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January 01, 2012

The influence of parental involvement in single-father, single-mother and heterosexual married two-parent family systems on adolescent internalizing and externalizing behaviors

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Recommended Citation

Camp, Nicole H., "The influence of parental involvement in single-father, single-mother and heterosexual married two-parent family systems on adolescent internalizing and externalizing behaviors" (2012). Counseling Psychology Dissertations. Paper 30. http://hdl.handle.net/2047/d20002658

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THE INFLUENCE OF PARENTAL INVOLVEMENT IN SINGLE-FATHER, SINGLE-MOTHER, AND HETEROSEXUAL MARRIED TWO-PARENT FAMILY SYSTEMS ON ADOLESCENT INTERNALIZING AND EXTERNALIZING BEHAVIORS

A dissertation submitted by Nicole H. Camp, M.A.

Submitted to
The Department of Counseling and Applied Educational Psychology
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy
in the field of
Counseling Psychology

Dissertation Committee

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Bouvé College of Health Sciences Northeastern University Boston, MA 2012

ABSTRACT

The purpose of this research is to identify any relationships between parental involvement, defined as parental monitoring, warmth, and communication, and adolescent internalizing and externalizing behavior, comparing adolescents of both biological sexes in two-parent, single-mother, and single-father families. Data are from a sample of 60 parent and adolescent dyads (20 two-parent, 20 single-father, 20 single-mother) taken from the Panel Study of Income Dynamics (PSID) database Child Development Supplement II (CDS-II). Respondents were adolescent boys and girls ages 13-17 in grades 8-12 (mean age = 14.7, mean grade = 9.7) and the mean age of the parents was 43. Multiple regression and univariate analysis of variance (ANOVA) tests were performed to test the following research questions: 1) from both the parent and the adolescent perspective, are higher levels of parental involvement positively correlated with relative freedom from internalizing and externalizing behaviors among adolescents?, 2) are there differences between how parents and adolescents report parental communication, warmth, or monitoring and if so, do differences vary by family structure, biological sex of the adolescent, or the interaction between family structure (single-mother, single-father, heterosexual twoparent) and biological sex, and 3) is one type of family structure more likely than others to have fewer reported adolescent internalizing and externalizing problems, and if so, are any differences more significant by adolescent biological sex? The results of the present study support that single-father family structure and adolescent

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perceived parental warmth, monitoring and communication predict adolescent internalizing behaviors. Additionally, results support that adolescent perceptions of parental warmth and monitoring as well as parent perceptions of monitoring and communication predict adolescent externalizing behaviors. Further, results indicate that single-fathers reported lower levels of perceived parental warmth than did adolescents from single-mother and two-parent family systems.

ACKNOWLEDGEMENTS

I would like to thank the members of my committee for your time, participation in this project, patience, and availability and willingness to provide professional and personal support throughout my time in the program. There have been many shiny objects and some speed bumps that have slowed me down, but thanks to your ongoing support and encouragement, I finally caught up to this carrot. To Dr. Mason, my incredibly patient and knowledgeable chairperson, neither of us would have made it through this without your research expertise, great sense of humor, and general kindness and understanding. I thank you so much for your guidance and support through this learning process. To Dr. Greenwald, I really don't have the words so imagine me mumbling the following but meaning to communicate so much more: I feel very lucky to have been your student and through your guidance, I have grown in my clinical skills and knowledge. Thank you for your support throughout the dissertation process, but more importantly, I thank you for your clinical and professional guidance, humanity, candor, humor, and personal and academic support. Thank you, thank you, and thank you. Dr. Hawks, clinical supervision was always something to look forward to. You made learning and going to work so much fun. Thank you for helping me to develop as a clinician, your clients are so lucky to have you and I aspire to your clinical skill and style. Thank you for your support with this project and for jumping in to help me complete it.

Although not directly involved with this research project, there are numerous

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people who have been a positive influence in my life, and thus part of this journey. Dr. Quill, thank you for employing me for three years and for your good humor and sanity! Jamie, thank you for your unending support, love, incredible patience, humor, and for the many sacrifices you've made as I've worked on this project. Law school shouldn't take up as much of my time. Jamie, Cora, and Ollie, all the love and lucky me to know you! To my family, thank you for affording me so many opportunities and adventures, this included. TMH and CK (almost H), thank you for being geniuses and for your help with this project. Now go get your own dissertations. Gma and Gpa, you have always been there and my gratitude is endless. Finally, to my friends, I cannot thank you enough for your friendship, general encouragement in all things, and the mini "interventions" you staged to help me complete this project. Onward...

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CHAPTER 1

INTRODUCTION

There is a growing awareness of the need to examine relationships between parental involvement and adolescent internalizing and externalizing behaviors in single-father family systems as compared to other types of family systems. This chapter presents a background of the problem, the purpose of the research, the research questions, and finally, the significance of the research.

Background of the Problem

Studies indicate that over half of the children in the United States will "spend some time" living in single-parent households (Demuth and Brown, 2004; Hanson, Heims, Julian, & Sussman, 1995). Based on U.S. Census Bureau data released in 2009, as of the spring of 2008, an estimated 13.7 million parents had custody of 21.8 million children under 21 years of age while the other parent lived somewhere else". Those 21.8 million children "represented over one-quarter (26.3 percent) of all 82.8 million children under 21 years old living in families" in the United States (U.S. Census Bureau, 2009). While mothers accounted for the majority of custodial parents (82.6 percent), 17.4 percent of single, custodial parents were fathers (U.S. Census Bureau, 2009).

During 1980's, the growth in mother-child families was surpassed by father-child families, although only 3% of all children lived with single-fathers at that time (Bianchi, 1995). According to Eggebeen, Snyder, and Manning's (1996) analysis of

U.S. census data between 1960 and 1990, the percentage of children living in singlefather homes grew from 1.1% in 1960, to 3.8% in 1990. By 2004, Demuth & Brown reported that fifteen percent of children living in single-parent households were living in single-father households and at that time, single-father families constituted the fastest growing type of family system in the United States (Demuth and Brown, 2004). U.S. 2009 Based Census Bureau data released on in (http://www.census.gov/prod/2009pubs/p60-237.pdf as found on 3/25/12), singlefather families continued to be the fastest growing type of family system, constituting 17.4% of all single-parent family systems in the United States. Because single-parent, particularly single-father family units, comprise an ever-growing demographic in our society, it becomes necessary to examine those factors that contribute to the formation of such family units, as well as the unique array of social and emotional conditions that affect children within them.

Social and environmental factors that lead to single-parent families include parental divorce, childbirth outside of marriage, or death of a parent (Hilton, Desrochers, & Devall, 2001; Demuth & Brown, 2004; Coley, 2001). When changes to family structure result in single-parent households, role demands increase for both single-mothers and for single-fathers and significant financial stress and stress related to securing social supports is characteristic among single-parent families. While in many cases they previously shared these responsibilities with a partner, single-parents become solely responsible for meeting the essential material, financial, and emotional needs of their children; the experience of taking on these added responsibilities alone

can feel overwhelming and challenging. Research supports that such stressors occur more for single-mothers when compared to single-fathers but consistently impact all single-parent dyads more than married two-parent families (Walker & Hennig, 1997; Hilton et al., 2001).

Developmental psychologists assert that social and emotional problems may be transmitted from parents to their children based on the parents own social and emotional health (Amato, 1993). In single-parent families, the social and emotional health of parents is likely impacted by amplified socioeconomic strain. As a result of socioeconomic stressors, lack of parental controls, and the greater time constraints faced by many single-parents, children raised in these homes can be at a disadvantage (Amato, 1993) and often experience increased levels of adjustment difficulties and maladaptive internalizing and externalizing problems.

Williams and Kelly (2005) categorized internalizing and externalizing behaviors as a way to understand the "effects of attachment and parental involvement on the adolescent's style of coping with the external stresses and demands of daily life". Similarly, for the purposes of the current study internalizing and externalizing behaviors are categorized as a way of exploring the effects of family structure and parental involvement on adolescent coping styles. To operationalize, internalizing behaviors such as extreme shyness, anxiety, depression, worry, and withdrawal are often associated with excessive emotional control (Hilton, Desrochers, & Devall, 2001) and often pass undetected by those who are close with the adolescent as they tend not to be overtly disruptive of the environment. In contrast, externalizing

problems are often disruptive to the environment and are generally more overt. Externalizing behaviors are often representative of a lack of emotional control and include aggression, hyperactivity, impulsivity, noncompliance, delinquency, and disobedience (Williams & Kelly, 2005; Mesman & Koot, 2000). Both internalizing and externalizing problem behaviors are known to impair social, academic, and familial functioning and to threaten overall health and well-being and prevalence data provide evidence that a significant proportion of children and adolescents experience emotional distress in the form of internalizing and externalizing behaviors. Specifically, data from the 2004 NHIS indicated that the parents of 11.6 percent of adolescents between the ages of twelve and seventeen reported that their child had serious behavioral or mental health difficulties, with slightly higher rates for male adolescents then for female adolescents (National Adolescent Health Information Center. 2007a, see also: Knopf, Park, & Mulye, 2008).

As mentioned, previous research has shown that changes to the family structure result in higher levels of internalizing and externalizing behaviors for adolescents living in single-parent homes than for those living in married, two-parent households (Letivian, 1979; Hilton, Desrochers, and Devall, 2001; Demuth & Brown, 2004; Cuffe, McKeown, Addy, & Garrison, 2005) thereby increasing their risk for problematic social, emotional, academic, and family functioning. Specifically, adolescents living in single-parent families often experience depression, anxiety, lowered academic performance, aggression, have a higher likelihood of using drugs and engaging in early sexual behaviors, and are significantly more delinquent than

adolescents from two-parent families (Emery, Hetherington, & DiLalla, 1985; Flewelling & Bauman, 1990; Peterson & Zill, 1986; Demuth & Brown, 2004; Cuffe, McKeown, Addy, & Garrison, 2005; Rodgers & Rose, 2002; Breivik & Olweus, 2006).

Changes to family structure not only predict increased internalizing and externalizing behaviors among adolescents, they also lead to increased parent-child conflict, with high levels of familial conflict more prevalent among single-parent families than among two-parent families. For example, in their exploration of "parent/child perceptions of relationships and actual interactions as a function of family structure" among 28 tenth graders and 28 parents, representing matched groups of mothers and fathers from one- and two-parent families, Walker and Hennig (1997) concluded that "both children and parents in single-parent families were found to be somewhat ambivalent in their relationships, with both greater intimacy and heightened conflict than evidenced in two-parent families, as well as less adequate ego functioning when dealing with conflicts". Elevated levels of conflict between adolescents and their parents are associated with poor developmental outcomes, including externalizing behaviors such as increased deviance and delinquency (Hanson & McLanahan, 1996; Henggeler, 1989; Buist et al, 2004; Allen, Aber, & Leadbetter, 1990).

While single-parent family structure has been shown to result in higher levels of familial conflict and higher rates of maladaptive adolescent behaviors, there is also evidence to support that single-parents are less likely to use effective parenting

practices, provide adequate supervision, and be sufficiently involved with their children when compared to two-parent family systems (McLanahan & Booth, 1989). Per the developmental psychology literature, authoritative parenting is a parenting style associated with high levels of warmth and monitoring which are both predictive of higher self-competence and self-esteem, higher social competence, academic success, and lower levels of internalizing and externalizing behaviors (Coley, 1998; Baumrind, 1991a, 1991b; Dornbush et al., 1987; Marsiglio et al., 2000). Moreover, parental support, also often discussed as parental warmth, is related to family cohesion and connectedness as well as to open family communication. While parental warmth is positively linked to adolescent academic competence (Scaramella, Conger, Simons & Whitbeck, 1999), lack of parental warmth is negatively related to "teen pregnancy and associations with deviant peers" (Scaramella, Conger, Simons & Whitbeck, 1999) as well as "feelings of alienation, expressions of hostility and aggression, diminished self-esteem, and antisocial and risk behaviors" (Young, Miller, Norton, & Hill, 1995; Davies & Cummings, 1998).

Additionally, parental monitoring (supervision), or the parent's knowledge and awareness of their child's activities as well as active monitoring of those activities has been shown to be positively related to higher adolescent self-esteem, higher academic achievement, and fewer internalizing and externalizing behaviors (Parker, & Benson, 2004; Mounts, 2001; Brody, Murry, Kim, & Brown, 2002; Barber, Olsen, & Shagle,1994; Guilamo-Ramos, Jaccard, Turrisi, & Johansson, 2005; Stephenson, Quick, & Atkinson, 2005). Alternately, inadequate parental monitoring

of adolescents activities has been closely related to maladaptive behavioral outcomes including greater risk of delinquent behaviors (Demuth & Brown, 2004) and poor school performance.

Further, in regard to parental involvement as protective against or predictive of adolescent behavioral outcomes, open communication between family members serves a protective effect against developing depression, anxiety, and engaging in high-risk behaviors or antisocial activities (Guilamo-Ramos, Jaccard, Dittus, & Bouris, 2006; Yu, Clemens, Yang, Li, & Stanton, 2006; Xiao, Li, & Stanton, 2011). Additionally, for adolescents and their parents, open communication is positively associated with the "development of moral reasoning, academic achievement and self-esteem" (Hartos & Power, 2000; Holstein, 1972; Stanley, 1978; also as cited in Xiao, Li, & Stanton, 2011). However, adolescents who reported difficulty communicating with their parents have been shown to feel unhappy or depressed and to engage in delinquent behaviors such as underage drinking, binge-drinking, and smoking (Clark & Shields; 1997; Guilamo-Ramos, Jaccard, Turrisi, & Johansson, 2005).

Finally, when considering the influence of parental involvement on adolescent behavioral outcomes, it seems worthwhile to explore and possibly expand the research on the influence of biological sex differences between the primary caregivers and the adolescents in their care, especially among opposite-sex parent-child dyads. When the family unit consists of one adult and an adolescent of different biological sexes interactions between them may be complex. Results from studies

exploring biological sex and gender differences between parents and the children in their care have been mixed.

One perspective is that the biological sex of the parent in relation to the biological sex of the child is critical to child development because of inherent biological differences between women and men; these differences are considered by some to contribute distinctly to the emotional development of children. Alternately, there is research that contradicts the notion that children fare better in same-sex parent-child households. Because the focus has primarily been on comparing single-mothers to two-parent families, researchers have lacked generalizable data about both single-mother and single-father families and there is no clear evidence for or against the notion that children function better in the custody of same-sex single-parents (Downey, Ainsworth-Darnell, & Durfur, 1998). Instead, most of the existing research suggests the need for more research on the influence of parental biological sex and gender-role socialization on child outcomes, especially when comparing single-mother to single-father family systems.

While the "demographics that characterize families have changed dramatically during the past fifty years" with more "dual income, single-parent, and blended families today than ever before" (Williams & Kelly, 2005; see also: Amato, 1994; Hilton, Desrochers, & Devall, 2001), previous research on single-parent families has consistently emphasized single-mother/child relationships or stepfamily relationships (Demuth and Brown, 2004) using small, regional samples of white, middle-class participants and are generally not representative of the diversity within

our society (Grief & DeMaris, 1990; Marsiglio et al., 2000; Coley, 2001). Although there are studies that have investigated some combination of parent involvement variables, adolescent behavior, and family structure, a limitation of the existing body of literature is that there are few studies comparing single-mother and two-parent family systems to single-father only families. Additionally, many of the aforementioned studies have relied solely on parent or adolescent report, not both. Finally, in their analyses of family structure as related to behavioral outcomes, many studies have not explored biological sex differences among members of the family systems.

Purpose of the Research

The purpose of this research is to explore the relationship between parental communication, warmth, and monitoring, and adolescent internalizing and externalizing behavioral outcomes by comparing parent and adolescent reports in two-parent and single-parent families (Appendix A). Because there is limited existing research on the role of parenting among single-father/adolescent dyads, the emphasis is to investigate potential significant differences between single-father/adolescent dyads as compared to single-mother and two-parent family structures.

Research Questions

Research Question 1

Are higher levels of adolescent and/or parent reported parental involvement (i.e. communication, warmth, or monitoring) positively correlated with relative

freedom from internalizing and externalizing behaviors among adolescents (Appendix B)? Hypotheses:

- 1) If adolescents perceive more warmth, monitoring, and communication in their relationships with their primary care-giver, then adolescents will also perceive themselves as having relative freedom from maladaptive internalizing and externalizing problems.
- 2) If parents report that they engage, through communication and showing warmth, in their relationships with their children, then they will report that their children have relative freedom from maladaptive internalizing and externalizing problems.
- 3) If parents report higher levels of monitoring of their children, then they will report higher levels of externalizing behaviors and relative freedom from internalizing behaviors.

Research Question 2

Are there differences between how parents and adolescents report parental communication, warmth, or monitoring and if so, do any differences vary by family structure, biological sex of the adolescent, or the interaction between family structure (single-mother, single-father, heterosexual two-parent) and biological sex (Appendix C)? Hypotheses:

1) Parents and adolescents in two parent households will report higher levels of parental warmth, communication, and monitoring, regardless of adolescent biological sex, than parents and adolescents from either single-father or

- single-mother households.
- 2) Single-mothers will report higher levels of parental warmth and communication than single-fathers.
- 3) Single-fathers will report higher levels of monitoring for their daughters than for their sons.

