Mother Anxiety, F-ANX = Father Anxiety; CRPBI = Children's Report of Parenting Behavior

Inventory Variables: M-ACCEP = Maternal Acceptance, F-ACCEP-Paternal Acceptance, M-CONTR =

Maternal Control, F-CONTR = Paternal Control; PBI = Parental Bonding Instrument Variables: M-CARE

= Maternal Care, F-CARE = Paternal Care, M-PROT = Maternal Protection, F-PROT = Paternal

Protection.

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

Table 12.

Intercorrelations Between Perceptions of Parenting Variables and Male Student Anxiety
on the CRPBI, PBI, and STAI

Variables	1	2	3	4	5	6	7	8	9	10	11
<u>STAI-T</u>											
1. S-ANX											
<u>CRPBI</u>											
2. M-ACCEP	-.27*										
3. F-ACCEP	-.21	.53**									
4. M-CONTR	.17	-.40**	-.16								
5. F-CONTR	.26*	-.13	-.38**	.30*							
<u>PBI</u>											
6. M-CARE	-.44**	.79**	.42**	-.52**	-.22*						
7. F-CARE	-.33**	.43**	.80**	-.15	-.53**	.51**					
8. M-PROT	.19	-.37**	-.21	.62**	.10	-.49**	-.23*				
9. F-PROT	.27*	-.30**	-.37**	.09	.59**	-.27*	-.41**	.35**			
<u>STAI-T</u>											
10. M-ANX	.22	-.24	-.24	.32*	.34**	-.21	-.26*	.20	.18		
11. F-ANX	.08	-.11	-.17	.16	.16	-.13	-.14	.09	.18	.30*	

Note. STAI-T = State Trait Anxiety Inventory - Trait Version: S-ANX = Student Anxiety, M-ANX =

Maternal Anxiety, F-ANX = Paternal Anxiety; CRPBI = Children's Report of Parenting Inventory

Variables: M-ACCEP = Maternal Acceptance, F-ACCEP = Paternal Acceptance, M-CONTR = Maternal

Control, F-CONTR = Paternal Control; PBI = Parental Bonding Instrument Variables: M-CARE =

Maternal Care, F-CARE = Paternal Care, M-PROT = Maternal Protection, F-PROT = Paternal Protection.

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

Simultaneous multiple regression analyses for females revealed a distinct and strong relationship between student perceptions of parenting and female trait anxiety. All results from these analyses appear in Table 13 and 14. Simultaneous multiple regression for females yielded a significant relationship between the CRPBI variable set and female student anxiety ($R = .51$, $R^2 = .26$, $F(4, 98) = 8.61$, $p < .0001$). Parental control and acceptance explained 23% (adjusted $R^2 = .23$) of the variance without the inclusion of parental anxiety. Specifically, as in the full sample analyses, paternal acceptance in a negative direction and maternal control in a positive direction proved to be significant

when individual variables were assessed. When self-reported parental anxiety was entered into the regression, 12% of the additional variance was explained, with a total of 35% of female student anxiety variance accounted for by variables in the equation. Parental anxiety, however, failed to contribute significant explained variance when individual variables were assessed.

Table 13.

Summary of Simultaneous Multiple Regression of Parental Acceptance and Control on Female Student Anxiety (Parental Anxiety not Included) (N = 103)

<i>Variable</i>	<i>b</i>	<i>sr²</i>	<i>t value</i>	<i>p <</i>
M-ACCEP	.01	.00	.05	.96
F-ACCEP	-.27	-.23	-2.62	.01**
M-CONTR	.36	.30	3.43	.001***
F-CONTR	.05	.05	.54	.59

Note. M-ACCEP = Maternal Acceptance, F-ACCEP = Paternal Acceptance, M-CONTR = Maternal Control, F-CONTR = Paternal Control.

Adjusted R² = .23 R = .51

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

Table 14.

Summary of Simultaneous Multiple Regression of Parental Acceptance and Control on Female Student Anxiety (Parental Anxiety Included) (N = 55)

<i>Variable</i>	<i>b</i>	<i>sr²</i>	<i>t value</i>	<i>p <</i>
M-ACCEP	.08	.06	.52	.61
F-ACCEP	-.32	-.27	-2.46	.02*
M-CONTR	.51	.36	3.29	.01**
F-CONTR	-.04	-.03	-.25	.80
M-ANX	.07	.06	.58	.57
F-ANX	.02	.02	.14	.89

Table 14 cont'd

Note. M-ACCEP = Maternal Acceptance, F-ACCEP = Paternal Acceptance, M-CONTR = Maternal Control, F-CONTR = Paternal Control, M-ANX = Maternal Anxiety, F-ANX = Paternal Anxiety.

Adjusted $R^2 = .35$

$R = .65$

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

Hierarchical regression analyses were performed for females only to determine the relative importance of female student perceptions of mothers and fathers in explaining variance in female student anxiety. As with the full sample, parental self-reported anxiety was not entered into the hierarchical regression analyses for females due to its initially low individual contribution. Results from these analyses performed with paternal variables entered first are reported in table 15. Paternal variables declared 13% (adjusted $R^2 = .13$) of the variance when entered first, while maternal variables explained significant variance even when their entry followed paternal variables in the regression, accounting for an additional 10% variance in female trait anxiety. A total of 23% of the variance in female student anxiety was accounted for by the CRPBI's control and acceptance scales. As in the full sample analysis, maternal control was significantly and positively related to female anxiety while paternal acceptance was significantly and negatively and significant related. When assessed individually, and these relationships were even stronger than those seen in the full sample.

