

ABSTRACT

Title of Thesis: THE MEDIATING ROLE OF PARENTING BEHAVIOR IN THE ASSOCIATION BETWEEN PARENTAL AND CHILD PSYCHOLOGICAL FUNCTIONING

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The aim of the present study was to broaden the investigation of the intergenerational association of psychological functioning by examining the role of parenting behavior (harsh parenting and parental acceptance) as a mediating factor in the association between maternal and youth psychological functioning (i.e., severity of anxiety and depression symptoms). Measures of psychological distress, harsh parenting, and parental acceptance were administered to a community sample of 309 Latino youth (ages 9-15) and their mothers. Results from a path analysis, controlling for monthly family income, mother's age at baseline assessment, and the number of children in the household, showed support for the mediating role of parental acceptance but not harsh parenting in the association between parent and youth psychological functioning. However, harsh parenting had an indirect association with child psychological distress, mediated by lower child perceptions of parental acceptance. Implications for future research and clinical practice are discussed.

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BETWEEN PARENTAL AND CHILD PSYCHOLOGICAL FUNCTIONING

by

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Table of Contents

Acknowledgements.....	ii
Table of Contents.....	iii
List of Tables.....	iv
List of Figures.....	v
Chapter 1: Introduction.....	1
Statement of the Problem.....	Error! Bookmark not defined.
Parental Depression and Parenting Behavior.....	6
Cultural Differences in effects of Parenting Styles.....	11
Purpose of the Study.....	14
Chapter 2: Literature Review.....	16
The Role of Family Wellbeing in the Context of Public Health.....	16
Parenting and Child Psychological Wellbeing: An Ecological Perspective.....	18
Parent-Child Transmission of Risk for Psychopathology.....	23
Maternal depression, parenting behavior, and child functioning	23
Paternal depression, parenting behavior, and child functioning	27
Harsh Parenting Behaviors and Child Outcomes.....	29
Summary.....	33
Study Objectives and Hypotheses.....	35
Chapter 3: Methodology.....	37
Overall Sample of Padres Data.....	37
Sample Used for the Present Study.....	38
Procedures Used in the Original Data Collection.....	41
Measures.....	42
Parent Psychological Distress	42
Child Psychological Distress	42
Parental Acceptance Behavior	44
Harsh Parenting	45
Control Variables	46
Chapter 4: Results.....	47
Analysis Plan.....	47
Tests for Possible Control Variables.....	48
Tests of the Hypotheses.....	49
Path Analysis Results for Control Variables.....	51
Chapter 5: Discussion.....	53
Summary of Findings.....	53
Limitations of the Study.....	60
Recommendations for Future Research.....	63
Clinical Implications.....	65
Conclusion.....	67
References.....	68

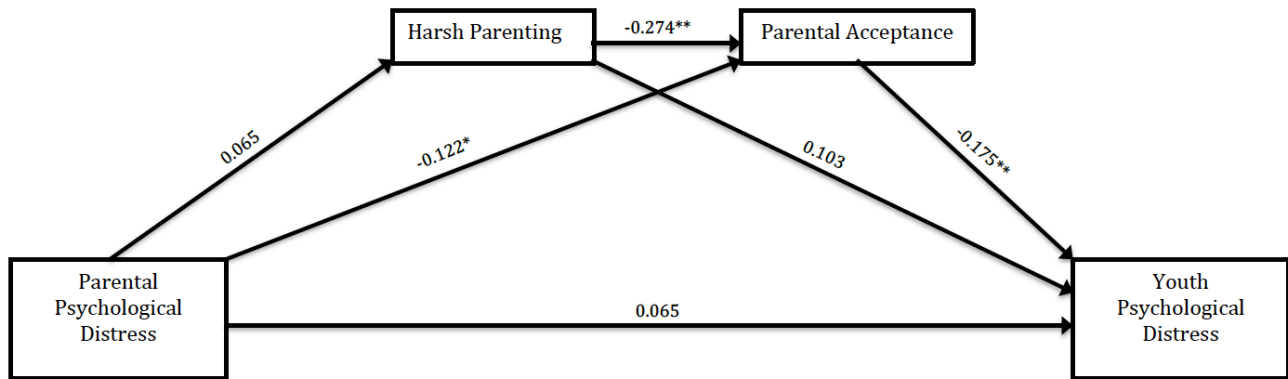
List of Tables

Table 1: Youth Sample Gender	39
Table 2: Descriptive Statistics on Sample Demographics	39
Table 3: Number of Children in Household Distribution	40
Table 4: Family Income Distribution	40
Table 5: Descriptive Statistics for the Study Variables	48

List of Figures

Figure 1

Results of the path analysis for parental psychological distress and youth psychological distress



*Significant at $P < 0.05$
**Significant at $P < 0.01$

Chapter 1: Introduction

Statement of the Problem

As the primary context in which children are socialized, the family plays an important role in human development. In the field of Marriage and Family Therapy, the family is conceptualized as a system, governed by specific rules (e.g., about who has power and authority) that commonly are implicit and can be inferred from observing repetitive patterns in family interaction, in which each member plays an active role. Furthermore, a system such as a family is a distinct entity that interacts with its environment, as a family interacts with extended family, schools, jobs, etc. As White and Klein (2008) assert, “a system’s behavior affects its environment, and in turn the environment affects the system” (p. 157). The main underlying assumptions held by systems theorists are twofold: (1) all parts of the system are interconnected, and (2) change/disruption occurring in one part of the system (i.e., the parental or child/sibling subsystem) influences the entire system (White & Klein, 2008). Through this lens, the family system is not simply the sum of its parts, but rather how the individual parts influence each other and combine to form a whole that is greater than the parts. Thus, family systems theory is really a theory about relationships among members who mutually influence each other. Based on the family systems theory framework, the current study examined how the level of psychological functioning in the parental subsystem affects child and adolescent psychological wellbeing.

In the context of the family system, the parent-child relationship is an

essential component of child wellbeing, and it plays a key role in children's behaviors. There are many factors that determine the quality of the parent-child relationship, one of the main determinants being the behavioral interactions between parents and their children (El-Sheikh, & Elmore-Staton, 2004; Smokowski, Bacallao, Cotter, Evans, 2015; Ying et al., 2018).

One of the major principles of human behavior in social learning theory posits that one's behavior is influenced by its consequences (Bandura, 1977; Kazdin, 2008). When it comes to parenting, positive consequences are often a reward for the child, and thus reinforces desired behavior. On the other hand, negative consequences such as punishments discourage "bad" behavior. Although parents are often tempted to use negative consequences in order to correct child behavior they may deem unacceptable, research indicates that parental focus on a child's positive behavior increases the frequency of desired behavior and also has positive effects on the child's psychological and emotional wellbeing (Kazdin, 2008; Lakind, & Atkins, 2018; Latham, 1994).

There also are many contextual factors that determine the quality of parent-child interactions, and therefore child development and psychological wellbeing. One such factor involves parent psychological functioning. Belsky's (1984) process model of parenting determinants suggests that parents' psychological functioning influences their behavior toward their children, which in turn influences child development. This model proposes that problems in parents' personal adjustment can contribute to problems in their children's psychological development and functioning, mediated by the behavioral interactions between parent and child. Throughout the past quarter

century, a growing body of research has emerged that has addressed that process model by investigating the association between parental psychopathology and child internalizing and externalizing disorders/symptoms, and by examining alternative pathways that link parental and child psychological functioning (Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007; Forehand, Thingpen, Parent, Hardcastle, Bettis, & Compas, 2012; Gray & Steinberg, 1999; Weissman, Prusoff, & Gammon, 1984).

While biological and genetic determinants have been found to play a role in the intergenerational transmission of psychopathology, researchers have also identified parenting practices that are associated with the transmission of risk for depression from parent to child (Forehand et al., 2012). Goodman and Gotlib (1999) proposed a developmental model for understanding mechanisms of transmission of risk for psychopathology in children of depressed mothers. The model identified four potential mechanisms that can mediate the relationship between maternal depression and child depression: “genetics mechanisms” (Mechanism 1), “adverse prenatal experiences mechanisms” (Mechanism 2), “adverse parenting mechanisms” (Mechanism 3), and “stressful context mechanisms” (Mechanism 4).

Mechanism 1 refers to heritability of depression due to a genetic predisposition. Observational studies have found that more severe parental depression (i.e., clinically significant levels of major depression), higher prevalence of depression among family members (especially both biological parents), and younger age of onset (before age 20) may also contribute to higher familial aggregation of depression (Goodman & Gotlib, 1999; Weissman, Prusoff, & Gammon, 1984).

Adverse prenatal experiences (Mechanism 2) are conceptualized in the context of the fetal environment and are defined by abnormal fetal development due to factors associated with mother's depression *during* pregnancy, such as: fetal exposure to neuroendocrine alterations (which the fetus experiences via utero blood flow), limited blood flow to the fetus, mother's use of antidepressant medication during pregnancy, and poor health behaviors during pregnancy. There is mixed support for the effects of adverse prenatal experiences in the overall research (Goodman & Gotlib, 1999).

Mechanism 3 refers to child exposure to the mother's maladaptive cognitions and negative affect, which are associated with the mother's use of more punitive, and hostile behavior in response to child misbehavior. Goodman and Gotlib (1999) agree that while there is consistent empirical support for the mediating role of adverse parenting behavior on the relationship between parent and child psychopathology, much of the literature has focused on infant-mother interactions. Additionally, while the association between maternal depression and child depression has had strong empirical support, Goodman and Gotlib (1999) point out that, "no study was found to have demonstrated that depressed mothers' negative cognitions, affect, or behavior per se predict subsequent depression in their children" (p. 476). This being said, within the past two decades a growing body of literature has emerged investigating the impact of parental behavior on the relationship between parents' and children's psychological functioning. Overall, the literature suggests that parent-child interactions can be a pathway linking parent and child wellbeing, but the inconsistent prior findings leave a significant gap in knowledge regarding that pathway.

Conversely, there also has been limited empirical research on positive parenting behavior on the psychological wellbeing of offspring, and the present study is designed to address that issue as well.

Finally, Mechanism 4 refers to exposure to stressful environments outside the context of mother-child interactions. Such stressors include: parental marital conflict (Kouros, Merrilees, & Cummings, 2008), stressful life events, and parents' job/financial stressors. Empirical support for Mechanism 4 derives mainly from research findings that individuals with depression, as well as children of depressed mothers face multiple contextual stressors in their lives.

