

2006

## Parental depressed mood, psychological control, and adolescent behavior problems: evidence of mediation?

Jennifer Kristina Sherwood

*Louisiana State University and Agricultural and Mechanical College*

Follow this and additional works at: [https://digitalcommons.lsu.edu/gradschool\\_theses](https://digitalcommons.lsu.edu/gradschool_theses)



Part of the [Human Ecology Commons](#)

---

### Recommended Citation

Sherwood, Jennifer Kristina, "Parental depressed mood, psychological control, and adolescent behavior problems: evidence of mediation?" (2006). *LSU Master's Theses*. 609.  
[https://digitalcommons.lsu.edu/gradschool\\_theses/609](https://digitalcommons.lsu.edu/gradschool_theses/609)

This Thesis is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Master's Theses by an authorized graduate school editor of LSU Digital Commons. For more information, please contact [gradetd@lsu.edu](mailto:gradetd@lsu.edu).

PARENTAL DEPRESSED MOOD, PSYCHOLOGICAL CONTROL, AND  
ADOLESCENT BEHAVIOR PROBLEMS: EVIDENCE OF MEDIATION?

A Thesis

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Master of Science

in

The School of Human Ecology

by  
Jennifer Kristina Sherwood  
B.S., Louisiana State University, 2004  
December, 2006

## TABLE OF CONTENTS

ABSTRACT .....	iv
CHAPTER 1: INTRODUCTION .....	1
Statement of Problem.....	2
Objectives .....	3
Hypotheses and Research Questions .....	3
Limitations .....	3
Definitions.....	4
Assumptions.....	4
CHAPTER 2: REVIEW OF LITERATURE.....	5
Psychological Control.....	5
What is Psychological Control?.....	5
Behavioral Consequences .....	7
Why Do Parents Use Psychological Control? .....	9
Contextual Influences .....	12
Parental Depressed Mood .....	13
Contextual Influences .....	17
Evidence of Mediation.....	18
Evidence of Moderation.....	20
Conclusion .....	21
CHAPTER 3: METHOD .....	22
Participants.....	22
Procedure and Measures .....	23
Procedure .....	23
Measures .....	23
Analysis Strategy .....	26
CHAPTER 4: RESULTS .....	27
Descriptive Statistics.....	27
Bivariate Associations .....	28
Hypothesis One.....	30
Hypothesis Two .....	31
Hypothesis Three .....	32
Hypothesis Four .....	34
CHAPTER 5: DISCUSSION.....	38
Primary Hypotheses .....	39
Mean-level Differences.....	41
Evidence of Moderation.....	43
Limitations .....	46
REFERENCES .....	48

APPENDIX: TABLE OF STUDIES .....	52
VITA .....	56

## ABSTRACT

The objective of the current study was to examine parental psychological control as a mediator between parental depressed mood and adolescent behavior problems. The study involved a secondary analysis of the data from the Baton Rouge Families and Teens Project (BRFTP). Structured, in-home interviews were completed with 86 families. The sample was demographically and racially diverse; 59% of the adolescents were female, 58% were of a minority background, and 52% lived in a dual-parent home. The data was collected over 2 years, and included adolescents who, at the time of recruitment, were in the 6<sup>th</sup>, 7<sup>th</sup>, or 8<sup>th</sup> grade. Adolescents reported on psychological control and behavior problems; parents reported on psychological control and depressed mood.

The results of the study indicated that parental depressed mood was associated with more parent-reported intrusion. For the full sample, no associations were found between parental depressed mood and adolescent behavior problems. Adolescent-reported psychological control, adolescent-reported intrusion, and parent-reported intrusion were associated with more adolescent internalized behavior problems. Adolescent-reported psychological control was associated with more externalized behavior problems. The non-significant associations between parental depressed mood and adolescent behavior problems indicated that further tests for mediation were not warranted.

Mean-level differences and moderating effects were tested to determine if measures varied as a function of family contextual variables. The results indicated that parents of girls reported more depressed mood than parents of boys. Black adolescents as well as parents of Black adolescents report more use of intrusion than White adolescents

and parents of White adolescents. Parents from low-income families report more intrusion than parents from high income families. Tests for moderation indicate that income may moderate the relation between parental depressed mood and adolescent-reported psychological control. Race may moderate the relation between parent depressed mood and adolescent internalized behavior problems. Finally, adolescent gender may moderate the relation between adolescent-reported psychological control and externalized behavior problems and adolescent-reported intrusion and externalized behavior problems.

## CHAPTER 1: INTRODUCTION

One of the primary tasks of being a parent is to guide and direct the behavior of the developing child. Parents may use one or more strategies in an attempt to gain compliance from their children. Some parents may choose techniques that succeed in achieving compliance while also facilitating healthy development and relationships. Other parents, however, may use strategies that do not succeed in gaining compliance, and at the same time further encourage negative behavior and poor relationships. Psychological control is one example of a parenting behavior that parents may view as successful, but in actuality, may be insensitive to the child's needs and inhibit the development of autonomy and independence. This paper will explore parental depressed mood as a possible antecedent to psychological control, and the adolescent behavior problems linked to both parental depression and psychological control. Additionally, family contextual variables will be examined to determine if associations vary as a function of child gender, race, income, or family income.

Psychological control is conceptualized as an intrusive style of parenting in which children and adolescents are subjected to the manipulation of their thoughts, feelings, and opinions (Rogers, Buchanan, & Winchell, 2003). The intrusion tactics include, but are not limited to, love withdrawal, isolation, personal attacks, guilt induction, disappointment, shaming, and restriction of verbal interaction (Barber, 1996). Rather than controlling behaviors directly, parents are attempting to change the child's opinions, emotions, and thinking patterns (Barber, 1996; Rogers, et al., 2003). Psychological control is most often a destructive form of parental control (Barber, 1996; Leondari & Kiosseoglou, 2002) and can result in negative internalized (e.g., anxiety) and externalized (e.g., aggression) symptoms (Barber & Harmon, 2002).

Parental depression also has been linked to child behavior problems. Although a direct association between depression and behavior problems is apparent in many studies, it may be that parental use of psychological control serves as a mediator between parental depression and child behavior problems. Many of the parenting practices displayed by depressed parents, including hostility and inconsistency (Downey & Coyne, 1990), are similar to those of psychologically controlling parents, suggesting that depression may be linked to behavior problems through psychological control.

#### Statement of Problem

Research has demonstrated the potential for negative child outcomes when parents are depressed and when parents engage in psychological control. It is unknown, however, whether depression and psychological control are distinct risk factors for behavior problems or whether they may be linked to behavior problems because they are parts of a larger process.

Adolescence is a period of change for both the parent and child, and many teens are beginning to seek independence and individuality from their families (Silk, Morris, Kanaya, & Steinberg, 2003). Although the stereotypical view of the angry adolescent has not been established in the research, it has however, been suggested that adolescence is a time of readjustment within the family (Steinberg, 1990). This period of change coupled with the everyday challenges of parenting may be especially difficult for a depressed parent who does not have the psychological resources available to implement authoritative parenting techniques, and who may be particularly sensitive to the emerging autonomy-seeking behaviors of developing adolescents. Such parents may be particularly likely to engage in psychological control. If so, psychological control may mediate the relationship between parental depressed mood and adolescent behavior problems.



## Objectives

The purpose of the current study is to examine the relationships among parental depressed mood, psychological control, and adolescent behavior problems. The study will also explore whether associations differ as a function of family contextual factors.

## Hypotheses and Research Questions

1. Parents who display depressed mood will use more psychological control.
2. Parents who display depressed mood will have adolescents with higher levels of internalizing and externalizing behavior problems.
3. Parents who use more psychological control will have adolescents with more internalizing and externalizing behavior problems.
4. Psychological control will mediate the association between parental depressed mood and adolescent behavior problems.
5. Do associations among parental depressed mood, psychological control, and adolescent behavior problems differ as a function of child gender, race, family income, or single parent status?
6. Are there mean-level differences for parental depressed mood, psychological control, and adolescent behavior problems as a function of child gender, race, family income, or single parent status?

## Limitations

Participants volunteered to join the study and therefore they may be different from those who did not volunteer. The participants are parents and adolescents residing in Baton Rouge, LA, and therefore the findings cannot be generalized to the entire population of the U.S. Because the interviews were done in the homes of participants, the data-collecting environment was different for each participant. Some homes contained

distractions that were not present in others and that may have caused inaccurate responses. The majority of parents interviewed were mothers and therefore the results may not look the same for fathers and adolescents.

### Definitions

Adolescent – a child who was in the 6<sup>th</sup>, 7<sup>th</sup>, or 8<sup>th</sup> grade at the time of recruitment for the study.

Depressed mood – a state of lowered mood, possible guilt, hopelessness, or helplessness, typically in response to a stressor event.

Behavior problems – physical aggression, non-physical aggression, delinquent behaviors, drug use, and depressed mood, as reported by the adolescent.

Internalized problems – inwardly expressed behavior problems, such as depression, low self-esteem, and guilt.

Externalized problems – outwardly expressed behaviors, such as delinquency, aggression, and drug use.

Mediation - occurs when one variable accounts for the relationship between a predictor and criterion variable.

Moderation – occurs when a qualitative or quantitative variable influences the direction and/or strength of the relationship between the predictor variable and outcome variable.

### Assumptions

The parents and adolescents were interviewed separately in their homes by two researchers. It is assumed that the participants' responses accurately reflected their thoughts and feelings. It is assumed that the measures are valid and accurately measure the variables of interest.

## CHAPTER 2: REVIEW OF LITERATURE

Both psychological control and parental depression have been linked to negative child outcomes, particularly behavior problems. Although the link between parental depression and psychological control has not been fully explored, there is some theory and evidence suggesting that depression may be associated with behaviors similar to psychological control. The following review will examine literature on psychological control, parental depression, and adolescent behavior problems.

### Psychological Control

What is Psychological Control?