Research Question 3

Is one type of family structure more likely than others to have fewer parent and adolescent reported adolescent internalizing and externalizing problems, and if so, are the differences more significant by adolescent biological sex (Appendix D)? Hypotheses:

- 1) Two-parent households are more likely than single-parent households to have fewer reported adolescent internalizing and externalizing behaviors.
- 2) Single-mother households are more likely than single-father households to have fewer reported adolescent internalizing and externalizing behaviors.
- 3) Consistent with research by Camera and Resnick (1989), mother-custody boys and father-custody girls will show the highest levels of both internalizing and externalizing behaviors.

Significance of the Research

Although single-father/adolescent dyads do not constitute a large demographic, it is a growing one. With the single-father population on the rise, it is important to investigate the influence of parental involvement on child and adolescent outcomes among single-father families. Through study of the relationship between

paternal involvement and associated adolescent maladaptive internalizing and externalizing behaviors, we can contribute to our understanding of the dynamics between parents and adolescents in this growing, but under-researched demographic. Based on any strength, direction, and degree of relationships discovered among the independent and dependent variables, it is hoped that this research will inform the growing body of literature related to the single-fathers and in doing so will provide information that can inform clinical decision making and interventions aimed at helping to guide single-parent families; specifically those with single-fathers as the primary care-giver.

Summary

Because changes in family structure and human development both influence parent-adolescent dynamics, the need to examine the relationship between parental involvement and adolescent internalizing and externalizing behaviors across family types is recognized by many scholars in the field (Williams & Kelly, 2005; Demuth & Brown, 2004; Jablonska & Lindberg, 2007). Additionally, many researchers recommend further exploration of the influence of gender roles and/or biological sex, depending how they describe or define their variables, on single-parent/adolescent relationships.

Preliminary review of the literature on single-parent families, single-father parenting, father-adolescent involvement, and parental involvement associated with adolescent internalizing and externalizing behaviors revealed gaps in the literature about how contemporary fathers influence child and adolescent development.

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Because even less is known about how single-father's parenting practices influence behavioral outcomes for their developing adolescents, parental involvement in singlefather headed homes is the focal interest of this study.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter begins with a review of family systems, ecological, and attachment theories as relevant to the study of single-parent family systems. Relevant perspectives on adolescent development are reviewed and the literature on parenting style and associations between parenting style and positive or maladaptive adolescent outcomes is also discussed. Finally, the literature on the influences of biological sex and gender on child development across family systems is reviewed.

Introduction

While the field of psychology has made valuable contributions to understanding single-mother family systems there remains a limited but growing body of research devoted to the study of resident single-fathers (Demuth and Brown, 2004; Hilton, Desrochers, and Devall, 2001; Jablonska and Lindberg, 2007; Marsiglio et al., 2000). Scholars in the area of single-father research acknowledge that the majority of single-parent research continues to be on White, middle-class families, and using small samples that are not representative of the general U.S. population (Marsiglio et al., 2000). Recognition of changes to traditional family structure and to changes in traditional gender roles have fostered an interest in research on the study of single-parent families, fathering, and types of parental involvement that impact adolescent internalizing and externalizing behaviors.

The focus of the current study is to investigate the influence of single-father parenting, as compared to two-parent and single-mother parenting, on the etiology and maintenance of adolescent maladaptive behaviors, as conceptualized from ecological, developmental, and family systems perspectives. This study is also an investigation of the impact of aspects of parental involvement, warmth, monitoring, and communication, on the development of internalizing and externalizing behaviors among adolescents. This study is largely informed by recognition that the larger social contexts in which families operate vary among single-father, single-mother, and intact heterosexual two-parent families. While studies grounded in family systems (Bowen, 1974; Cox & Paley, 1997; Minuchen, 1974) and ecological theories (Bronfenbrenner, 1977; Doherty, Kouneski, & Erickson, 1998) inform our current understanding of fathering and the role of fathers in the lives of their children, longstanding research grounded in attachment theory (Ainsworth, 1989) supports our understanding of adolescent development.

It is widely held that adolescence is often a period of social, emotional, and physical transition which may contribute to conflict between parent and child (Steinberg, 1990; Baer, 1999; Houser et al., 1993). Adolescents attempt to gain autonomy while also wanting closeness and connection with care-takers. In the face of the adolescent's pursuit of independence, some parents may rigidly adhere to preexisting rules and guidelines; conflict in the adolescent-parent relationship often ensues. Research investigations have shown that the combination of adolescent development and changes to the family structure in which adolescents live results in higher levels of internalizing and externalizing behaviors for adolescents living in single-parent homes than for those living in married, two-parent households (Letivian, 1979; Hilton et al., 2001; Demuth & Brown, 2004; Cuffe, McKeown, Addy, & Garrison, 2005; Emery, Hetherington, & DiLalla, 1985; Flewelling & Bauman, 1990; Peterson & Zill, 1986; Rodgers & Rose, 2002; Breivik & Olweus, 2006).

Finally, beyond the issue of parental influence on adolescent development, questions persist regarding the impact of parent-child gender or biological sex, often discussed interchangeably but defined as biological sex for the purposes of the current study. While there is a same-sex notion that posits that children living with a parent of the same biological sex as the child may fare better on measures of social and emotional functioning, there is also a significant body of literature that finds no support for this notion; both notions are further explored later in this chapter.

Theoretical Framework

Conceptualizing the study of parent/adolescent relationships through integrated family systems and ecological perspectives allows for the consideration of the larger social context in which these parent/adolescent family systems operate. For that reason, family systems theories and ecological theory are reviewed as relevant to the current research.

Family Systems Theory

Family systems theory (FST) was derived in part from Ludwig von Bertalanffy's (1968) general systems theory. Von Bertalanffy's work led to a shift from the "linear analyses" (Corsini and Wedding, 2005) of relationships, to acknowledge the complexity of and interactions within relationships. Von Bertalanffy posited that in order to best understand the dynamics of relationships, it was important to investigate organisms from the perspective of "circular causality;" looking within family systems at member's interactions with each other (von Bertalanffy, 1969). In this regard, it would seem that Von Bertalanffy was ahead of his time, and his theory was in line with more recent ecological conceptualizations of how the environment influences organisms.

Expanding on von Bertalanffy's initial work, other theorists and practitioners such as Bowen and Minuchin performed research and clinical work focused on studying individuals in the context of their family systems. The focus was on minimizing the role of the individual and biological bases for behavior in favor of looking at families as coexisting systems in which individuals unite to accomplish family goals (Minuchin, 1974). In more general terms, family systems theory is concerned with the power relations, boundary violations, and communication patterns that constitute family dynamics (Rothbaum, Rosen, Ujie, & Uchida, 2002). Through their contributions, family systems theories developed to consider how individual members of the family unit experience and make sense of their interactions with one another, including interactions related to "material..., health..., moral and spiritual ..., temporal, spatial and relationship concerns" that may lead to complex family processes (Daly, 2003).

Family systems theories also "provide valuable conceptual frameworks for understanding ways in which maladaptive behaviors may be passed on from one family member or subsystem to the next" (Kaczynski, Lindahl, & Malik, 2006). In some cases, child behavior problems may serve as a distraction from other underlying, unaddressed family dynamics problems and as such may perpetuate negative reinforcement patterns between parent and child so as to allow the larger system to avoid more relevant issues (Minuchin, 1974).

An integral part of researching relationships within parent/adolescent dyads then, is understanding what factors, on an individual level (i.e. developmentally, socially), impact the push and pull on their relationships. From there, further exploration into the underlying mechanisms that allow each member to organize, react, and cope with the challenges and tasks they face and encounter can take place (Hanson et al., 1995).

Ecological Theory

Ecological theory is based on Bronfenbrener's (1977) theory that human behavior is a function of reciprocal interaction with and within larger social systems. Primary tenets of ecological theory are that human development is more a function of human communities than of the individual members within those communities and that psychological well-being is related to an individual's interactive effectiveness with their personal environment.

Recently, Bronfenbrenner's ecological theory was renamed "bioecological systems theory" to emphasize that biology, in addition to social influences, is a factor

that contributes to human development. Bioecology recognizes the interaction between children's maturing biology, the immediate family system, and the larger, global and community influences on development. These interactions are especially relevant to the push-pull relationship that can occur within parent/adolescent family systems as parents and adolescents in these systems may face pressures and frustrations associated with school, developmental stage, work, and non-familial relationships, as well as financial and social stressors unique to single-parent families.

Conceptualizing family dynamics from an ecological family systems perspective allows for further consideration into which community resources, i.e., who, other than their primary care-giver(s) adolescents utilize for support or view as role models (teachers, family members, peers, father's partners). Further, this ecological conceptualization fosters an understanding into systemic strengths or inadequacies that social action and advocacy efforts may expand or ameliorate. For example, once support systems and community resources are identified, it may be possible to incorporate them into treatment for any existing maladaptive behaviors.

Although the ecological model is not a theory of adolescent development, it is a socio-cultural framework which contextualizes adolescent development in terms of variables that impact human development such as family structure, and the availability of social, emotional and financial supports. While biological and developmental bases of behavior are considered, the focus extends beyond the behaviors of individual family members to the larger context from which the behaviors may be attributable and in which the behaviors occur.

When considering the factors that influence family systems, it is important to think about and respect the values and goals of each member of the family unit and how "these goals are formed out of cultural experiences, beliefs and understanding, and how each member is operating in an effort to achieve these goals, either for themselves or for their family unit" (Rothbaum et al, 2002). Each member of a parent/adolescent system is operating within a shared context as well as within their own developmentally defined and appropriate social context. In doing so, they are attempting to meet their own needs while also sharing responsibility for satisfying the often very different social and developmental needs within the family unit.

Attachment Theory

Attachment theory provides a framework from which to approach understanding mother-infant bonding and asserts that the bond between infant and primary caregiver, typically the mother, is the template for all future relationships (Ainsworth, Blehar, & Waters, 1978; Bowlby, 1969, 1988). Bowlby's (1982) 'internal working model of attachment' suggested that a child's mental representations, developed from early relationships with their primary caregiver during infancy, lead to expectations for future relationships. A child is said to have achieved a "secure base" if the primary care-giver has nurtured a relationship in which the child has confidence to stray and return while experimenting with environments outside that of the child-caregiver relationship (Hazan & Shaver, 1994). The child may use the care-giver as a safe haven from which to come and go, with the knowledge that upon return the caregiver will be there to provide comfort.

"Theoretically, attachment between parent and child is a lifelong, enduring bond that is important to later psychosocial development" (Bowlby, 1973). According to Bowlby, attachment is considered to be stable over time and there is evidence that if the quality of parental care is stable and development of solid self-concept and selfesteem occur, then the attachment will likely remain stable (Thompson, 2000).

Similarly, other researchers have found strong retention rates in classification of attachment with the exception of cases where life changing events, such as loss of a parent or parental divorce, impacted the attachment (Thompson, 2000; Hamilton, 2000; Waters, Hamilton, & Weinfield, 2000). Alternately, there are arguments that attachment may change over time as a result of hormonal, neurophysiological, cognitive, and socioemotional experiences (Ainsworth, 1989) and that attachment security only remains stable if other aspects related to the attachment also remain stable across transitions (Thompson, 2000). Evidence against the notion that attachment remains stable over time was also found by Lewis, Feiring, and Rosenthal (2000). They found no relationship between a secure attachment base in infancy and later attachment security in adolescence. Actually, they found that in cases where divorce occurred, adolescents were more likely to show insecure attachments at the age of 18. Based on this literature, it is plausible that among single-parent households, attachment security may be impacted if parental care changes as a result of changes to family structure.

Adolescent Development

Adolescence is a time for exploration, autonomy seeking, individual and group identity formation, peer group formation, and when many young people test limits set by society at large. It is also a stage of major transition in the course of human development and is a period of physical, cognitive, emotional, behavioral, biological, social, and psychological change; from developmental and ecological perspectives, it follows that changes in any one of the aforementioned areas impacts change on other areas. Individual changes also occurs in the context of the adolescent's larger ecology and likely impact the adolescent's relationships with family members, peers, and the community at large.

If, during their search for autonomy, adolescents cannot concurrently maintain healthy familial relationships and attachments, there is an increased likelihood for engaging in delinquent and problematic behaviors. At the same time, parents may continue to abide by pre-existing rules and structures while adolescents seek higher levels of independence and autonomy (Baumrind, 1991) and as a result, conflict may ensue. According to Steinberg (2001), conflict may be a necessary part of gaining independence from while simultaneously working to stay connected with care-givers. Adolescents who come from families in which conflict runs high tend to be more deviant and delinquent (Henggeler, 1989) and engage in "other problematic behaviors" (Allen, Aber, & Leadbetter, 1990; Buist et al, 2004). Allen, et al 1990; Barrera, Chassin, & Rogosch, 1993) defined problematic behaviors as those that

"may both create immediate difficulties for the adolescent and leave him or her at high risk for future problems in social adaptation."

Alternately, research indicates that positive parent-child interactions, or lower levels of conflict, are related to higher grade point averages and lower externalizing behaviors (O'Connor, Hetherington, & Clingempeel, 1997) and according to Kim and Brody (2005), in their study of single-mother headed African-American families, high levels of parental support, monitoring, and involvement, along with low levels of arguing, were positively linked to their young adolescent's ability to regulate their own behaviors.

Parenting

Parenting Styles and Practices

In her work with preschool children and their parents, Baumrind (1991) noticed that parenting style influenced children's social competence. From this work, she developed three parenting style classifications: authoritarian, authoritative, and permissive of which the permissive parenting style was later split into separate classifications, permissive-indulgent and permissive-indifferent (or, neglectful) (Baumrind, 1978; Maccoby and Martin, 1983). To define, authoritarian parents "are obedience oriented and status oriented, and expect their orders to be obeyed without explanation" (Baumrind, 1991) and they are not responsive to the needs of their children. Adolescents living with authoritarian parents are less well adjusted than adolescents living with authoritative parents (Steinberg, 1994). In contrast, permissive parents "are more responsive than they are demanding. They are nontraditional and lenient, do not require mature behavior, allow considerable self-regulation, and avoid confrontation" (Baumrind, 1991, p.62)

Authoritative parents on the other hand, strike what is considered to be the more optimal balance between being both demanding and responsive. Authoritative parents "monitor and impart clear standards for their children's conduct. They are assertive, but not intrusive and restrictive. Their disciplinary methods are supportive, rather than punitive. They want their children to be assertive as well as socially responsible, and self-regulated as well as cooperative" (Baumrind, 1991, p. 62).

As mentioned in chapter one, authoritative parenting is the parenting style associated with high levels of warmth and monitoring which are predictive of higher self-competence and self-esteem, higher social competence, academic success, and lower levels of internalizing and externalizing behaviors (including illicit substance use) (Coley, 1998; Baumrind, 1991a, 1991b; Dornbush et al., 1987; Marsiglio et al., 2000). Additionally, because parenting style is "highly" influential to middle adolescent behavioral adjustment (Steinberg, 1991), Slicker (1998) investigated whether or not parenting style was as influential in late adolescence; she found that parenting style was significantly related to older adolescent positive behavioral adjustment when the adolescents rated parenting style as authoritative versus authoritarian, indulgent, or neglectful. Slicker's (1998) results also showed that parenting style significantly mediates the effects of gender, SES, and family structure; all relevant to the present study. Overall, authoritative parenting has been found to

support adaptive psychological, academic, and behavioral adjustment among adolescents (Steinberg et al., 1995).

The Impact of Parental Involvement on Adolescent Behavior

In addition to the previously described parenting styles typically associated with child and adolescent outcomes, there are three types of parental involvement consistently shown to predict positive adolescent developmental outcomes such as academic success, lower levels of internalizing and externalizing problems, and positive social behavior when optimally practiced. Specifically, the literature supports that parental communication, warmth, and monitoring contribute to positive health and mental health outcomes for developing children and adolescents.

Parental Communication

In the present study, parental communication is described as a measure of "the frequency and nature of parent-child communication between parent and child about school, future plans, friends, and closeness with family members and other adults" (PSID). Generally, it is agreed that open communication between family members improves family functioning and poor communication results in maladaptive adolescent behavioral outcomes including serious delinquency problems (Clark and Shields,1997).

Positive outcomes of open communication include improved parent-child relationships and reduced risk of developing internalizing problems such as depression and anxiety (Barnes & Olson, 1985) or externalizing problems such as high risk sexual behaviors (Kotchick, Dorsey, Miller, and Forehand, 1999).

Specifically, in their analysis of 339 high school students from predominantly twoparent household in the mid-western part of the United States, Clark and Shields (1997) found that having open communication with either parent was significantly less associated with delinquency. Alternately, they found that if problematic communication exists between adolescents and their parents, then there is "a significant tendency toward engaging in more serious forms of delinquency". In regard to internalizing behaviors, when analyzing data from 752 Bahamian youth and their parents Yu et al (2006) found that depressed youth were more likely to describe their communication with parents as highly impaired and less likely to describe it as either open or positive. Additionally, these youth were more likely to engage in risk behaviors.

Parental Warmth

Parental support, also often discussed as parental warmth, is related to family cohesion and connectedness as well as to family communication. Parental warmth is "positively related to adolescent academic competence and negatively related to teen pregnancy and associations with deviant peers" (Scaramella et al., 1998). Additionally, in their review Marsiglio et al. (2000) include evidence from Zimmerman, Salem, and Maton's (1995) study which found that among African-American urban adolescent boys, the amount of time spent and the amount of emotional support received from fathers were associated with lower levels of depression and delinquency, and higher self-esteem and life satisfaction. Alternately, perceived lack of warmth, emotionally unavailable parenting, increases the likelihood

of children developing internalizing and externalizing behaviors and "insufficient parental support can foster feelings of alienation, expressions of hostility and aggression, diminished self-esteem, and antisocial and risk behaviors" (Young, Miller, Norton, & Hill, 1995; Childtrends, 2002; Davies & Cummings, 1998).