Table 15.

Summary of Hierarchical Regression of Paternal Acceptance and Control on FemaleStudent Anxiety (N = 103)

<i>Variable</i>	<i>b</i>	<i>sr²</i>	<i>t value</i>	<i>p <</i>
STEP 1				
F-ACCEP	-.28	-.26	-2.77	.01**
F-CONTR	.17	.15	1.63	.11
STEP 2				
F-ACCEP	-.27	-.23	-2.62	.01**
F-CONTR	.05	.05	.54	.59
M-ACCEP	.01	.00	.51	.96
M-CONTR	.36	.30	3.43	.001***

Note. F-ACCEP = Paternal Acceptance, F-CONTR = Paternal Control, M-ACCEP = Maternal

Acceptance, M-CONTR = Maternal Control.

Adjusted R² = .23

R = .51

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

To evaluate the possible equal importance of fathers' relationship to female trait anxiety, the order of entry in the hierarchical regression was reversed to assess paternal variables over and above maternal variables. All results from the regression analyses with mothers entered first are reported in table 16. Maternal variables (acceptance and control) explained 17% of the variance when entered first, but paternal variables added significant variance (6%) over that explained by maternal variables (sig. F change = .01). Comparatively maternal and paternal variables explained 17% and 13% of female anxiety variance respectfully when entered first, but here again, maternal control was positively and significantly related to female trait anxiety while paternal acceptance was negatively and significantly associated with female trait anxiety.

Table 16.

Summary of Hierarchical Regression of Parental Acceptance and Control on FemaleStudent Anxiety (Parental Anxiety not Included in Regression) (N = 103)

<i>Variables</i>	<i>b</i>	<i>sr²</i>	<i>t value</i>	<i>p <</i>
STEP 1				
M-ACCEP	-.12	-.10	-1.10	.27
M-CONTR	.36	.31	3.47	.001***
STEP 2				
M-ACCEP	.01	.00	.05	.96
M-CONTR	.36	.30	3.43	.001***
F-ACCEP	-.27	-.23	-2.62	.01**
F-CONTR	.05	.05	.54	.59

Note. M-ACCEP = Maternal Acceptance, M-CONTR = Maternal Control, F-ACCEP = Paternal

Acceptance, F-CONTR = Paternal Control.

Adjusted $R^2 = .23$

$R = .51$

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

Results for males reveal that the model asserting that perceptions of parenting are related to offspring anxiety did not appear to apply to males in this sample. Results from regression analyses for males are displayed in table 17. When simultaneous multiple regression was performed for males, only 7% of the variance in male anxiety was explained by CRPBI variables ($R = .34$, $R^2 = .11$, $F(4,80) = 2.75$, $p < .05$). No variables on the CRPBI achieved significance for males when assessed individually, but, interestingly, an opposite trend of that seen with females emerged, with paternal control and maternal acceptance coming close to achieving significance. Analyses adding self-reported parental anxiety were not performed due to only low general contributing significance of parental anxiety in the entire sample.

Table 17.

Summary of Simultaneous Multiple Regression of Parental Acceptance and Control onMale Student Anxiety (Parental Anxiety not included) (N = 49)

<i>Variable</i>	<i>b</i>	<i>sr²</i>	<i>t value</i>	<i>p <</i>
M-ACCEP	-.21	-.16	-1.53	.13
F-ACCEP	-.01	-.01	-.05	.96
M-CONTR	.01	.01	.09	.93
F-CONTR	.23	.20	1.88	.06

Note. M-ACCEP = Maternal Acceptance, F-ACCEP = Paternal Acceptance, M-CONTR = Maternal

Control, F-CONTR = Paternal Control.

Adjusted $R^2 = .07$

$R = .34$

To summarize the results, all perceptions of parenting variables proved to be significant in the full sample analysis, except for paternal anxiety. When entered into simultaneous multiple regression analyses, however, maternal control and paternal acceptance repeatedly surfaced as possessing individual significance within the regression. Hierarchical Regression revealed that maternal and paternal variables were significant, depending on order of entry into the regression, but individual analyses again revealed the significance of the maternal control and paternal acceptance constructs. Large gender differences emerged in this sample, with all parenting constructs resulting in significant bivariate correlations for females, but with only a partial set of correlates for males. When simultaneous multiple regression was performed for both genders, the perceptions of parenting model only proved significant for females. Individual analysis of variables within the regression revealed an even stronger pattern of maternal control and paternal acceptance significance for females than that seen in the full sample analysis. Hierarchical regression for females revealed again the significance of both maternal and paternal variables.