Parenting styles were described by Diana Baumrind (1966) with the authoritarian style characterized by high levels of control and low levels of warmth. Baumrind's description of the authoritarian parent as one who attempts to shape and control the child, unwilling to exchange in verbal interaction, and overly restrictive of the child's autonomy is very similar to more recent descriptions of the psychologically controlling parent. Both psychologically controlling parents and authoritarian parents have been described as demanding, critical, and strict.

Psychological control represents only one portion of the control exhibited by authoritarian parents. Authoritarian parents use both behavioral control and psychological control, with psychologically controlling behaviors considered a contrast to behavioral control. Behavioral control, as defined by Barber, Olsen, and Shagle (1994), focuses on rules, restrictions, and awareness of children's activities and behaviors. The most important distinction to be made is that behavioral control regulates behaviors that the parent views as inappropriate, whereas psychological control regulates thoughts and ideas. It is important for parents to maintain some degree of control over children and

adolescents, and behavioral control is typically viewed as positive form of control because it does not intrude upon the child's psychological development, as does psychological control (Smetana & Daddis, 2002).

Schaefer's early research (1965a), along with more recent work of other researchers, developed characterizations and descriptions of psychologically controlling behavior. Three replicated factors were found in Schaefer's (1965a) Child Report of Parent Behavior Inventory (CRBPI), including Psychological Autonomy versus Psychological Control. This early definition viewed psychological control as a potential inhibitor of psychological development and autonomy (Barber, 1996). Because of the lack of independent expression and interaction with others, children of parents who use psychological control may have difficulty developing a healthy awareness of self (Barber, 1996).

Following a period dominated by typological perspectives, the psychological control dimension was resurrected by Barber et al. (1994). Barber stressed the importance of distinguishing psychological control from behavioral control, with the former focusing on feelings and identity, and the latter concentrating on behaviors (Barber, 2002). Additionally, Barber examined several characteristics of psychological control that had not been fully explored, such as how the effects of behavioral control are different than the effects of psychological control (Barber, 1996).

In sum, psychological control is viewed as a negative form of control in which parents intrude on and manipulate the child's thoughts, feelings, and opinions (Barber, 1996). The intrusion tactics include, but are not limited to, love withdrawal, isolation, personal attacks, guilt induction, disappointment, shaming, and restriction of verbal interaction (Stone, Buehler, & Barber, 2002). Rather than regulating behaviors, parents

who use psychological control are attempting to change the adolescent's opinions, emotions, and thinking patterns, which can interfere with the development of autonomy and individuality (Barber, 1996; Rogers, et al., 2003).

### Behavioral Consequences

Psychological control is hypothesized to be detrimental to children's development because psychological control inhibits children's ability to develop the psychological mechanisms needed to express independent thoughts and ideas (Barber, 1996). The successful parent should make the transition from complete control during infancy to less control and increased independence as the child approaches adolescence (Belsky, Robins, and Gamble, 1984; Maccoby, 1984). If this transition is not made, parents are more likely to exert high levels of intrusiveness and over- involvement in their children's lives. This can lead to internalized and sometimes externalized problems for the child.

Psychological control has been found to be associated with a range of internalized problems, such as depression, low self-esteem, social withdrawal, passivity, and guilt (Barber, 1996; Galambos, Barker, & Almeida, 2003; Rogers, et al., 2003). Although not reported as often, psychological control also has been linked with externalized problems, including aggression, defiance, delinquency, and risky behaviors (Barber & Harmon, 2002; Barber & Olsen, 1997). For example, Barber (1996) surveyed 933 fifth and eighth graders as part of a 4-year longitudinal study (see Appendix A for a full summary of studies). The surveys were administered in school, and included measures of psychological control and delinquency. The results indicated that parental use of psychological control is a significant predictor of youth behavior problems. Furthermore, Finkenauer, Engels, and Baumeister (2005) collected cross-sectional data from 1,359 Dutch school-children, aged 10-14 to determine if and how parenting behaviors are

related to emotional and behavioral problems during adolescence. Consistent with previous research, results indicated that child reports of parental use of psychological control were positively related to child-reported delinquency and aggression.

Many studies examining authoritarian parenting as well as those focusing on psychological control have provided very similar findings, possibly because both constructs involve infringement on the child's development of self (Barber, Bean, & Erickson, 2002). Thompson, Hollis, and Richards (2003) examined data from the 1970 British Cohort study in order to test the relationship between authoritarian parenting attitudes and child conduct problems. The sample included 16,151 individuals born during a week of 1970 in England, Scotland, and Wales. The participants were followed up at the ages of 5 and 10. The results showed a positive relationship between authoritarian parenting beliefs assessed at age 5 and child conduct problems at ages 5 and 10.

Aunola and Nurmi (2005) examined parental parenting styles as a predictor of children's internalized and externalized problems. Participants included 210, 5-6 year old Finnish schoolchildren. Children were assessed six times through structured interviews in order to determine their internalizing and externalizing problems. Parenting styles were assessed three times through a mailed questionnaire. The results indicated that for mothers, high levels of psychological control combined with high levels of affection predicted increased externalized problems. The combination of high control and high warmth is similar to Baumrind's (1966) description of the authoritative parent, which is typically viewed as a positive parenting style. It is important to note, however, that the use of psychological control, even when combined with affection, remains associated with problem behaviors.

Parental use of psychological control has been linked to both internalizing and externalizing problems in children, although internalizing problems are reported more often in the psychological control literature. The previously mentioned studies have found psychological control to be associated with several problem behaviors including aggression, delinquency, anxiety, and low self-esteem. These results suggest that parents who engage in psychological control are potentially setting their children up for a wide range of problems.

#### Why Do Parents Use Psychological Control?

The antecedents of psychological control are rarely studied in the literature, but Belsky's (1984) process model may offer some assistance in determining why parents engage in psychologically controlling behaviors. According to Belsky's (1984) process model, there are three sources of influence on parenting: the child's characteristics, contextual sources of stress and support, and the parents' ontogenic origins and personal psychological resources.

According to Belsky (1984), the child can display several characteristics that influence parental functioning, thus making parenting more or less difficult. The strongest of these characteristics is temperament, which can influence how positive or negative the parent views the child. Among psychological control research, child characteristics, including gender and temperament, have been linked to differing levels of psychological control (Pettit & Laird, 2002; Rogers, et al., 2003). For example, Pettit, Laird, Dodge, Bates, and Criss (2001) found that parental use of psychological control was preceded by mothers' reports of earlier child behavior problems, thus suggesting that child temperament has the potential to affect parental use of psychological control.

Contextual sources of stress and support also are hypothesized to influence parenting. This can include social support, emotional support, the marital relationship, social networks, and work. Although not all sources of stress and support have been studied in relation to psychological control, Stone et al. (2002) examined the role of the marital relationship and its possible linkages to psychological control. They hypothesized that the stress related to interparental conflict may lead to increased tension, anxiety, and distraction, which does not leave parents with the time and energy to implement consistent parenting and discipline. Two samples of children (337, age 10-15 and 545, age 9-15) were studied in order to examine the links between interparental conflict and psychological control. In both samples, results indicated that interparental conflict was associated with increased levels of psychological control.

Finally, parents' ontogenic origins and personal psychological resources are hypothesized to influence parenting. This can be thought of as the parent's contribution to the parenting relationship. Belsky (1984) highlights several examples of parent characteristics that promote optimal child development, including sensitivity, warmth, responsiveness, and nonrestrictive caregiving. Similarly, the parent can also exhibit negative characteristics, such as hostility and rejection, which fail to promote optimal child development. According to Barber et al. (2002), the strongest indicator of whether or not a parent will engage in psychological control is the parent's psychological status. This perspective is consistent with Belsky's model. Although there is not much research on why parents use psychological control, results from two studies suggest that it may be a product of characteristics from within the parent (Pettit et al., 2001; Soenens, Elliot, Goossens, Vansteenkiste, Lyten, & Duriez, 2005).



Soenens et al. (2005) explored the question of why some parents use psychological control and others do not by examining parental perfectionism as a predictor of psychological control. In this study, perfectionism was divided into adaptive and maladaptive, with the latter described as harsh, critical, and not attuned to the needs of the child. If parental use of psychological control does indeed come from something within the parent, rather than as a reaction to certain behaviors, it would seem reasonable that perfectionism would serve as an antecedent to psychological control. Participants in Soenens et al. (2005) study included 155 Belgian female students and their parents. The students completed a questionnaire and were asked to have each of their parents complete a questionnaire. Results indicated that parental use of psychological control was associated with more parental maladaptive perfectionism. These results provide further support for the hypothesis that antecedents for psychological control are likely to be characteristics from within the parent. It is important to note, however, that one major limitation of this study was the lack of diversity among participants, all of which were White females. It is unknown whether the results would remain the same with males and with other racial groups.

In the second study, Pettit et al. (2001) collected data from 440 mothers and their 13 year-old children in order to determine if early parenting styles predicted later parenting styles. The first wave of data collection began when the children were 5 years old, and continued yearly through questionnaires and structured interviews. Mothers of 5 year olds were asked about parenting techniques, including harsh discipline. A psychological control scale, adapted from Barber (1996; Barber et al., 1994), was administered to both parents and adolescents when the children were 13. The results indicated that mothers' use of psychological control during adolescence was anteceded

by use of harsh discipline when the child was 5 years old. These results suggest that parents display a continuity of their parenting styles from early childhood through adolescence. Although not direct evidence, the results of the previously mentioned studies are consistent with the idea that psychological control is parent-driven.