Parental Monitoring

In the present study, parental monitoring (or supervision) is thought of as "a set of correlated parenting behaviors involving attention to and tracking of the child's whereabouts, activities, and adaptations" (Stattin & Kerr, 2000) with the specific emphasis on the parent's knowledge and awareness of the child's activities as well as active parental monitoring of those activities. When combined with parental support, active parental monitoring, as described above, is positively related to higher selfesteem and academic success (Parker & Benson, 2004; Mounts, 2001) and fewer internalizing and externalizing problems.

As early as 1958 (Nye, 1958 – not available, in Demuth & Brown, 2004), there was evidence to support that "children who experience low levels of parental control and supervision are at greater risk of delinquent behaviors". Additionally, Freeman and Newland (2002), in their study examining whether adolescents in newly formed single-parent families experienced less parental control and responsiveness than adolescents in stable, non-divorced and mother-custody family systems, found that single-parent families as compared to two-parent families often provide less supervision and less parental support. Moreover, among children in single and stepparent families, lack of supervision is associated with poor school performance (McLanahan, 1997).

Summary of Parental Involvement Variables

In summary, while parental communication, warmth, and monitoring have been found to be protective against the development of maladaptive behaviors during adolescence, the absence of any one of them has been shown to have equally deleterious effects.

Paternal Involvement with and Parenting of their Children

Doherty, Kouneski, and Erickson (1998) outlined an ecological framework from which to conceptualize father-child connections and the "welfare of fathers, mothers, and children as intertwined and interdependent". They suggested that individual, interpersonal, and social factors impact the context in which responsible fathering can occur and concluded that for both nonresident and resident biological fathers, as compared to mothers, fathering is "uniquely sensitive to contextual influences." Contextual influences they identified included: father's role identification, skills, and commitment to fathering; father's own experience in his own family of origin; father's psychological wellbeing; father's employment; father's economic situation; institutional supports; and mother's expectations and behaviors.

As Culp et al. (2000) noted, the research on the influence of parenting on children's development has primarily focused on the role of the mother, with little attention to the role of the father. However, there is a small but growing body of research investigating the impact of fathering on child and adolescent development.

Understanding the relationship between paternal involvement and adolescent internalizing and externalizing behaviors is critical, as paternal involvement may have a protective effect against psychological maladjustment among adolescents from nonintact families (Flouri & Buchanan, 2003). Of the existing literature, there is data to support that the influence of paternal emotional support, caring, supervision, and discipline results in more positive child outcomes (Amato, 1998; Amato, 1994; Williams & Kelly, 2005). Specifically, adolescents living with resident fathers benefit from the amount of time spent with their fathers and the amount of emotional support provided by fathers. Further, father involvement in their children's school activities is associated with decreased maladaptive behaviors such as drug use and delinquency (Zimmerman, Salem, & Notaro, 2000).

Additionally, in the review Scholarship on Fatherhood in the 1990s and Beyond (Marsiglio et al., 2000), it was reported that among fathers in two-parent families, most paternal involvement associated with positive child outcomes falls under the category of authoritative parenting. Outcomes reported included academic success, lower levels of internalizing and externalizing problems, and positive social behavior. In Coley's (2001) review of the literature on low-income, unmarried, and minority fathers, she summarized that aspects of father-daughter relationships related to adolescent "emotional health" (internalizing behaviors) and "behavioral problems" (externalizing) included emotional closeness, nurturance, activities, and parenting style. In their review on the relationships between fathers and adolescents, Hosley and Montemayor (1997) found that "research on communication, involvement, and closeness in father-adolescent relationships shows that while adolescents report feeling closer to their mothers, and communication with fathers is less emotional, intimate, and open, fathers are perceived as more enabling and accepting." This is consistent with work by Williams and Kelly (2005), who found that "fathers are less involved in parenting their adolescent children than are mothers," and that adolescents who lived with their fathers reported feeling more secure than those not living with fathers, though the highest levels of secure adolescent attachment was to mothers.

While much of the literature about fathering has focused on father absence and nonresident fathers, in response to the increase in single-father family systems researchers have begun to examine these structures with many studies in the literature occurring between 2000 and the present (Demuth and Brown, 2004; Hilton, Desrochers, and Devall, 2001; Jablonska and Lindberg, 2007; Marsiglio et al., 2000; Coley, 2007). Although the body of research is growing, there remains much to learn about the influence of single-fathers as primary care-givers on the social and emotional development of their children as little is known about their relationships with the children and adolescents in their care (Eggebeen, Snyder, & Manning, 1996; Demuth & Brown, 2004).

In regard to custodial single-fathers specifically, the overall age and economic stability of single-fathers has decreased, never married single-fathers are more likely than divorced single-fathers to have lower educational attainment and unsteady employment, custodial fathers are more likely to be White, financially secure, to have

achieved higher levels of education, and they are more racially and educationally representative of the general population than single-mothers (Eggebeen, Snyder, & Manning, 1996; Meyer & Garasky, 1993). Additionally, according to 2009 U.S. Census Bureau information: 57.8% are divorced or separated, 20.9% have never married, 20% are currently married (In most cases, these numbers represent men who have remarried), fewer than 1% were widowed, 90% of custodial single fathers are gainfully employed of which 71.7% work full time, year round, and 18.4% work parttime or part-year, and, 12.9% of custodial single fathers and their children live in poverty.

From Grief's (1995) review, specific areas of difficulty for single-fathers include balancing work and child care, re-establishing a social life, and interacting with the court system. Further, Greif and DeMaris (1990), found that fathers who were uncomfortable in their role as custodial parent were different from men who had assimilated to the role in that they: had no religious preference, had been the sole caregiver for a shorter amount of time, were less satisfied with their lives, were of lower income, rated themselves lower on a scale of parenting ability, reported deteriorating relationships with their children, and were dissatisfied with the challenges resulting from disagreeable visitation decisions. Finally, in Cooksey and Fondell's (1996) investigation of fathers' time spent with children, family structure, and children's academic achievement, they found that single-fathers reported more "shared activities" with their children than did stepfathers or fathers in married twoparent family systems.

The Influence of Biological Sex

As mentioned in Chapter 1, when the family unit consists of only two people, an adult and an adolescent of different sexes, interactions between them may be even more complex. The question as to whether or not men and women play unique roles in shaping their children's well-being is not new and there are two opposing arguments as to whether or not biological sex/gender differences between parents and adolescents, especially those residing in single-parent family systems, impact child and adolescent developmental outcomes.

In support of the same-sex notion, Santrock and Warshak (1979) studied children in single-father, single-mother, and two-parent families and found that children living with the same-sex parent were better adjusted. Specifically, they found that boys in single-father households displayed higher levels of social competence than boys in two-parent families, and girls in single-father families were less socially competent than girls from two-parent families. Additionally, Camara and Resnick (1989) found that mother-custody boys and father-custody girls showed the highest levels of aggression and behavior problems and the lowest self-esteem. In a family system where only a father is present, there may be many issues that adolescent girls will not (or feel that they cannot) share with their fathers. Instead, their concerns may often go unresolved resulting in problematic internalizing and externalizing behaviors, higher levels of aggression, and low self-esteem (Camara & Resnick, 1989).

Research by Hetherington et al. (1989) indicated that boys in single-mother families and girls in remarried families evidenced significant behavior and adjustment problems. Further, while the literature is inconclusive, there is evidence that fathers may be more involved with, and have a greater influence on, sons than daughters (Harris & Morgan, 1991) and that father involvement may depend on the child's biological sex and the type of activity in which they're engaged (Cooksey & Craig, 1998).

Alternately, there is research that contradicts the notion that children fare better in same-sex parent-child households. Downey & Powell (1993) investigated whether eighth graders from single-father and single-mother homes fared better when living with the same-sex parent. Of the 3,892 households studied, ninety percent were single-mother households and of the 35 dependent variables studied, they did not find any case in which both boys and girls were at an advantage when living with their same-sex parent. The only significant result they found was that girls living in singlemother custody homes had a lower likelihood of smoking. The authors noted that their lack of any other findings was contradictory to previously existing literature and they "cautioned against drawing conclusions from their research", as the sample was limited to a group of eighth graders, until more research has been conducted in this area. Later research by the same authors (Powell & Downey, 1997) found little evidence that children do better when residing with the same-sex parent.

Also in contrast to the same-sex notion of child-rearing is the report by Welsh, Powers, and Jacobson (1991) that there exists more "mutual connectedness"

between mothers and their sons than between mothers and their daughters in singlemother families. Further, Walker and Hennig check (1997) found that mother/daughter relationships in single-parent families were "characterized as entailing a high level of negative interactions" and they did not find any support for the "commonly held notion that children in single-parent families fare better in the custody of same-sex parents". Finally, in stark contrast to the same-sex notion, in Russell & Saebel's (1997) review of 301 studies focused on the contribution of gender to parent-child dyadic relationships, they found that parent-child relationships may be less affected by gender than was previously believed.

Because the focus has primarily been on comparing single-mothers to twoparent families, researchers have lacked generalizable data about both single-mother and single-father families and there is no clear evidence for or against the notion that children function better in the custody of same-sex single-parents (Downey et al., 1998). Instead, most of the existing research suggests the need for more research on the influence of parental biological sex and gender-role socialization on child outcomes, especially when comparing single-mother to single-father family systems (Hosley & Montemayor, 1997).

CHAPTER 3

METHODS

This chapter includes descriptions of the database, sample, study design, measures, and procedures used in this study.

The Panel Study of Income Dynamics Database

The research questions, summarized in earlier chapters, were investigated using the Panel Study of Income Dynamics (PSID) database produced by a joint effort of the National Science Foundation, the National Institute on Aging, and the National Institutes of Child Health and Development in 1968. The PSID database contains economic, demographic, sociological, and psychological information about over 65,000 individuals and their families residing in the United States. The PSID Child Development Supplement (CDS-I and CDS-II) is one aspect of the PSID that "gathers a broad array of measures on developmental outcomes across domains of health, psychological well-being, social relationships, cognitive development, achievement, motivation, and education as well as a number of measures of family, neighborhood, and school environments in which the sample members live and learn" (as found on 10/01/06 at: http://psidonline.isr.umich.edu/data/).

The following information about the CDS was taken from The Panel Study of Income Dynamics Child Development Supplement User Guide for CDS-II: In 1997, the PSID created the CDS-I to supplement its main data with new data on children aged 0-12 and their parents. The CDS-I included data from successfully completed

interviews with 2,394 families and provided information on 3,563 children. The focus of the interviews was on developmental issues relevant to infancy through "middle childhood" with an emphasis on feedback from caregivers and teachers.

In 2002-2003, the PSID created the CDS-II by re-interviewing 2,019 families previously interviewed for the CDS-I. From those families, data were obtained on 2,907 children and adolescents between the ages of five and eighteen. Since many of the youth interviewed were adolescents at the time of the CDS-II, "substantially more youth-reported measures, new adolescent-appropriate scales...and more psychological and educational scales" were presented (CDS-II User Guide, P. 3).

Participants

The final sample, as taken from the CDS-II, was comprised of 60 dyads of adolescents and their parents. The 2002 Child Development Supplement (CDS-II) of the PSID database contained 20 single-father adolescent dyads who met inclusionary criteria. Therefore, 20 parent-adolescent dyads were randomly selected from the other two groups. The sample was constructed such that there were three groups of 20 parent/adolescent dyads from: 1) single-father only families, 2) single-mother only families, and 3) heterosexual, married, biological two-parent families.

Respondents were adolescent boys and girls ages 13-17 in grades 8-12 (n=60, mean age = 14.7, mean grade = 9.7). The mean age of the parents was 43 years old. Single-mothers and single-fathers were defined as divorced, never married, or widowed head of household and two-parent families self-identified as two-parent households with either a male or female head of household.

Adolescents were excluded who were outside of the established age range (13-17) and grade range (8-12). Adolescents were also excluded if they were being raised by single parents who listed their marital status as separated. Finally, individuals who did not identify as either male or female and those who received care from additional adults within the home were excluded.

Study Design

This is an exploratory, pilot study conducted using the Panel Study of Income Dynamics (PSID) longitudinal database which contains economic, demographic, behavioral, sociological, and psychological data on over 65,000 families since 1968. The purpose of this research is to explore the relationship between parental involvement and adolescent internalizing and externalizing behavior, comparing adolescents of both sexes in two-parent and single-parent families. Because there is little existing research on the role of parenting among single-father/adolescent dyads, the emphasis is to investigate significant differences between single-father/adolescent dyads and other family structures.

Measures

Variables

Independent and dependant variables for the study were both derived from and taken directly from the PSID CDS-II. For those variables that were derived, factor analysis was used for data reduction purposes (Hair et al, 1998, pg. 95) and to create an entirely new set of variables as the PSID had no exact match to provide the variables required. Specifically, principal components analysis (PCA) was used to

reduce the information in many measured variables into a smaller set of components (Hair et al, 1998). Further, scree test criterion contributed to decisions about factors as well as factor loadings. Items generally are considered acceptable for inclusion in a factor if the loadings were between .25 and .75 (Hair et al, 1998).

The independent variables in this study were biological sex, family structure, and parental involvement. The dependent variables were adolescent internalizing and externalizing behaviors. All variables were studied as reported by the primary caregiver parent(s) and adolescents. A list of all independent and dependent variables and their descriptions can be found in Appendices E and F, respectively.

Independent Variables (Appendix E):

Biological Sex: The independent variable biological "sex" was based on each individuals (parent(s) and adolescents) response to PSID variable ER32000 which asked them to identify themselves as either male, female, or "NA" (coded in the PSID database as: "0: Female, 1: Male, 9:NA"). Parents and adolescents were excluded from this study if they did not identify their sex as male or female.

Family Structure: Adult participants were asked to identify their head of family marital status and which biological parents live in the home with the child (PSID variables: ER17024: HEAD MARITAL STATUS: A3. "Are you (HEAD) married, widowed, divorced, separated, or have you never been married?", and, BIOPR01: BIO PARENTS LIVE WITH CHILD 01: Whether biological parents live with child in the [family unit]). To be included in this study, the adult participants must have identified themselves as: (1) either the a) primary head divorced, never

married or widowed single-father, b) primary head divorced, never married or widowed single-mother, or c) primary-head in a married mother-father household, and (2) if they identified as single-parents, they must have reported that they were not married or were divorced and lived independent of other care-givers. The 'Parent Status' (PARSTAT) variable was then created in SPSS and coded as: 0 – biological mother only, 1 – biological father only, and, 2 – both parents (biological mother and biological father).

Parental Involvement: Parental involvement was based on parent and adolescent responses to questions about 1) parental monitoring, 2) parental communication, and 3) parental warmth:

1) Parental Monitoring: Parental monitoring describes "parenting behaviors involving attention to and tracking of the adolescent's whereabouts, activities, and adaptations" (Stattin & Kerr, 2000). The specific emphasis is on the "parent's knowledge and awareness of the adolescent's activities as well as active monitoring of those activities" (PSID CDS-II Codebook, P. 29).

Correlations and exploratory factor analysis were performed on the parent monitoring items (Appendix G). The inter-item correlations (Appendix G) were all between the ranges of .13 and .82 with most over .34. All seven items were used to measure the construct parental monitoring from the parent's perspective. Results of the exploratory factor analysis using principal component analysis showed that all seven individual items grouped into this factor well, with each item having a statistically significant proportion of variance in common with other items (Table

3.1). All seven items loaded on one factor creating a parent monitoring scale with Cronbach's alpha = .75 and the Kaiser-Meyer-Olkin (KMO) statistic equaled .79. The Kaiser-Meyer-Olkin (KMO) statistic is used to predict if "data are likely to factor well, based on correlation and partial correlation" and can be used to "assess which variables to drop from the model because they are too multicollinear" (http://faculty.chass.ncsu.edu/garson/PA765/factor.htm, see also: Hutcheson & Sofroniou, 1999). Each individual variable had its own KMO statistic with the sum of the individual statistics equaling the overall KMO statistic. The overall KMO statistics varied from 0 to 1.0 and were .60 or higher to proceed with factor analysis. If not, the indicator variables with the lowest individual KMO statistic values were dropped until the overall KMO statistic rose to above .60 (Hutcheson & Sofroniou, 1999, http://faculty.chass.ncsu.edu/garson/PA765/factor/htm).

Table 3.1 Factor Loadings for Parental Monitoring Parent Report: MONITPAR (n=2907)

Parental Monitoring Parent Report: Individual Items (MONITPAR)	Factor Loading	
Do you have rules about which children CHILD can spend time with?	.58	
Do you have rules about how CHILD spends time after (school/daycare)?	.52	
Do you have rules about when CHILD does (his/her) homework?	.59	
Do you have rules about CHILD's dating?	.79	
Do you have rules about how late CHILD can stay out on weeknights?	.84	
Do you have rules about how late CHILD can stay out on weekends?	.85	
Do you have rules about CHILD's use of the car?	.57	
Cronbach's alpha	.75	
Unweighted n	290 7	

Measures of the primary care-giver's knowledge of the adolescent's activities, from the adolescent's perspective, were drawn from the CDS-II Child Interview individual items L23-L28 (Appendix H). Correlations and exploratory factor analysis were performed on the adolescent monitoring items. Inter-item correlations provided evidence that all six individual items were relatively highly correlated with each other (Appendix G), with correlations ranging from .65 to .93. All were included in the parental monitoring from the adolescent's perspective measure. Since there were only

five items in the factor, all were included despite some relatively high correlations. Results of the exploratory factor analysis using principal components showed that all six items loaded on one factor with loadings in the .84 to .94 range. Factor loadings for this variable are provided in Table 3.2; based on the statistically significant loadings (p < .01) all six items were loaded to construct an overall measure of adolescent reported parental monitoring yielding a Cronbach's alpha = .96 and KMO = .88.