Discussion

Hypothesis 1 asserted that self-reported perceptions of parental control, acceptance, and anxiety would all have significant relationships with offspring anxiety. This statement was partially supported in the initial bivariate correlational analyses, with all variables proving to be significantly correlated to offspring anxiety, except for paternal anxiety. These findings are in accordance with the large body of research suggesting that these specific parental control/autonomy granting and rejection/acceptance variables are related to child anxiety (Rapee, 1997; De Mann, 1986; Gruner et al., 1999; Siqueland et al., 1996; Whaley et al., 1999). The moderate bivariate correlation between maternal anxiety and offspring anxiety that occurred in this sample also corresponds to literature emphasizing maternal, not paternal, anxiety as a significant parent variable related to offspring anxiety. (Cobham et al., 1999). Overall, the initial bivariate correlational results corresponded with the majority of past research in this area.

The correlational data also offered some other important results to consider. High intercorrelation between subscales of the CRPBI and PBI indicated that these scales were measuring similar constructs. In accordance with research on the CRPBI by (Schwartz et al., 1985), significant correlations between students' perceptions of their parents and parents' self-reports on identical constructs of this measure were also observed. These relationships indicate that student perceptions of parenting are consistent, to some degree, with parenting practices as reported by parents. Also, t-tests revealed that in general, this sample of college students perceived mothers as more accepting, caring, and protective than fathers. These findings indicate that the body of research showing that children, on average, perceive mothers as more loving than fathers (Goldin, 1969), may also apply to

late adolescence and young adulthood. Finally, significant bivariate correlations between maternal and paternal constructs also indicated that student's perceptions of one parent might be related to their perceptions of their other parent.

Simultaneous multiple regressions provided more specific information about the relation of perceptions of parenting practices to offspring anxiety described in hypothesis 1. Perceptions of maternal control and paternal acceptance repeatedly explained unique variance in student anxiety while maternal acceptance and paternal control did not. Results indicated that, for the full sample, only specific perceptions of those controlling or autonomy granting behaviors performed by mothers and those rejecting or accepting behaviors performed by fathers were related to offspring anxiety levels. These findings correspond to a large body of literature examining the mother's role in childhood anxiety. A pattern of maternal intrusive control, conflict, aversive affect, and lack of autonomy granting has been consistently associated with the presence of child anxiety. (Dumas and Lafreniere, 1993; Whaley et al., 1999). The results also suggest that more attention should be paid to the father's role, which is usually bypassed or ignored in parenting research. Indeed, others have noted that offspring anxiety may be related to both mother and father levels of acceptance of their child in clinical and non-clinical populations (Gruner et al., 1999; Siqueland et al., 1996). The present study examined the father's role in offspring anxiety and showed that perceptions of paternal accepting or rejecting behaviors may be as important as perceptions of maternal controlling behaviors. This specific type of parenting data adds valuable insight that may contribute to the growing trend of including parents in treatment programs for child anxiety (Dadds et al., 1997). Parental self-reports of anxiety did not appear to be significantly related to student

anxiety in these analyses, though the current literature cites it as an important factor in the study of childhood anxiety development (Ginsburg et al., 1995; Muris and Merckelbach, 1998; Whaley et al., 1999). The failure of this relationship to emerge could have been due to the non-clinical status of the parents and students in this sample. Parents' self reports on their own parenting practices also did not prove to be significantly related to students' perceptions of these same practices. This discrepancy in responses could be due to parents' unwillingness to respond negatively to their own parenting practices or error in the actual memory of both parents and students concerning these practices could have occurred as well.

Hypothesis 2 predicted that maternal variables would be more strongly related to offspring anxiety than paternal variables. This hypothesis failed to receive solid support. Though maternal variables attained statistical significance over paternal variables in hierarchical regression analyses, paternal variables also proved to be significant when the order of entry was reversed. Maternal control and paternal acceptance specifically appeared to be of approximately equal importance when unique variance accounted for in student anxiety was examined. The individual examination of mothers' versus fathers' role might better be elaborated upon through an observational approach or a combination of a questionnaire and observational method.

Unexpected, large differences in the model were observed when males and females were analyzed separately. Though independent t-tests yielded no significant differences between male and female trait anxiety (likely a reflection of the non-clinical composition of the sample), the overall model assessing the relationship between perceptions of parenting variables and offspring anxiety applied most strongly to females,

while explaining very little variance in male anxiety. Parental control/protection and acceptance/care and anxiety explained as much as 35% of female anxiety variance while these same constructs only garnered 7% of male anxiety variance. Also, the relationship of maternal control and paternal acceptance to offspring anxiety that was evident in the entire sample clearly applied most strongly to female offspring anxiety. In fact, simultaneous multiple regressions yielded stronger relationships between these constructs and female anxiety than those seen in the full sample. Past research has indicated that the relationship between perceived parenting practices and offspring anxiety in non-clinical populations, such as college students, may be more applicable to females than males (DeMann, 1986). This study provides strong support for this hypothesis asserting that this model is much more compelling for female than male offspring anxiety. Research has also indicated that the addition of a parent component in child anxiety treatment programs may only prove to be beneficial for females (Dadds et. al, 1999), and the results from this study appear to add support to the assertion that parenting may be a critical component of treatment for female anxiety related problems. Interestingly, though male anxiety was not strongly related to parenting, the trend seen in regression was opposite that for females, indicating that maternal acceptance and paternal control might be more relevant for male anxiety. If this study had included a larger or clinical sample, a model opposite that suggested for females might have been observed for males.