### Contextual Influences

It may be possible that some of the inconsistencies among studies are due to family contextual variables, including child gender, race, family income, and single parent status. One of the limitations of much of the current research is the lack of diversity among participants, which does not allow for testing of mean-level differences among groups. One of the few studies to examine contextual variables did find evidence of a possible mean level difference. Smetana and Daddis (2002), in a study of 93 African-American adolescents, found that children from intact families reported less parental use of psychological control than children from single-parent families. In a second study that addresses the issue of a lack of Black families in the psychological control literature, Bean, Barber, and Crane (2006) examined a sample of 202 5<sup>th</sup>, 8<sup>th</sup>, and 10<sup>th</sup> grade Black children to test for associations among psychological control and adolescent depression and delinquency. While most studies with White families consistently find positive correlations among psychological control and depression and delinquency, the Bean et al. study found no significant relationships. While the two previously mentioned studies are not enough to make any significant conclusions, they do suggest a need for more diverse samples and a closer look at group differences.

Of the little theory that does exist on antecedents of psychological control, many studies lend support to the idea that use of psychological control comes from within the parent. Parents may be attempting to maintain their psychological power in the

relationship by halting their children's development of autonomy and individuality (Pettit, et al., 2001). The need to maintain power is likely driven from forces within the parent, specifically their developmental history, which is consistent with Belsky's (1984) model. Moreover, Barber et al. (2002) suggest that parents do not use psychological control to better their children, but rather to manipulate the parent-child relationship for the benefit of the parent. They also suggest that in order to better understand antecedents of psychological control, it is more important to focus on characteristics from within the parent, rather than contextual sources. Because depression exists as a condition from within the parent, the above-mentioned research provides support for the hypothesis that parental depressed mood may serve as an antecedent for parental use of psychological control. Further evidence will be reviewed in the next section.

#### Parental Depressed Mood

Before discussing research on parental depression, it is important to distinguish between clinical depression and depressed mood. Depressed mood refers to a state of lowered mood, possible guilt, hopelessness, or helplessness, typically in response to a stressor event, and for most people, settles quickly (Parker, Wilhelm, & Asghari, 1998). Clinical depression, however, refers to a mental health diagnosis of major depressive disorder as defined by the Diagnostic and Statistic Manual of Mental Disorders (1994). In this literature review, depression will be used as a global term encompassing both depressed mood and clinical depression, but the more precise terms will be used when appropriate.

It has been suggested that up to 8% of mothers suffer from depression, thus resulting in a significant number of children exposed to at least one depressed parent (Downey & Coyne, 1990). Children of clinically depressed parents are not only at a

higher risk for depression themselves, but for a wide array of other problems, including aggression, delinquency, and poor academic performance (Downey & Coyne, 1990; Langrock, Compas, Keller, Merchant, & Copeland, 2002). In many studies, child behavior problems have been linked to parental depression. For example, West and Newman (2003) collected data from 65 preschoolers and their parents in order to measure how parental depressed mood is related to behavior problems in preschool children. Parental depression was measured using a 13 item depression scale taken from the larger Symptom Checklist-90-R. Depending on the age of the child, different versions of the Child Behavior Checklist were used to assess behavior problems. Results indicated that mild parental depressed mood was associated with higher levels of both internalizing and externalizing symptoms in children as well as higher displays of anger.

Additionally, Gartstein and Fagot (2003) examined 159 children and their parents to determine if parental depressed mood was related to externalizing problems in preschool children. Parental depressed mood was measured using the Center for Epidemiological Studies Depression Scale. The Child Behavior Checklist was used to measure children's externalizing behaviors. The results indicated that after controlling for socioeconomic indicators and child gender, mothers' depressed mood explained a significant part of child externalizing behaviors. For fathers, depressed mood did not contribute significantly to child externalizing behaviors.

In a third study, Ohannessian et al. (2005) examined the relation between parental depression and adolescent depression, anxiety, drug use and alcohol use, and conduct disorder. Four hundred twenty six adolescents, ages 13-17, and their parents were measured for symptoms of depressed mood. Additionally adolescents were measured for symptoms of alcohol dependence, marijuana dependence, anxiety, and conduct disorder.

The results indicated that adolescents with a depressed mood father were more likely to suffer from alcohol dependence, but maternal depressed mood did not influence adolescents' use of alcohol. Both paternal and maternal depressed mood were associated with adolescent conduct disorder and depression, but only maternal depressed mood predicted adolescent anxiety. Neither maternal nor paternal depressed mood was associated with adolescent marijuana use.

Although several studies link parental depression to child behavior problems, it may not be that depression itself leads directly to increased behavior problems, but rather that depression leads to mediators that in turn affect children's behavior (Langrock et al., 2002). Several possible mediators have been recognized, including increased marital conflict, a higher chance of divorce, and the added stress related to living with a depressed parent (Langrock et al., 2002; Sarigiani, Heath, & Camarena, 2003).

Fendrich, Warner, and Weissman (1990) studied data from 220 children and their parents in order to determine if family discord was related to risk factors in children. Of the 220 children, 153 had one or more depressed parents, and 67 had no depressed parents. Five measures of family discord were assessed, including marital adjustment and rates of divorce. Results indicated that family risk factors such as marital discord and divorce were higher among children of depressed parents and that the presence of these risk factors was associated with higher rates of conduct disorder among children.

Additionally, Langrock et al. (2002), in a study of 66 depressed adults and their children, examined parental depressed mood, children's coping responses, and child behavior problems. Results indicated that children's stress-related coping was significantly related to aggression, as well as anxiety and depressed mood. The study did not test for

mediation, but it is possible that children's stress-related coping mediated the relationship between parental depressed mood and child behavior problems.

Depression may also be linked to behavior problems through unpredictable parenting. There are several characteristics of depressed parents that may serve to facilitate child behavior problems. In a review of parenting behavior of depressed parents, Downey and Coyne (1990) concluded that depressed persons are generally more hostile and irritable, speak less often, and have difficulty forming positive relationships. In the parenting relationship, hostility and irritability can prove especially difficult when children are seeking positive interactions and parents are unable to express warmth and consistency (Susman, Trickett, Iannotti, Hollenbeck, & Zahn-Waxler, 1985). According to Downey and Coyne, depressed parents often put less effort into interacting with their children, and choose techniques that do not require extensive cognitive effort. They will frequently withdraw from a conflict situation if the child expresses defiance (Downey & Coyne, 1990). These behaviors are similar to psychological control and have the potential to inhibit parental encouragement of autonomy and individuality (Susman et al., 1985).

Susman et al. (1985) studied parental depression and the environmental characteristics created by depression that could potentially influence the child-rearing environment. Ninety-four mothers completed the Child Rearing Practices Report, a 91 item measure examining child-rearing attitudes, values, behaviors, and goals. The results indicated that mothers with both moderate and severe depressed mood, compared to non-depressed mothers, were more likely to use inconsistent discipline, guilt and anxiety inducing techniques, and had difficulty letting children make their own decisions. These characteristics of depressed mothers, specifically guilt and anxiety induction, are very similar to the characteristics of psychologically controlling parents.

In a study by Gordon, Burge, Hammen, Adiran, Jaenicke, and Hiroto (1989), 12 clinically depressed mothers were compared to 23 non-clinically depressed mothers in order to test the hypothesis that depressed mothers display more negative behavior and less involvement with their children. Their children ranged from ages 8 to 16. Data for this study was collected in three stages. During the first session, the mother was administered the Beck Depression Inventory. For the second stage, mothers and children were videotaped discussing a mutually disagreed upon topic, with the goal of reaching a compromise after 5 minutes. Using a modified version of the Peer Interaction Rating System, researchers coded the mothers' statements during the first, third, and fifth minutes of the conversation. Results indicated that depressed mothers displayed more critical and negative behaviors, less positive behavior, and made more comments unrelated to the task at hand. These behaviors are very similar to those of psychological control, specifically criticism (Barber, 1996).

#### Contextual Influences

Just as with psychological control, contextual variables may account for mean-level differences in parental depressed mood. Specifically, race differences and depression have been studied extensively, but the results are still unclear (George & Lynch, 2003). Blacks typically report more depressive symptoms than Whites, but some studies find no race differences. Other studies have found that after controlling for socioeconomic status, race differences become non-significant (George & Lynch). There is evidence that both race and socioeconomic status can have an influence on depressive symptoms, but the inconsistencies among studies suggest that further research needs to be conducted in this area.

Parental depression has been linked to child behavior problems, and depressed parents have been described as engaging in behaviors similar to those of psychological control. Both psychologically controlling and depressed parents may alternate between being warm, avoidant, or irritable. Depressed parents may also display inconsistent discipline, sometimes exhibiting practices similar to psychological control, such as intrusiveness.

### Evidence of Mediation

It may be that psychological control mediates the relationship between parental depression and adolescent behavior problems. Baron and Kenny (1986) defined mediation as one variable accounting for the relationship between a predictor and criterion. For a variable to serve as a mediator, there are three conditions that must be met: variations in the independent variable must significantly account for variations in the mediator variable; variations in the mediator must significantly account for variations in the outcome variable; and after controlling for the mediator, the previously significant relationship between the independent variable and outcome variable should no longer be significant. Stated in terms of the variables of interest in this study, parental depressed mood will serve as the independent variable, and is expected to be related to adolescent behavior problems, the outcome variable. Additionally, parental depressed mood is expected to be related to psychological control, the proposed mediator. Psychological control, the proposed mediator, is also expected to be related to adolescent behavior problems. In order for psychological control to serve as a mediator, the relationship between parental depressed mood and adolescent behavior problems should no longer be significant after controlling for psychological control.



Research has demonstrated a link between both psychological control and child behavior problems, and parental depression and child behavior problems. This research links the mediator to the outcome variable and the independent variable to the outcome variable. Many of the parental behaviors of psychologically controlling parents and depressed parents are very similar, suggesting a link between the independent variable and the mediator. Although no research study to date has addressed this question specifically, two studies in particular may have found evidence of a mediating effect.