The link between parental depression and family discord has been consistently supported by research (Kouros et al., 2008; Nomura, Wickramaratne, Warner, Mufson, & Weissman, 2002; Pilowsky, Wickramaratne, Nomura, Weissman, 2006). A longitudinal study aimed at identifying the distinct effects of parental depression and family discord on psychological functioning of offspring found that parental depression was a strong risk factor for offspring depression (specifically MDD), and anxiety disorders later in life (Nomura et al., 2002). Moreover, the researchers found that when family conflict was present rates of anxiety disorders, depression, and substance use disorder in offspring increased. The study by Nomura et al. (2002) was conducted over a period of ten years. At baseline, the average age of the offspring cohort was 17 years; results of the study represent data analyzed at the ten-year follow-up.

While there is a robust body of literature on the association between parental and child depression, there is significantly less research on the affect of parental

depression on childhood anxiety. The study conducted by Nomura et al. (2002) suggest that parental depression may be related to offspring anxiety in children's later stages (i.e., adulthood), however research on this association at earlier stages in the child's life is lacking. Many studies allude to such an association by suggesting a link between parental depression and child internalizing disorders and symptoms (which includes both depression and anxiety), however the dearth of information on anxiety outcomes in children is surprising given that depression and anxiety are often comorbid in both children and adults (Colletti et al., 2009).

Parental Depression and Parenting Behavior

Given the evidence for the Mechanism 3 pathway through which negative parenting behavior is a risk factor for child depression, researchers have investigated parental characteristics that contribute to problematic parenting. Researchers investigating the relationship between parental depression and parenting behavior have observed discrepancies between depressed mothers and non-depressed control groups. When interacting with their child, depressed mothers exhibit less positive affect, more sadness, irritability, and tend to engage in more punitive behaviors (Cohn, Campbell, Matias, & Hopkins, 1990; Dix, & Meunier, 2009; Field, Healy, Goldstein, & Guthertz, 1990; Goodman, Adamson, Riniti, & Cole, 1994). Forehand et al. (2012) offer an explanation for why depressive symptoms may relate to more negative parenting: "Depressive symptoms promote negative appraisals of a child, which, in turn, lead to negative verbal and physical behavior with the child" (p. 2). While a majority of studies investigating parental depression and child outcomes have

focused on the interactions in mother-infant dyads, a significant body of literature also exists on the effects of depression in parent-adolescent relationships.

A study by Foster et al. (2008) that provided an intervention (the SSRI antidepressant medication citalopram) to reduce depressed mothers' symptoms tested mediation of family functioning and parenting on the relationship between remission of maternal depression and children's psychosocial adjustment. Participants for this study came from the STAR*D study, which was designed to compare the efficacy of different treatments for major depressive disorder (MDD). All mothers were treated with citalopram and were evaluated twice over a 3-month period. Foster et al. (2008) investigated whether improvement in youth outcomes was related to reduction of maternal depressive symptoms/overall remission of the illness, and if these improvements were associated with changes in family and parental functioning (Foster et al., 2008). Parental functioning was defined by levels of maternal acceptance (expressions of warmth, approval, and responsiveness toward the child), and psychological control (the extent to which the parent tries to influence/control the child's emotions or beliefs). Both maternal acceptance and psychological control were assessed from the child's perspective, using the Children's Report of Parenting Behavior Inventory (CRPBI-30; Schludermann & Schludermann, 1970, 1988); internal consistency was high for both the acceptance and the psychological control subscales, with Cronbach alpha levels of .81 and .72, respectively. Children completed the CRPBI at baseline and at the three-month follow up.

Family functioning was defined by family cohesion, positive open communication/expressiveness, and family conflict, and it was measured using the

Family Relationship Index (Holahan & Moos, 1982) of the Family Environment Scale (FES; Moos & Moos, 1994) that was completed by the mothers. Cronbach alpha levels for those three domains of family functioning were: ($\alpha = .70$) for cohesion, ($\alpha = .62$) for expressiveness, and ($\alpha = .71$) for conflict. Mothers completed the FES twice, once at baseline and again at a three-month treatment follow-up. The researchers hypothesized that family/parental functioning would mediate the relationship between maternal remission of depression and youth psychopathology and psychosocial impairments that were measured at the three-month follow-up.

Youth psychopathology was measured using the Child Behavior Checklist (CBCL/4-18; Achenbach, 1991) a scale used to assess internalizing and externalizing symptoms of the child as reported by the mother. Alpha levels at baseline were .82 for the internalizing and .88 for the externalizing scale, respectively. The Social Adjustment Inventory for Children and Adolescents (SAICA; John, Gammon, Prusoff, & Warner, 1987) was used to assess children's social functioning in school, during spare time activities (jobs, and hobbies), and regarding peer relationships (choosing to socialize with pro-social vs. antisocial peers, peer rejection, and popularity). The SAICA was administered through structured interviews with the child and had high inter-rater reliability across all three dimensions described above. Both the SAICA and the CBCL were administered at baseline and the three-month follow-up.

One-hundred-and-fifty-one mother-child dyads took part in this cohort study design, which spanned a 3-month period. Mothers were outpatients (ages 25 to 60) diagnosed with nonpsychotic major depressive disorder (MDD) and had no other

lifetime diagnosis (i.e., no psychosis and no bipolar disorder). Child participants were between the ages of 7 and 17, the biological offspring of the mother, lived with the mother at least 50% of the time, and did not have any severe developmental disabilities or psychotic disorders. As noted previously, all adult participants were treated with citalopram.

The findings showed that remission of maternal depression was positively associated with improvements in youth outcomes. In other words, as mothers' depressive symptoms decreased, so did the levels of both internalizing and externalizing symptoms in their children. While no significant relationship was found between remission of maternal depression and youth psychosocial functioning, the study found support for the mediating role of parental functioning (maternal warmth) in the relationship between maternal remission of depression and youth psychopathology at the 3-month follow up: "that is, remission of maternal depression significantly predicted changes in mothers' expressions of warmth and acceptance as reported by children in the 3 months following the initiation of mothers' antidepressant treatment (Foster et al., 2008, p. 719). The results of this study support prior research on the relationship between parental depression and child psychopathology (Pilowsky et al., 2006). Moreover, this was one of the first studies to "examine family-level mediators of the relation between remission of maternal depression and youth outcomes in older children and adolescents" (Foster et al., 2008, p. 721).

Many studies investigating parenting behaviors contributing to intergenerational transmission of psychopathology focus on populations in which

clinical depression is prevalent, or in which the participating parents have a clear diagnosis. Thus, the results of these studies may not be generalizable beyond a population of clinically depressed mothers and their children. Therefore, one aim of the present study was to broaden the investigation of the intergenerational association of psychopathology symptoms (depression and anxiety symptoms) by examining psychological distress in a community sample of Latino parents who were not selected on the basis of being clinically depressed and their older children/adolescents.

Research testing mediation by parenting practices in the link between parent and child psychological wellbeing has found evidence that parents' rejection behavior (e.g., "My parents seem too busy to spend as much time with me as I'd like"; Lempers, Clark-Lempers, & Simons, 1989) toward their children mediates the links between parental depressive symptoms and youth internalizing and externalizing problems (Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007). In addition, research examining the relationship between positive parenting styles and child outcomes shows that parental acceptance and involvement (e.g., responsive, loving, and involved parenting style in which the child can count on the parent to meet their needs) along with appropriate levels of parental control and granting of autonomy are positively associated with favorable child outcomes including academic competence, psychosocial development, greater self-esteem, and lower depression and anxiety (Gray & Steinberg, 1999; Steinberg, 2001). Thus, use of harsh parenting practices (e.g., spanking, yelling, and using degrading language towards child) is linked to negative child outcomes including increased risk for clinical levels of

psychopathology (anxiety and depression diagnosis later in life) as well as childhood internalizing (symptoms of depression and anxiety including low affect, fearfulness, and social withdrawal) and externalizing symptoms (physical aggression, truancy, and conduct disorders) (Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007; Goodman, & Gotlib, 1999), but positive parenting has positive effects on child well-being. The present study simultaneously examined both processes.

In contrast to warmth and responsiveness, harsh parenting is characterized by physical and verbal aggression (e.g., yelling, spanking, slapping, and shouting), as well as neglect, rejection, threat, and disapproval (Barajas-Gonzalez & Brooks-Gunn, 2014; Hinnant, Erath, & El-Sheikh, 2015). Researchers commonly have identified harsh parenting practices as a core component of an authoritarian parenting style, which is characterized by low levels of support and high levels of parental control. Although authoritarian parenting has been found to be associated with maladaptive outcomes in children and adolescents, the literature also shows that parental control acts as a protective factor against adolescent maladaptive behaviors (i.e., substance use) (Driscoll, Russell & Crockett, 2008). A factor that seems to influence the degree to which authoritarian parenting has negative child outcomes, is the manner in which the children perceive the parents' controlling behavior (which includes parental monitoring and discipline behaviors).

Cultural Differences in effects of Parenting Styles

While harsh parenting is negatively correlated with adolescent mental and behavioral outcomes overall, studies in the U.S. of minority children raised by authoritarian parents who use harsh parenting practices have found the children to be

less negatively affected than adolescents from the dominant/majority culture/race (Steinberg, 2001). This may be due to a cultural difference in the meanings that family members attach to authoritarian parenting behavior. Based on these findings, harsh parenting may prove to be a protective factor in minority families due to children's perception of their parent's behavior as a reflection of caring and concern. Research on parent socialization practices identifies cultural components that influence parenting practices (Pagano, Hirsch, Deutsch, & McAdams, 2003). For instance, although majority American culture promotes values of individuality and autonomy, African American culture, as well as Latin-American cultures, promotes strong traditions of familialism, community wellbeing, and responsibility for others (Littlejohn-Blake, & Darling, 1993; Smokowski, Chapman, & Bacallao, 2007). In addition, research has shown that African American parents socialize their children differently from white American parents in order to promote awareness about the dangers in the world from racial discrimination (Deater-Deckard & Dodge, 1997; Pagano, et al., 2003). Studies have found an increased use of harsh parenting with African-American children, intended by parents to protect their children from societal dangers (Kohl, Kagotho, & Dixon, 2011). Thus, it is important to avoid generalizing findings regarding links between parenting styles and child psychological functioning that have been based on majority white samples to minority families.

In summary, prior research has found support for the association between parental psychological functioning and child psychological functioning. In addition to potential biological and pre-natal pathways accounting for that link, other important pathways include environmental factors such as external familial stressors, and

quality of the parent-child relationship. Parenting behavior, a component in the quality of the parent-child relationship, has received much attention by theoreticians and researchers. There is no doubt that individuals diagnosed with depression exhibit cognitive, emotional, and behavioral traits common to their diagnosis (i.e., low affect, irritability, fatigue, and cognitive distortions), which in turn affect the way they interact with the world around them, including their family. Numerous studies have found that depressed mothers exhibit greater negative affect such as irritation when interacting with their children, compared to non-depressed mothers (Cohn, Campbell, Matias, and Hopkins, 1990), and among community samples, maternal depression has been associated with higher risk of harsh parenting (Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Research supporting an interactional model for transmission of psychopathology has found that maternal parenting practices account more for child outcomes than mother's diagnostic status (Goodman, & Brumley, 1990). While an interactional model for the transmission of psychopathology has been supported by literature on clinically significant maternal depression, less is known about sub-clinical psychological distress (i.e., symptoms that do not reach thresholds for a formal clinical diagnosis) in parents and its effect on children.