In summary, this study indicates that young adults' perceptions of maternal and paternal controlling and accepting behaviors do seem to play a role in the level of anxiety experienced by that individual. Specifically, this study revealed a model supporting maternal control and paternal acceptance as particularly important constructs when

examining the anxiety levels of young adults. This model especially applied to females, indicating that these perceptions of parenting may be much more related to the development of female rather than male trait anxiety. Though a great deal of variance is still left for consideration, it appears that these perceptions of parenting are valid variables to consider when evaluating trait anxiety in young adult populations.

A few limitations concerning the methods utilized in this study must be mentioned. One major limitation of this study was the use of retrospective reports, evaluating perceptions of parenting rather than actual parenting practices. While there is a substantial amount of literature supporting the use of these reports, great caution must be incorporated when analyzing such findings (Rapee, 1997; and Brewin, 1993). Brewin (1993) asserts that the body of literature available leaves little room for doubt that anxiety symptomatology in children as well as adults is consistently associated with retrospective reports of problematic early experiences involving caretakers. The moderate relationships between parents' and students' responses found in this study indicate, however, that this method may not be fully or accurately sampling actual parenting practices, opening up speculation as to what is being measured. Past studies, however, do offer support to the notion that these perceptions may play a more important role than actual parenting practices in the development of offspring anxiety (Rapee, 1997). When analyzing parent responses, it is also important to note the possibility that parents who responded here are a unique group of parents with a high level of interest in their children, possibly causing them to rate differently from an average group of parents on trait levels of anxiety or on perceptions of parenting in general. Another limitation involves the non-clinical status of this sample. In a sample of children or adults with

anxiety related disorders, a different pattern of relations might have been observed. This study also lacked diversity in that the majority of the participants were Caucasian. If a more diverse sample had been chosen, relationships between variables may have differed. Finally, due to the correlational nature of this study, no causal relationships between these variables can be assumed.

This study reveals possible new avenues of future research. Future studies may specifically address the differences between male and female relationships with their parents in relation to the development of offspring anxiety. An examination of these differences across more diverse populations might also provide greater detail concerning these variables. In addition, there is still a large amount of offspring anxiety variance not accounted for by the limited constructs of parental control/autonomy granting and acceptance/rejection. An investigation into other parenting constructs might yield a more complete picture of the relationship between parenting and child anxiety and give rise to more powerful preventative and therapeutic interventions.

References

- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington DC: Author.
- Barrios, B. A., & O'Dell, S. L. (1988). Fears and Anxieties. In Mash, E. J., & Terdal, L. G. (Eds.). Childhood Disorders (pp. 246-345). New York, Guilford.
- Brewin, C. R., Andrews, B. & Gotlib, I. H. (1993). Psychopathology and early experience: A reappraisal of retrospective reports. Psychological Bulletin, 113, 82-98.
- Burger, G. K. & Armentrout, J. A. (1971). A factor analysis of fifth and sixth graders' reports of parental child-rearing behavior. Developmental Psychology, 4, 483.
- Buros, O. K. (Ed.). (1978). The Mental Measurements Yearbook (pp. 682-684). New Jersey, Highland Park.
- Cobham, V. E., Dadds, M. R., & Spence, S. H. (1999). Anxious children and their parents: What do they expect. Journal of Clinical Child Psychology, 28, 220-231.
- Cobham, V. E., Dadds, M. R., & Spence, S. H. (1998). The role of parental anxiety in the treatment of childhood anxiety. Journal of Consulting and Clinical Psychology, 66, 893-905.
- Cole, D. A., Peeke, L. G., Martin, J. M., Truglio, R., & Seroczynski, A. D. (1998). A longitudinal look at the relation between depression and anxiety in children and adolescents. Journal of Consulting and Clinical Psychology, 66, 451-460.
- Conley, J. C. & Kramer, J. J. (Eds.). (1989). The Mental Measurement Yearbook (pp. 694-698). Nebraska, Lincoln.

Dadds, M. R., Holland, D. E., Laurens, K. R., Mullins, M., Barrett, P. M., & Spence, S. H. (1999). Early intervention and prevention of anxiety disorders in children: Results at 2-year follow-up. Journal of Consulting and Clinical Psychology, *67*, 145-150.

Dadds, M. R., Holland, D. E., Barrett, P. M., Laurens, K. R., & Spence, S. H. (1997). Prevention and early intervention for anxiety disorders: A controlled trial. Journal of Consulting and Clinical Psychology, *65*, 627-635.

De Mann, A. F. (1986). Parental control in child rearing and trait anxiety in young adults. Psychological Reports, *59*, 477-478.

Dumas, J. E., & LaFreniere, P. J. (1993). Mother-child relationships as sources of support or stress: A comparison of competent, average, aggressive, and anxious dyads. Child Development, *64*, 1732-1754.