In a study performed by Langrock et al. (2002), parents were measured for symptoms of depression using the Beck Depression Inventory-II. They also completed the Responses to Stress Questionnaire, which included questions regarding parental intrusiveness. Additionally, the Child Behavior Checklist was used to assess their children's symptoms of aggression. The results indicated that children of depressed parents experienced parental intrusiveness on almost a daily basis and were approximately five to eight times more likely than children of non-depressed parents to exhibit signs of aggression. Children of depressed parents also experienced parental withdrawal as well, which is frequently used by psychologically controlling parents. These results demonstrate a link between parental depression, use of psychologically controlling tactics, and child behavior problems. Although Langrock et al. did not explicitly test for mediation, the results of their study suggest that the link between behavior problems and depression may be mediated by psychological control. Additionally, the participants in the study were 98% White, which did not allow for testing of race differences.

In a similar study by Cummings, Keller, and Davies (2005), parental depression was found to be related to both increased psychological control and child behavior

problems. Participants in the study included 235 parents and their kindergarten age child. The data was collected over two laboratory visits, which included questionnaires, observations, and other tasks. Parental depressed mood was measured using the Centers for Epidemiologic Studies Depression Scale. Psychological control was measured using the Intrusiveness, Control through Guilt, and Instilling Persistent Anxiety Scales of the Children's Report of Parental Behavior Inventory. Finally, child behavior problems were measured with the Internalizing and Externalizing Scales of the Child Behavior Checklist using reports from both the child's parents and teacher. For both mothers and fathers, depressive symptoms were related to increased psychological control, including intrusiveness, guilt and anxiety induction, and low warmth. Additionally, parental depression was linked to both internalizing and externalizing problems in the children. Although this study did not test psychological control as a mediator between parental depressed mood and child behavior findings are consistent with a mediating relationship. Furthermore, this study suggests that such a process may be identified in a community sample.

#### Evidence of Moderation

According to Baron and Kenny (1986), moderation occurs when a qualitative or quantitative variable affects the relation between an independent and dependent variable. Specifically, a moderator can affect both the direction and the strength of a relation. Of the literature reviewed for the current study, one study tested for evidence of moderation. Cummings et al. (2005), in a study examining parental depressive symptoms and child functioning, found that child gender may moderate the processes affected by family stressors, with girls and boys exhibiting different vulnerabilities to different stressors.

Although no other studies explicitly tested for moderation, the presence of mean-level differences among contextual variables suggests that moderation is a possibility.

### Conclusion

Research lends support to the idea that having a depressed parent can have serious consequences for a developing child. While it is unclear if depressed parents are more likely to use psychological control, there is some evidence that suggests it is a possibility. The following study will examine the links between parental depression, psychological control, and child behavior problems in order to determine if parental psychological control serves as a mediator between parental depressed mood and adolescent behavior problems.

## CHAPTER 3: METHOD

### Participants

Data collection took two years to complete. The recruiting for the study began in the spring of 2004, with the first wave of interviews beginning the following summer. The remaining families were recruited in the spring of 2005, and were interviewed in the summer. The families were recruited from 3 middle schools in Baton Rouge, LA, and the surrounding areas. Specific schools were selected with the goal of obtaining a racially diverse sample of students. Researchers visited 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade classrooms to distribute informational flyers and pre-stamped postcards. The students were asked by the researchers to take the information home to their parents and discuss the possibility of participating in the study. If both the parent and adolescent agreed to participate, the parent filled out the postcard with their name, telephone number, and best time to be contacted, and returned it to the researchers. The families were contacted by telephone to confirm willingness to participate and set up an appointment for the in-home interviews.

Attempts were made to contact all families who returned postcards, but some were unreachable due to relocation, phone service being turned off, or no one answering the telephone. Interviews were completed with 86 families; 81 with a mother and an adolescent and 5 with a father and an adolescent.

The sample included 51 females. Of the 86 total adolescents, 36 were White, non-Hispanic, 45 were Black, 3 were Asian, and 2 were Hispanic. 22.1% were in the 6<sup>th</sup> grade, 40.7% were in the 7<sup>th</sup> grade, and 37.2% were in the 8<sup>th</sup> grade. The mean age of the adolescents was 13.5, with a maximum age of 15.3 and a minimum age of 11.7. Of the 86 adolescents, 90% had at least 1 sibling and 56% had at least 1 older sibling. 52% of the adolescents lived in a two-parent home.

The mean age of the interviewed parent was 40.23, with a range from 27-54. The median parent education level was some college/trade/technical school with 97% of the parents finishing high school. The median household income was between \$40,000 and \$60,000. According to the 1989 Socioeconomic Index of Occupations, a scoring system used to reflect the education, income, and prestige of different occupations, the mean SEI (Socioeconomic Index) for the interviewed parent was 49.4, which is approximately equivalent to the position of administrative support. The maximum was 86.9 and the minimum was 25.5, which are equivalent to postsecondary teachers and hairdressers, respectively.

## Procedure and Measures

### Procedure

Informed consent was obtained from the parents and adolescents prior to beginning the interview. The consent form explained the purpose of the study, who the participants were, a description of the study, benefits, possible risks, rights of participants, privacy, and release of information. Parents were interviewed by one researcher and adolescents were interviewed by a second researcher. Parents and adolescents were interviewed in separate locations in the home.

### Measures

Included in the 356 item interview were measures of psychological control, psychological intrusion, parental depressed mood, and adolescent behavior problems. All measures were adapted from previously used scales in the literature.

#### Psychological Control

Both parents and adolescents were asked questions about psychological control. Psychological control was measured using items adapted from Barber (1996) and Barber,

Olsen, and Shagle (1994). Twelve questions (e.g., “My mother/father acts like she/he knows what I’m thinking or feeling”; “My mother/father brings up my past mistakes when she/he criticizes me”.) assessed adolescents’ perceptions of parental psychological control. Items were scored on a five-point scale (1 = “not at all like him/her”, 2 = “just a little bit like him/her”, 3 = “somewhat like him/her”, 4 = “like him/her”, 5 = “a lot like him/her”). An adolescent-reported psychological control score was computed as the mean of the 12 items ( $\alpha = .82$ ). Additionally, parents were administered a 12-item scale (e.g., “I am a parent who acts like I know what my child is thinking or feeling”. “I am a parent who often changes my moods when I’m with my child”) in order to assess perceived use of psychological control. Items were scored on a five-point scale (1 = “not at all like me”, 2 = “just a little bit like me”, 3 = “somewhat like me”, 4 = “like me”, 5 = “a lot like me”). A parent-reported psychological control score was computed as the mean of the 12 items ( $\alpha = .74$ ).

In addition to psychological control, a psychological intrusion scale was administered to both parents and adolescents. Whereas psychological control refers to behaviors (e.g. “I do these things” or “My parent does these things”), psychological intrusion refers to feelings (e.g., “I feel this way” or “My parent makes me feel this way”). Psychological intrusion was measured using 13 items (e.g., “My mother/father makes me feel guilty about how I have treated her/him.” “It upsets my mother/father when I feel differently about things than she/he does.”) adapted from Wentzel, Feldmen, and Weinberger (1991). The items were scored on a five point scale (1 = “mostly false”, 2 = “more false than true”, 3 = “not sure”, 4 = “more true than false”, 5 = “mostly true”). An adolescent-reported psychological intrusion score was computed as the mean of the

thirteen items ( $\alpha = .67$ ). Parents were also administered a 13-item (e.g., “I like to think of myself as the most important person in my child’s life”) psychological intrusion scale. Items were scored on a five-point scale (1 = “mostly false”, 2 = “more false than true”, 3 = “not sure”, 4 = “more true than false”, 5 = “mostly true”). A parent-reported psychological intrusion score was computed as the mean of the 13 items ( $\alpha = .84$ ).

#### Parental Depressed Mood

Parental depressed mood was measured using the 20 item Center for Epidemiological Studies Depression Scale (CES-D; e.g., “I felt sad”. “I thought my life had been a failure”). The items were scored on a four point scale (0 = “rarely or none of the time”, 1 = “some or a little of the time”, 2 = “occasionally or a moderate amount of time”, 4 = “most or all of the time”). A parental depression score was computed as the mean of the 20 items ( $\alpha = .89$ ).

#### Adolescent Behavior Problems

Externalizing adolescent behavior problems were assessed using a 26 item scale adapted from Farrell, Kung, White, and Valois (2000) that included subscales of physical aggression, non-physical aggression, delinquency, and drug use (e.g., “In the past 30 days, how often have you skipped school?”). The items were scored on a six point scale (1 = “never”, 2 = “1-2 times”, 3 = “3-5 times”, 4 = “6-9 times”, 5 = “10-19 times”, 6 = “20 times or more”). An externalizing behavior problems score was computed as the mean of the 26 items ( $\alpha = .83$ ).

Adolescent internalizing behavior problems were measured using a 6 item depressed mood scale (e.g. “In the last month, how often were you very sad?”), adapted from Orpinas (1993). The items were scored on a five-point scale (1 = “never”, 2 =

“hardly ever”, 3 = “sometimes”, 4 = “often”, 5 = “always”). An adolescent depressed mood score was computed as the mean of the 6 items ( $\alpha = .66$ ).

### Analysis Strategy

Descriptive statistics, including means and standard deviations will be calculated for each of the variables for the full sample and separately for each of the family contextual factors. Bivariate correlations will be used to test for simple associations between measures. To test the first three hypotheses, correlations will be calculated to determine the relationships between parental depressed mood and use of psychological control, parental depressed mood and adolescent behavior problems, and use of psychological control and adolescent behavior problems.

To answer the research question of whether or not associations among parental depressed mood, psychological control, and adolescent behavior problems differ as a function of child gender, race, family income, or single parent status, two-tailed t-tests will be used to test for any mean-level differences. Finally, r to z transformations will be used to test for differences between bivariate correlations with each of the family contextual variables.