To date, there have been fewer studies investigating the association between parental and child psychological distress in a community sample. Furthermore, building on research that has found support for an interactional model for transmission of psychopathology from mother to child, this was one of the first to examine the mediating effect of parenting practices on the link between parent and child non-clinical psychological distress. Although a growing body of literature is

emerging on minority and immigrant families, currently the research is limited. In addition, much of the current research on parental depression and child outcomes focuses on mothers, with little on fathers' functioning, parenting, and child outcomes. The lack of research on links between paternal functioning and child well-being is a significant gap that needs attention.

Finally, much of the existing literature on parenting has been viewed through the lens of an Anglo Western value system, which can sometimes pathologize practices that are considered normal in other cultures. Therefore, current and future research should avoid generalizing across families in an increasingly diverse U.S. population. The aim of the present study was to increase knowledge in this area.

Purpose of the Study

Goodman and Gotlib's (1999) model of risk for psychopathology has been supported by research conducted over the past two decades (Goodman, 2007; Kuckertz, Mitchell, & Wiggins, 2018). A growing body of literature continues to emerge in support of the mediating effects of parenting practices in the relation between parent (maternal and paternal depression) and child psychopathology (Reeb, Conger, & Wu, 2010). Furthermore, parental harsh discipline has been found to relate to reports of depression, anxiety, and externalizing behaviors in adolescents (Bender et al., 2007), while parental warmth (a component of parental acceptance) has been shown to act as a protective factor in the association between harsh parenting practices and negative youth outcomes (Germàn, Gonzales, McClain, Dumkan, and Millsap, 2013). Finally, research exploring the pathways between parent and child psychopathology has identified negative parenting practices, such as harsh discipline,

to account for this relationship (Callender, Olson, Choe, & Sammeroff, 2012).

This thesis research project was designed to explore the association between Latino parents' and their youths' psychological functioning, and the degree to which that association is mediated by parenting styles. The study design involves a cross-sectional analysis of psychological distress measured in both parents and their children, as well as a test of whether the relationship between parent and child psychological distress is mediated by two major forms of parenting behavior: (1) harsh parenting practices, and (2) parental acceptance. In the context of the present study, harsh parenting practices are defined by physical aggression toward child (such as spanking or slapping), and verbal aggression toward the child (using threats, intimidation, aggression, criticism, or degrading language/calling child names,). Parental acceptance is defined by positive parenting behavior when interacting with their child (i.e., behavior that shows warmth, understanding, nurturing and acceptance of child).

Using the theoretical framework proposed by Goodman and Gotlib (1999) as well as the process model of parenting determinants (Belsky, 1984) the present study aimed to contribute to the existing literature investigating the role of parental psychological functioning on parenting practices, and the effect of this relationship on child outcomes. This study was intended to add a new dimension to the existing literature on risk for transmission of psychopathology by evaluating levels of psychological distress (as opposed to clinically significant depression) in both parents and their children, while focusing on parenting behavior mechanisms to explain this effect.

Chapter 2: Literature Review

The Role of Family Wellbeing in the Context of Public Health

As the primary institution responsible for the socialization of new generations, the family system is the foundation upon which a society rests. Research on the social determinants of health has placed a growing emphasis on the link between family wellbeing/functioning and offspring's physical and mental health outcomes both short-term and later in life (Felitti et al., 1998; McNeill, 2010). For instance, the adverse childhood experiences study (ACES) found a strong graded correlation between the degree of exposure to household dysfunction in childhood and elevated risk for developing life-threatening diseases in adulthood including: heart disease, cancer, lung disease, and liver disease (Felitti et al., 1998). Household dysfunction was characterized by the following: (1) substance abuse, (2) mental illness (i.e., depression) of one or more household members, (3) exposure to interpersonal violence (specifically, observation of the mother being treated violently), and (4) criminal behavior of members of the household.

In addition to those aspects of household dysfunction, physical abuse victimization of the child has been found to be a risk factor for negative health outcomes. Fuller-Thomson and Brennenstuhl (2009) investigated the link between childhood physical abuse victimization and cancer. The investigators found a positive correlation between childhood experiences of physical abuse and risk of developing cancer later in life. Moreover, adult health behavior was found to be the primary

pathway accounting for this association. In other words, childhood adverse experiences and later negative health outcomes is strongly mediated through the child's own development of health risk behaviors such as alcohol/drug abuse (Halpern et al., 2018), tobacco use (Topitzes, Mersky, & Reynolds, 2010), and risky sexual behaviors (Fuller-Thomson, & Brennenstuhl, 2009).

While there is much evidence regarding the negative effects of childhood maltreatment and early-life adverse experiences in relation to later-life health outcomes, researchers examining the opposite type of process have found that family strengths, such as open communication, facilitate optimal family functioning, which in turn facilitates positive child outcomes (Walsh, 1996; Werner, 1993).

Findings from the Kauai Longitudinal Study (Werner, 1993) identified three clusters of protective factors that help facilitate resilience: factors within the individual, those within the family system, and support from the community. This study observed a multi-racial cohort of 698 children from birth to midlife who were born in 1955 on the island of Kauai, Hawaii. Data were gathered at six different developmental stages throughout a 40-year period when the participants were ages, 1, 2, 10, 18, 32, and 40 respectively. These six stages were identified by the researchers as crucial points during the lifecycle for the development of: trust, independence, industry (hard work, activity, dedication), identity/individuality, intimacy, and generativity (concern for constructing and grooming the future generation). Two-hundred-and-ten participants (about 30%) who completed the study in its entirety represented the at-risk group ("born and raised in poverty, had experienced pre- or perinatal complications; lived in families troubled by chronic discord, divorce, or

parental psychopathology; and were reared by mothers with less than 8 grades of education”, Werner, 1993, p. 11). One-third of the participants in the at-risk group, who experienced 4 or more of the aforementioned risk factors by the second stage (age 2), grew into competent, confident and caring adults. The remaining two-thirds developed learning or behavioral disabilities by age 10 or had juvenile records and/or mental health problems by stage four (age 18). With regard to the family system, Werner (1993) found, “children who succeeded against the odds had the opportunity to establish, early on, a close bond with at least one competent, emotionally stable person who was sensitive to their needs” (Werner, 1993, p. 12). When there was a lack in the parent-child relationship, nurturing care was sought from and provided by substitute caregivers (older siblings, grandparents, and extended family members). In addition, religiosity was a common factor in these families; holding religious beliefs provided some stability and meaning in the lives of these at-risk children. This study provides support for the positive and protective effect of a healthy family dynamic in the lives of children exposed to multiple stressors early in life. Furthermore, the study showed that among children growing up in at-risk environments, “only a minority develops serious emotional disturbances or persistent behavioral problems” (Werner, 1993, p. 11).

Parenting and Child Psychological Wellbeing: An Ecological Perspective

Research on human development throughout the life-course identifies numerous environmental factors contributing to offspring physical and psychological wellbeing. In the context of the family system, parents play a key role in child

development by modeling behaviors that children later adopt. Werner (1993) observed that, “resilient boys tended to come from households with structure and rules, where a male served as a model of identification, and where there was encouragement of emotional expressiveness” (p. 12) while girls who were more resilient came from households that emphasized independence combined with reliable support from a female caregiver. Moreover, resilient children tended to be particularly adept at finding surrogate parents from which they were able to receive nurturing care when their biological parents were unavailable to provide such support. These observations are consistent with the literature on the impact of parental warmth combined with appropriate levels of parental control in facilitating the healthy psychosocial development of a well-adjusted child.

The effects of positive and negative parenting behaviors on child wellbeing is clear; however, it is important to note that parenting behavior itself is influenced by parental psychological functioning. Research investigating the link between parental psychopathology and child internalizing and externalizing symptoms has found support for the mediating role of parenting behaviors in the relationship between parental depression and child psychological functioning (Cohn, Campbell, Matias, & Hopkins, 1990; Dix, & Meunier, 2009; Forehand, Thingpen, Parent, Hardcastle, Bettis, & Compas, 2012; Goodman, Adamson, Riniti, & Cole, 1994; Foster et al., 2008).

Belsky’s (1984) Process Model for Parenting Determinants promotes an ecological perspective in conceptualizing parenting. Three domains that influence parenting behavior are identified: parent personality and psychopathology, child

characteristics (i.e., temperament, and behavior), and contextual sources of stress/support (e.g., marital relationship, social network, employment). The model is based on an assumption that distress/disturbance in one or more of those domains “influences individual personality and general psychological wellbeing of parents and, thereby, parental functioning and, in turn, child development” (Belsky, 1984, p. 84).

Based on his model, Belsky conducted research on types of parenting behavior as determinants of optimal child functioning. Prior research suggests that parental warmth is consistently related to positive child outcomes across multiple developmental stages including infancy, childhood, and adolescence (Belsky, 1984; Gray & Steinberg, 1999; Steinberg, 2001). However, Belsky found that as children grow older, parental use of *consistent discipline* (a form of control) along with parental expression of warmth is related to a variety of positive outcomes in school-age children including greater self-esteem, better self-control, and more prosocial attitudes (Belsky, 1984). Other studies investigating parenting behavior and adolescent outcomes have found that parental warmth, structure, and fair parenting promote healthy psychological development in teenagers (Gray & Steinberg, 1999; Steinberg, 2001). Therefore, it is important to consider child age when investigating parent-child interactions, because effective parenting behavior may differ based on the child’s developmental stage.

Gray and Steinberg (1999) investigated the relationship between authoritative parenting and adolescent adjustment in a sample of 8,700 fourteen-to-eighteen-year-olds. Three dimensions of authoritative parenting were identified (acceptance-

involvement, behavioral supervision and strictness, and psychological autonomy) and measured using three different scales that were adapted for use in their study. The acceptance-involvement scale measured adolescents' perceptions of their parents' parenting traits (i.e., loving, responsive, and involved), while the strictness-supervision scale assessed parental monitoring and limit setting as reported by the adolescent (parental control), and the final scale was designed to measure the extent to which parents employ non-coercive, democratic discipline and encourage youth expression of individuality in the family. Adolescent adjustment was measured using a variety of subscales measuring the adolescent's pride and successful completion of tasks, self-reliance (internal control and autonomous decision-making) (Form D; Greenberger, Josselson, Knerr, & Knerr, 1974), school deviance (cheating, copying, and tardiness), peer conformity (susceptibility to antisocial peer pressure), drug and alcohol use, frequency of antisocial behavior of teen participant, and depression (CES-D; Randloff, 1977).