Gerlsma, C., Emmelkamp, P. M. G., & Arrindell, W. A. (1990). Anxiety, depression, and perception of early parenting: A meta-analysis. Clinical Psychology Review, *10*, 251-277.

Ginsburg, G. S., Silverman, W. K., & Kurtines, W. K. (1995). Family involvement in treating children with phobic and anxiety disorders: A look ahead. Clinical Psychology Review, *15*, 457-473.

Goldin, P. C. (1969). A review of children's reports of parent behaviors. Psychology Bulletin, *71*, 222-236.

Gruner, K., Muris, P., & Merckelbach, H. (1999). The relationship between anxious rearing behaviors and anxiety disorders symptomatology in normal children. Journal of Behavior Therapy and Experimental Psychiatry, *30*, 27-35.

Muris, P., & Merckelbach, H. (1998). Perceived parental rearing behavior and anxiety disorders symptoms in normal children. Personality and Individual Differences, 25, 1199-1206.

Parker, G., Tupling, H., & Brown, L. B. (1979). A parental bonding instrument. British Journal of Medical Psychology, 52, 1-10.

Rapee, R. M. (1997). Potential role of childrearing practices in the development of anxiety and depression. Clinical Psychology Review, 17, 47-67.

Rapee, R. M. (1991). Generalized anxiety disorder: A review of clinical features and theoretical concepts. Clinical Psychology Review, 11, 419-440.

Schludermann, E., & Schludermann, S. (1970). Replicability of factors in children's report of parent behavior (crpbi). Journal of Psychology, 76, 239-249.

Schaefer, E. S. (1965). Children's reports of parental behavior: An inventory. Child Development, 36, 413-424.

Schwartz, J. C., Barton-Henry, M. L., & Pruzinsky, T. (1985). Assessing child-rearing behaviors: A comparison of ratings made by mother, father, child, and sibling on the CRPBI. Child Development, 56, 462-479.

Siqueland, L., Kendall, P. C., & Steinberg, L. (1996). Anxiety in children: Perceived family environments and observed family interaction. Journal of Clinical Child Psychology, 25, 225-237.

Tannenbaum, L. E., Forehand, R., & Thomas, A. M. (1992). Adolescent self-reported anxiety and depression: Separate constructs of a single entity. Child Study, 22, 61-72.

Whaley, S. E., Pinto, A. & Sigman, M. (1999). Characterizing interactions between anxious mothers and their children. Journal of Consulting and Clinical Psychology Review, 67, 826-836.

Appendix A.

Consent Form for Students

Consent to Participate in Research

TITLE: Specific Parenting Variables Associated With Offspring Anxiety in Late Adolescence

INVESTIGATORS: David Reitman, Ph.D., Assistant Professor (388-4096)
Joan Asseff, student
Department of Psychology
Louisiana State University

PARTICIPANTS: You must have at least one living parent (mother or father) who is able to fill out questionnaires, and you must be 18 years old or older.

DESCRIPTION: Your help is requested in a research project. We are interested in certain parenting practices and those practices possible relationships to childhood anxiety. This study requires the participation of both you and both your parents or, in more specific terms, those adults who were your **primary care takers** during the years of your upbringing (this could include stepmothers, stepfathers, aunts, uncles, grandparents, or any other adult, as long as they filled the maternal or paternal role in your upbringing). Your participation will take approximately 20 minutes to fill out the attached questionnaires. You will then be asked to take home some questionnaires to be filled out by your parents, and your parents will be asked to mail the questionnaires to the psychology department via a enclosed, self-addressed envelope. You are reminded to please allow your parents to fill out the forms independently of any outside party discussion.

RISKS AND BENEFITS: Students will be asked to recall memories of their childhood and to provide information on their feelings of anxiety. There are, however, no significant risks in participating.

CONFIDENTIALITY: All data will be kept confidential. Any presentation of the data will involve anonymous group data. The data will be kept in a locked office accessible only to principle investigators.

COST AND PAYMENT: There are no costs to students for participating. You will receive a set number of bonus points for initially participating and additional bonus points upon arrival of completed parent questionnaires.

RIGHT TO WITHDRAW: You are free to refuse to participate in this project or to withdraw at any time by simply informing the experimenter in person, by letter, or by phone. Your decision will not adversely affect your status with the Psychology department or University.

VOLUNTARY CONSENT: I certify that I have read the preceding or it has been read to me, and that I understand its contents. I acknowledge that I have been given the opportunity to ask questions regarding the study, hazards, discomforts, and benefits that were not clear to me, and that that the questions I asked were fully answered. I understand that further questions will be answered by Dr. Reitman. I understand that if I have questions about subjects' rights, or other concerns, I can contact Robert C. Mathews, LSU Institutional Review Board at (225) 388-8692. A copy of this consent form has been given to me. My signature below means that I fully agree to participate in this research project.

Signature

Name (print)

Name (signature)

Date

Witness

Name (signature)

Appendix B.

Consent Form for Parents

Consent to Participate in Research

TITLE: Specific Parenting Variables Associated With Offspring Anxiety in Late Adolescence

INVESTIGATORS: David Reitman, Ph.D., Assistant Professor (225 388-4096)
Joan Asseff, student
Department of Psychology
Louisiana State University

PARTICIPANTS: You must be the mother, father, or primary caretaker of the student in question. Any person who has provided care to the student over the majority of his/her life span or has served in place of a mother or father for the student may fill out these forms.