Table 3.2 Factor Loadings for Parental Monitoring Adolescent Report (n=2182)

Parental Monitoring from the Adolescent's Perspective			
Do your parents know what you do during your free time?	.94		
Do your parents know what friends you hang out with during your free time?			
Do your parents know what you spend your money on?	.94		
Do you keep secrets from your parents?			
Do you hide things from your parents?			
If you are out at night, do you tell your parents what you did that evening?	.91		
Cronbach's alpha	.96		
Unweighted n	2182		

2) Parental Communication: The communication between parents and adolescents, as reported by the primary care-giver parent was investigated using CDS-II individual items B26A-C (Appendix H). Correlations and exploratory factor analysis were performed on the parent communication items. Inter-item correlations suggested that all three individual items were highly correlated (Appendix G), with correlations ranging from .62 to .80, and all measuring the construct parental communication from the parent's perspective. Results of the exploratory factor analysis using principal component analysis showed that all three individual items (B26A-C) grouped into a single factor. Factor loadings for this variable are provided in (Table 3.3). All three items were loaded on the construct of parent reported parental communication. Cronbach's alpha = .87 and KMO = .699.

Table 3.3 Factor Loadings for Parental Communication from the Parent's Perspective (n=2173)

Parental Communication from the Parent's Perspective	Factor Loading
Discuss interests with child?	.86
Discuss studies with child?	.89
Discuss school with child?	.93
Cronbach's alpha	.87
Unweighted n	2173

Because there is no exact corresponding measure for adolescent reported communication with parents, items H4 A-C (Appendix H) were used to measure adolescent reported communication with their mothers, and items H4 D-F (Appendix

H) were used to measure adolescent reported communication with their fathers. Correlations and exploratory factor analysis were performed on the aforementioned set of items to verify that the items mapped together. Inter-item correlations provided evidence that all three individual items were highly correlated (Appendix G), with correlations ranging from .62 to .80, and all measuring the construct parental communication with mothers from the adolescent's perspective.

Results of the exploratory factor analysis using principal component analysis showed that all three individual items grouped into this factor quite well with each item having a statistically significant (>.40) proportion of variance in common with other items. Factor loadings for this variable are provided in Table 3.4; based on factor loadings approximately .62 to .79, all three items were included to construct an overall measure of adolescent reported communication. Cronbach's alpha = .79 and KMO = .69.

Table 3.4
Factor Loadings for Parental Communication with Mothers from the Adolescent's Perspective (n=2182)

Parental Communication with Mothers from the Adolescent's Perspective	Factor Loading
Mother: talk about friends?	.67
Mother: talk about future?	.62
Mother: talk about problems?	.64
Cronbach's alpha	.79
Unweighted <i>n</i>	2182

To measure adolescent reported communication with their fathers, PSID items H4D-F (Appendix H) were used. Correlations and exploratory factor analysis were performed on the aforementioned set of items to verify that the items mapped together. Inter-item correlations provided evidence that all three individual items were correlated with each other (Appendix G), with correlations ranging from .51 to .60. All measured the construct parental communication from the adolescent's perspective. Results of the exploratory factor analysis using principal component analysis suggested that all items loaded on the construct parent reported parental communication (Table 3.5). Cronbach's alpha = .90 and KMO = .75.

Table 3.5
Factor Loadings for Parental Communication with Fathers from the Adolescent's Perspective (n=2182)

Parental Communication with Fathers from the Adolescent's Perspective	Factor Loading
Discuss interests with child?	.80
Discuss studies with child?	.80
Discuss school with child?	.80
Cronbach's alpha	.90
Unweighted n	2182

3) Parental Warmth: The parental warmth variable measures the warmth of the relationship between the adolescent and the parent. From the parent's perspective, individual items E13A-E and E13G (Appendix H) were used to measure parental warmth. Correlations and exploratory factor analysis were performed on the set of items to verify that the items mapped together. Although inter-item correlations (Appendix G) were not all between the ranges of .25 and 1.00, they ranged from .28 to .53 with most over .36 and all six items were used to measure the construct parental warmth from the parent's perspective. Results of the exploratory factor analysis using principal component analysis showed that all items grouped into this factor quite well. Factor loadings for this variable are provided in Table 3.6; based on results ranging from .62 to .8, all six items were loaded to construct an overall measure of parent reported parental warmth. Cronbach's alpha = .79 and KMO = .86.

Table 3.6
Factor Loadings for Parental Warmth from the Parent's Perspective (WARMPAR) (n=708)

Parental Warmth from the Parent's Perspective	Factor Loading
Said I love you	.64
Participate in activities	.69
Talk about interests	.80
Spoken appreciatively	.76
Talk about relationships	.68
Talk about child's day	.62
Cronbach's alpha	.79
Unweighted n	708

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Because there is no exact corresponding measure for adolescent reported parental warmth, items L17C, L17E, L17F, L17H (Appendix H) were used to measure adolescent reported maternal warmth, and items L18C, L18E, L18F, L18H (Appendix H) were used to measure adolescent reported paternal warmth.

Correlations were computed and exploratory factor analyses were performed to verify that the items selected to create the variable adolescent reported maternal warmth mapped together. Inter-item correlations provided evidence that all four individual items were highly correlated with each other (Appendix G), with correlations ranging from .85 to .95, and all measuring the construct 'maternal warmth from the adolescent's perspective'. Results of the exploratory factor analysis using principal component analysis showed that all four individual items (L17C, E, F, H – Appendix H) grouped into this factor quite well. Factor loadings for this variable are provided in Table 3.7. All four items were loaded to construct an overall measure of parent reported parental communication. Cronbach's alpha = .97 and KMO = .87.

Table 3.7 Factor Loadings for Maternal Warmth from the Adolescent's Perspective (n=2182)

Maternal Warmth from the Adolescent's Perspective	Factor Loading
Mother: enjoys	.96
Mother: cheers	.97
Mother: care	.97
Mother: praises	.93
Cronbach's alpha	.97
Unweighted n	2182

Additional correlations and exploratory factor analyses were performed on the individual items used to create the adolescent reported paternal warmth variable to ensure that the items contributed to the structure of the construct. Inter-item correlations provided evidence that all items were highly correlated with each other (Appendix G), with correlations ranging from .88 to .95, and all measuring the construct paternal warmth from the adolescent's perspective. Results of the exploratory factor analysis using principal component analysis are provided in Table 3.8. All three items loaded on the same construct designated adolescent reported paternal warmth. Cronbach's alpha = .98 and KMO = .88.

Table 3.8 Factor Loadings for Paternal Warmth from the Adolescent's Perspective (n=2182)

Paternal Warmth from the Adolescent's Perspective	Factor Loading
Father: enjoys	.97
Father: cheers	.97
Father: care	.98
Father: praises	.94
Cronbach's alpha	.98
Unweighted n	2182

Dependent Variables (Appendix F):

The dependent variables in this study are defined as adolescent internalizing and externalizing behaviors:

Behavioral Problems Index: In the present study, adolescent internalizing and externalizing behaviors, from the parent's perspective, were measured using the PSID CDS-II Behavioral Problems Index (BPI). This measure has two subscales with items used to assess the incidence and severity of adolescent internalizing and externalizing behaviors. Confirmatory factor analyses conducted by the PSID on each subscale resulted in the Externalizing Behaviors Scale with 17 items (Unweighted n = 2,893), a Cronbach alpha of .86, and an Internalizing Scale having 14 items (Unweighted n = 2,880). The Total Index had 31 items (Unweighted n = 2,872) (PSID CDS-II User

Guide, P. 27, 28). Other reliability and validity for the BPI were not available from the PSID.

Children's Depression Inventory Short Form: In the present study, adolescent internalizing behaviors, from the adolescent's perspective, are measured using the CDS-II Children's Depression Inventory Short Form (CDI-S) for adolescent internalizing behaviors. The CDI-S is a "diagnostic instrument that quantifies depressive symptomatology of children 7 to 17 years of age" and is an "established measure, copyrighted by the Multi-Health Systems Incorporated and has been validated with normative populations of children 7-17 years of age" (CDS-II User Guide, P. 40). Reliability and validity data for the CDI-S were not available from the PSID.

Adolescent Reported Externalizing Behaviors: To measure adolescent externalizing behaviors, from the adolescent's perspective, the variable adolescent reported externalizing problems (ARE) was created combining PSID items Q23L11 A, C, D, E, G, H, I and J (Appendix I). Correlations among the items and exploratory factor analysis were performed on the items with inter-item correlations providing evidence that most items were correlated (.33 to .94) (Appendix G). Results of the exploratory factor analysis using principal component analysis showed that all eight individual items (Q2311L A, C, D, E, G, H, I, J – Appendix I) contributed to this factor with each item having a factor loading of at least .69. Factor loadings for this variable are provided in Table 3.9. All eight items contributed to the measure of

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adolescent reported adolescent externalizing problems with a Cronbach's alpha = .97 and KMO = .88.

Table 3.9
Factor Loadings for Adolescent Reported Externalizing Behaviors (n=2182)

Adolescent Reported Externalizing Behaviors: Individual Items (ARE)	Factor Loading
In the last six months, about how many times have you stayed out later than your parent(s) said you should?	.69
In the last six months, about how many times have you lied to your parent(s) about something important?	.70
In the last six months, about how many times have you taken something from a store without paying for it?	.89
In the last six months, about how many times have you damaged school property on purpose?	.88
In the last 6 months, about how many times have you skipped a day of school without permission?	.70
In the last 6 months, about how many times have you stayed out at night without permission?	.86
In the last 6 months, about how many times have you been stopped and questioned by the police?	.85
In the last 6 months, about how many times have you been arrested by the police?	.88
Cronbach's alpha	.97
Unweighted n	2182

Procedures

The items in the parental communication, monitoring, warmth, and adolescent externalizing behavior variables were analyzed using the item analysis features of the SPSS SCALE program to explore the usefulness of the items and their contribution to the variables. Each variable included met recommended criteria (Nunnally & Bernstein, 1994).

Multiple regression analyses were used to test the hypotheses related to Research Question 1, which examined whether, from both the parent and the adolescent perspective, higher levels of parental involvement (i.e. communication, warmth, or monitoring) are positively correlated with relative freedom from internalizing and externalizing behaviors among adolescents. Additionally, univariate analysis of variance tests were performed to investigate the hypotheses related to Research Questions 2 and 3. For Research Question 2, ANOVA, was used to test whether or not there were differences between parent and adolescent reported parental communication, warmth, or monitoring and if so, whether any differences varied by family structure or biological sex. Further analyses of variance were performed to explore whether or not one type of family structure was more likely than others to have fewer reported adolescent internalizing and externalizing problems, and whether or not any differences were more significant by adolescent biological sex.

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CHAPTER 4

RESULTS

This chapter presents the results of the analysis of the data. The chapter is organized by the research questions. Additional findings of the study are presented last. A cautionary note for this section is that all analyses are unweighted and should be taken as preliminary and investigative. Weights were not applied to permit generalization to the population represented by the complex sample because of the large number of cases that were deleted and the resulting distortion of the sample profile.

Research Question 1

Research Question 1 addressed whether higher levels of parental involvement (i.e. communication, warmth, or monitoring) are positively correlated with relative freedom from internalizing and externalizing behaviors among adolescents. Multiple regression analyses were used to examine effects of parental involvement, per both adolescent and parent report, on both adolescent-reported internalizing and externalizing problems, and, parent-reported adolescent internalizing and externalizing problems. Tables 4.2-4.9 summarize results from these regression analyses.

To investigate the first research question, a total of eight linear multiple regression analyses were conducted (Table 4.1). While the first multiple regression analysis assessed the impact of parent involvement, as reported by adolescents, on

adolescent-reported externalizing behaviors, the second multiple regression analysis modeled the impact of parent involvement, as reported by parents, on adolescentreported externalizing behaviors. The third multiple regression analysis addressed the impact of parent involvement, as reported by adolescents, on adolescent-reported internalizing behaviors and the fourth multiple regression analysis assessed the impact of parent-reported parent involvement on adolescent-reported internalizing behaviors. The fifth multiple regression analysis assessed the impact of adolescentreported parent involvement on parent-reported adolescent externalizing behaviors. The sixth multiple regression analysis assessed the impact of parent-reported parent involvement on parent-reported adolescent externalizing behaviors. The seventh multiple regression analysis assessed the impact of adolescent-reported parent involvement on parent-reported adolescent internalizing behaviors. The final multiple regression analysis, assessed the impact of parent-reported parent involvement on parent-reported adolescent internalizing behaviors.

Table 4.1

Analyses of Adolescent and Parent Reports of the Impact of Parental Involvement on Adolescent Externalizing and Internalizing Behaviors for Addressing Question 1

	Adolescent- reported Parental Involvement	Parent- reported Parental Involvement
Adolescent-reported Adolescent Externalizing Behaviors	Regression 1	Regression 2
Adolescent-reported Adolescent Internalizing Behaviors	Regression 3	Regression 4
Parent-reported Adolescent Externalizing Behaviors	Regression 5	Regression 6
Parent-reported Adolescent Internalizing Behaviors	Regression 7	Regression 8

Regression 1: Regression analysis for the impact of adolescent-reported parent communication, warmth, and monitoring on adolescent-reported externalizing behaviors.

Adolescent-reported parent communication, warmth, and monitoring were analyzed in relation to their influence on adolescent-reported externalizing behaviors (ARE). As shown in Table 4.2, the results of multiple regression analysis indicated that while adolescent-reported parent communication (p > .05) and biological sex (p > .05) did not significantly predict ARE, adolescent-reported parental warmth ($\beta = .388$) and monitoring ($\beta = .394$) predicted ARE at statistically significant levels (p < .05). $R^2 = .48$, suggesting that 48% of the variance in ARE is accounted for by adolescent-reported parent warmth and monitoring. Of the 48%, adolescent-reported

parental warmth (partial $r^2 = -.38$, $r^2 = .14$) and monitoring (partial $r^2 = .42$, $r^2 = .18$) combined explained 32% of the ARE variance, once the variance common to adolescent-reported parental communication and biological sex of individual were removed.

Table 4.2 Summary of Multiple Regression Analysis for the Impact of Adolescent-reported Warmth, Parent Communication, and Monitoring on Adolescent-reported Externalizing Behaviors (n = 50)

Variable	В	SE	β	t	p
Warmadolpar	-7.019	2.573	388	-2.728	.009*
Commadolpar	-1.251	1.413	115	886	.380
Monitadolpar	-2.859	.921	.394	3.104	.003*

^{*}p < .05

Regression 2: The impact of parent-reported parent communication, warmth, and monitoring on adolescent-reported externalizing behaviors.

Parent-reported parent communication, warmth, and monitoring were analyzed in relation to their influence on adolescent-reported externalizing behaviors (ARE) (Table 4.3). The results of the multiple regression analysis indicated that while biological sex (p > .05), parent-reported parental warmth (p > .05), and parentreported parental monitoring (p > .05) did not predict adolescent-reported adolescent externalizing behaviors (ARE) at a statistically significant level, parent-reported parental communication ($\beta = -.734$) predicted adolescent-reported externalizing behaviors (ARE) at statistically significant levels (p < .05). $R^2 = .41$, suggesting that 41% of the variance in ARE is accounted for by parent-reported parental communication. Of the 41%, parent-reported parental communication (partial $r^2 = -$.59, $r^2 = .34$) explained 34% of the ARE variance, once the variance common to parent-reported parental warmth, monitoring and biological sex of individual were removed.

Table 4.3 Summary of Multiple Regression Analysis for the Impact of Parent-reported Parent Communication, Warmth, and Monitoring on Adolescent-reported Externalizing Behaviors (n = 50)

Variable	В	SE	β	t	p
Warmadolpar	1.725	1.634	.162	1.056	.297
Commadolpar	-6.560	1.351	734	-4.855	<.001*
Monitadolpar	.154	.712	.025	.216	.830

^{*}p < .001

Regression 3: The impact of adolescent-reported parent communication, warmth, and monitoring on adolescent-reported internalizing behaviors.

Adolescent-reported parent communication, warmth, and monitoring were regressed on adolescent-reported internalizing behaviors (CDI). As shown in Table 4.4, the results of the multiple regression analysis indicated that while adolescent-reported communication (p > .05) and biological sex (p > .05) did not predict CDI at a statistically significant level, adolescent-reported parental warmth ($\beta = -.702$) and monitoring ($\beta = -.425$) did predict CDI at statistically significant levels (p < .05). $R^2 = .35$, suggesting that 35% of the variance in CDI was accounted for by adolescent-reported warmth and adolescent-reported monitoring. Of the 35%, adolescent-reported parental warmth (r = -.55, $r^2 = .30$) and monitoring (r = -.41, $r^2 = .17$) combined explained 47% of the CDI variance, once the variance common to adolescent-reported parental communication and biological sex of individual were removed.