Results of the study supported previous findings that healthy psychological teen adjustment is related to parental warmth and attentiveness, as well as to appropriate levels of parental control and autonomy granting. Overall the findings showed that more parental involvement, autonomy granting, and structure (as perceived by the adolescent) was correlated to more positive adolescent evaluation of their own mental health, behavioral conduct, and psychosocial development. Moreover, the findings showed that the three dimensions of authoritative parenting overlapped statistically, suggesting that characteristics of a parent's parenting style

work together and, “no single characteristic of a parent’s behavior exists entirely independent of other qualities” (Gray & Steinberg, 1999, p. 584).

Research testing mediation by parenting practices in the link between parent and adolescent psychological wellbeing has found support for the role of parental rejection (the opposite of warmth/acceptance; “My parents seem too busy to spend as much time with me as I’d like”; Lempers et al., 1989). Elgar, Mills, McGrath, Waschbusch, and Brownridge (2007) investigated the mediating role of parental behavior on the relationship between maternal and paternal depressive symptoms and adolescent maladjustment. Data for the study came from the 1998 and 2000 cycles of the National Longitudinal Survey of Children and Youth (NLSCY), a study administered by the Canadian Government. Participants were 4,184 parents and their children ($n = 6,048$) between the ages of 10 and 15 years old. Parent data were collected in 1998 (Time 1) and in 2000 (Time 2), while adolescent data were collected only at Time 2. The researchers assessed parental and child depressive symptoms, adolescent internalizing and externalizing problems, and their perceptions of parental behavior (i.e., nurturance, rejection, and parental monitoring). The results indicated a mediating role of parental rejection behavior in the relationship between parental depressive symptoms and adolescent internalizing and externalizing symptoms. Additionally, this study supported the larger body of literature on the tendency for depressed parents to exhibit more hostility, less nurturance, and more rejecting behaviors towards their children (Kane & Garber 2004; Lovejoy, Graczyk, O’Hare, & Neuman, 2000).

Parent-Child Transmission of Risk for Psychopathology

Psychopathology is one of the most widely researched determinants of parenting quality. The aforementioned model for understanding transmission of risk for psychopathology in children of depressed mothers proposed by Goodman and Gotlib (1999) identifies negative parenting practices as a mediator for this relationship. Depressed parents have more difficulty regulating their emotions (Besharat, Nia, & Farahani, 2013) and are more likely to use harsh parenting and punitive tactics when interacting with their children (Barros, Goes, & Pereira, 2015; Goodman, & Gotlib, 1999).

Maternal depression, parenting behavior, and child functioning.

Cohn, Campbell, Matias, and Hopkins (1990) identified the effect of depression on mothers' parenting behavior in an observational study of depressed ($n = 24$) and non-depressed ($n = 22$) mother-infant dyads. Inclusion criteria for the depressed group were: white women between ages 18-35, married and living with spouse, and met Research Diagnostic Criteria (RDC; Spitzer, Endicott, & Robins, 1978) for clinically significant post-partum depression. Inclusion criteria for the control group were the same as the depressed group, with the exception of the clinically significant post-partum diagnosis. One interesting difference between the two groups was that 20% of the depressed group had returned to work at least 20 hours per week, whereas none of the control group members had returned to work. Structured face-to-face infant-mother interactions were observed and video recorded by the researchers in the participant's home. Researchers coded facial and vocal expressions, direction of gaze, and body language for both mothers and infants.

Depressed mothers exhibited greater negative affect, particularly irritation, when interacting with their child compared to the control group. Moreover, “both the proportion of depressed mothers showing negative affect and the proportion of negative affect they displayed were significantly greater than that observed among non-depressed mothers” (Cohn et al., 1990, p. 20). Interestingly, one of the more provocative findings from this research was observed regarding the interaction of work status and maternal depression. Depressed mothers working 20 hours a week or more (outside of the home) exhibited more positive affect in their interaction with their babies than non-working depressed mothers.

In the context of Belsky’s model for the determinants of parenting, this finding could provide support for the contextual sources of support/stress domain. Mothers who worked outside the home may have obtained more support in the form of greater self-esteem, supportive interactions with other adults/co-workers, and the ability to enjoy the limited time they had with their baby. Additionally, in the context of Goodman and Gotlib’s (1999) transmission of risk for psychopathology model, work-status of depressed mothers can be conceptualized as a potential protective factor in the transmission of risk. A considerable amount of literature exists on the negative influence of maternal depression on mother-infant interactions, suggesting that quality of parent-child interactions is a better predictor of child psychological and behavioral outcomes, than status of parental depression (Murry, Woolgar, Martins, Christaki, Hipwell, & Cooper, 2006).

Murray et al., (2006) investigated links between parental mental health, family characteristics and child psychological functioning in an observational study of

parents (mothers and fathers) helping their children with homework. Four dimensions of parental communication, with regard to homework support, were measured: (1) positive mastery motivation (parents enthusiasm, encouragement, and willingness to help child on homework task), (2) providing information about the homework task to help the child understand, (3) parental psychological availability, supportive awareness of the child, and positive affirmative comments (e.g., “yes, that’s it; “Ok, you’re starting there then”), and (4) coercive control/parent’s use of strong directives (e.g., “put this here”).

The researchers hypothesized that depressed mood in mothers would interfere with homework support across all four dimensions of parental communication.

Participants were 96 8-year-old children and their parents (96 mothers and 81 fathers). Fifty-five children and their mothers (along with 46 fathers) comprised the maternal depression group, while the non-depressed control group consisted of 41 mother-child dyads and 35 fathers. Participants were recruited from a representative community sample of 702 first-time mothers and their healthy, full-term infants. All mothers were assessed for maternal depression using the Edinburgh postnatal depression scale (EPDS; Cox, Holden, & Sagovsky, 1987) six weeks after giving birth. Mothers who experienced an episode of depression during the postpartum period met criteria for inclusion in the depressed group, while mothers comprising the control group had not experienced any postnatal depression. All mothers and their children were assessed at 18 months (post-delivery), at 5 years, and at 8 years. Data used in the study were collected and assessed at the 8-year period. The researchers observed mothers and fathers at home, each interacting with their child during a

homework task at home.

Over 5% of fathers in the control group experienced at least one of the following diagnoses: depression, alcohol abuse, and anxiety disorder (Murray et al., 2006). The number was higher (17%) for fathers in the postnatal depressed group. Although all mothers in the depressed group were diagnosed with postnatal depression, only 14.5% experienced depression at the 8-year period, and 2.4% of mothers in the control group (who initially had no postnatal depression) were currently experiencing depression at the time of assessment. Current depression in both mothers and fathers was measured using the affective disorders dimension of the structured clinical interview for DSM diagnosis (SCID; First, Spitzer, & Williams, 1996). Child outcomes included: self-esteem (as reported by the child on the Perceived Competence Scale for Children; Harter, 1982), and school adjustment (as reported by teachers using the Rutter Scale; Rutter, 1967).

The findings showed that current maternal depression was associated with poorer support for the child on each of the homework support/communication dimensions as well as both of the aforementioned child functioning dimensions (Murray et al., 2006). In addition, while children's self-esteem was positively related to most maternal communication dimensions (except for mother's use of coercive control, which was associated with lower child self-esteem), it was not associated with any communication dimensions when the child was interacting with their father. Furthermore, it was observed that the most well adjusted children (on the school-adjustment dimension) had mothers who exhibited more emotional support fathers who expressed less coercive control, and more positive mastery motivation. Current

maternal depression was associated with all aspects of maternal homework support/communication; however, the researchers found no association between the original postnatal depressive episode and current child functioning. This study provided further support for the positive impact of warm, engaging, and non-restrictive parenting on child outcomes. One important implication of the study is that the current quality of parent-child interactions and the parent's use of positive communication is more predictive of positive child outcomes than the parent's current or previous depressive status. The study provided further support for the mediating role of parenting style in the relation between current parent psychopathology, and child outcomes later in life.

Paternal depression, parenting behavior, and child functioning.

While much research exists on the topic of maternal depression, particularly during the postpartum period, less research has investigated paternal depression and its effects on child-rearing behaviors and child outcomes. The available research indicates that the association between paternal depressive symptoms and poorer adolescent functioning is comparable to that associated with maternal depressive symptoms (Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007; Phares & Compas, 1992). However, research on parent-child interactions suggests that parent gender contributes to different child outcomes. Specifically, some studies have indicated that mother-child interactions affect children's self-esteem and emotional wellbeing more, whereas father-child interactions are associated with a greater impact on children's social competence (Conger, Patterson, & Ge, 1995; Goodman et al., 1994; Kaisa, & Jari-Erik, 2005; Reeb et al. 2010).

In addition, there are research findings suggesting that adolescent gender and perception of paternal hostility moderate the relationship between paternal psychopathology and adolescent outcomes (including adolescent depressive symptoms). In a prospective cohort design (spanning a 2-year period), Reeb et al. (2010) examined the impact of paternal depressive symptoms, paternal hostility, and adolescent gender on adolescent functioning while controlling for the effects of maternal depression, family demographic variables, and previous adolescent depressive symptoms. The study used a community sample of 451 7th grade adolescents (236 female, 215 male) from two-parent families. Participants were from middle- and lower-middle class white American families living in rural Iowa.

Self-report measures of depressed mood were administered to parents and adolescents, using the Depression Subscale of the SCL-90-R (Derogatis, 1983). Adolescents were asked to report on their perceptions of paternal hostility using the Father Hostility subscale of the Behavioral Affect Rating Scale (BARS; Conger, 1989), whereas maternal hostility was not assessed (Reeb et al., 2010).

The researchers hypothesized that the child's gender, adolescents' reports of high paternal hostility, and adolescents being raised by depressed mothers would be risk factors for psychopathology. The researchers also posited that at higher levels of both paternal depression and paternal hostility, girls would be at greater risk for depression than boys (Reeb et al., 2010). The findings supported the hypotheses that child gender influences perception of paternal hostility, as female adolescents experienced more depressive symptoms than male adolescents as a function of paternal depression. Finally, consistent with prior research on risk for transmission of

psychopathology, maternal depression was significantly related to adolescent symptoms.

The findings of Reeb et al. (2010) offer an interesting observation about adolescent gender differences and perceptions of paternal hostility as moderators of the relationship between parental and child psychopathology. Building upon their research, it could be hypothesized that adolescent gender moderates the link between child and parental psychopathology, especially when the association between parental and child psychopathology is influenced by parental use of harsh (hostile) parenting practices.

Harsh Parenting Behaviors and Child Outcomes

Although there is general consensus in the professional literature that severe forms of physical abuse during parenting are associated with negative outcomes later in life, there is conflicting evidence regarding the broader continuum of relatively harsh discipline behaviors such as spanking and slapping that are milder than what commonly would be considered abusive. Baumrind, Larzelere, and Cowan (2002) suggest that milder forms of physical discipline (i.e., corporal punishment) are not harmful to a child, whereas other researchers have found that use of harsh discipline is associated with greater adolescent depression and externalizing behaviors.