DESCRIPTION: Your help is requested in a research project. We are interested certain parenting practices and their relationship to child development. This study requires the participation of both you and your child. Your child has already consented to participate and has answered a set of questionnaires. We now ask you to fill out a set of questionnaires and to mail them back to the LSU Psychology Department with the self addressed, stamped envelope provided for you in the questionnaire packet. This study requires responses from both the child's mother and father (or **primary caretaker** during his/her upbringing), if they are available. Please answer all questions without discussing them with your spouse, child, or any outside party. It will take approximately 15 minutes to fill out the attached questionnaires. Please refer all questions regarding the questionnaires to Dr. Reitman (225) 388-4096.

RISKS AND BENEFITS: You will be asked to answer questions that will require you to remember attitudes toward your child as he/she was growing up. You will answer questions regarding your everyday functioning.

CONFIDENTIALITY: All data will be kept confidential. Any presentation of the data will involve anonymous group data. The data will be kept in a locked office accessible only to principle investigators.

COST AND PAYMENT: There are no costs for participating. Your child will receive bonus points towards his/her psychology course for your additional participation.

RIGHT TO WITHDRAW: You are free to refuse to participate in this project or to withdraw at any time by simply informing the experimenter in person, by letter, or by phone. Your decision will not adversely affect your son or daughter's status with the Psychology department or University.

VOLUNTARY CONSENT: I certify that I have read the preceding or it has been read to me, and that I understand its contents. I acknowledge that I have been given the opportunity to ask questions regarding the study, hazards, discomforts, and benefits that were not clear to me, and that that the questions I asked were fully answered. I understand that further questions will be answered by Dr. Reitman. I understand that if I have questions about subjects rights, or other concerns, I can contact Robert C. Mathews, LSU Institutional Review Board at (225) 388-8692. A copy of this consent form has been given to me. My signature below means that I fully agree to participate in this research project.

Signature

Name (print)

Name (signature)

Date

Appendix C.

Children's Report of Parenting Behavior Inventory

(CRPBI – 30)

Schludermann Revision, 1988

Completed by Students for Both Mother and Father

CRPBI: Please read the following before answering any questions: We would like you to describe some of these experiences as you remember them from your upbringing. Please read each statement on the following pages and circle the answer that most closely describes the way your parents acted towards you. **BE SURE TO MARK EACH ANSWER FOR EACH PARENT.**

If you think that the statement describes a person who is NOT LIKE your parent, circle NL.

If you think that the statement describes a person who is SOMEWHAT LIKE your parent, circle SL.

If you think that the statement describes a person who is A LOT LIKE your parent, circle L.

Form For Mother

NL = Not Like, SL = Somewhat Like, L = A Lot Like

My Mother Is A Person Who

1. makes me feel better after talking over my worries with her.	NL	SL	L
2. tells me of all the things she had done for me.	NL	SL	L
3. believes in having a lot of rules and sticking with them.	NL	SL	L
4. smiles at me very often.	NL	SL	L
5. says, if I really cared for her, I would not do things that cause her to worry.	NL	SL	L
6. insists that I must do exactly as I am told.	NL	SL	L
7. is able to make me feel better when I am upset.	NL	SL	L
8. is always telling me how I should behave.	NL	SL	L
9. is very strict with me.	NL	SL	L
10. enjoys doing things with me.	NL	SL	L
11. would like to be able to tell me what to do all the time.	NL	SL	L
12. gives hard punishment.	NL	SL	L
13. cheers me up when I am sad.	NL	SL	L
14. wants to control whatever I do.	NL	SL	L
15. is easy with me.	NL	SL	L
16. gives me a lot of care and attention.	NL	SL	L
17. is always trying to change me.	NL	SL	L
18. lets me off easy when I do something wrong.	NL	SL	L
19. makes me feel like the most important person in her life.	NL	SL	L
20. only keeps rules when it suits her.	NL	SL	L
21. gives me as much freedom as I want.	NL	SL	L
22. believes in showing her love for me.	NL	SL	L
23. is less friendly with me, if I do not see things her way.	NL	SL	L
24. lets me go any place I please without asking.	NL	SL	L
25. often praises me.	NL	SL	L
26. will avoid looking at me when I have disappointed her.	NL	SL	L
27. lets me go out any evening I want.	NL	SL	L
28. is easy to talk to.	NL	SL	L
29. if I have hurt her feelings, stops talking to me until I please her again	NL	SL	L
30. lets me do anything I like to do.	NL	SL	L

Form For Father

NL = Not Like, SL = Somewhat Like, L = A Lot Like

My Father Is A Person Who. . . .