Table 4.4 Summary of Multiple Regression Analysis for the Impact of Adolescent-Reported Parent Communication, Warmth, and Monitoring on Adolescent-Reported Internalizing Behaviors (n = 50)

Variable	В	SE	β	t	p
Warmadolpar	977	.222	702	-4.402	<.001**
Commadolpar	.184	.122	.220	1.513	.137
Monitadolpar	237	.079	425	-2.986	.005*

^{*}*p* < .05, ** *p* < .001

Regression 4: Regression analysis for the impact of parent communication, warmth, and monitoring as related by parents, on adolescent-reported internalizing behaviors.

The variable adolescent-reported internalizing behaviors (CDI) was not predicted by parent communication, warmth, or monitoring, as reported by parents. As shown in Table 4.5, the results of the multiple regression analysis indicated that none of the independent variables predicted CDI at a statistically significant level (p < .05).

Table 4.5 Summary of Multiple Regression Analysis for the Impact of Parent-reported Parent Warmth, Communication, and Monitoring on Adolescent-reported Internalizing Behaviors (n = 50)

Variable	В	SE	β	t	p
Warmadolpar	095	.156	115	604	.549
Commadolpar	093	.129	135	719	.476
Monitadolpar	064	.068	135	941	.352

Regression 5: Regression analysis for the impact of adolescent-reported parent communication, warmth, and monitoring on parent-reported adolescent externalizing behaviors.

Adolescent-reported parent communication, warmth, and monitoring were analyzed in relation to their influence on parent-reported adolescent externalizing behaviors. As shown in Table 4.6, the results of the multiple regression analysis indicated that none of the independent variables predicted the dependent variable at statistically significant levels (p < .05).

Table 4.6 Summary of Multiple Regression Analysis for the Impact of Adolescent-reported Parent Warmth, Communication, and Monitoring on Parent-reported Adolescent Externalizing Behaviors (n = 50)

Variable	В	SE	β	t	p
Warmadolpar	.296	1.080	.053	.274	.785
Commadolpar	.287	.593	.085	.484	.631
Monitadolpar	.276	.386	.123	.715	.478

Regression 6: Regression analysis for the impact of parent-reported parent communication, warmth, and monitoring on parent-reported adolescent externalizing behaviors.

The results of the multiple regression analysis indicated that while biological sex (p > .05), parent-reported parental communication (p > .05), and parent-reported parental warmth (p > .05) did not predict parent-reported adolescent externalizing behaviors (BPI-E) at a statistically significant level, parent-reported parental

monitoring ($\beta = .273$) did predict BPI-E at statistically significant levels (p < .05) (Table 4.7). Further, $R^2 = .11$, suggesting that 11% of the variance in BPI-E is accounted for by parent-reported parental monitoring. Of the 11%, parent-reported parental monitoring (partial $r^2 = .28$, $r^2 = .08$) explained 8% of the BPI-E variance once the variance common to parent-reported parental communication, warmth, and biological sex of individual were removed.

Table 4.7 Summary of Multiple Regression Analysis for the Impact of Parent-reported Parent Communication, and Monitoring on Parent-reported Adolescent Externalizing Behaviors (n = 60)

Variable	В	SE	β	t	p
Warmadolpar	.225	.478	.072	.471	.639
Commadolpar	257	.352	110	731	.468
Monitadolpar	.465	.219	.273	2.119	.039*

^{*}p < .05

Regression 7: Regression analysis for the impact of adolescent-reported parent communication, warmth, and monitoring on parent-reported adolescent internalizing behaviors.

Adolescent-reported parent communication, warmth, and monitoring were analyzed in relation to their influence on parent-reported adolescent internalizing behaviors (BPI-I). The results of the multiple regression analysis (Table 4.8) indicated that while adolescent-reported monitoring (p > .05) and biological sex (p > .05) did not predict BPI-I at a statistically significant level, adolescent-reported warmth ($\beta = -.515$) and communication ($\beta = .375$) predicted BPI-I at statistically significant levels (p < .05). $R^2 = .24$, suggesting that 24% of the variance in BPI-I was accounted for by adolescent-reported parental warmth and adolescent-reported parental communication. Of the 24%, adolescent-reported parent warmth (r = -.41, $r^2 = 17$) and communication (r = .34, $r^2 = 12$) combined accounted for 29% of the BPI-I variance once the variance common to adolescent-reported parental monitoring and biological sex of individual were removed.

Table 4.8 Summary of Multiple Regression Analysis for the Impact of Adolescent-reported Parent Warmth, Communication, and Monitoring on Parent-reported Adolescent Internalizing Behaviors (n = 50)

Variable	В	SE	β	t	p
Warmadolpar	470	.157	515	-2.997	.004*
Commadolpar	.206	.086	.375	2.392	.021*
Monitadolpar	.000	.056	002	012	.990

^{*}p < .05

Regression 8: Regression analysis for the impact of parent-reported parent communication, warmth, and monitoring on parent-reported adolescent internalizing behaviors.

The results of the multiple regression analysis indicated that none of the independent variables, biological sex and parent-reported parent communication, warmth, or monitoring, predicted parent-reported adolescent internalizing behaviors at statistically significant levels (p < .05) (Table 4.9).

Table 4.9 Summary of Multiple Regression Analysis for the Impact of Parent-reported Parent Communication, and Monitoring on Parent-reported Adolescent *Internalizing Behaviors* (n = 60)

Variable	В	SE	β	T	p
Warmadolpar	.148	.090	.250	1.643	.106
Commadolpar	127	.066	288	-1.915	.061
Monitadolpar	037	.041	116	903	.370

^{*} p < .05

Additional Explorations of Research Question 1

Because results from the multiple regression analyses identified significant predictors, additional follow-up analyses were conducted to provide additional information about the relationships among the variables. Pearson product-moment correlations were computed to determine whether there were significant correlations between: (1) parent involvement variables and adolescent-reported adolescent internalizing and externalizing behaviors, and (2) parent involvement variables and parent-reported adolescent internalizing and externalizing behaviors (Table 4.10).

Table 4.10 Correlations among parent and adolescent-reported parent involvement variables (warmth, communication, and monitoring) and (1) adolescent-reported adolescent internalizing and externalizing behaviors, and, (2) parent-reported adolescent internalizing and externalizing behaviors

Parent and Adolescent- reported Parent Involvement Variables	Adolescent- reported Internalizing Behaviors (N = 50)	Parent- reported Adolescent Internalizing Behaviors (N = 60)	Adolescent- reported Externalizing Behaviors (N = 50)	Parent- reported Adolescent Externalizing Behaviors (N = 60)
Warmpar	20	.13	32	01
Commpar	19	14	63*	09
Monitpar	14	12	.08	.27**
Adolwarmpar	43*	31	60*	.06
Adolcommpar	14	.13	33	.12
Adolmonitpar	17	.24	.52*	.13

Note. Warmpar = parent-reported parental warmth; Commpar – parent-reported *parental communication; Monitpar = parent-reported parental monitoring; Adolwarmpar* = *adolescent-reported parental warmth; Adolcommpar* = *adolescent*reported parental communication; Adolmonitpar = adolescent-reported parental monitoring.

^{*} p < .05, ** p = .05

The correlations indicated a significant relationship between adolescentreported parental warmth and adolescent-reported internalizing behaviors (r = -.43, p< .05) (Table 4.10). Additionally, several significant relationships were identified among parent and adolescent-reported parental involvement variables and adolescentreported externalizing behaviors. Specifically, there were significant relationships between adolescent-reported parental monitoring (r = .52, p < .05), adolescentreported parental warmth (r = -.60, p < .05), and parent-reported parental communication (r = -.63, p < .05). Further, there was a statistically significant relationship between parent-reported monitoring and parent-reported ARE (r = .27, p)= .05). As shown in Table 4.10, no significant relationships were identified among parent or adolescent-reported parent involvement variables and parent-reported adolescent internalizing behaviors.

Summary for Research Question 1

Adolescent-reported externalizing behaviors were predicted by adolescentreported parental warmth and monitoring as well as by parent-reported parental communication. Adolescent reported internalizing behaviors were predicted by adolescent-reported warmth and monitoring. Parent-reported adolescent externalizing problems were predicted by parent-reported parental monitoring and parent-reported adolescent internalizing problems were predicted by both adolescent-reported parental warmth and adolescent-reported parental communication. Additional analyses looking at zero-order correlations supported these results.

Research Question 2

Research Question 2 addressed whether or not there were differences between parent and adolescent-reported parental communication, warmth, or monitoring and if so, did any differences vary by the type of family structure (single-mother, singlefather, or two-parent), biological sex (adolescent male or female), or the interaction of family structure and biological sex. Two-way univariate analysis of variance (ANOVA) was performed on the 'parental involvement' variables to identify effects of biological sex and/or family structure (Tables 4.11 and 4.12).

Table 4.11 Analyses of Variance for Adolescent-reported Parental Involvement (n-50)

Source	df	F	Eta ²	p
	Mod	tornal Warmth		
Parstat (P)	2	ternal Warmth 55.48	.716	.00*
r arstat (r)	2	33.40	.710	.00
Sex (S)	1	.05	.001	.82
,				
P x S	2	1.47	.063	.24
C within group	44			
S within-group error	44			
CHOI				
	Pat	ernal Warmth		
Parstat (P)	2	31.38	.588	*00.
C (C)	1	02	010	27
Sex (S)	1	.83	.019	.37
P x S	2	1.19	.051	.32
	_	2.27	1001	
S within-group	44			
error				
	Co	mmunication		
Parstat (P)	2	3.14	.125	.053
i urstut (1)	_	3.11	.120	.022
Sex (S)	1	.23	.005	.637
	_			
P x S	2	1.70	.072	.194
S within-group	44			
error	-1-1			
.		Monitoring	0.5.5	
Parstat (P)	2	.731	.032	.487
Sex (S)	1	3.73	.078	.060
SCA (D)	1	5.15	.070	.000
P x S	2	.324	.015	.725
S within-group	44			
error				

^{*} p < .001

Table 4.12 Analyses of Variance for Parent-reported Parental Involvement (n = 60)

Source	Df	F	Eta ²	p
		Warmth		
Parstat (P)	2	w armin .689	.025	.506
			000	- 00
Sex (S)	1	.441	.008	.509
PxS	2	.385	.014	.683
S within-group error	54			
	(Communication		
Parstat (P)	2	2.44	.083	.096
Sex (S)	1	.003	.000	.956
PxS	2	.054	.002	.948
S within-group error	44			
		Monitoring		
Parstat (P)	2	.088	.003	.915
Sex (S)	1	.009	.000	.926
PxS	2	.059	.002	.943
S within-group error	54			

^{*} *p* < .001.

For adolescent-reported parental warmth there were no statistically significant differences by biological sex or by the interaction of biological and family structure. That is, there were not reported differences for boys or girls with regard to parental

warmth. However, there were statistically significant differences noted for family structure with significant differences for mothers (p < .001) and fathers (p < .001) on the monitoring variable (Table 4.11). Bonferroni's post hoc tests found that adolescents reported that two-parent family systems (mean difference = 7.80; p < .05) and single-mother family systems (mean difference = 8.10; p < .05) are perceived as providing more warmth than are single-father family systems. The results suggest (1) that adolescents from two-parent family systems reported the highest levels of parent warmth; (2) that there was no difference between adolescents raised by mothers alone and those from two-parent family systems; and (3) that adolescents from single-father only family systems do not report high levels of paternal warmth or, report significantly lower levels of warmth. Finally, based on the results of the ANOVA, there were no statistically significant differences by family structure, biological sex, or biological sex by family structure interaction on adolescent-reported parental communication, adolescent-reported parental monitoring, parent-reported parental warmth, parent-reported parental communication, or parent-reported parental monitoring (Table 4.12).

Summary for Research Question 2

Results from the ANOVA tests performed to identify effects of biological sex, family structure, and biological sex combined with family structure on the variables adolescent and parent-reported parental warmth, parental communication, and parental monitoring indicated that adolescents reported that two-parent family systems and single-mother family systems are perceived as providing more warmth

than are single-father family systems. In contrast, there were no statistically significant differences by family structure, biological sex, or biological sex combined with family structure on adolescent-reported parental communication or adolescentreported parental monitoring. Additionally, there were no statistically significant differences by family structure, biological sex, or the interaction of the two for parent-reported parental warmth, parent-reported parental communication, or parentreported parental monitoring (Table 4.12).

Research Question 3

Research Question 3 addressed whether one type of family structure is more likely than others to have fewer reported adolescent internalizing and externalizing problems, and if so, whether the differences were more significant by adolescent biological sex (Appendix D). To answer this question, two-way (adolescent sex by family structure [single-mother, single-father, two-parent]) factorial univariate analysis of variance (ANOVA) tests were performed on four dependent variables (adolescent-reported internalizing and externalizing behaviors, parent-reported internalizing and externalizing behaviors).

In regard to parent-reported adolescent internalizing behaviors (Table 4.13), while there were no statistically significant differences by biological sex or the biological sex by family structure interaction, there was a statistically significant relationship (p = .02) between family structure and parent-reported adolescent internalizing behavior. Bonferroni's post hoc tests revealed that single-fathers reported higher levels of adolescent internalizing behaviors than did single-mothers (t = 1.85: p < .05). In contrast, results of the analyses of variance on the parent-reported adolescent externalizing problems (Table 4.13), adolescent-reported internalizing problems (Table 4.14), and adolescent-reported externalizing problems (Table 4.14) were not significant and did not support the hypothesis that there was an effect of family structure, biological sex, or the combination of the two on the aforementioned variables.

Table 4.13 Analyses of Variance for Parent-reported Adolescent Behaviors

Source	df	F	Eta ²	p			
	Adolescent Internalizing Behaviors (n=60)						
Parstat (P)	2	4.51	.143	.02*			
Sex (S)	1	2.58	.046	.11			
PxS	2	.287	.011	.75			
S within-group error	54						
Adolescent Externalizing Behaviors (<i>n</i> =60)							
Parstat (P)	2	2.75	.092	.07			
Sex (S)	1	1.96	.035	.17			
PxS	2	1.98	.068	.15			
S within-group error	54						

^{*} p < .05.

Table 4.14 Analyses of Variance for Adolescent-reported Adolescent Behaviors

Source	df	F	Eta ²	p			
	Adolescent Internalizing Behaviors (n=50)						
Parstat (P)	2	.646	.029	.53			
Sex (S)	1	1.28	.028	.26			
PxS	2	.260	.012	.77			
S within-group error	44						
Adolescent Externalizing Behaviors (n=50)							
Parstat (P)	2	2.89	.116	.07			
Sex (S)	1	.06	.001	.81			
PxS	2	.76	.033	.48			
S within-group error	44						

^{*} *p* < .05.

Summary of Research Question 3

Results from the ANOVA tests performed to identify effects of family structure, biological sex, and the interaction of family structure and biological sex on the dependent variables adolescent and parent-reported adolescent internalizing and externalizing behaviors support that family structure has a statistically significant effect (p = .02) on parent-reported adolescent internalizing behaviors. Specifically,

single-fathers reported higher levels of parent-reported adolescent internalizing behaviors than did single-mothers. There were no data to support that family structure, biological sex, or the two combined had an effect on adolescent-reported internalizing or externalizing behaviors or on parent-reported adolescent externalizing behaviors.

Summary of Results

The results of the present study support that although there was no evidence of the biological sex of adolescents as a predictor of perceived parental involvement and/or adolescent behavior, conclusions can be drawn about the relationships between family structure, adolescent behaviors, and parental warmth, monitoring, and communication. Specifically, results indicate that single-father family structure and adolescent perceived parental warmth, monitoring and communication predict adolescent internalizing behaviors. Additionally, adolescent perceptions of parental warmth and monitoring as well as parent perceptions of monitoring and communication predict adolescent externalizing behaviors. Finally, adolescents in single-father family systems reported lower levels of perceived parental warmth than did adolescents from single-mother and two-parent family systems.

CHAPTER 5

DISCUSSION

This chapter provides a discussion of the findings and their implications. In addition, the limitations of the present study and recommendations for future research are presented.

Findings and Implications

A discussion of the findings and their implications, as related to each predictor variable, follows:

Warmth

Throughout the literature reviewed in Chapters 1 and 2, warmth was shown to be protective against maladaptive adolescent internalizing and externalizing problems (Scaramella, Conger, Simons & Whitbeck, 1998; Marsiglio et al., 2000; Child Trends, 2002; Flouri and Buchanan, 2003; Williams & Kelly, 2005). Alternately, the absence of parental warmth can result in behavioral and emotional impairment (Young, Miller, Norton, & Hill, 1995). The results of the present study supplement the literature by providing evidence that adolescent's perceptions of parental warmth were, in fact, significantly and inversely related to internalizing and externalizing behaviors. In other words, those adolescents who experienced their parents as warm were less likely to experience symptoms of depression and/or to engage in maladaptive behaviors such as lying, stealing, and truancy.