Bender et al. (2007) examined the use of harsh physical discipline and its effects on developmental outcomes in adolescence. Participants were 141 adolescents age 16 and their mothers ($n = 141$) and fathers ($n = 48$). The adolescents were selected for the study based on their academic records. Inclusion in the study was based on one or more of the following: “failing a single course for a single marking

period, any lifetime history of grade retention, 10 or more absences in one marking period, and any history of school suspension” (Bender et al., 2007, p. 230). Self-report measures were administered to both parents and adolescents. Adolescents were asked about parental affection/warmth, parental use of harsh physical discipline, and their own externalizing and internalizing symptoms. Parents reported on their use of harsh physical discipline. A portion of the study investigated parent-child interactions. Adolescents were asked to discuss and attempt to resolve a disagreement with both their mother and their father in separate 10-minute intervals.

The study found that adolescent girls endorsed more depression and anxiety symptoms than boys. Older adolescents also reported more depression and externalizing symptoms than their younger counterparts. Regarding parenting behavior, it was found that adolescent boys were more likely to receive harsh discipline from their fathers than girls, but equally likely to receive harsh discipline from their mothers. Overall, parental harsh discipline was related to reports of depression, anxiety, and externalizing behaviors in adolescents. The researchers found no differences across age, race/ethnicity, or socioeconomic status associated with histories of harsh discipline. These findings suggest a direct relationship between parents’ use of harsh discipline (that was differentiated from physical abuse) and adolescent psychological distress (particularly depression and anxiety symptoms).

In addition to having direct effects on youth psychological wellbeing, harsh parenting has also been determined to mediate the relationship between parental psychopathology and child externalizing problems. Callender, Olson, Choe, and Sammeroff (2012) conducted a longitudinal study examining the cognitive-behavioral

pathways through which parental depressive symptoms increase the risk for child externalizing problems, through parents' use of physical discipline. Data were collected over a period of 2 years. Participants were 245 children and their parents. Children were 3 years old at Time 1 and 5 ½ years old at Time 2. At Time 1 parents were asked to report on their own depressive symptoms (BSI; Derogatis, 1993), negative perceptions of child behavior (i.e., perceptions of child's lack of affection, and perceptions of child's unresponsiveness..."my child seems to prefer spending time by himself/herself rather than with me"; items adapted from the Unresponsiveness scale in the Maternal Perceptions Questionnaire; Olson, Bates, & Bayles, 1982), use of physical violence (Harshness of Discipline scale; Dodge, Pettit, & Bates, 1994), and degree of child externalizing problems (CBCL/2-3; Achenbach, 1992). At Time 2, a different measure was used to assess child externalizing problems (CBCL/6-18; Achenbach, & Rescorla, 2001). On average, mothers scored close to the 60th percentile ($M = 0.29$, $SD = 0.44$) for non-patient women on the depression scale, while fathers scored closer to the 70th percentile ($M = 0.24$, $SD = .36$) for non-patient men. Overall, fathers ($M = 1.90$, $SD = 0.59$) had more negative perceptions of their child's behavior compared to mothers ($M = 1.78$, $SD = 0.56$).

In support of prior literature on parenting determinants, Callender et al. (2012) found that maternal depressive symptoms were positively associated with more frequent maternal physical punishment. This association was mediated through mother's negative appraisal of child's behavior. In other words, mothers who were more depressed perceived their child's behavior more negatively, and therefore used more physical punishment. This indirect effect was observed in fathers as well: more

paternal depression related to more negative appraisal of the child's behavior (particularly level of responsiveness), which in turn predicted more physical punishment.

Although parental rejection and physical discipline has been shown to have negative effects on child and adolescent outcomes, research has also found that maternal warmth can be a buffer between harsh discipline and negative youth outcomes. Germàn, Gonzales, McClain, Dumkan, and Millsap (2013) investigated the moderating role of maternal warmth in the link between harsh discipline practices and adolescent externalizing problems in a longitudinal study of low-income Mexican American families. Participants were 189 adolescents and their mothers who took part in this study from Time 1 (when the adolescent was beginning 7th grade) to Time 3 (at the end of the 8th grade). Data on maternal warmth and harsh discipline were collected from child report measures, while child externalizing behaviors were assessed by maternal report. The researchers reported support for the conditional effects of harsh parenting. Specifically, it was found that under conditions of higher maternal warmth, there was no relationship between degree of harsh discipline and level of adolescent externalizing symptoms. Conversely, low maternal warmth was associated with a positive relationship between harsh discipline and youth externalizing behaviors. Thus, parents commonly exhibit a combination of parenting behaviors, at times a mix of harsh parenting and support for the child, and it is important to take both types of parental behavior into account in studies of parenting and child outcomes. The present thesis study was designed to do so.

Although harsh parenting has been positively associated across time and culture with poor youth outcomes (Brody, Yu, Beach, Kogan, Windle, & Philibert, 2014), there is some literature suggesting that parental control (including harsh parenting) may act as a protective factor against youth delinquency (Jacobson & Crockett, 2000). Research has found support for the prevalence of harsh parenting tactics among families living in dangerous contexts. Parents tend to use more harsh discipline in order to protect their children against environmental risks, including neighborhood dangers and the influence of peers' delinquency (Bradley, Corwyn, Caldwell, Whiteside-Mansell, Wasserman, & Mink, 2000; Brody & Flor, 1998). The function of harsh parenting in this context is to exercise parental control with the aim of reducing child's exposure to the dangers of the world.

Summary

Parental psychological functioning is one component influencing parents' behavior (Belsky, 1984). Numerous studies investigating the role of maternal depression in parent-child interactions have shown that depressed mothers tend to be more irritable, less warm, and exhibit more punitive behavior towards their children as a result of their depression. Overall, individuals who experience depression have more difficulty regulating their emotions and tend to experience more irritation and anger (Besharat et al., 2013). Therefore, it is important to note that parental psychological functioning influences parenting behaviors.

Goodman and Gotlib's model for transmission of risk for psychopathology (Goodman and Gotlib, 1999) goes one step further in proposing an indirect pathway to account for this transmission where the relationship between parent and child

psychopathology is mediated by parenting practices. On the whole, the literature shows support for the affect of parent-child interactions on the link between parent and child wellbeing. However, inconsistencies exist in prior findings, leaving a significant gap in knowledge regarding this pathway.

Harsh parenting, a form of discipline that involves physical and verbal aggression (distinct from physical abuse), has been consistently linked to negative outcomes in children and adolescents (Bender et al., 2007; Brody et al., 2014). Moreover, maternal depressive symptoms have been positively associated with more frequent use of physical punishment (Callender et al., 2012). Most of the literature on parenting focuses on mothers' interactions with their children, and indeed much of the literature on the effects of parental psychopathology on child wellbeing has looked at maternal depression. Yet, a significant gap in the literature exists on the role of fathers in the transmission of risk for psychopathology via father-child interactions. There is evidence, however, that higher levels of paternal depression relates to more frequent use of physical punishment in fathers via their more negative appraisal of the child's behavior (Callender et al., 2012). However, in the study by Callender et al. (2012), the interaction between levels of paternal depression and father's use of harsh discipline was not directly associated with adolescent depression. Furthermore, inconsistencies exist in the literature on the negative effects of harsh discipline, with some evidence suggesting that milder forms of physical discipline are not harmful to a child (Baumrind, Larzelere, & Cowan, 2002). This thesis study was designed to add to knowledge about these links among parental psychological functioning, parenting behavior, and child functioning, taking gender into account.

Study Objectives and Hypotheses

Based on the findings from the theoretical and research literature that has been reviewed here, the purpose of this study was to examine the role of parenting behavior as a mediating factor in the association between level of parental psychological distress and youth psychological distress, in a sample of Latino youth and their mothers and fathers. In the present study, the term “youth” encompasses both older children and young adolescents aged 9 to 15 years old. Therefore, the terms child, youth, and adolescent are used interchangeably throughout the remainder of this paper unless explicitly stated otherwise. The study was intended to investigate both paternal and maternal psychological distress, along with parents’ behavior toward their offspring, specifically parents’ use of harsh parenting tactics and parental acceptance, and youth psychological distress. The following hypotheses were tested:

- (1) Level of parental symptoms of psychological distress will be positively associated with level of adolescent symptoms of psychological distress.
- (2) Greater parental psychological distress will be associated with more frequent harsh parenting behavior.
- (3) Greater parental psychological distress will be associated with less parenting acceptance behavior.
- (4) Greater harsh parenting behavior will be associated with greater adolescent psychological distress.
- (5) Greater parental acceptance behavior will be associated with less adolescent psychological distress.
- (6) Harsh parenting behavior will mediate the relationship between parental

psychological distress and youth psychological distress.

(7) Parental acceptance behavior will mediate the relationship between parental psychological distress and child psychological distress.

Chapter 3: Methodology

Overall Sample of Padres Data

This study involved a secondary analysis of de-identified data that were collected previously as part of a community-based participatory research (CBPR) project. The data came from Padres Informados/Jovenes Preparados, a longitudinal study investigating tobacco and substance use behaviors among Latino youth (ages 9-15) and the development and testing of a preventive program for parents designed to strengthen parent-child relationships. The original sample consists of 344 families in which families were assigned randomly to intervention and waiting list control groups. The researchers originally intended to have at least 50% of the overall sample consisting of two-parent families (with both mothers and fathers participating), but only 27 families with two parents were enrolled in the study. Families in the control group received the intervention after 10 months. Parents in the intervention group were committed to 8 weekly sessions, and youth participants in the intervention group attended 4 family nights.

Inclusion criteria for parents consisted of the following: either mother or father was born in a Latin American country, was Spanish speaking, and was willing to give consent to participate for self and their child. Parents who did not meet the inclusion criteria, or who participated in past parenting programs were excluded from the original study. Inclusion criteria for the youth were age between 10 to 14 upon starting the program, either English or Spanish speaking, and being willing to give assent to participate in the study (in addition to their parent's providing consent for

them). The original researchers excluded youth who engaged in substance use behavior that was considered greater than experimental (i.e., consuming more than 100 cigarettes ever, having consumed more than 3 alcoholic drinks in past year or having consumed any in the past month, and having used marijuana or other drugs more than once ever).

In the Padres Informados/Jovenes Preparados study, a bilingual site coordinator obtained informed consent from parents for their participation and for their child's participation, and assent was obtained from adolescent participants. Initial contact was made with either parent or youth participant. In the event that a parent participant was contacted first, the researchers made sure to arrange an in-person interview with the youth participant in order to gain assent from the youth to participate in the project.