1. makes me feel better after talking over my worries with him.	NL	SL	L
2. tells me of all the things he had done for me.	NL	SL	L
3. believes in having a lot of rules and sticking with them.	NL	SL	L
4. smiles at me very often.	NL	SL	L
5. says, if I really cared for him, I would not do things that cause him to worry.	NL	SL	L
6. insists that I must do exactly as I am told.	NL	SL	L
7. is able to make me feel better when I am upset.	NL	SL	L
8. is always telling me how I should behave.	NL	SL	L
9. is very strict with me .	NL	SL	L
10. enjoys doing things with me.	NL	SL	L
11. would like to be able to tell me what to do all the time.	NL	SL	L
12. gives hard punishment.	NL	SL	L
13. cheers me up when I am sad.	NL	SL	L
14. wants to control whatever I do.	NL	SL	L
15. is easy with me.	NL	SL	L
16. gives me a lot of care and attention.	NL	SL	L
17. is always trying to change me.	NL	SL	L
18. lets me off easy when I do something wrong.	NL	SL	L
19. makes me feel like the most important person in his life.	NL	SL	L
20. only keeps rules when it suits him.	NL	SL	L
21. gives me as much freedom as I want.	NL	SL	L
22. believes in showing his love for me.	NL	SL	L
23. is less friendly with me, if I do not see things his way.	NL	SL	L
24. lets me go any place I please without asking.	NL	SL	L
25. often praises me.	NL	SL	L
26. will avoid looking at me when I have disappointed him.	NL	SL	L
27. lets me go out any evening I want.	NL	SL	L
28. is easy to talk to.	NL	SL	L
29. if I have hurt his feelings, stops talking to me until I please him again.	NL	SL	L
30. lets me do anything I like to do.	NL	SL	L

Appendix D.

Children's Report of Parenting Behavior Inventory – Reworded for Parent Self-Response

(CRPBI – 30)

Schludermann Revision, 1988

Completed by Both Mother and Father

Raising My Child Is Like

DIRECTIONS: Parents have different ways of trying to raise their children. We would like you to describe some of the ways you handled raising your child. Please read each statement on the following page and circle the answer that most clearly describes the way you acted toward your child. Please answer these questions according to past experiences of raising your child rather than current experiences. Please answer each question as honestly and as accurately as you can.

If you think that the statement describes a parent **NOT LIKE** yourself, circle **NL**.

If you think that the statement describes a parent **SOMEWHAT LIKE** yourself, circle **SL**.

If you think that the statement describes a parent **A LOT LIKE** yourself, circle **L**.

I AM A PARENT WHO

- | | | | |
|---|----|----|---|
| 1. makes my child feel better after he/she talks over worries with me. | NL | SL | L |
| 2. tells my child all the things I have done for him/her. | NL | SL | L |
| 3. believes in having a lot of rules and sticking with them. | NL | SL | L |
| 4. smiles at my child very often. | NL | SL | L |
| 5. says, if he/she really cared for me, he/she would not do things that cause me to worry. | NL | SL | L |
| 6. insists that my child must do exactly as he/she is told. | NL | SL | L |
| 7. is able to make my child feel better when he/she is upset. | NL | SL | L |
| 8. is always telling my child how he/she should behave. | NL | SL | L |
| 9. is very strict with my child. | NL | SL | L |
| 10. enjoys doing things with my child. | NL | SL | L |
| 11. would like to be able to tell my child what to do all the time. | NL | SL | L |
| 12. gives hard punishment. | NL | SL | L |
| 13. cheers my child up when he/she is sad. | NL | SL | L |
| 14. wants to control whatever my child does. | NL | SL | L |
| 15. is easy with my child. | NL | SL | L |
| 16. gives my child a lot of care and attention. | NL | SL | L |
| 17. is always trying to change my child | NL | SL | L |
| 18. lets my child off easy when he/she does something wrong. | NL | SL | L |
| 19. makes my child feel like the most important person in my life. | NL | SL | L |
| 20. only keeps rules when it suits me. | NL | SL | L |
| 21. gives my child as much freedom as he/she wants. | NL | SL | L |
| 22. believes in showing my love for my child. | NL | SL | L |
| 23. is less friendly with my child, if I do not see thing his/her way. | NL | SL | L |
| 24. lets my child go any place he/she pleases without asking. | NL | SL | L |
| 25. often praises my child. | NL | SL | L |
| 26. will avoid looking at my child when he/she has disappointed me. | NL | SL | L |
| 27. lets my child go out any evening he/she wants. | NL | SL | L |
| 28. is easy to talk to. | NL | SL | L |
| 29. if my child has hurt my feelings, stops talking to him/her until he/she pleases me again. | NL | SL | L |
| 30. lets my child do anything he/she likes to do. | NL | SL | L |

Appendix E.

Parental Boding Instrument

(PBI)

Parker, G., Tupling, H., and Brown, L.B. (1979)

Completed by Students for Both Mother and Father

PBI: The following questionnaire lists some more attitudes and behaviors of parents. Please answer as you remember your **mother/father** in *the first 16 years of your life*. Please indicate whether or not these attitudes and behaviors are **Very Like, Moderately Like, Moderately Unlike, or Very Unlike** your MOTHER.