## CHAPTER 4: RESULTS

### Descriptive Statistics

Descriptive statistics for the full sample for each of the variables are displayed in Table 1. The results show that parent depressed mood scores ranged from no reported symptoms to mid-range, with the average score on the lower end of the scale. The adolescent-reported control scores range from no control to moderately high, with the average score on the lower end of the scale. Parent-reported control ranged from no reported control to moderately high, with the average score on the lower end of the scale. Repeated measures t-tests for the control measures show that adolescents believe that their parents use more control than the parents feel they are using, ( $T(84) = 4.57$ ,  $p < .001$ ). The mean scores for intrusion are very close for adolescent and parent reports, both ranging from the lower end of the scale to the higher end of the scale, with the average in the midpoint of the scale. On average, adolescents are reporting more internalized behavior problems than externalized behavior problems. The average internalized behavior problem score lies in the midrange of the scale, while the externalized behavior problem score is on the low end.

Table 1. Means and Standard Deviations for all Variables

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>
Adolescent-reported psychological intrusion	86	39.95	7.29	19.00 - 58.00
Adolescent-reported psychological control	86	2.18	.73	1.00 - 4.08
Adolescent internalized behavior problems	86	2.55	.73	1.00 - 4.67
Adolescent externalized behavior problems	86	1.43	.44	1.00 - 3.62
Parent-reported psychological intrusion	85	39.73	9.73	17.00 - 60.00
Parent-reported psychological control	85	1.79	.50	1.00 - 3.58
Parent depressed mood	85	13.39	9.73	0 - 42.00

Mean-level differences for adolescent gender, race, income, and single parent status were tested using two-tailed *T*-tests. As reported in Table 2, the results indicate that parents of girls reported more depressed mood symptoms than parents of boys; no other gender differences were significant. Black adolescents as well as parents of Black adolescents reported more use of intrusion when compared to Parents of White adolescents and White adolescents; no other race differences were significant (see Table 3). Parents with low incomes reported more use of intrusion than high income parents; no other income differences were significant (see Table 4). Single parent families did not differ from dual parent families on any of the measures (see Table 5).

Table 2. Mean Differences by Gender

Variable	Females ( <i>n</i> =51)		Males ( <i>n</i> =35)		<i>t</i>	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Adolescent-reported psychological intrusion	40.12	7.46	39.71	7.14	.25	.80
Adolescent-reported psychological control	2.09	.70	2.32	.77	-1.45	.15
Adolescent internalized behavior problems	2.49	.74	2.64	.73	-.90	.37
Adolescent externalized behavior problems	1.40	.39	1.49	.52	-.94	.35
Parent-reported psychological intrusion	40.58	10.23	38.51	8.98	.96	.34
Parent-reported psychological control	1.82	.49	1.76	.53	.53	.60
Parent depressed mood	15.45	9.92	10.49	8.79	2.36	.02

#### Bivariate Associations

To test the relations among variables, one-tailed bivariate correlations were computed for the entire sample (see Table 6). Additionally, to determine whether demographic factors moderated bivariate associations, the sample was split separately by gender, race, income, and single parent status. Finally, tests of differences between bivariate correlations via *r* to *z* transformations were used to test for moderation by each

of the family contextual variables (Cohen & Cohen, 1983). Because the moderation analyses were more exploratory, two-tailed tests were used. Correlations and tests of moderation will be presented according to the study hypotheses.

Table 3. Mean Differences by Race

Variable	Black ( <i>n</i> =45)		White ( <i>n</i> =36)		<i>t</i>	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Adolescent-reported psychological intrusion	41.89	7.41	37.25	6.36	2.98	.00
Adolescent-reported psychological control	2.29	.76	2.01	.70	1.70	.09
Adolescent internalized behavior problems	2.65	.75	2.44	.61	1.38	.17
Adolescent externalized behavior problems	1.40	.47	1.49	.44	-.84	.41
Parent-reported psychological intrusion	42.29	10.68	36.06	7.51	2.93	.00
Parent-reported psychological control	1.80	.45	1.74	.54	.53	.60
Parent depressed mood	13.98	9.67	10.71	8.68	1.57	.12

Table 4. Mean Differences by Income

Variable	Low income (<\$40k) ( <i>n</i> =35)		High income (≥\$40k) ( <i>n</i> =50)		<i>t</i>	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Adolescent-reported psychological intrusion	40.97	6.90	36.36	7.57	1.00	.32
Adolescent-reported psychological control	2.23	.78	2.16	.71	.44	.66
Adolescent internalized behavior problems	2.63	.82	2.49	.67	.83	.41
Adolescent externalized behavior problems	1.51	.55	1.38	.36	1.29	.20
Parent-reported psychological intrusion	42.91	9.71	37.50	9.20	2.61	.01
Parent-reported psychological control	1.81	.49	1.79	.52	.20	.84
Parent depressed mood	15.23	9.56	12.10	9.73	1.47	.15

Table 5. Mean Differences by Parent Relationship Status

Variable	Single ( <i>n</i> =36)		Not single ( <i>n</i> =48)		<i>t</i>	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Adolescent-reported psychological intrusion	41.42	6.67	39.04	7.72	-1.48	.14
Adolescent-reported psychological control	2.25	.79	2.12	.69	-.78	.44
Adolescent internalized behavior problems	2.65	.69	2.48	.77	-1.06	.29
Adolescent externalized behavior problems	1.48	.42	1.40	.47	-.90	.37
Parent-reported psychological intrusion	40.50	10.14	38.85	9.34	-.77	.44
Parent-reported psychological control	1.76	.47	1.83	.53	.61	.54
Parent depressed mood	14.47	9.94	12.04	8.88	-1.18	.24

### Hypothesis One

The first hypothesis was that parents who reported more depressed mood will report using and be reported by adolescents as using more control. Bivariate correlations were computed between parent depressed mood and adolescent-reported control, adolescent-reported intrusion, parent-reported control, and parent-reported intrusion (see Table 7). When examining bivariate correlations for the entire sample, parent depressed mood was significantly associated with only increased parent-reported-intrusion. No other measures of control were found to be associated with parent depressed mood.

After dividing the sample by adolescent gender, the relation between parent depressed mood and parent-reported intrusion is non-significant for boys, but significant for girls; however, a *z*-test reveals that the difference is not significant. Although parent depressed mood was not related to adolescent-reported control when examining the entire sample, a significant relation was found for low income families. It is important to note, however, that the relation was the opposite of what was expected. For low income families, parental depressed mood was associated with less adolescent-reported control.

For high income families, the correlation was non-significant. A z-test reveals that the correlations between the high and low income groups are significantly different from one another. No significant differences were found when the sample was split by race and single parent status.

## Hypothesis Two

The second hypothesis was that parents who report more depressed mood will have adolescents who report higher levels of internalizing and externalizing behavior problems. Bivariate correlations were computed between parent depressed mood and adolescent externalized and internalized behavior problems (see Table 8). When examining the correlations for the entire sample, it appears that there were no significant associations between parent depressed mood and adolescent behavior problems.

When the sample was divided by race, however, the relation between parental depressed mood and both internalized and externalized behavior problems was significant for Black adolescents but not White adolescents. It is important to note, however, that the relations were opposite of what was expected. When parents displayed depressed mood, Black adolescents reported fewer internalized and externalized behavior problems. A z-test reveals that Black and White adolescents differ significantly in their correlations between parental depressed mood and internalized behavior problems, but not between parental depressed mood and externalized behavior problems. When the sample was divided by income, it was revealed that adolescents from low income families exhibit less internalized problems when parents display more symptoms of depressed mood, which is also opposite of what was expected. A z-test reveals that the difference between low and high income families is non-significant for the correlation between parental depressed

mood and internalized behavior problems. No significant differences were found when the sample was split by gender and single parent status.

### Hypothesis Three

The third hypothesis was that parents who use more control will have adolescents with more internalizing and externalizing behavior problems. Bivariate correlations were computed between each of the four control measures and adolescent internalizing and externalizing behavior problems (see Table 8). In the full sample, a significant relationship was found between adolescent-reported control and both internalized and externalized behavior problems. As expected, adolescent-reported control was associated with higher levels of both internalized and externalized behavior problems. When the sample is split by gender, the relation between adolescent-reported control and externalized behavior problems is non-significant for boys but is significant for girls. A z-test reveals that the difference between the gender groups is significant. When the sample is split by gender, the relation between adolescent-reported control and internalized behavior problems remains significant for both boys and girls and a z-test reveals that the difference between the groups is non-significant. When the sample is split by the remaining demographic variables, significant correlations remained between adolescent-reported control and externalized behavior problems for Blacks, high-income families, and single-parent families, but the correlations were not significantly different from Whites, low-income families, and non-single parent families. The relation between adolescent-reported control and internalized behavior problems remained significant for boys and girls, Whites and Blacks, low-income families and high income families, and single-parent families and non-single parent families, and z-tests revealed no significant differences in bivariate correlations across groups.

In the full sample, adolescent-reported intrusion was significantly related to more internalized behavior problems, but not to externalized behavior problems (see Table 9). Significant correlations remained for the relation between adolescent-reported intrusion and internalized behavior problems for girls, Blacks, low-income families, single parent families, and non-single parent families, but did not differ significantly from boys, Whites, or high-income families. After dividing the sample by gender, the relation between adolescent-reported intrusion and externalized behavior problems remained non-significant for boys, but was significant for girls, with girls reporting more externalized problems when they reported their parents as using more intrusion. A z-test revealed that the difference between the gender groups was significant.

In the full sample, parent-reported control was not found to be significantly correlated with either internalized or externalized adolescent behavior problems. When the sample was split by gender, the relation between parent-reported control and externalized behavior problems remained non-significant for boys, but was significant for girls, with girls reporting more externalized problems when their parents reported using more control, however a z-test reveals that the difference between the gender groups is non-significant. When the sample was split by income, the relation between parent-reported control and internalized behavior problems remains non-significant for low income families, but was significant for high income families. Again, a z-test reveals that the difference between the groups is non-significant. No significant differences were found when the sample was split by race and single parent status.