Sample Used for the Present Study

The present study analyzed data collected at baseline in the Padres Informados/Jovenes Preparados study. Of the original 344 parent participants, 309 (89.8%) were mothers and 27 (7.8%) were fathers, while the remaining 8 (2.4%) participants were guardians, grandmothers, or aunts. Due to the limited data available on fathers, the sample size for the present study consisted solely of mothers ($n = 309$). A total of 309 youth participated in this study, 47% were male and 53% were female (see Table 1). Ages for the sample are depicted in Table 2 ranging from 9-15 (Mean = 12.31, $SD = 1.399$) for youths and from 27-55 (Mean = 37.53, $SD = 5.481$) for mothers. Over 92% of the families who participated in this study had up to 4

children in their households, and one family had a total of 7 children in the home as depicted by Table 3. Finally, Table 4 presents the sample’s household monthly income. Overall, the sample represents lower-income Latino families. One hundred and six families out of the total 309 had less than \$1,000 in monthly income, 128 families made \$1,001 – \$2,000 per month, 36 families had between \$2,000 – \$3,001 in household income per month, and 9 families had a household income ranging from \$3,001 - \$4,000, while 6 families reported making more than \$4,000 in family income per month.

Table 1
Youth Sample Gender

<u>Youth Gender</u>	<u>Frequency</u>	<u>Percent</u>
Male	145	46.9
Female	164	53.1

Note. Total N = 309

Table 2
Descriptive Statistics on Sample Demographics

<u>Variables</u>	<u>Valid N</u>	<u>M</u>	<u>SD</u>	<u>Min</u>	<u>Max</u>
Youth age at baseline	308	12.31	1.399	9	15
Parent age at baseline	304	37.53	5.481	27	55
Children in Household	308	2.79	1.172	1	7
Monthly Family Income	285	1.88 [^]	0.896	1	5
Youth gender	309	1.53	0.50	1	2

Note. N = 309 mother-child dyads. One youth and five mothers did not report their age. One family did not report the number of children in household. Twenty-four families did not report monthly family income.

[^] On average, families who participated in this study had a monthly

Table 3
Number of Children in Household Distribution

<u>Total # of Children in Household</u>	<u># of Families</u>	<u>Percent</u>
1	43	13.9
2	90	29.1
3	91	29.4
4	63	20.4
5	17	5.5
6	3	1.0
7	1	0.3

Note. $N = 309$.

household income of less than \$2,001 (see Table 4 for reference).

Table 4
Family Income Distribution

<u>Monthly Family Income</u>	<u># of Families</u>	<u>%</u>
(1) Less than \$1,000	106	34.3
(2) \$1,001 – \$2,000	128	41.4
(3) \$2,001- \$3,000	36	11.7
(4) \$3,001 - \$4,000	9	2.9
(5) More than \$4,000	6	1.9

Note. $N = 309$

Procedures Used in the Original Data Collection

In partnership with collaborating organizations, researchers from the Padres Informados/Jovenes Preparados project recruited participants from eight community agencies in the Minneapolis/St. Paul, Minnesota metro area and the surrounding rural area. These agencies are known and trusted among members of the Latino community and serve exclusively or largely Latino populations. The researchers utilized the attractive intervention materials (i.e., parenting workshops) and monetary incentives to maximize recruitment and promote retention in the study. Parent participants were offered \$50 per family and youth participants were offered \$25 for completion of each survey.

The 5-year longitudinal study was conducted in three stages (collaborative development; community-based trial; and data analysis and dissemination). The community-based trial stage from which the data for the present study will be drawn consisted of recruitment, delivery of the parenting skills intervention versus the waitlist control condition, and a 6-month follow-up assessment. This stage began in the second year of the five-year study, and lasted 2 years and 6 months.

Data were collected through computer assisted survey information collection (CASIC). A trained bilingual data collector conducted interviews with each parent and adolescent separately. Due to the low literacy levels of many study participants, data collection occurred through one-on-one interviews, and families were given the option of completing their interview at their homes, at the collaborating organization, or at a different location of their choice. Interviews were completed in approximately 60 minutes.

Measures

Parent Psychological Distress

Child Psychological Distress

Psychological functioning of both mother and youth participants was measured using the short screening scale of nonspecific psychological distress (K10) originally developed by Kessler and Mroczek (1992) for use in the annual U.S. National Health Interview Survey. The K10 measures the quality of the participants' psychological functioning in terms of degrees of emotional distress, specifically depression and anxiety symptoms. The scale allows researchers to distinguish cases of serious mental illness from non-cases (Kessler et al., 2003) and has been regularly included in population health surveys, including all of the national surveys in the World Mental Health Initiative spearheaded by the World Health Organization (WHO) (Kessler et al., 2002).

The K10 is a uni-dimensional self-report scale designed to measure general psychological distress. The 10-item K10 measures nonspecific distress based on questions about anxiety and depressive symptoms that an individual experienced during the most recent 30-day period. Items on the scale are: "In the past 30 days how often... did you feel tired out for no good reason... did you feel nervous... did you feel so nervous that nothing could calm you down... did you feel hopeless... did you feel restless or fidgety... did you feel so restless that you could not sit still... did you feel depressed... did you feel that everything was an effort... did you feel so sad that nothing could cheer you up... did you feel worthless". Respondents use a Likert-type response scale, with the values (1) always, (2) almost always, (3) sometimes, (4)

almost never, and (5) never. In the Padres Informados/Jovenes Preparados project, the K10 items were scored so that higher scores indicated less psychological distress, but for the present study the item responses were reverse-coded so that higher values represented more distress, in order to maintain consistency with the original K10 response values. Thus, total scores can range from a maximum of 50 (indicating severe psychological distress) to a minimum of 10 (representing no psychological distress). Psychological distress ranges from: low (indicated by scores of 10-15), moderate (indicated by scores of 16-21), high (indicated by scores of 22-29) and very high (indicated by scores of 30-50) (Vargas-Terrez, Villamil-Salcedo, Rodríguez-Estrada, Pérez-Romero, & Cortés-Sotres, 2011).

The K10 has been validated for use in multiple languages including Spanish. For example, researchers in Mexico City (Vargas-Terrez, Villamil-Salcedo, Rodríguez-Estrada, Pérez-Romero, & Cortés-Sotres, 2011) administered the K10 to 280 individuals from two health care centers. The scale showed high internal consistency (Cronbach alpha = .90), and the investigators concluded that, “the instrument is highly precise, it can detect up to 87% of depression cases, and 82.4% of anxiety cases. For the present study the K10 had an alpha level of 0.92 for parents, and 0.86 for youths at baseline assessment.

Parental Acceptance Behavior

Parental acceptance behavior toward the child was measured with a multidimensional scale using items adapted from the Acceptance subscale of the original Children’s Report of Parents’ Behavior Inventory (CRPBI) developed by Schaefer (1965) to assess children’s perception of their parents’ behaviors. The

Acceptance subscale consists of 8 items designed to describe parental warmth, nurturance, and expression of affection. The current scale was adapted from the original CRPBI for use in the Bridges Program (Dumka, Gonzales, Darya, Bonds, & Millsap, 2009; Germán et al., 2013), a family-focused program for middle school students and their parents, and uses a five-option response scale for each question (*1 = almost never or never, 2 = once in a while, 3 = sometimes, 4 = a lot of the time (frequently), and 5 = almost always or always*). The wording of these items was slightly changed by the Bridges Project researchers in order to make the scale appropriate for parent reports. Spanish translations of both parent and youth reports were also developed for the Bridges Project, and were used in the present study.

For the present study, youth participants were asked to rate how often in the last month each statement described their relationship. Youth participants reported on the following items: “My parent/s made me feel better after talking over my worries with (him/her)”, “My parent/s saw my good points more than my bad points”, “My parent/s spoke with me in a warm and friendly voice”, “My parent/s understood my problems and worries”, “My parent/s was able to make me feel better when I was upset”, “My parent/s cheered me up when I was sad”, “My parent/s had a good time with me”, and “My parent/s told or showed me that (he/she) liked me just the way I was”.

This scale has been cross-validated with regard to ethnic and language equivalence on Hispanic samples. Germán et al. (2013) used this measure in their study investigating the link between harsh discipline and later externalizing behaviors for Mexican-American adolescents. Participants were 189 Mexican-American

adolescents and their parents. The scale showed high internal consistency for youth reports on the Parental Acceptance scale, with an alpha level of .90 at Wave 1 (German et al., 2013). Dumka et al., (2009) evaluated the associations of parents' parenting practices with their adolescent's academic performance. Participants were 560 Mexican origin seventh graders and their parents. Parents reported on four parenting practices including *warmth*, which was measured using a composite scale comprised of the 8-item Acceptance subscale, as well as a 7-item Attachment subscale, an 11-item Reinforcement subscale, and a 4-item Personal Involvement Subscale. For the present study, the parental acceptance measure at baseline had an alpha level of .91 for the youth sample.

Harsh Parenting

Harsh parenting was measured using a scale developed by Caples and Barerra (2006), aimed at measuring the frequency of degrading parenting behavior. This scale was developed as a measure of harsh punishment and does not include items representing physical abuse. The scale consists of items adapted from the following: the 8-item CRPBI hostile control subscale (Schaefer, 1965a), and the harsh-parenting scales used by Conger and Elder (1994). In their research, Caples and Barerra (2006) reported a Cronbach alpha level of .71 for mother's degrading parenting. Dumka et al. (2009) also used a 5-item version of the harsh parenting scale developed by Caples and Barerra (2006) and found reliabilities of $\alpha = .67$ for mothers and $\alpha = .63$ for fathers.

The harsh parenting scale used in the present analysis consists of 8 items as reported by the youth participants: "My parent spanked or slapped me when I did

something wrong”, “My parent got so mad at me he/she called me names”, “My parent got angry when I was noisy around the house”, “My parent screamed at me when I did something wrong”, “My parent lost his/her temper with me when I didn’t help around the house”, “My parent bothered me until I did what he/she wanted me to do”, “When I did something wrong, my parent punished me in front of my friends”, and “When I did something wrong, my parent said he/she was disgusted with me”. Therefore, it should be noted that youth perceptions of harsh parenting do not solely describe strict controlling parenting behavior, but also the use of corporal punishment and verbal aggression. Respondents use a 5-point scale: (1) almost never or never, (2) once in a while, (3) sometimes, (4) a lot of the time, and (5) almost always or always. Higher scores indicate a greater frequency of harsh parenting behaviors. The measure had an alpha level of .79 for the youth sample at baseline.

Control Variables

Data collected on mother’s age, household monthly income, and the number of children in the household were used as control variables in this study.