The current study suggests new avenues through which to explore parental warmth as it, unlike most existing studies, compared parent involvement variables using both parent and adolescent respondents. Specifically, parent's perceptions of their own warmth did not predict their perceptions of adolescent behaviors; in other words, parents did not associate the amount of warmth they demonstrated to their children with better or worse adolescent behavioral outcomes. Nonetheless, in families where adolescents reported higher levels of parental warmth, parents reported lower levels of adolescent internalizing problems. It seems then that in the absence of any independent assessment of warmth, it is the adolescents' perception of having warm relationships with their parents rather than the parents' perceptions or even, as far as we know, what is happening in the actual home environment that is what is important and protective against adolescents experiencing maladaptive internalizing and externalizing problems

Overall, the parents and adolescents did not have identical assessments of the degree of familial warmth, and the adolescent's experience of it was more significant in predicting their behavior. One could hypothesize that better understanding this discrepancy might have implications for prevention and/or treatment interventions when parent-adolescent attitudes toward one another are not ideal. It is recommended that future research more thoroughly investigate this variance in perceptions in order to inform prevention and/or treatment interventions aimed at increasing parent and adolescent awareness of each others needs and perceptions so as to decrease existing disparities and ultimately maladaptive adolescent behaviors. Or instead, that

treatment might focus on facilitating a familial experience that helps adolescents feel parental warmth.

Monitoring

There is an abundance of literature indicating that effective parental monitoring, or supervision, has protective effects on parent-child relationships and adolescent behavioral outcomes (Kerr and Stattin, 2000; Crouter & Head, 2002; Dishion & McMahon, 1998; Stattin & Kerr, 2000). This study found that both parents and adolescents who perceived higher levels of parental monitoring reported higher levels of adolescent externalizing behaviors. This finding contradicts results from numerous other studies which indicated that higher levels of parental monitoring and awareness of children's activities, friends and whereabouts, are associated with lower levels of externalizing behavior (Jacobson & Crockett, 2000; Pettit et al., 2001; Fletcher et al., 1995; Waizenhofoafer, 2004; Cottrell, 2003). As there is no objective measure of the degree of monitoring, parental monitoring as reported here may be a result of prior acting out, so that these are not optimally monitoring parents, but those who have only recently begun to monitor the adolescent whose behavior has become problematic. Alternatively, the adolescent may experience the monitoring as excessive and therefore rebels; since parental monitoring may be "perceived by youth as either supportive or as controlling", parents and adolescents should "have explicit discussions about monitoring behaviors and the interpretations tied to them" (Manongdo et al, 2007). Further, and consistent with findings from prior research (Stattin and Kerr, 2000; Zimmerman et al, 1995), there was an inverse relationship

between monitoring and internalizing behaviors; adolescents who reported higher levels of parental monitoring also reported lower levels of internalizing behaviors.

Communication

Findings from this study vary significantly between adolescent and parent report. Overall, communication was not as strong as a predictor of adolescent behavioral outcomes as warmth or monitoring, and parent and adolescent perceptions of parent communication differed significantly.

Although, Clark and Shields (1997) found that, per adolescent report, open communication with parents resulted in decreased delinquency, results from the current study suggested that adolescent perceptions of parental communication predicted neither adolescent-reported internalizing nor externalizing behaviors. Parents who perceived more communicative relationships also perceived that their children demonstrated adolescent internalizing behaviors. If there were, in fact, more communication in their relationships, one might speculate that these parents may have had more information about their children's emotional processes to report on. Inversely, parents who reported communicative relationships had children who reported fewer externalizing problems.

The results suggest that, although adolescents did not identify any effects of parental communication on their own behaviors, in relationships where parental communication was perceived by parents to be stronger, it was protective against adolescent reported externalizing behaviors and corresponded to increased parental perceptions of adolescent internalizing behaviors. Possibly when adolescents

experience or perceive communicative relationships with their parents, there is significant potential to decrease negative outcomes (i.e. depressive symptoms; as measured by the CDI Short Form) related to adolescent internalizing experiences. These results not only emphasize the salience of communication, but also point to significant differences in how adolescents and parents perceive and report communication in their relationships. Based on these findings, research is needed to explore actual communication as well as perceived communication to determine what specifically it is about communication that may be protective. Further, research is needed to explore treatment options related to communication in adolescent/parent dyads, i.e., should treatment incorporate a significant psycho-education component related to the protective benefits of parent-adolescent communication and/or specific parent training in effective communication strategies.

Family Structure

Past research supports that growing up in a single-parent household directly affects children's behavior, regardless of the biological sex of the custodial parent. Additionally, children in single-parent families are at greater risk for adjustment difficulties such as lowered academic performance, depression, and anxiety as well as externalizing behaviors including delinquency, aggression, drug use, and early sexual behaviors than children from two-parent families (Levitin, 1979; Hilton, Desrochers, and Devall, 2001; Flewelling & Bauman, 1990; Peterson & Zill, 1986).

In regard to Research Question 2, the current study found an effect of family structure on how adolescents responded to questions related to parental warmth. Specifically, adolescent participants were asked to report whether or not their primary care-giver enjoyed "doing things with" them, cheered them up when they were sad, provided "a lot of care and attention", and/or praised them. In response to these questions, the present study found that adolescents from two-parent family systems reported the highest levels of warmth, followed closely by those from single-mother families. Although previous studies have not specifically compared single-father families to single-mother or two-parent family systems when exploring this issue, the present study found that single-fathers were the least likely, according to both male and female adolescent reports, to provide warm, nurturing environments.

Similarly, results for Research Question 3 indicated that single-father family structure predicted higher levels of parent perceived adolescent internalizing problems than single-mother or two-parent families. In direct contrast to findings by Jablonska and Lindberg (2007), who, using only adolescent self-report data, found that "children of single parents fared worse regarding risk behaviors, victimization and mental distress than children in intact families" and also that "children of single fathers fared even worse than those of single mothers", results from the current study did not indicate that the type of family system in which male or female adolescents lived predicted externalizing behaviors, by either adolescent or care-giver report. Further, while their findings indicated that per adolescent report, adolescents from single-parent families are at an increased risk of developing "mental distress" (internalizing behaviors), the current study found no evidence to support that family structure predicted higher levels of adolescent-reported internalizing behaviors; only higher levels of single-father perceived adolescent internalizing behaviors. Given the differences in these findings, further exploration, using both parent and adolescent report data, is encouraged to better assess adolescent risk levels for developing internalizing problems dependant upon the type of family structure in which the adolescent resides.

Overall, single-father families were viewed by adolescents as less warm or supportive. Single-fathers themselves reported higher levels of internalizing behaviors among their children than did parents in the other family systems investigated here. Additionally, in the current study single-father family structure stands out as having higher parent perceived adolescent internalizing problems and lower adolescent perceived parental warmth. Therefore, one might hypothesize that because adolescents living with single-fathers perceived less warmth, and warmth is associated with decreased symptomology, adolescents living with single-fathers may be at higher risk for experiencing internalizing problems; consistent with single-father perceived higher adolescent internalizing behaviors. These results suggest that single-fathers and the children living with them likely have a unique set of needs that require future studies investigating what types of intervention and prevention strategies might best meet those needs.

Biological Sex

This study developed out of the researcher's clinical observation of a small sample of high-conflict adolescent daughter/single-father dyads. Although findings by Camera and Resnick (1989) indicated that mother-custody boys and father-custody

girls showed the highest levels of both internalizing and externalizing behaviors, in the current study there was no evidence that the biological sex of the adolescent (male or female) in relation to the three types of family structure predicted adolescent internalizing or externalizing behaviors. Specifically, there were no data to support that boys or girls living with single-mothers reported higher levels of internalizing or externalizing behaviors than boys or girls living with single-fathers. While the findings of the current study do not support the clinical observations that led to the development of this study, it is possible that other factors not explored here contributed to the observed conflicts among the adolescent daughter/single-father dyads in the small clinical sample; factors identified below.

Limitations and Recommendations for Future Research

There are several limitations in the current study. First, because this study is correlational in design, causality cannot be inferred from the results. Therefore, it can only be stated that there were significant relationships between the parent involvement, family structure, and adolescent behavior variables. No further statement can be made relative to cause.

Second, the generalizability of this data is affected by a number of limitations related to the sample. Although the PSID database is comprised of a large sample, there are more single-father families at the time of this writing than there were when the PSID data was gathered. Therefore, the present study was limited to the small sub-sample of single-father/adolescent dyads who met inclusion criteria. While this study was initially designed to approximate representation based on U.S. Census data in the year 2005, the number of single-fathers represented in the sample was small. Therefore, the final sample was not large enough to use the recommended weights to approximate the U.S. census population. For this reason the analyses were run without using the recommended weights for the complex sample. Thus, it is difficult to know whether the results can be generalized to any population other than the sample providing the raw data PSID study. Results from this exploratory study support the need for continued research into the role single-fathers play in the lives of their children. While the lack of generalizability limits interpretation, many of the results are congruent with theory and literature. Using the present study as an outline and because of limited literature in regard to single-father parenting, future investigations should involve field-based and qualitative research with a demographically representative sample of single-fathers.

Although field-based research was the original goal, identification of a sample large enough to establish potentially small effects proved too challenging for the purposes of completing this project in a timely manner. Therefore, the PSID database was selected as the best alternative. A limitation inherent in using this type of data is that the researcher is limited to design decisions made by others for other purposes, including the choice of variables, sample make-up, and instrumentation. Although there were limitations, the advantages of using the PSID database were that it included data about adolescent behavior and parental involvement, contained a large enough sample such that the requisite smaller sub-sample of single-fathers was available, and the database provided both parent and adolescent self-report data.

Another limitation of this study is that there was no analysis of possible interactions between the three parental involvement variables. Future investigation into the interplay between warmth, monitoring, and communication, in the context of many different types of family structures, may provide pertinent information about parenting practices.

As other researchers have reported, it is important to "treat different forms of externalizing problem behavior as separate constructs, since they have different trajectories and relationships, particularly with parenting" (Reitz et al, 2006); this is true for internalizing behaviors as well. The scope of the present study was limited to the investigation of more global measures of behavior (i.e. internalizing and externalizing) as outcome variables rather than to more specific and separate constructs of individual behaviors, diagnoses, or symptoms (i.e. anxiety, depression, truancy, drug use); limiting the ability to more accurately draw conclusions about the predictive value of the independent variables. In light of this and because there is still so little research investigating the influence of parenting, across different family structures, on child outcomes, a recommendation for future research is to explore adaptive and maladaptive behaviors, as separate constructs, in the context of parenting style, biological sex, and family structure.

This study focused on the role of family structure, biological sex, and parent involvement variables; however, there are numerous other variables influencing both adolescents and their parents that ultimately contribute to or protect against maladaptive adolescent internalizing and externalizing behaviors. It will be important for future investigations to expand the scope of the present study and explore variables relevant to the larger ecological contexts in which each type of family system and its individual members operate. For example, assessment of parent mental health, the factors that led to or resulted in changed family structure (i.e. divorce, death of spouse, never married, or adoption), and community supports utilized and/or available to families are among many salient issues to explore as they will likely influence results.

Based on the results of the present study as well as previous literature, one might hypothesize that in single-parent families with elevated conflict and/or adolescent behavior problems, preventative programming and intervention are warranted; they should therefore be explored in future studies. As recommended by Jablonska and Lindberg (2007), children of single parents, and in this case, singlefathers specifically, "should not be treated as a homogenous group when planning prevention and intervention programs;" this extends to research as well. Additionally, because it is a "relatively recent phenomenon, single fatherhood may also be associated with specific experiences and needs of the fathers that are not fully recognized in research and practice" (Jablonska and Lindberg, 2007). Therefore, future research and interventions should not be generalized to single-parents rather they should be sensitive to the unique variables that impact diverse and ever-changing family structures.

Finally, in regard to adolescent development, the influence of peer associations cannot be minimized. Exploration into peer influence seems particularly

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relevant to the study of parent/adolescent dyads and dynamics and is something that has often not been considered in the existing literature on parent-adolescent relationships.

Conclusions

The present study sought to examine the influence of parent and adolescent perceived parental involvement on adolescent internalizing and externalizing behavior in the context of family structure and biological sex (i.e. same or oppositesex single-parent/adolescent dyads). In general, results support that it is the adolescent report of both parenting behaviors and their own behavior that shows more significant correlations. Overall, it would seem then that it is how the adolescent perceives the parental involvement variables that protects against or fosters maladaptive behavioral outcomes. Specifically, for Research Question 1, the findings revealed that adolescent perceived parental warmth, whether warmth was really present or not, was protective against adolescent maladaptive internalizing and externalizing behaviors. Also, although parent perceived parental warmth did not predict behavioral outcomes, parents of adolescents who perceived higher levels of parental warmth reported lower levels of adolescent internalizing problems. In other words, when adolescents perceived their parents as warm, both the adolescent themselves and their parents, independently, perceived the adolescents as having fewer internalizing problems.

In contrast, when parents and adolescents perceived higher levels of parental monitoring, both also reported higher levels of adolescent externalizing behaviors.

Although higher levels of perceived monitoring was associated with a negative effect on externalizing behaviors, monitoring was protective against internalizing behaviors for those adolescents who perceived it to be high.

In regard to communication, results were mixed. In dyads where adolescents reported higher levels of communication with parents, parents reported fewer internalizing behaviors. Then, for parents who reported that they were communicative with their children, adolescents self-reported fewer externalizing problems.

Results for Research Questions 2 and 3 indicate that male and female adolescent's perceived single-fathers as the least likely, when compared to two-parent and single-mother families, to provide warm, nurturing environments. Additionally, when compared to two-parent families and single-mothers, single-fathers perceived their adolescents to experience higher levels of internalizing problems. Because single-father families were viewed by the adolescents in them as less warm, or supportive, and because single-fathers themselves reported higher levels of internalizing behaviors among their children than did the parents in other family systems investigated, adolescents living with their single-father primary care-giver may be at higher risk for experiencing internalizing and externalizing problems.

The overarching implication of the current findings is that perceptions, especially adolescent perceptions, of parent behavior influence adolescent behavioral outcomes both positively and negatively. Therefore future exploration into the bases of such perceptions and how to increase adolescent perceptions of positive parental influence is recommended. Further, it would seem that making parents aware of how

salient warmth and monitoring, and to a lesser degree, communication are to adolescents might help reduce maladaptive adolescent behaviors by providing more emotionally supportive environments and by increasing parent's awareness of their adolescent's whereabouts, peer groups, and activities.

It will be important for future investigations to expand the scope of the present study and explore variables relevant to the larger ecological contexts in which each type of family system and its individual members operate. Future investigations should consider: specific demographic information about parents and adolescents, the role of peer influence on adolescent experiences, interplay between the parental involvement variables (warmth, monitoring, and communication), individual diagnoses/behaviors, and finally, how family structures came to be, i.e. as a result of divorce, death of spouse, never married, or adoption.

This study was conducted to better understand how these issues present themselves and affect relationships and behavioral outcomes for developing children. Despite the limitations discussed earlier in this chapter, the findings here extend previous findings by contributing to the literature on single-parents, especially singlefathers, emphasizing the relevance of perceptions about parental involvement, and showing the importance of consistent parental warmth, monitoring and communication.

REFERENCES

- Ainsworth, M.D.S. (1989). Attachments beyond infancy. *American psychologist*, 44(4), 709-716.
- Ainsworth, M.D.S., Blehar, M.C., Waters, E., Wall, (1978). *Patterns of attachment: a psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.
- Allen, J.P., Aber, J.L., Leadbeater, B.J. (1990). Adolescent problem behaviors: The influence of attachment and autonomy. *Psychiatric clinics of north america*, 13(3), 455-467.
- Amato, P.R. (1993). Family structure, family process, and family ideology. *Journal of marriage and the family* 55, 50-54
- Amato, P.R. (1993). Children's adjustment to divorce: Theories, hypotheses, and empirical support. *Journal of marriage and the family* 55, 23-38.
- Amato, P.R. (1994). Single-parent households as settings for children's development, well-being, and attainment: A social network/resources perspective. *Sociological studies of children*, 7, 19-47.
- Armsden, G.C., Greenberg, M.T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of youth and adolescence*, 16, 427-454.
- Armsden, G.C., McCauley, E., Greenberg, M.T., Burke, P.M., Mitchell, J.R. (1990).

 Parent and peer attachment in early adolescent depression. *Journal of abnormal psychology*, 18(6), 683-698.

- Baer, J. (1999), The effects of family structure and SES on family processes in early adolescence. Journal of adolescence, 22(3), 341-354.
- 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(4), 1120-1136.
- Barrera, M., Li, S.A., Chassin, L. (1995). Effects of parental alcoholism and life stress on Hispanic and non-Hispanic Caucasian adolescents: a prospective study. American *journal of psychology*, 23(4).
- Baumrind, D. (1967). Child care practices anteceding three patterns of the preschool behavior. Genetic psychology monographs, 75, 43-88.
- Baumrind, D. (1971). Current patterns of parental authority. Developmental psychology monographs, 4(1).
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of early adolescence*, 11(1), 56-95.
- Bianchi, S.M. (1995). The changing demographic and socioeconomic characteristics of single-parent families. Marriage and family review, 20, 71-97.
- Borrine, M., Handal, P., Brown, N., Searight, H. (1991). Family conflict and adolescent adjustment in intact, divorced, and blended families. Journal of consulting and *clinical psychology*, *59*(5), *753-755*.
- Bowen, Murray, (1974) Toward the differentiation of self in one's family of origin. as published in Family Therapy In Clinical Practice, Copyright © 1985, 1983, 1978 by Jason Aronson, Inc., 1986 Printing

- Bowlby, J. (1969), Attachment and loss: Vol. 1: Attachment. New York: Basic Books.
- Bowlby, J. (1973). Attachment and loss: Vol. 2: Separation: Anxiety and anger. New York: Basic Books.
- Bowlby, J. (1988). A secure base: Parent-child attachment and healthy human development. New York: Basic Books.
- Breivik, K., Olweus, D. (2006). Adolescent's ajustment in four post-divorce family structures: single mother, stepfather, joint physical custody and single father families. Journal of divorce & remarriage 44(3-4), 99-124.
- Brody, G.H., Murry, V.M., Kim, S. Brown, A.C. (2002). Longitudinal pathways to competence and psychological adjustment among African American children living in rural single-parent households. Child development, 75(5), 1505-1516.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American psychologist*, *32*(7), 513-531.
- Brown, B.V. (1996). The single-father family: recent trends in demographic, economic, and public transfer use characteristics. Paper presented at the conference on father involvement, Bethesda, MD.
- Buista, K.L., Dekovica, M., (2004) The reciprocal relationship between early adolescent attachment and internalizing and externalizing problem behaviour. Journal of adolescence, 27, 251-266.
- Buist, K.L., Deković, M., Meeus, W., Van Aken, M.A.G. (2002). Developmental patterns in adolescent attachment to mother, father and sibling. Journal of youth and *adolescence*, 31, 167-176.