In the full sample, parent-reported intrusion was found to be related to adolescent internalized behavior problems, but not externalized behavior problems. As expected, more parent-reported intrusion was associated with more internalized behavior problems.

When the sample was split by gender, the relation between parent-reported intrusion and externalized behavior problems was significant for girls, but did not differ significantly from boys. The relation between parent-reported intrusion and internalized behavior problems remained significant for girls, Blacks, low-income families, and single-parent families, but did not differ significantly from boys, Whites, high-income families, and non-single parent families.

#### Hypothesis Four

The fourth hypothesis was that control would mediate the relation between parental depressed mood and adolescent behavior problems. In order to proceed with tests of mediation, significant relations need to exist between all three variables, as outlined by Baron and Kenny (1986). Because there was not a significant relation between parental depressed mood and adolescent behavior problems, further tests for mediation were not warranted.



Table 6. Correlations among Variables

	Adolescent- reported Psychological Intrusion	Adolescent- reported Psychological Control	Adolescent Internalized Behavior Problems	Adolescent Externalized Behavior Problems	Parent-reported Psychological Intrusion	Parent- reported Psychological Control	Parent Depressed Mood
Adolescent-reported Psychological Intrusion							
Adolescent-reported Psychological Control	.40**						
Adolescent Internalized Behavior Problems	.32**	.42**					
Adolescent Externalized Behavior Problems	.07	.26**	.44**				
Parent-reported Psychological Intrusion	.38**	.25*	.26**	.14			
Parent- reported Psychological Control	.13	.25*	.17	.11	.47**		
Parent Depressed Mood	.01	-.06	-.14	-.15	.21*	.11	

\* p &lt; .05, \*\* p &lt; .01

Table 7. Parent Depressed Mood and Psychological Control

	Full Sample	Male	Female	Z test	White	Black	Z test	Low income	High income	Z test	Single	Not single	Z test
Adolescent-reported psychological control	-.06	-.12	.04	.70	-.06	-.21	.63	-.38*	.17	2.49*	-.16	-.05	.49
Adolescent-reported psychological intrusion	.01	.08	-.05	.56	-.11	-.09	.10	.02	-.03	.21	.14	-.11	1.07
Parent-reported psychological control	.11	.04	.13	.43	-.04	.07	.46	.07	.12	.23	.15	.17	.10
Parent-reported psychological intrusion	.21*	.01	.29*	1.22	.11	.16	.22	.09	.24*	.65	.19	.14	.21

Table 8. Parent Depressed Mood and Adolescent Behavior Problems

	Full Sample	Male	Female	Z test	White	Black	Z test	Low income	High income	Z test	Single	Not single	Z test
Externalized behavior problems	-.15	-.10	-.16	.26	.04	-.25*	1.28	-.27	-.09	.84	-.24	-.12	.56
Internalized behavior problems	-.14	-.26	-.04	.99	.10	-.42**	2.36*	-.36*	-.00	1.62	-.17	-.17	0

Table 9. Psychological Control and Adolescent Behavior Problems

	Adolescent-reported Psychological Control												
	Full Sample	Male	Female	Z test	White	Black	Z test	Low income	High income	Z test	Single	Not single	Z test
Externalized Behavior problems	.26**	-.04	.53**	2.76**	.21	.34*	.60	.25	.27*	.09	.42**	.13	1.43
Internalized Behavior problems	.42**	.36*	.45**	.48	.32*	.49*	.86	.44**	.42**	.07	.45**	.42**	.19
	Adolescent-reported Psychological Intrusion												
	Full Sample	Male	Female	Z test	White	Black	Z test	Low income	High income	Z test	Single	Not single	Z test
Externalized Behavior problems	.07	-.18	.31*	2.19*	.24	.05	.84	-.04	.16	.86	.06	.06	.03
Internalized Behavior problems	.32**	.16	.42**	1.26	.21	.31*	.48	.43**	.23	.9	.36*	.28*	.38
	Parent-reported Psychological Control												
	Full Sample	Male	Female	Z test	White	Black	Z test	Low income	High income	Z test	Single	Not single	Z test
Externalized Behavior problems	.11	-.01	.24*	1.13	.08	.16	.35	.12	.10	.08	.15	.10	.20
Internalized Behavior problems	.17	.17	.18	.06	.15	.02	.54	.09	.24*	.68	.19	.18	.07
	Parent-reported Psychological Intrusion												
	Full Sample	Male	Female	Z test	White	Black	Z test	Low income	High income	Z test	Single	Not single	Z test
Externalized Behavior problems	.14	.03	.26*	1.02	.20	.18	.08	.10	.13	.12	.01	.24	1.01
Internalized Behavior problems	.26**	.22	.30*	.39	.06	.25*	.85	.36*	.13	1.08	.42**	.14	1.34

## CHAPTER 5: DISCUSSION

The purpose of the current study was to investigate the associations among parental depressed mood, control, and adolescent behavior problems. The results of the study indicate that parental depressed mood was associated with more parent-reported intrusion. For the full sample, no associations were found for the relation between parental depressed mood and adolescent behavior problems. Adolescent-reported control, adolescent-reported intrusion, and parent-reported intrusion were associated with more adolescent internalized behavior problems. Adolescent-reported control was associated with more externalized behavior problems. Because the association between parental depressed mood and adolescent behavior problems was not supported, further tests for mediation were not conducted.

Mean-level differences and moderating effects were tested to see if measures varied as a function of family contextual variables. The results indicate that parents of girls report more depressed mood than parents of boys. Black adolescents as well as parents of Black adolescents report more use of intrusion than White adolescents and parents of White adolescents. Parents from low-income families report more intrusion than parents from high-income families. Tests for moderation indicate that income may moderate the relation between parental depressed mood and adolescent-reported control, with adolescents from low-income families reporting significantly less control than adolescents from high-income families. Race may moderate the relation between parent depressed mood and adolescent internalized behavior problems, with Black adolescents reporting significantly less internalized behavior problems than white adolescents. Finally, adolescent gender may moderate the relation between adolescent-reported

control and externalized behavior problems and adolescent-reported intrusion and externalized behavior problems, with girls reporting more externalized behavior problems than boys.

### Primary Hypotheses

The first hypothesis stated that parents who report depressed mood will use more control. Correlations for the full sample showed that the only measure of control that was significantly correlated with parental depressed mood was parent-reported intrusion. Although there is not much research on parental depression and psychological control, Susman et al. (1985) found that depressed parents are more likely to use guilt and anxiety inducing techniques. Intrusion focuses on feelings, whereas control focuses on actions, which may provide an explanation for why the correlation was only significant for intrusion.

Additionally, Downey and Coyne (1990) stated that depressed parents will often withdraw from a conflict situation. It may be possible that no associations were found between parental depressed mood and psychological control because psychological control focuses on actions. If parents are withdrawing from their children, there is less opportunity to engage in psychological control.

The second hypothesis was that parents who report depressed mood will have adolescents who report higher levels of internalizing and externalizing behavior problems. Correlations for the full sample showed that there was not a significant relation between parent depressed mood and externalized behavior problems or internalized behavior problems. This finding is inconsistent with the research reviewed for this study that found relationships between parental depressed mood and both internalized and

externalized problems in children. A possible explanation for the discrepancy is that the majority of research reviewed for this study that examined behavioral outcomes for children of depressed parents was conducted with preschool-age children. One reviewed study, conducted by Langrock et al. (2002), included older children (7-17) and found evidence that parental depression was associated with higher levels of depression and aggression.

Another possible explanation for the inconsistencies is that the current study measured depressed mood, whereas many of the reviewed studies examined clinical depression. The results may not be the same for parents who are experiencing ongoing clinical depression versus parents who are experiencing a temporary state of depressed mood. Furthermore, the sample for the current study reported very little depressed mood. Additionally, behavior problems were reported only by the adolescents, who may have been unwilling to fully disclose the behaviors that they were engaging in. The results may have differed if parents had reported on adolescent behavior problems.

The third hypothesis was that parents who use more psychological control will have adolescents with more internalizing and externalizing behavior problems. This hypothesis was partially supported; significant correlations were found between adolescent-reported intrusion and internalized behavior problems, adolescent-reported psychological control and internalized and externalized problems, and parent-reported intrusion and internalized behavior problems. These results are consistent with those of previous studies (Barber, 1996; Galambos, et al., 2003; Rogers, et al., 2003), which typically find psychological control to be associated with more internalized problems than externalized problems. It also appears that where the information comes from may

have an impact. For example, only adolescent reports were used for measures of internalized and externalized behavior problems. When comparing parent reports of control with adolescent internalized and externalized behavior problems, the correlations are non-significant. Adolescent reports of control, however, are significantly correlated with both internalized and externalized behavior problems. The only parent report to be significantly correlated with adolescent behavior problems was parent-reported intrusion and internalized behavior problems. This information suggests that results may differ significantly depending on who the informant is.

The fourth hypothesis stated that psychological control would mediate the relation between parental depressed mood and adolescent behavior problems. According to Baron and Kenny (1986), significant relations would need to exist between parental depressed mood and psychological control, psychological control and adolescent behavior problems, and parental depressed mood and adolescent behavior problems in order to test for mediation. Because the relation between parental depressed mood and adolescent behavior problems was not significant, no further tests for mediation were conducted.

#### Mean-level Differences

After splitting the sample by the family contextual variables of adolescent gender, race, income, and single-parent status, mean level differences were identified for three of the measures. Parental depressed mood was found to be reported more often by parents of girls than boys, although the mean score for parents of girls was still on the lower end of the scale. Although none of the reviewed literature for the current study offered any explanations as to why parents of girls would experience more depressed mood, it may be possible that parents perceive girls to be more difficult, thus resulting in more parenting

stress and increased depressed mood. There is very little literature on this topic, and what does exist is inconsistent. For example, Ohannessian et al. (2005) examined the effects of child gender on parental depression, and found no significant differences for parents of girls versus parents of boys. Susman et al. (1985), however, found that parents of girls expressed less joy in the parental role. Although not directly related to gender as a function of parental depression, research on parental monitoring finds that girls are often monitored more than boys, suggesting that parents feel the need to closer supervise girls (Pettit et al., 2001). It is possible that if parents are expressing more concern for girls, there may be more parenting-related stress and anxiety, thus resulting in more depressed mood. There were no significant mean-level differences for parental depressed mood after dividing the sample by race, income, and single parent status.