Chapter 4: Results

Analysis Plan

Using SPSS statistical software, descriptive analyses regarding the sample's demographic characteristics (mother's age, youth age, youth gender, monthly household income, number of children in household) were conducted, and are represented in Tables 1, 2, 3, and 4. Descriptive statistics were also calculated on the four measures used in this study and are represented in Table 5. The average score for mother's psychological distress was 20.11 ($SD = 7.3$) indicating a high level of psychological distress, and the mean score for youth psychological distress was 24.30 ($SD = 10.6$) indicating a moderate level of psychological distress (Vargas-Terrez et al., 2011). Although the community sample used in this study was not selected on the basis of having clinical depression or anxiety, the mean K10 scores of both mothers and their youth were fairly high. Given that the participants in this study were enrolled in an intervention program focused on improving parenting skills and parent-youth interactions, it is not surprising that families who experience intergenerational conflict also experience elevated levels of psychological distress. In addition to family discord, there are also extraneous factors that may affect this sample's depression and anxiety levels, include potential financial stressors (the sampled population is largely low-income). Prior research has found that socio-economic factors such as family income affect family wellbeing (Tang & Sinanan, 2015). Next, a Pearson correlation analysis was conducted in order to identify the associations of

the demographic variables with the studies variables. Finally, a path analysis testing the relations among the variables proposed in the hypotheses was tested using Mplus version 8.1 software (Muthén & Muthén, 1998-2017).

Table 5

Descriptive Statistics for the Study Variables

Variable Name	<i>M</i>	<i>SD</i>	Min	Max
1. Mother Psychological Distress	20.11	7.30	10	48
2. Youth Psychological Distress	24.30	10.60	10	50
3. Parental Acceptance*	31.19	6.94	10	40
4. Harsh Parenting*	18.02	6.47	8	38

Note: *Youth Perception of Parenting Practices
N = 309

Tests for Possible Control Variables

Based on the literature, there are a number of factors that have been found to affect parenting behaviors and family wellbeing. Among these factors are household income (Tang & Sinanan, 2015), parent age (Elgar et al., 2007), and number of children in the household (Ozer, Fernald, Roberts, 2008; Patten, 1991; Sandhu & Bhargava, 1987). In order to determine if these factors should be used as control variables in testing the hypotheses of the present study, Pearson correlations were computed to examine the associations between these potential control variables and all four of the variables in the hypothesized mediation model (i.e., parent

psychological distress, child psychological distress, parental acceptance, and harsh parenting). Parent's psychological distress was found to be positively correlated with parent age ($r = .137, p < .05$) and negatively correlated with number of children in the household ($r = -.117, p < .05$).

No significant Pearson correlation was found between maternal psychological distress and monthly family income, and none of the potential control variables were significantly correlated with youth psychological distress. Similarly, no significant Pearson correlations were found between the potential control variables and youth perceptions of parental acceptance; however, mother's age was associated with youth perception of harsh parenting behavior ($r = -.125, p < .05$). While the Pearson correlations did not indicate any significant associations between the proposed control variables and the dependent variable (youth psychological distress), their low magnitude but statistically significant associations with the independent and proposed mediating variables were enough to warrant their inclusion as control variables in the tests of the hypotheses. Therefore the following three control variables were incorporated into the hypothesis tests: (1) monthly family income, (2) mother's age at baseline assessment, and (3) number of children in the household.

Tests for the Hypotheses

In order to investigate whether mother's psychological distress is associated with youth psychological distress and whether parenting behavior mediates that association, a path model depicted in Figure 1 was tested using Mplus Version 8.1 (Muthén & Muthén, 1998-2017). The analysis used maximum likelihood estimation

with robust standard errors (MLR) to adjust for non-normality in the data in testing both direct effects between variables and indirect effects via mediating variables.

Regarding Hypothesis 1, the results showed no significant direct relationship between level of maternal psychological distress and level of youth psychological distress, $\beta = 0.065$, $SE = 0.058$, $p = 0.262$. A significant direct effect was found between mother's level of psychological distress and level of parental acceptance (as perceived by the youth) (consistent with Hypothesis 3); $\beta = -0.122$, $SE = 0.062$, $p < .05$. Additionally, parental acceptance was found to be significantly associated with adolescent psychological distress (consistent with Hypothesis 5); $\beta = -0.175$, $SE = 0.065$, $p < .01$. Although harsh parenting was directly associated with youth perception of parental acceptance, $\beta = -0.274$, $SE = 0.064$, $p < .001$ (not hypothesized), harsh parenting behavior was not significantly related to adolescent psychological distress, $\beta = 0.103$, $SE = 0.065$, $p = .114$ (inconsistent with Hypothesis 4). Finally, the results indicated no significant direct effect for the relationship between parental psychological distress and harsh parenting behavior, $\beta = 0.065$, $SE = 0.058$, $p = 0.262$ (inconsistent with Hypothesis 2).

The significance of the indirect effect of parent psychological distress on youth psychological distress through parenting behavior was tested by constructing 95% confidence intervals (CIs) using 5,000 bootstrap samples (Preacher & Hayes, 2004). As would be expected from the results above, the indirect effect of maternal psychological distress on youth psychological distress was significant when adolescents' perceptions of parental acceptance accounted for that pathway, $\beta =$

0.031, 95% CI [0.001, 0.086]. The results were not significant, however, when harsh parenting behavior was used as the mediating variable, consistent with Figure 1.

Although the effect of harsh parenting was not significant for the hypothesized mediation model, harsh parenting was not irrelevant in this sample. Although not hypothesized, harsh parenting had an indirect effect on youth psychological functioning via youth perception of parental acceptance, $\beta = 0.079$, 95% CI [0.022, 0.169]. The more children perceived harsh parenting, the less they perceived parental acceptance, which was in turn associated with poorer youth psychological functioning. Overall, the results supported the hypothesis that mother's psychological functioning is associated with youth psychological functioning through parenting behavior, but only when parental acceptance accounts for this association. This does not rule out the possibility that other forms of parenting behavior that were not assessed in this study may mediate between maternal and youth psychological functioning.

Path Analysis Results for Control Variables

As described previously, three control variables were used in the Mplus path analysis: (1) monthly household income, (2) age of the mother, and (3) the number of children in the household. Maternal age was found to be significantly negatively associated with harsh parenting, $\beta = -0.143$, $SE = 0.057$, $p < .05$ (older mothers were perceived by their children as less harsh), and the number of children in the household was significantly negatively associated with youth perceptions of parental acceptance, $\beta = -0.127$, $SE = 0.062$, $p < .05$ (the more children in the household, the less parental acceptance the youth reported). Finally, mother's level of psychological

distress was significantly negatively associated with family income ($\beta = -0.116$, $SE = 0.050$, $p < .05$) (lower income was associated with greater distress), positively associated with mother's age ($\beta = 0.145$, $SE = 0.059$, $p < .05$) (older mothers reported greater psychological distress), and negatively associated with the number of children in household ($\beta = -0.116$, $SE = 0.051$, $p < .05$) (lower distress with fewer children).

Chapter 5: Discussion

Summary of Findings

This study's aim was to examine the role of parenting behavior as a mediating factor in the association between maternal and youth psychological functioning (i.e., severity of anxiety and depression symptoms), using self-report measures that previously had been administered to a sample of Latino families in the Minneapolis area as part of a community based participatory research project. The present study used scores from mother and youth self-report measures of their psychological functioning, as well as youths' reports of their perceptions of acceptance and harsh parenting from their mothers. Furthermore, previous research has identified numerous factors that could potentially affect parenting behavior and youth wellbeing, and based on that literature and correlations among variables in the present sample, mother's age, household income, and the number of children in the household were used as control variables in the tests of this study's hypotheses.

Based on prior research on psychological functioning among members of families, it was hypothesized that higher levels of maternal psychological distress would be associated with higher levels of youth psychological distress (Hypothesis 1). It was hypothesized that higher levels of maternal psychological distress would be associated with their greater use of harsh parenting (Hypothesis 2) and less parental acceptance toward their children (Hypothesis 3), both of which would be associated

with higher levels of psychological distress in the youth (Hypothesis 4). Thus, levels of harsh parenting (Hypothesis 6) and acceptance (Hypothesis 7) would account for the association between maternal psychological distress and adolescent psychological distress.

After accounting for the control variables of mother's age, household income, and the number of children in the household, the results of the MLR and bootstrap path analyses provided support for three of the seven hypotheses. Greater maternal psychological distress was found to be associated significantly with less parental acceptance behavior (consistent with Hypothesis 3), and less parental acceptance was significantly associated with more psychological distress in the youth offspring (consistent with Hypothesis 5). Finally, although no direct association was found between maternal psychological distress and youth psychological distress (inconsistent with Hypothesis 1), a positive indirect effect was found between mother and youth psychological functioning via level of parental acceptance as perceived by the youth (consistent with Hypothesis 7).

The present study was informed by the assumptions and concepts proposed by family systems theory, which posits that issues/problems affecting one family member affect the system as a whole through relational/behavioral pathways involving the ways that family members interact. Previous research has identified psychological functioning factors that are associated with parenting behaviors; in particular parental depression has been found to be associated with a higher risk of harsh parenting practices (Belsky, 1984; Callender et al., 2012). Previous studies also have indicated a link between harsh parenting behavior and psychological distress

(depression and anxiety symptoms) in adolescents (Bender et al., 2007). Thus, the rationale for this study's hypothesis regarding a mediating effect of harsh parenting on the relationship between mother and youth psychological functioning was informed by both theoretical and empirical underpinnings.

However, contrary to prior research findings, the present results did not indicate a direct association between harsh parenting and either maternal or youth psychological distress. The hypothesized positive association between maternal psychological distress and harsh parenting was not significant (inconsistent with Hypothesis 2), and no support was found for the hypothesized positive association between harsh parenting and youth psychological distress (Hypothesis 4). Thus, in contrast to the support found for the mediating role of parental acceptance, the hypothesized mediation effect for harsh parenting in the association between mother and youth psychological functioning (Hypothesis 6) was not supported by the findings. Thus, the study partially supported the hypothesis that parenting behavior mediates the relationship between maternal and youth psychological functioning; it was the case for parental acceptance but not for harsh parenting. However, the results do indicate that harsh parenting had an indirect association with poorer adolescent functioning, via its association with youth perceptions of lower parental acceptance (even though harsh parenting was not found to be associated with mothers' psychological functioning). Because this study only investigated maternal psychological functioning as a determinant of harsh parenting, the factors that influenced this sample's level of harsh parenting remain unknown. Therefore, it is likely that maternal harsh parenting behavior may be elicited by other characteristics

unrelated to the mother's psychological functioning. There is a need for further investigation of such determinants of harsh parenting, because this study indicated that it influenced youth's perceptions of the degree to which their mothers accept and support them. In addition, the findings of this study are consistent with prior research indicating that at least some children may be resilient to the potential negative effects of harsh parenting than the overall parenting literature suggests, and harsh discipline may not have similar effects for children from diverse cultural backgrounds (Deater-Deckard & Dodge, 1997).