- Camara, K.A., Resnick, G. (1989). Styles of conflict resolution and cooperation between divorced parents: effects on child behavior and adjustment. American journal of orthopsychiatry, 59, 560 - 575.
- Centers for Disease Control and Prevention, National Center for Health Statistics. 2007 National Health Interview Survey. Unpublished data. Analysis by the Maternal and Child Health Information Resource Center.
- Clark, R.D., Shields, G. (2004). Family communication and delinquency. Adolescence, *32*(125).
- Coley, R.L. (1998). Children's socialization experiences and functioning in single-mother households: the importance of fathers and other men. Child Development, 69(1), 219-230.
- Coley, R.L. (2001). (In)visible men: emerging research on low-income, unmarried, and minority fathers. American psychologist, 56(9), 743-753.
- Coley, R.L. (2003). Daughter-father relationships and adolescent psychosocial functioning in low-income African American families. Journal of marriage and family, 65, 867-875.
- Cooksey, E., Fondell, M. (1996). Spending time with his kids: effects of family structure on fathers' and children's lives. *Journal of marriage and the family*, 58, 693-707.
- Cooksey, E.C., Craig, P.H. (1998). Parenting from a distance: the effects of paternal characteristics on contact between nonresidential fathers and their children. *Demography*, 35(2), 187-200.

- Corey, G. (2005). Theory and practice of counseling & psychotherapy. Brooks-Cole, Belmont, CA.
- Corsini, R.J., Wedding, D. (2005). Current psychotherapies. *Brooks-Cole, Belmont*, CA.
- Cottrell, L., Li, X., Harris, C., D'Alessandri, D., Atkins, M., Richardson, B., Stanton, B. (2003). Parent and adolescent perceptions of parental monitoring and adolescent risk involvement. Parenting: science and practice, 3(3), 179-195.
- Cox, M.J., Paley, B. (1997). Families as systems. Annual Review of Psychology, 48, 243
- Crouter, A.C., & Head, M.R. (2002). Parental monitoring and knowledge of children. In M.H. Bornstein (ed.) Handbook of Parenting (2nd ed.). Vol. 3, (pp461-483). Mahwah, NJ: Erlbaum.
- Cuffe, S.P., McKeown, R.E., Addy, C.L., Garrison, C.Z. (2005). Family and psychosocial risk factors in a longitudinal epidemiological study of adolescents. Journal of the american academy of child and adolescent psychiatry, 44(2), 121-129.
- Culp, R.E., Schadle, S., Robinson, L., Culp, A.M. (2000). Relationships among paternal involvement and young children's perceived self-competence and behavioral problems. *Journal of child and family studies*, 9(1), 27-38.
- Daly, K. (2003). Family theory versus the theories families live by. *Journal of marriage* and family, 65, 771-784.
- Davies, P.T., Cummings, E.M. (1998). Exploring children's emotional security as a mediator of the link between marital relations and child adjustment. Child development, 69(1), 124-139.

- Dekovic, M., Buist, K. L., & Reitz, E. (2004). Stability and changes in problem behavior during adolescence: latent growth analysis. Journal of youth and adolescence, 33, 1-12.
- Deković, M., Buist, K. (2005). Multiple perspectives within the family: family relationship patterns. *Journal of family issues*, 26, 467-490.
- Demuth, S., & Brown, S.L. (2004). Family structure, family processes, and adolescent delinquency: the significance of parental absence versus parental gender. Journal of research in crime and delinquency, 41(1), 58-81.
- Dishion, T.J., McMahon, R.J. (1998). Parental monitoring and the prevention of child and adolescent problem behavior: a conceptual and empirical formulation. Clinical child and family psychology review, 1(1), 61-75.
- Doherty, W.J., Kouneski, E.F. & Erickson, M.F. (1998). Responsible fatherhood: a review and conceptual framework. *Journal of marriage and the family*, 60(2), 277-292.
- Dornbusch, S.M., Ritter, P.L., Leiderman, P.H., Roberts, D.F., Fraleigh, M.J. (1987). The relation of parenting style to adolescent school performance. Child development, *58*, 1244-1257.
- Downey, D.B., Powell, B. (1993). Do children in single-parent households fare better living with same-sex parents? Journal of marriage and family, 55(1), 55-71
- Downey, D. B., Ainsworth-Darnell, J. W., Dufur, M. J. (1998). Sex of parent and children's well-being in single-parent households. Journal of marriage and the family, 60(4), 878-893.

- Dworkin, J.B., Larson, R. (2001). Age trends in the experience of family discord in single-mother families across adolescence. *Journal of adolescence*, *24*, 529-534.
- Easterbrooks, M.A. (1989). Quality of attachment to mother and to father: effects of perinatal risk status. *Child development*, 60, 825-830.
- Eggebeen, D.J., Snyder, A.R., Manning, W.D. (1996). Children in single-father families in demographic perspective. *Journal of family Issues*, *17*(4), 441-465.
- Emery, R. E., Hetherington, E. M., DiLalla, L F. (1985). Divorce, children, and social policy. In H. Stevenson & A. Siegel (Eds.), *Child Development Research and Social Policy*. Chicago: University of Chicago Press.
- Enos, D., Handal, P. (1986). The relation of parental marital status and perceived family conflict to adjustment in white adolescents. *Journal of consulting and clinical psychology*, 54(6), 820-824.
- Family Strengthening Policy Center. (2005). Sustaining and growing father involvement for low-income children. Policy brief no. 13, Washington, D.C.
- Federal Interagency Forum on Child and Family Statistics. (2006). *America's children in brief.* Federal interagency forum on child and family statistics, Washington, D.C.:

 U.S. Government Printing Office.
- Fletcher, A.C., Steinberg, L., Williams-Wheeler, M. (2004). Parental influences on adolescent problem behavior: revisiting Stattin and Kerr. *Child development*, 75(3), 781 796.

- Flewelling, R., Bauman, K. (1990). Family structure as a predictor of initial substance use and sexual intercourse in early adolescence. Journal of marriage and the family. *52*, 171-181.
- Flouri, E., Buchanan, A. (2003). The role of father involvement and mother involvement in adolescent's psychological well-being. British journal of social work, 33, 339-406.
- Franklin, C., Jordan, C. (2001). Guidelines for conducting family therapy. As cited in Roberts, A., Greene, G. Social workers desk reference. Oxford University Press.
- Freeman, H., Newland, L. (2003). Family transitions during the adolescent transition: Implications for parenting. Adolescence 37(147), 457-472.
- Garasky, S., & Meyer, D.R. (1996). Reconsidering the increase in father-only families. *Demography*, 33(3), 385-389.
- Greif, G.L., DeMaris, A. (1990). Single fathers with custody. Families in society: The journal of contemporary human services, 71(5), 259-266.
- Greif, G.L. (1995). Single fathers with custody following separation and divorce. *Marriage and family review, 20, 213-231.*
- Guilamo-Ramos, V., Jaccard, J., Turrisi, R., Johansson, M. (2005). Parental and school correlates of binge drinking among middle school students. American journal of public health, 95(5), 894-899.
- Guilamo-Ramos, V., Jaccard, J., Dittus, P., Bouris, A.M. (2006). Parental Expertise, Trustworthiness, and Accessibility: Parent-Adolescent Communication and Adolescent Risk Behavior. Journal of marriage and family, 68(5), 1229–1246.

- Hamilton, C.E. (2000). Continuity and discontinuity of attachment from infancy through adolescence. Child development, 71(3), 690-694.
- Hanson, S.M., Heims, M.L., Julian, D.J., Sussman, M.B. (1995). Single-parent families, present and future perspectives. Marriage & family review, 20(1), 1-26.
- Hanson, T.L., McLanahan, S.S., Thomson, E. (1996). Double jeopardy: parental conflict and stepfamily outcomes for children. Journal of marriage and family, 58(1), 141-154.
- Harris, K.M., Morgan, S.P. (1991). Fathers, sons, and daughters: differential paternal involvement in parenting. Journal of marriage and the family, 53, 531-544.
- Hazan, C., Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of personality and social psychology, 52*(3), 511-524.
- Hazan, C., Shaver, P. (1994). Research on close relationships. *Psychological inquiry*, 5(1), 1-22.
- Henggeler, S.W. (1989). Delinquency in adolescence. Developmental clinical psychology and psychiatry series, 18, 151.
- Henry, C.S. (1994). Family system characteristics, parental behaviors, and adolescent family life satisfaction. Family relations, 43(4), 447-455.
- Hetherington, E.M. (1989). Coping with family transitions: winners, losers, and survivors. Child development, 60, 1-14.
- Hilton, J.M., Desrochers, S., Devall, E.L. (2001). Comparison of role demands, relationships, and child functioning in single-mother, single-father, and intact families. Journal of divorce and remarriage, 35(1), 29-56.

- Hosley, C.A., Montemayor, R. (1997). Fathers and adolescents. In M.E. Lamb (Ed.), The role of the father in child development (3rd ed., pp. 162-178), New York: Wiley.
- Houser, R., Daniels, J., D'Andrea, M., Konstam, V. (1993). A systematic behaviorally based technique for resolving conflicts between adolescents and their single parents. Child & family behavior therapy, 15(3), 17-31.
- Hutcheson, G.D., Sofronio, N. (1999). Multivariate social scientist: introductory statistics using generalized linear models. Thousand Oaks, CA: Sage.
- Ivey, A. E., Bradford-Ivey, M., Simek-Morgan, L. (1997). Counseling and psychotherapy, a multicultural perspective. Viacom, Needham Heights, MA.
- Jablonska B, Lindberg L. (2007). Risk behaviours, victimisation and mental distress among adolescents in different family structures. Social psychiatry and psychiatric epidemiology 42(8):656-663.
- Jacobson, K. C., Crockett, L. J. (2000). Parental monitoring and adolescent adjustment: an ecological perspective. Journal of research on adolescence, 10, 65–97.
- Kaczynski, K. J., Lindahl, K. M., Malik, N. M., Laurenceau, J-P. (2006). Marital conflict, maternal and paternal parenting, and child adjustment: A test of mediation and moderation. Journal of Family Psychology, 20(2), 199-208.
- Kazak, A.E., Segal-Andrews, A.M. (1992). Women and families: Individual and family systems issues related to theory, therapy, and research. Journal of family psychology, 5(3-4), 360-378.

- Kenny, M.E., Gallagher, L.A. (2002). Instrumental and social/relational correlates of perceived maternal and paternal attachment in adolescence. Journal of adolescence, 25, 203-219.
- Kenny, M.E., Gallagher, L.A., Alvarez-Salvat, R., Silsby, J. (2002). Sources of support and psychological distress among academically successful inner-city youth. Adolescence, 37(145), 161-182.
- Kerr, M., Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: further support for a reinterpretation of monitoring. *Developmental psychology, 36, 366 – 380.*
- Kim, S., Brody, G.H. (2005). Longitudinal pathways to psychological adjustment among black youth living in single-parent households. Journal of family psychology, *19*(2), 305-313.
- Knopf, D., Park, M.H., Mulye, T.P. (2008). The mental health of adolescents: a national profile. San Francisco, CA: National Adolescent Health Information Center.
- Kostelecky, K. (2005). Parental attachment, academic achievement, life events and their relationship to alcohol and drug use during adolescence. Journal of adolescence, 28, 665-669.
- Kotchick, Beth A.; Dorsey, S., Miller, K.S., Forehand, R (1999). Adolescent sexual risktaking behavior in single-parent ethnic minority families. Journal of family psychology, 13(1), 93-102

- Lamborn, S.D., Mounts, N.S., Steinberg, L., Dornbusch, S.M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child development*, 62, 1049-1065.
- Levitin, T.E. (1979). Children of divorce: an introduction. *Journal of social issues*, 35(4), 1-25.
- Lewis, M., Feiring, C., Rosenthal, S. (2000). Attachment over time. *Child development*, 71(3), 707-720.
- Loukas, A., & Prelow, H.M. (2004). Externalizing and internalizing problems on low-income latino early adolescents. *The journal of early adolescence*, 24(3), 250-273.
- Maccoby, E.E., Martin, J.A. (1983). Socialization in the context of the family: parent-child interaction. In P.H. Mussen (Series Ed.) & E.M. Hetherington (Vol. Ed.), Handbook of child psychology: Vol. 4, Socialization, personality, and social development (4th ed., pp.1-101) New York: Wiley.
- Manning, W., Lamb, K. (2003). Adolescent well-being in cohabiting, married, and single parent families. *Journal of marriage and family*, 65, 876-893.
- Manning, W.D., Lamb, K.A. (2003). Adolescent well-being in cohabiting, married, and single-parent families. *Journal of marriage and family*, 65, 876-893.
- Manongdo, J.A., Ramirez Garcia, J.I. (2007). Mothers' parenting dimensions and adolescent externalizing and internalizing behaviors in a low-income, urban Mexican american sample. *Journal of clinical child and adolescent psychology*, 36(4), 593-604.

- Marsh, P., McFarland, F.C., Allen, J.P., McElhaney, K.B., Land, D. (2003). Attachment, autonomy, and multifinality in adolescent internalizing and risky behavioral symptoms. *Development and psychopathology*, *15*, 451-467.
- Marsiglio, W., Amato, P., Day, R.D., Lamb, M.E. (2000). Scholarship on fatherhood in the 1990's and beyond. *Journal of marriage and the family*, 62, 1173-1191.
- Marsiglio, W., Cohan, M. (2000). Contextualizing father involvement and paternal influence: sociological and qualitative themes. *Marriage and family review*, 29(2/3), 75-95.
- Martin, E., Siegel, P. (1997). *New directions for exploring fathers' attachment to households*. Prepared for NICHD Workshop "Improving data on male fertility and family formation" at the Urban Institute, Washington, D.C., January 16-17.
- McBride, B.A., Schoppe, S.J., Rane, T.R. (2002). Child characteristics, parenting stress, and parental involvement: fathers versus mothers. *Journal of marriage and family*, 64, 998-1011.
- McLanahan, S., Booth, K. (1989). Mother only families: problems, prospects, and politics. *Journal of marriage and family therapy*, *51*(3), 557-580.
- McLanahan, S. S. (1997). Parent absence or poverty: which matters more? In G. J. Duncan & J. Brooks-Gunn (Eds.), *Consequences of growing up poor* (pp. 35–48). New York: Russell Sage Foundation.
- Mesman, J., Koot, H.M. (2000). Common and specific correlates of preadolescent internalizing and externalizing psychopathology. *Journal of abnormal psychology*, 109(3), 428-437.

- Meyer, D. R., & Garasky, S. (1993). Custodial fathers: Myths, realities, and child-support policy. *Journal of Marriage and the Family*, 55, 73 89.
- Minuchen, S. (1974). Families and family therapy. Cambridge, MA: Harvard University Press.
- Mounts, N.S. (2002). Parental management of adolescent peer relationships in context: the role of parenting style. *Journal of family psychology*, *16*(1), 58-69
- Nunnally, J., Bernstein, I. (1994). *Psychometric Theory*, New York: McGraw Hill, 3rd ed. (required: available at SBX)
- Nye, F. Ivan. 1958. Family Relationships and Delinquent Behavior. New York:

 JohnWiley and Sons.
- O'Connor, T.G., Hetherington, E.M., Clingempeel, W.G. (1997). Systems and bidirectional influences in families. *Journal of social and personal relationships*, 14(4), 491-504.
- Panel Study of Income Dynamics, (CDS-II) public use dataset. Produced and distributed by the University of Michigan with primary funding from the National Science Foundation, the National Institute of Aging, and the National Institute of Child Health and Human Development. Ann Arbor, MI, (2002).
- Parker, J.S., Benson, M.J. (2004). Parent-adolescent relations and adolescent functioning: self-esteem, substance abuse, and delinquency. *Adolescence*, *39*(155), 519-530.
- Pederson, S., Revenson, T. (2005). Parental illness, family functioning, and adolescent well-being: a family ecology framework to guide research, *Journal of family psychology*, 19(3), 404-414.