For measures of intrusion, it was revealed that both Black adolescents as well as parents of Black adolescents reported more use of intrusion than White adolescents and parents of White adolescents. Although there is some research on parenting and Black families, the majority of the literature relevant to this study was conducted with White families. There are several possible explanations for the difference in reported intrusion. Black families have psychological characteristics that are intrinsically different from White families, and often emphasize collectivism and group cooperation (Krishnakumar, Buehler, & Barber, 2003). Additionally, Krishnakumar et al. report that some Black parents may use stronger and more assertive discipline than White parents. If Black parents are placing value on the importance of unity on thoughts and ideas, it would make sense that parents use intrusion as a way to meet that goal. Additionally, this type of parenting may be viewed as culturally acceptable and continues to be passed through the



generations. No mean level race differences were found for any other measures of psychological control.

After dividing the sample by income, it was revealed that parents from low income families reported using more intrusion than parents from high income families. Barber and Harmon (2002), in an overview of psychological control literature, found a slight pattern suggesting that lower income families reporting higher levels of parental psychological control, although this idea was not discussed in depth. Additionally, there is consistent literature that suggests that low-income parents use more harsh and controlling discipline. Suchman and Luthar (2000) concluded that low socioeconomic status parents were more likely to engage in child abuse, authoritarian parenting, and controlling parenting styles. No mean-level psychological control differences were found after dividing the sample by adolescent gender and single-parent status.

#### Evidence of Moderation

There was some evidence of moderation for each of the hypotheses, but the lack of consistency suggests that these findings may be difficult to replicate. See Table 10 for a full summary of moderated variables.

Table 10. Evidence of Moderation

	Gender	Race	Income	Single-parent status
Hypothesis 1	No	No	Some (1/4)	No
Hypothesis 2	No	Some (1/2)	No	No
Hypothesis 3	Some (2/8)	No	No	No

Correlations for the full sample showed that adolescent-reported control was not significantly correlated with parental depressed mood. After dividing the sample by income, however, a significant association was found for the association between parental depressed mood and adolescent-reported control for low and high income families. Adolescents from low-income families, when compared to adolescents from high income families, reported experiencing less control when parents reported depressed mood, and a z-test revealed that the difference between the two groups was significant. This is not consistent with the first hypothesis which states that parental depressed mood would be associated with increased control. No other measures of control followed this trend in low-income families. This finding is also inconsistent with Barber and Harmon's (2002) suggestion that low income parents use more control. Additionally, Susman et al. (1985) found that lower socioeconomic status parents were more likely to rely on control by anxiety induction. Although the two previously mentioned studies were looking at mean-level differences, it is possible that a moderating relationship exists, but was not tested. No moderating effects for parental depressed mood and control were found for adolescent gender, race, and single parent status.

After dividing the sample by race, it was discovered that Black adolescents report significantly less internalized behavior problems than White adolescents when their parents report more depressed mood symptoms. None of the literature reviewed for this study offered a reason for why race could have an impact on child internalized problems; however there is evidence from other studies that may provide an explanation.

Several studies suggest that parenting practices that typically result in negative outcomes for White children, including authoritarian parenting and corporal punishment, can have less or limited influences on Black children (Vendlinski, Silk, Shaw, & Lane, 2006). Vendlinski et al. examined race as a possible moderator between family processes and child outcomes. Specifically, their sample included Black and White families, with about half of the parents reporting child-onset depression. The results of the study found that White children experienced higher levels of depression when their parents engaged in child-rearing disagreements, but Black children actually experienced less depression when their parents engaged in child-rearing disagreements. Although the Vendlinski et al. study did not specifically examine the relation between parental depression and adolescent depressed mood, it does suggest that race can have an effect on how children place meaning on certain parental behaviors. In the current study, no moderating effects for parental depressed mood and adolescent behavior problems were found for the family contextual factors of gender, income, and single parent status.

After dividing the sample by gender, evidence of moderation was found for the relation between adolescent-reported control and externalized behavior problems and the relation between adolescent-reported intrusion and externalized behavior problems. Girls reported significantly more externalized behavior problems than boys when they reported that their parents used control. Girls also reported significantly more externalized behavior problems than boys when they reported that their parents used intrusion. Two reviewed studies examined gender as a possible moderator between psychological control and behavior problems. First, Pettit et al. (2001) found that psychological control was associated with increased anxiety, depression, and delinquency, and that this relationship

was stronger for girls than for boys. Conversely, Rogers et al. (2003) suggest that when faced with psychological control, boys are more likely to respond with externalized symptoms, while girls typically express more internalized symptoms. The current study found that girls were more likely than boys to respond with internalized symptoms for three of the four psychological control measures, but the differences between the groups were non-significant. Additionally, externalized symptoms for girls were significant for all four measures of psychological control, whereas for boys, there was no relationship between control and externalized symptoms. These studies suggest that there are inconsistencies when examining gender effects and responses to control. One possible explanation for the relationship between control and externalized problems in girls is that parents expect less externalized problems from girls than boys, and therefore react with increased control when girls exhibit externalized problems (Pettit et al., 2001). More research needs to be conducted in this area before any conclusions can be made.

#### Limitations

The strengths of the current study include the racially diverse sample and comprehensive measures of psychological control. It is important, however, to note the study's limitations. While the adolescent participants were equally divided by gender, the parents were predominately mothers. Some literature suggests that parent gender may influence behavioral outcomes for children (Cummings et al., 2005). In order to gain a better understanding of parent gender differences, it would have been beneficial to include equal numbers of mothers and fathers in the study. Additionally, the participants all resided in the same city, thus there may be cultural differences that do not allow the

results to be generalized to other geographic regions. The study had a relatively small sample size, and a larger sample size may have yielded more reliable results.

Several aspects of the data collecting process may have influenced the quality of the data. First, not all measures were collected from both the parent and adolescent. Only parents reported on depressed mood symptom, while only adolescents reported on behavior problems. It would have been advantageous to have both parent and adolescent reports for all of the measures. Second, the interviews were conducted face-to-face, which may have influenced the participants' responses to some of the more sensitive questions. Finally, the information obtained was one-time, cross-sectional data. It would have been beneficial to follow participants in a longitudinal study in order to track changes over time.

The results from the current study have provided several important findings, but also demonstrate the need for more research in this area. Although not all hypotheses were supported, the results strengthen the idea that family contextual factors may play an important role in the parenting process. While the results of the current study do not provide enough evidence to reach any conclusions, they do warrant further research on this topic and demonstrate the importance of diverse samples.

## REFERENCES

- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV). Washington, DC: American Psychiatric Association.
- Aunola, K., & Nurmi, J. (2005). The role of parenting styles in children's problem behavior. *Child Development*, 76, 1144-1159.
- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, 67, 3296-3319.
- Barber, B. K. (2002). Reintroducing parental psychological control. In B.K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 3-13). Washington, DC: American Psychological Association Press.
- Barber, B. K., Bean, R. L., & Erickson, L. D. (2002). Expanding the study and understanding of psychological control. In B.K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 263-289). Washington, DC: American Psychological Association Press.
- Barber, B. K., & Harmon, E. (2002). Violating the self: Parental psychological control of children and adolescents. In B.K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 15-52). Washington, DC: American Psychological Association Press.
- Barber, B. K., & Olsen, J. A. (1997). Socialization in context: Connection, regulation, and autonomy in the family, school, and neighborhood, and with peers. *Journal of Adolescent Research*, 12, 287-315.
- Barber, B.K., Olsen, J.E., & Shagle, S.C. (1994). Associations between Parental Psychological and Behavioral Control and Youth Internalized and Externalized Behaviors. *Child Development*, 65, 1120-1136.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child Development*, 37, 887-907.
- Bean, R.A., Barber, B.K., & Crane, D.R. (2006). Parental support, behavioral control, and psychological control among African American youth. *Journal of Family Issues*, 27, 1335-1355.

- Belsky, J. (1984). The Determinants of Parenting: A process model. *Child Development*, 55, 83-96.
- Belsky, J., Robins, E., & Gamble, W. (1984). The determinants of parental competence: Toward a contextual theory. In M. Lewis & L. Rosenblum (Eds.), *Beyond the Dyad: Social Connections*, pp. 251-279, NY: Plenum.
- Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavior sciences. New Jersey: Lawrence Erlbaum Associates, Inc.
- Cummings, E.M., Keller, P.S., & Davies, P.T. (2005). Towards a family process model of maternal and paternal depressive symptoms: Exploring multiple relations with child and family functioning. *Journal of Child Psychology and Psychiatry*, 46, 479-489.
- Downey, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin*, 108, 50-77.
- Farrell, A.D., Kung, E.M., White, K.S., & Valois, R.F. (2000). The Structure of Self-Reported Aggression, Drug Use, and Delinquent Behaviors During Early Adolescence. *Journal of Clinical Child Psychology*, 29, 282-292.
- Fendrich, M., Warner, V., & Weissmann, M.M. (1990). Family risk factors, parental depression, and psychopathology in offspring. *Developmental Psychology*, 26, 40-50.
- Finkenauer, C., Engels, R. C., & Baumeister, R. F. (2005). Parenting behaviour and adolescent behavioural and emotional problems: The role of self-control. *International Journal of Behavioral Development*, 29, 58-69.
- Galambos, N. L., Barker, E. T., Almeida, D. M. (2003). Parents do matter: Trajectories in externalizing and internalizing problems in early adolescence. *Child Development*, 74, 578-594.
- Gartstein, M.A., & Fagot, B.I. (2003). Parental depression, parenting and family adjustment, and child effortful control: Explaining externalizing behaviors for preschool children. *Journal of Applied Developmental Psychology*, 24, 143-177.
- Gordon, D., Burge, D., Hammen, C., Adrian, C., Jaenicke, C., & Hiroto, D. (1989). Observations of Interactions of Depressed Women with their Children. *American Journal of Psychiatry*, 146, 50-55.
- Krishnakumar, A., Buehler, C., & Barber, B.K. (2003). Youth perceptions of interparental conflict, ineffective parenting, and youth problem behaviors in European-American and African-American families. *Journal of Social and Personal Relationships*, 20, 239-260.