Form For Mother

	Very Like	Moderately Like	Moderately Unlike	Very Unlike
1. Spoke to me with a warm and friendly voice	()	()	()	()
2. Did not help me as much as I needed	()	()	()	()
3. Let me do those things I liked doing	()	()	()	()
4. Seemed emotionally cold to me	()	()	()	()
5. Appeared to understand my problems and worries	()	()	()	()
6. Was affectionate to me	()	()	()	()
7. Liked me to make my own decisions	()	()	()	()
8. Did not want me to grow up	()	()	()	()
9. Tried to control everything I did	()	()	()	()
10. Invaded my privacy	()	()	()	()
11. Enjoyed talking things over with me	()	()	()	()
12. Frequently smiled at me	()	()	()	()
13. Tended to baby me	()	()	()	()
14. Did not seem to understand what I needed or wanted	()	()	()	()
15. Let me decide things for myself	()	()	()	()
16. Made me feel I wasn't wanted	()	()	()	()
17. Could make me feel better when I was upset	()	()	()	()
18. Did not talk with me very much	()	()	()	()
19. Tried to make me dependent on her	()	()	()	()
20. Felt I could not look after myself unless she was around	()	()	()	()
21. Gave me as much freedom as I wanted	()	()	()	()
22. Let me go out as often as I wanted	()	()	()	()
23. Was overprotective of me	()	()	()	()
24. Did not praise me	()	()	()	()
25. Let me dress in any way I pleased	()	()	()	()

PBI: The following questionnaire lists some more attitudes and behaviors of parents. Please answer as you remember your **mother/father** in *the first 16 years of your life*. Please indicate whether or not these attitudes and behaviors are **Very Like, Moderately Like, Moderately Unlike, or Very Unlike** your FATHER.

Form for Father

	Very Like	Moderately Like	Moderately Unlike	Very Unlike
1. Spoke to me with a warm and friendly voice	()	()	()	()
2. Did not help me as much as I needed	()	()	()	()
3. Let me do those things I liked doing	()	()	()	()
4. Seemed emotionally cold to me	()	()	()	()
5. Appeared to understand my problems and worries	()	()	()	()
6. Was affectionate to me	()	()	()	()
7. Liked me to make my own decisions	()	()	()	()
8. Did not want me to grow up	()	()	()	()
9. Tried to control everything I did	()	()	()	()
10. Invaded my privacy	()	()	()	()
11. Enjoyed talking things over with me	()	()	()	()
12. Frequently smiled at me	()	()	()	()
13. Tended to baby me	()	()	()	()
14. Did not seem to understand what I needed or wanted	()	()	()	()
15. Let me decide things for myself	()	()	()	()
16. Made me feel I wasn't wanted	()	()	()	()
17. Could make me feel better when I was upset	()	()	()	()
18. Did not talk with me very much	()	()	()	()
19. Tried to make me dependent on him	()	()	()	()
20. Felt I could not look after myself unless he was around	()	()	()	()
21. Gave as much freedom as I wanted	()	()	()	()
22. Let me go out as often as I wanted	()	()	()	()
23. Was overprotective of me	()	()	()	()
24. Did not praise me	()	()	()	()
25. Let me dress in any way I pleased	()	()	()	()

Appendix F.

State Trait Anxiety Inventory – Trait Version

(STAI – T)

Spielberger, Gorsuch, & Lushene, 1970

Completed by Students and Parents

STAI: A number of statements which people have used to describe themselves are given below. Read each statement and then choose the answer to the right of the statement that indicates how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	Almost Never	Sometimes	Often	Almost Always
1. I feel pleasant	1	2	3	4
2. I feel nervous and restless	1	2	3	4
3. I feel satisfied with myself	1	2	3	4
4. I wish I could be as happy as others seem to be	1	2	3	4
5. I feel like a failure	1	2	3	4
6. I feel rested	1	2	3	4
7. I am "calm, cool, and collected"	1	2	3	4
8. I feel that difficulties are piling up so that I cannot overcome them	1	2	3	4
9. I worry too much over something that really doesn't matter	1	2	3	4
10. I am happy	1	2	3	4
11. I have disturbing thoughts	1	2	3	4
12. I lack self-confidence	1	2	3	4
13. I feel secure	1	2	3	4
14. I make decisions	1	2	3	4
15. I feel inadequate	1	2	3	4
16. I am content	1	2	3	4
17. Some unimportant thought runs through my mind and bothers me	1	2	3	4
18. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4
19. I am a steady person	1	2	3	4
20. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4

Appendix G.

Definitions of Terminology

Definitions

--Parental Control/Granting of Autonomy: behaviors that impair/aid a child's ability to develop as an individual from the parent.

Parental Controlling Behaviors: intrusiveness, control through guilt, excessive parental direction

Parental Granting of Autonomy Behaviors: encouraging sociability, encouraging independent thinking, equalitarian treatment, avoids judgemental or dismissive reactions

--Parental Rejection/Acceptance: parent's tendencies toward sharing, expressions of affection, support, and positive evaluation to child.

Parental Rejecting Behaviors: parent irritability, negative evaluation, nagging, excessive strictness.

Parental Acceptance Behaviors: positive evaluation, expression of affection, emotional support, sharing

--Parental Anxiety: the level of parent's experienced trait anxiety as measured by the STAI

--Child Anxiety: the level of child's experienced trait anxiety as measured by the STAI