- Peterson, J., Zill, N. (1986). Marital disruption, parent-child relationship, and behavioral problems in children. *Journal of marriage and the family*, 48, 295-307.
- 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(2), 583-598.
- Pinsof, W.M. (1989). A conceptual framework and methodological criteria for family therapy process research. *Journal of counseling and clinical psychology*, 57(1), 53-59.
- Powell, B., Downey, D.B. (1997). Living in single-parent households: an investigation of the same-sex hypothesis." *American sociological review*, 62, 521-39.
- Quesenberry, A., Ostrosky, M.M., Corso, R.M. Fathers and father-figures: their important role in children's social and emotional development. *Center on the social and emotional foundations for early learning: What works briefs 16.*
- Reitz, E., Prinzie, P., Dekovic, M., Buist, K.L. (2007). The role of peer contacts in the relationship between parental knowledge and adolescents' externalizing behaviors: a latent growth curve modeling approach. *Journal of youth adolescence*, *36*, 623-634.
- Renk, K., Liljequist, L., Simpson, J.E., Phares, V. (2005). Gender and age differences in the topics of parent-adolescent conflict. *The family journal: counseling and therapy for couples and families*, 13(2), 139-149.

- Rodgers, K.B., Rose, H.A. (2002). Risk and resiliency factors among adolescents who experience marital transitions. *Journal of marriage and the family*, 64(4), 1024-1037.
- Rothbaum, F., Rosen, K., Ujie, T., & Uchida, N. (2002). Family systems theory, attachment theory and culture. *Family process*, *41*, 328-350.
- Russell, A., & Saebel, J. (1997). Mother-son, mother-daughter, father-son, and father-daughter: are they distinct relationships? *Developmental review*, *17*, 111-147.
- Santrock, J.W., Warshak, R.A. (1979). Father custody and social development in boys and girls. *Journal of social issues*, *35*(4), 112–125.
- Scaramella, L.V., Conger, R.D., Simons, R.L., and Whitbeck, L.B. (1998). Predicting risk for pregnancy by late adolescence: a social contextual perspective. *Developmental psychology*, *34*(6), 1233-1245.
- Scaramella, L., Conger, R., Simons, R. (1999). Parental protective influences and genderspecific increases in adolescent internalizing and externalizing problems. *Journal* of research on adolescence, 9(2), 111.
- Siverman, J.R., Caldwell, R.M. (2005). The influence of parental emotional support and monitoring on self-reported delinquent impulsive behavior and noncompliance among juvenile offenders: an examination of gender differences. *International journal of forensic mental health*, 4(2), 159-174.
- Shirraev, E., Levy, D. (2004). *Cross-cultural psychology: Critical thinking and contemporary applications*. Pearson Education: Boston, MA.

- Slicker, E. (1998). Relationships of parenting style to behavioral adjustment in graduating high school seniors. *Journal of youth and adolescence*, 27(3), 345.
- Smetana, J.G. (1995). Parenting styles and conceptions of parental authority during adolescence. *Child development*, *66*, 299-316.
- Spruijt, E., DeGoede, M. (1997). Transitions in family structure and adolescent well-being. *Adolescence*, 32(128), 897-912.
- Spruijt, E., DeGoede, M., Vandervalk, I. (2000). The well-being of youngsters coming from six different family types. *Patient education and counseling*, 45, 285-294.
- Sroufe, L.A. (1979). The coherence of individual development: early care, attachment, and subsequent developmental issues. *American psychologist*, *34*(10), 834-841.
- Stattin, H., & Kerr, M. (2000). Parental monitoring: a reinterpretation. *Child development*, 71(4), 1072-1085.
- Steinberg, L. (1983). The varieties and effects of work during adolescence. In M. Lamb, a. Brown, B. Rogoff (Eds.), Advances in developmental psychology (Vol. 3, pp. 1-37). Hillsdale, NJ: Lawrence Erlbaum.
- Steinberg, L. (1987). Impact of puberty on family relations: effects of pubertal status and pubertal timing. *Developmental psychology*, 23, 451-460.
- Steinberg, L. (1988). Reciprocal between parent-child distance and pubertal maturation, *Developmental psychology*, 24(1), 122-128.
- Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In S. S. Feldman & G. R. Elliott (Eds.), At the threshold: The developing adolescent (pp. 255-276). Cambridge, MA: Harvard University Press.

- Steinberg, L., Mounts, N. S., Lamborn, S. D., Dornbusch, S. M. (1991). Authoritative parenting and adolescent adjustment across varied ecological niches. *Journal of research on adolescence*, *I*(1), 19-36.
- Steinberg, L. (2001). We know some things: parent-adolescent relationships in retrospect and prospect. *Journal of research on adolescence*, 11, 1-19.
- Steinberg, L., Sheffield-Morris, A. (2001). Adolescent development. *Annual Review of Psychology*, 52, 83-110.
- Stolz, H.E., Barber, B.K., Olsen, J.A. (2005). Toward disentangling fathering and mothering: an assessment of relative importance. *Journal of marriage and family*, 67(4), 1076–1092.
- Tanfer, K., Mott, F. (1997). *The meaning of fatherhood for men.* Prepared for NICHD Workshop "Improving data on male fertility and family formation" at the Urban Institute, Washington, D.C., January 16-17.
- Thomas, G., Farrell, M.P., Barnes, G.M. (1996). The effects of single-mother families and nonresident fathers on delinquency and substance abuse in black and white adolescents. *Journal of marriage and the family*, 58(4), 884-894.
- Thompson, R.A. (2000). The legacy of early attachments. *Child development*, 71(1), 145-152.
- U.S. Census Bureau, Current Population Survey, 2005 Annual Social and Economic Supplement.

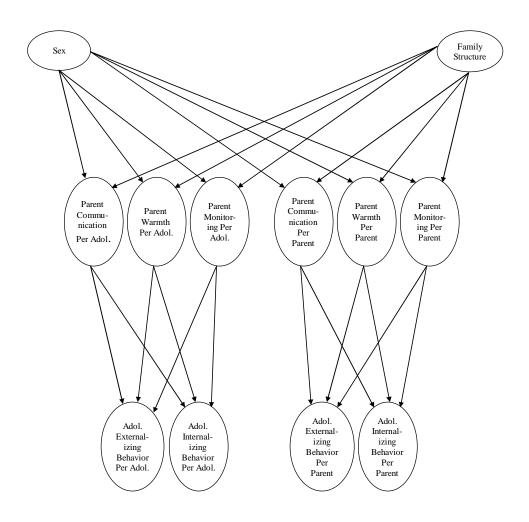
- U.S. Census Bureau, Current Population Reports by T. S. Grall. Custodial mothers and fathers and their child support: 2007. Issued November 2009. www.census.gov/hhes/www/childsupport/source07.pdf
- U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census. Census Brief: Children living with single-parents, how they fare. CENBR/97-1. Issued Sept. 1997.
- Waizenhofer, R.N., Buchanan, C.M., Jackson-Newsom, J. (2004). Mothers' and fathers' knowledge of adolescents' daily activities: its sources and its links with adolescent adjustment. *Journal of family psychology*, 18(2), 348–360.
- Walker, L.J., Hennig, K.H. (1997). Parent/child relationships in single-parent families.

 Canadian journal of behavioural science, 29, 63-75.
- Waters, E., Hamilton, C., Weinfield, N. (2000). The stability of attachment security from infancy to adolescence and early adulthood: general introduction. *Child development*. 71(3): 678-683.
- Waters, E., Merrick, S., Treboux, D., Crowell, J., Albersheim, L. (2000). Attachment security in infancy and early adulthood: a twenty-year longitudinal study. *Child development*, 71(3), 684-689.
- Way, N., Gillman, D.A. (2000). Early adolescent girl's perceptions of their relationships with their fathers: a qualitative investigation. *Journal of early adolescence*, 20(3), 309-331.

- Williams, S., Kelly, D.F. (2005). Relationships among involvement, attachment, and behavioral problems in adolescence: examining father's influence. *Journal of early adolescence*, 25(2), 168-196.
- Xiao, Z., Li, X., Stanton, B. (2011). Perceptions of parent-adolescent communication within families: it is a matter of perspective. *Psychology, health, & medicine,* 16(1), 53-65.
- Young, M. H., Miller, B. C., Norton, M. C., Hill, E. J. (1995). The effect of parental supportive behaviors on life satisfaction of adolescent offspring. *Journal of marriage and the family*, 57, 813-822.
- Yu, S., Clemens, R., Yang, H., Li, X., Stanton, B., Deveaux, L., Lunn, S., Cottrell, L., Harris, C. (2006). Youth and parental perceptions of parental monitoring and parent-adolescent communication, youth depression, and youth risk behaviors.
 Social behavior and personality, 34(10), 1297-1310.
- Zimmerman, M., Salem, D., Maton, K. (1995). Family structure and psychosocial correlates among urban African-American adolescent males. *Child development*, 66(6), 1598-1613.

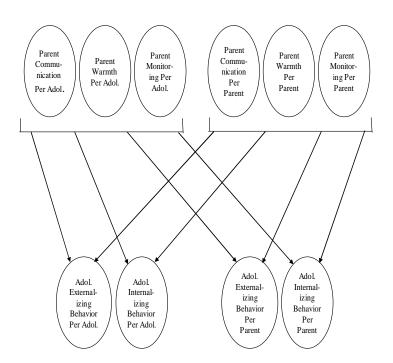
Appendix A

Global Model of Research Questions



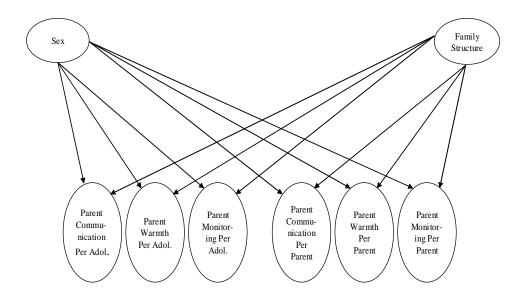
Appendix B

Research Question One



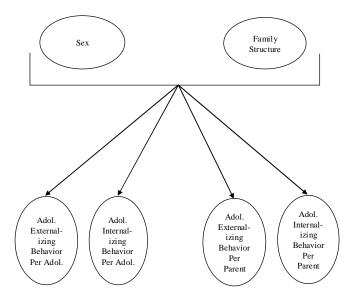
Appendix C

Research Question Two



Appendix D

Research Question Three



Appendix E

Independent Variables

Independent Variable: Parental Involvement (6 variables)

Parent-reported

- 1. Parental Warmth
- 2. Parent-Child Communication About School
- 3. Parental Monitoring

Adolescent-reported

- 4. Parental Warmth
- 5. Parental Communication
- 6. Parental Monitoring

Independent Variable: Biological Sex (1 variable)

Sex of Individual: SEXINDIV

Coded: 1 – Male

0 – Female

9 – Not Ascertained (NA)

Independent Variable: Family Structure (1 variable) labeled in SPSS as 'PARSTAT'

Biological Parent Living with Child '01

Coded in SPSS:

- 0 Biological Mother Only
- 1 Biological Father Only
- 2 Both Parents (Biological Mother and Biological Father)

Appendix F

Dependent Variables

<u>Dependent Variable: Adolescent Externalizing Behavior (2 variables)</u>

Parent-reported

Behaviors Problems Index (BPI) Externalizing Score: EXTERPAR

Adolescent-reported

Adolescent Externalizing Behaviors: ARE

<u>Dependent Variable: Adolescent Internalizing Behavior (2 variables)</u>

Parent-reported

Behaviors Problems Index (BPI) Internalizing Score: INTERPAR

Adolescent-reported

Children's Depression Inventory Short Form: INTEADOL

Appendix G

N, Cronbach's alpha, KMO, and Inter-Item Correlation Matrix by Independent and Dependent Variable

a. Independent Variable: Parent Reported Parental Monitoring: $N=2907, \alpha=.75,$ KMO

= .79

Individual Items	1	2	3	4	5	6	7
1. Rules whom child							
interacts							
2. Rules after school	.35						
activities							
3. Rules about homework	.25	.43					
4. Rules about dating	.20	.28	.35				
5. Curfew on weeknights	.20	.26	.35	.62			
6. Curfew on weekends	.21	.27	.35	.65	.82		
7. Rules about car use	.17	.13	.21	.41	.38	.40	

b. Independent Variable: Adol. Reported Parental Monitoring: $N=2182,\ \alpha=.96,\ KMO$

= .88

Individual Items	1	2	3	4	5	6	
1. Parents know what							
you do in free time?							
2. Do your parents know	.92						
what friends you are							
w/during free time?							
3. Do your parents know	.93	.92					
what you spend your							
money on?							
4. Do you keep secrets	.72	.73	.71				
from your parents?							
5. Do you hide things	.67	.69	.67	.91			
from your parents?							
6. If you are out at night,	.87	.86	.87	.69	.65		
when you get home							
do you tell your							
parents what you did							
that evening?							

Appendix G (continued)

c. Independent Variable: Parent Reported Par. Communication: $N=2182,\,\alpha=.87,\,KMO=.70$

Individual Items	1	2	3
1. Discuss interests with			
child?			
2. Discuss studies with	.62		
child?			
3. Discuss school with	.72	.80	
child?			

d. Independent Variable: Adol. Reported Maternal Communication: N =2182, α = .79, KMO = .69

Individual Items	1	2	3
1. Mother: talk about			
friends?			
2. Mother: talk about	.53		
future?			
3. Mother: talk about	.60	.52	
problems?			

e. Independent Variable: Adol. Reported Paternal Communication: N =2182, α = .90 KMO= .75

Individual Items	1	2	3	
1. Father: talk about				
friends?				
2. Father: talk about future?	.74			
3. Father: talk about	.77	.72		
problems?				

f. Independent Variable: Parent Reported Parental Warmth: N = 708, $\alpha = .79$, KMO= .86

Individual Items	1	2	3	4	5	6	
1. Said I love you							
2. Participate in activities	.38						
3. Talk about interests	.43	.53					
4. Spoken appreciatively	.45	.48	.52				
5. Talk about relationships	.28	.36	.49	.47			
6. Talk about child's day	.37	.29	.42	.37	.32		

Appendix G (continued)

g. Independent Variable: *Adol. Reported Maternal Warmth:* N =2182, α = .97, KMO= .87

Individual Items	1	2	3
1. Mother: enjoys			
2. Mother: cheers	.92		
3. Mother: care	.93	.95	
4. Mother: praises	.85	.86	.87

h. Independent Variable: Adol. Reported Paternal Warmth: N =2182, α = .98, KMO= .88

Individual Items	1	2	3
1. Father: enjoys			
2. Father: cheers	.94		
3. Father: care	.95	.95	
4. Father: praises	.88	.88	.90

i. Dependent Variable: Adol. Reported Externalizing Behaviors: N =2182, α = .97, KMO= .88

Individual Items	1	2	3	4	5	6	7	8
1. Stayed out late?	•	-	J	•		Ü	,	Ü
2. Lied to your parent(s) about something?	.81							
3. Stolen from a store?	.45	.47						
4. Damaged school property	.43	.48	.94					
purposefully?	27	22	27	27				
5. Skipped a day of school without permission?	.37	.33	.37	.37				
6. Stayed out at night w/out permission?	.51	.47	.51	.69	.64			
7. Been stopped and questioned by the police?	.45	.44	.45	.77	.61	.72		
8. Been arrested?	.42	.43	.42	.75	.62	.79	.85	

Appendix H

Independent Variables: PSID Individual Item Numbers and Descriptions

Parent F	Reported Parental Monitoring
B35E:	Do you have rules about which children CHILD can spend time with?
B35F:	Do you have rules about how CHILD spends time after (school/daycare)?
B35G:	Do you have rules about when CHILD does (his/her) homework?
B35L:	Do you have rules about CHILD's dating?
B35N:	Do you have rules about how late CHILD can stay out on weeknights?
B35O:	Do you have rules about how late CHILD can stay out on weekends?
B35R:	Do you have rules about CHILD's use of the car?
Adolesc	ent Reported Parental Monitoring
L23:	Do your parents know what you do during your free time?
L24:	Do your parents know what friends you hang out with during your free
	time?
L25:	Do your parents know what you spend your money on?
L26:	Do you keep secrets from your parents?
L27:	Do you hide things from your parents?
L28:	If you are out at night, when you get home do you tell your parents what you did that evening?
	·
Parent F	Reported Parental Communication
B26A:	Discuss interests with child?
B26B:	Discuss studies with child?
B26C:	Discuss school with child?
Adolesc	ent Reported Maternal Communication
H4A:	Mother: talk about friends?
H4B:	Mother: talk about future?

H4C:

Mother: talk about problems?

Appendix H (continued)

Adolescent Reported Paternal Communication

H4D: Father: talk about friends?H4E: Father: talk about future?H4F: Father: talk about problems?

Parent Reported Parental Warmth

E13A:	Said I love yo	u

E13B: Participate in activities E13C: Talk about interests E13D: Spoken appreciatively E13E: Talk about relationships E13G: Talk about child's day

Adolescent Reported Maternal Warmth

L17C: Mother: enjoys L17E: Mother: cheers L17F: Mother: care L17H: Mother: praises

Adolescent Reported Paternal Warmth

L18C: Father: enjoys L18E: Father: cheers L18F: Father: care L18H: Father: praises

Appendix I

Dependent Variable: PSID Individual Item Numbers and Descriptions

Adolescent	Reported Adolescent Externalizing Behaviors
Q23L11A:	In the last six months, about how many times have you stayed out later than your parent(s) said you should?
Q23L11C:	In the last six months, about how many times have you lied to your parent(s) about something important?
Q23L11D:	In the last six months, about how many times have you taken something from a store without paying for it?
Q23L11E:	In the last six months, about how many times have you damaged school property on purpose?
Q23L11G:	In the last 6 months, about how many times have you skipped a day of school without permission?
Q23L11H:	1
Q23L11I:	In the last 6 months, about how many times have you been stopped and questioned by the police?
Q23L11J:	In the last 6 months, about how many times have you been arrested by the police?