- Langrock, A. M., Compas, B. E., Keller, G., Merchant, M. J., & Copeland, M. E. (2002). Coping with the stress of parental depression: Parent' reports of children's coping, emotional, and behavioral problems. *Journal of Clinical and Adolescent Psychology, 31*, 312-324.
- Leondari, A., & Kiosseoglou, G. (2002). Parental psychological control and attachment in late adolescents and young adults. *Psychological Reports, 90*, 1015-1030.
- MacCoby, E. E. (1984). Middle childhood in the context of the family. In W. A. Collins (Ed.), *Development during middle childhood* (pp. 184-239). Washington, DC: National Academy Press.
- Ohannessian, C. M., Hesselbrock, V. M., Kramer, J., Kuperman, S., Bucholz, K. K., Schuckit, M. A., & Nurnberger, J. I. (2005). The relationship between parental psychopathology and adolescent psychopathology. *Journal of Emotional and Behavioral Disorders, 13*, 67-76.
- Orpinas, P. K. (1993). Skills training and social influences for violence prevention in middle schools: A curriculum evaluation. Doctoral Dissertation. Houston, TX: University of Texas Health Science Center at Houston, School of Public Health.
- Parker, G., Wilhelm, K., & Asghari, A. (1998). Depressed mood states and their inter-relationship with clinical depression. *Social Psychiatry and Psychiatric Epidemiology, 33*, 10-15.
- Pettit, G. S. & Laird, R. D. (2002). Psychological control and monitoring in early adolescence: The role of parental involvement and earlier child adjustment. In B.K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 97-123). Washington, DC: American Psychological Association Press.
- Pettit, G. S., Laird, R. D., Dodge, K. A., Bates, J. E., & Criss, M. M. (2001). Antecedents and Behavior-Problem Outcomes of Parental Monitoring and Psychological Control in Early Adolescence. *Child Development, 72*, 583-598.
- Rogers, K. N., Buchanan, C. M., & Winchell, M. E. (2003). Psychological control during early adolescence: Links to adjustment in differing parent/adult dyads. *Journal of Early Adolescence, 23*, 349-383.
- Sarigiani, P. A., Heath, P. A., & Camarena, P. M. (2003). The significance of parental depressed mood for young adolescents' emotional and family experiences. *Journal of Early Adolescence, 23*, 241-268.
- Schaefer, E. S. (1965a). Children's reports of parental behavior: An inventory. *Child Development, 36*, 413-424.



- Silk, J. S., Morris, A. S, Kanaya, T., & Steinberg, L. (2003). Psychological control and autonomy granting: Opposite ends of a continuum or distinct constructs? *Journal of Research on Adolescence*, 13, 113-128.
- Smetana, J.G., & Daddis, C. (2002). Domain-Specific Antecedents of Parental Psychological Control and Monitoring: The Role of Parenting Beliefs and Practices. *Child Development*, 73, 563-581.
- Soenens, B., Elliot, A. J., Goossens, L., Vansteenkiste, M., Luyten, P., & Duriez, B. (2005). The intergenerational transmission of perfectionism: Parents' psychological control as an intervening variable. *Journal of Family Psychology*, 19, 358-366.
- Steinberg, L. (1990). Interdependency in the family: Autonomy, conflict, and harmony. In S. Feldman, & G. Elliot (Eds.), *At the threshold: The developing adolescent* (pp. 255-276). Cambridge, MA: Harvard University Press.
- Stone, G., Buehler, C., & Barber, B. K. (2002). Interparental conflict, parental psychological control, and youth problem behavior. In B.K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 53-95). Washington, DC: American Psychological Association Press.
- Suchman, N. E., & Luthar, S. S. (2000). Maternal addiction, child maladjustment and socio-demographic risks: Implications for parenting behaviors. *Addiction*, 95, 1417-1428.
- Susman, E.J., Trickett, P.K., Iannotti, R.J., Hollenbeck, B.E., & Zahn-Waxler, C. (1985). Child-rearing patterns in depressed, abusive, and normal mothers. *American Journal of Orthopsychiatry*, 55, 237-251.
- Thompson, A., Hollis, C., Richards, D. (2003). Authoritarian parenting attitudes as a risk for conduct problems: Results from a British national cohort study. *European Child and Adolescent Psychiatry*, 12, 84-91.
- West, A.E., & Newman, D.L. (2003). Worried and blue: Mild parental anxiety and depression in relation to the development of young children's temperament and behavior problems. *Parenting: Science and Practice*, 3, 133-154.

# APPENDIX: TABLE OF STUDIES

Author(s) and Year	Sample size	Gender of Sample	Race/ethnicity of sample	Age of sample	Related constructs measured	Results	Contextual variables
Barber, 1996	933	Split evenly between male and female	71% White, 16% Hispanic	5 <sup>th</sup> and 8 <sup>th</sup> graders	Psychological control; delinquency	Use of psychological control is a predictor of youth behavior problem	Hispanics reported more control than Whites. Males reported more control than females.
Finkenaur et al., 2005	1,359	709 males; 650 females	96.4% of Dutch background	10-14	Psychological control; delinquency; aggression	Psychological control positively related to adolescent delinquency and aggression	Females engaged in less aggression, but reported more depressive symptoms.
Thompson et al., 2003	16,151	50.1% males, 49.9% females	92.3% White	5 and 10	Authoritarian parenting beliefs; conduct problems	Positive relationship between authoritarian parenting beliefs and conduct problems at ages 5 and 10.	Low SES was associated with increased conduct problems at age 5.
Aunola and Nurmi, 2005	210	Not reported	100% White and of Finnish background	5-6	Parenting styles; child internalized and externalized problems	High levels of psychological control combined with high affection predicted increased eternalized problems	None tested

Table continued

Stone et al., 2002	337(sample one) and 545 (sample two)	56% females and 44% males (sample one) 50% males and females (sample two)	Not reported	10-15 and 9-15	Interparental conflict; psychological control	Interparental conflicted was related to increased levels of psychological control	Background differences did not exist to any great extent.
Soenens et al., 2005	155	100% females	100% White and of Dutch background	18-24	Perfectionism; psychological control	Use of psychological control was predicted by maladaptive perfectionism	None tested
Pettit et al., 2001	440	52% males, 48% females	81% European American, , 17% African American	5-13	Parenting styles; psychological control	Mothers' use of psychological control was anteceded by use of harsh discipline	Child gender did not serve as a moderator.
West and Newman, 2003	65	50% males, 50 % females	72.3% European American, 9.2% African American	Preschoolers	Parental depression; behavior problems	Mild parental depression was associated with increased behavior problems and anger	Parental depression was not associated with any contextual variables.
Gartstein and Fagot, 2003	159	52% males, 48% females	93% White, 5% African American	Preschoolers	Parental depression; externalizing problems	Depression explained a significant part of child externalizing behaviors	None tested
Fendrich et al., 1990	220	48% male, 52% female	100% White	6-23	Family discord; parental depression; conduct disorder	Family risk factors were higher among children of depressed parents, and are associated with higher rates of conduct disorder	None tested
							Table continued

Langrock et al., 2002	66 parents with 101 children	50% male, 50% female	98% White	7-17	Parental depression; children's coping responses; behavior problems	Children's stress-related coping was related to aggression, anxiety, and depression	None tested
Cummings et al., 2005	235	46% male, 54% female	76.5% White, 16.7% Black	Kindergarten age	Parental depression; child adjustment	Parental depression was associated with child internalizing and externalizing problems	Girls reacted more strongly to maternal depression, while boys reacted more to paternal depression.
Susman et al., 1985	94	Not reported	Predominately White	4-9	Parental depression; environmental characteristics	Depressed mothers were more likely to use inconsistent discipline and guilt and anxiety induction	Mothers of girls expressed less joy in the parental role. The higher the SES, the more likely the mothers were to use rational guidance. The lower the SES, the more likely the mothers were to engage in authoritarian control and control by anxiety induction.
Gordon et al., 1989	35	46% male, 54% female	Predominately White	8-16	Parental depression; negative parental behaviors	Depressed mothers displayed more critical and negative behaviors	None tested

Table continued

Langrock et al., 2002	66 parents with 101 children	50% male, 50% female	98% White	7-17	Parental depression; parental intrusiveness; aggression	Children of depressed parents experienced more intrusiveness and withdrawal and displayed higher levels of aggression	None tested
--------------------------	---------------------------------	-------------------------	-----------	------	---	--	-------------

---

## VITA

Jennifer K. Sherwood was born on September 15, 1982, to Herbert and Monica Sherwood. She is a native of Chalmette, Louisiana, and graduated from Andrew Jackson Fundamental Magnet High School in 2000. She received her Bachelor of Science degree in Family, Child, and Consumer Sciences from Louisiana State University in May, 2004.

Jennifer's work experiences include two years as a graduate assistant in the School of Human Ecology. During this time she worked as a research assistant for the Baton Rouge Families and Teens Project, served as the graduate student representative for one year, and as a teaching assistant in the College of Agriculture for two semesters.

Her career goals include becoming an undergraduate advisor. She is engaged to be married to Kenneth Neal.