It also is important to consider possible explanations for the lack of significant findings regarding links among parental psychological functioning, harsh parenting and youth psychological functioning that had been hypothesized. One possibility for why parental psychological distress is not related to harsh parenting may be in the way psychological distress was measured in this study. As mentioned before, the K-10 scale is a screening tool for symptoms of both depression and anxiety. It may be that mothers who participated in this study experience more anxiety rather than depression, and while there is much research linking parental depression with harsh parenting tactics, there is no empirical support for the association between parental anxiety and increased risk for harsh parenting. Due to the fact that the K-10 is scored as a uni-dimensional scale, it is impossible to distinguish between symptoms of the two types of psychological distress. Furthermore, because common symptom of depression include inertia and social withdrawal, it is possible that some mothers in the sample expressed depression through aggressive parenting behavior while others were more likely to be passive and withdraw from their children. Therefore, a more

refined assessment of the mothers' symptoms and their associations with alternative parenting behaviors than was achieved in the present study may be needed.

Although not a focus of this study's hypotheses, an association was found between one of the demographic characteristics used as a control in this study and degree of harsh parenting. Specifically, the results of the path analysis showed that younger mothers used more harsh parenting than older mothers, as perceived by their children. This finding is consistent with prior research that has found disparities among parenting behavior (specifically harsh parenting) relating to the parent's age (Elgar et al., 2007; Lee & Guterman, 2010).

The present results for harsh parenting do not support the model for transmission of risk proposed by Goodman and Gotlib (1999), which proposes an indirect pathway to account for the relationship between parent and child psychological functioning through parenting practices. However, it is important to note that the focus of Goodman and Gotlib's model was aimed at understanding mechanisms of transmission of risk for psychopathology in children of depressed mothers. The data analyzed for the present study was from a community sample, and not a clinical sample of depressed parents/youths. Thus, even if some psychopathology symptoms were present, it may not have been the root issue for which participating families sought support by enrolling in the parenting intervention and associated research study. Moreover, the measure of harsh parenting assessed more severe actions (spanking, slapping, name-calling, and using degrading language), and there is no evident reason why mothers' levels of anxiety and depression symptoms would elicit such harsh parenting. Therefore, harsh parenting

behavior may be related to other characteristics of the mother that are unrelated to her levels of depression and anxiety. In contrast, mother's psychological distress did contribute to lower perceptions of parental acceptance by the youth, indicating that maternal distress led to less acceptance behavior by the mother. It is well established that symptoms of depression affect one's ability to be emotionally present, leading to social and emotional withdrawal. With regard to the current sample, it could be that mothers who experienced higher levels of distress were less emotionally available or present when interacting with their children.

The path model did identify an indirect link between harsh parenting and youth psychological distress, via the youth's perceptions of lower acceptance from their parents, which had not been anticipated in the study's hypotheses but is important. One interpretation could be that harsh parenting in this youth sample is not perceived as distressing because harsh parenting may be more accepted as a parenting norm among Latino culture. Previous findings that harsh discipline may not have similar effects for all children (Deater-Deckard & Dodge, 1997) may be linked to cultural difference in the meanings that family members attach to authoritarian parenting behavior (which includes harsh parenting). Indeed past research findings support the mediating role of maternal warmth (a component of parental acceptance) in the relationship between harsh discipline and negative youth outcomes [externalizing behaviors] (Germàn et al., 2013). The present findings support prior research findings by suggesting that parental acceptance is a protective factor against the negative impact of harsh parenting on youth psychological functioning. Thus, harshness in itself is insufficient to explain its impact; rather it depends on how much

the child perceives harsh parenting as a reflection of a lack of acceptance and support. These findings show a key role for parental acceptance on youth emotional and psychological wellbeing.

All of the hypothesized effects were significant with regard to parental acceptance. As predicted, mothers who were experiencing more anxiety and depression symptoms (i.e., greater levels of psychological distress) were perceived by their child to show less parental acceptance (i.e., praise, understanding, and nurturance), and less parental acceptance perceived by the child was correlated with more youth psychological distress. Thus, although a direct relationship between parent and youth psychological distress was not supported by the results, the findings suggest that parental acceptance (specifically mother's acceptance) accounts for a relationship between parental and child psychological functioning. The mediating effect of parental acceptance is echoed by prior research investigating the role of parent-child relationships in the link between parent psychological distress and child adjustment problems (Papp, Cummings, Goeke-Morey, 2005). The present findings support Goodman and Gotlib's (1999) proposed mediation model for the role of parenting behavior in the relationship between parent and child psychological functioning when parental acceptance accounts for that pathway.

Considering the more limited findings for harsh parenting described above, it may be that while mothers may still use harsh parenting towards their children, their parental acceptance behavior may be more salient to their children, due to expectations of a mother's common role in the family as caretaker, supporter, and nurturer. Thus, if an adolescent perceives their mother as not accepting, not nurturing,

and therefore not caring, this may have a more severe impact on their psychological wellbeing than does harsh parenting behavior. Given that there was an insufficient sample of fathers to conduct similar analyses for father-youth relations, it is not possible to generalize from these findings regarding mothers to the paths that exist regarding fathers' harsh parenting and acceptance.

The overall study results indicate that parental acceptance is more impactful to children's psychological wellbeing than may be commonly assumed, and although harsh parenting has been shown in the literature to be linked to youth psychological distress (Bender et al., 2007), this direct path was not supported in the present study. The present findings are unique in that they emphasize the powerful impact of positive parent-child interactions, while many other studies have shown the potential risk/consequences of negative parenting behavior. Moreover, these findings reinforce the principles of family systems theory by showing how psychological functioning in the parental subsystem affects functioning in the child subsystem through positive parent-child interactions.

Limitations of the Study

One major limitation to this study was the exclusion of data on fathers due to the very small sample that was available. The present study focuses exclusively on the mother-youth relationship, and does not consider the influence of fathers' parenting behavior on youth psychological functioning. Prior research indicates that parenting behavior differs based on both parent and offspring gender (Bender et al., 2007; McKee et al., 2007) particularly when it comes to *type* of harsh parenting (harsh verbal vs. physical discipline). Although mothers are generally more likely to

engage in harsh parenting compared to fathers (including both verbal and physical), findings from McKee et al. (2007) indicate that fathers tend to use more harsh *physical* punishment compared to mothers, and boys are more likely to receive harsh physical punishment than girls. In addition, if fathers are less traditionally in a nurturing role toward children, it will be important to examine the relative effects of harsh parenting and acceptance by fathers on their youth's well-being. Furthermore, prior research has indicated that youth gender is also a factor influencing youth perceptions of parenting behavior, and in turn youth psychological and emotional wellbeing (Reeb et al., 2010). The present study did not examine possible differences in youth outcome based on the gender of the offspring. Therefore, future studies should take into account both youth and parent gender with regard to the mediating role of parenting behavior on parent and youth psychological functioning.

There were also limitations with regard to some of the measures that were used to assess the variables in this study. Although the K10 measure seemed to be an adequate and appropriate measure of adult psychological distress, it may not have been suitable for measuring youth psychological distress. According to the New South Wales Mental Health Outcomes and Assessment Training (MH-OAT) facilitator's Manual (NSW Health Department, 2001; Patterson, Matthey & Baker, 2006) the K10 is recommended for use in *adults* and *older people*. This being said, research supports the use of K10 in older children (12+) and adolescents (Kwan, & Rickwood, 2015). Although the K10 is deemed suitable for use with individuals ranging from ages 12 to 25 years old and beyond, given the age range of youth

participants in the present sample (9-15), a different measure may be more suitable for determining child psychological functioning for the present study.

Moreover, the topic of psychological distress is a sensitive one among immigrant populations, and it is not clear how honest participants may have been on self-report measures. Given that the present study uses data that were collected at baseline when the participants had not yet established a relationship with the clinicians who took part in this CBPR project, it could be that participants did not feel comfortable reporting on severity of depression and anxiety symptoms. Therefore, an outside rater's observation of psychological functioning may be useful in this context. In addition, in two-parent households parents could rate each other's psychological functioning along with their own. With regard to the child-report measures, the same potential limitation may apply. Namely, children may want to protect their parents by reporting positive parenting behavior to unfamiliar researchers. Although youth's report of parental acceptance may be one of this study's strengths, children's reports of their harsh parenting may be a potential limitation.

Finally, the study's mediation effects were measured exclusively with youth perceptions of parenting (parental acceptance and harsh parenting) in Latin-American immigrant families. All of the parents who participated in this study were born in Latin America and completed the assessments through interviews that were delivered in Spanish. These families came from the Minneapolis/St. Paul, Minnesota metro area and the surrounding rural area. Given this specific population, the results of this study may not generalize to other types of parenting behavior and other family contexts/circumstances.

Recommendations for Future Research

From the current study, it is unknown how fathers' psychological wellbeing might influence their parenting behavior or how fathers' parenting practices might influence their children's psychological functioning. Thus, consistent with a systems theory perspective on family functioning, it would be important to examine both mothers' and fathers' parenting simultaneously. Furthermore, while prior research has found associations between parenting and youth outcomes based on both parent and child gender, the present study did not take youth gender into consideration as a variable. Because this association is echoed loudly throughout the research on parenting behaviors and child outcomes, it would be beneficial to consider gender as a variable that can influence both parenting and youth perceptions of parenting behavior in future studies.

Along with including data on fathers and examining possible gender differences in the youth sample, it would also be beneficial to include other variables and measures in studies of parenting and wellbeing. Prior research investigating immigrant families has found that acculturation factors also influence individual and family wellbeing (Nap et al., 2015). Therefore, one possible control variable to consider in future research is how long participants have lived in the U.S.

The present findings provided evidence of a relationship between parent and child psychological distress mediated by youth perceptions of parenting behavior (parental acceptance). However, the study did not investigate how much the child sees their parents' behaviors as reasonable vs. unreasonable given a parent's traditional leadership role in the family system. Thus, it would be helpful to ask

children specific questions about such perceptions of their parents' behavior. Another potential mediating variable, given the results of the present study, may be a youth self-report measure of how "appropriate" the parenting behavior is. Furthermore, given the prior findings on the different disciplinary behaviors of mothers and fathers, in the future researchers should consider using a more comprehensive measure of harsh parenting that is more specific about the types of verbal and physical punishments that are used, in order to further examine how behavior differs among parents based on age and gender of the child.

Finally, while the measure of psychological functioning used in this study was useful as the same instrument was administered to both parents and youths, future studies could use different measures of psychological functioning for parents and youth. Considering the developmental differences between adults and children, it should not be assumed that older children manifest symptoms of anxiety and depression in the same way that adults experience them. Furthermore, due to the limitations described above regarding measures of other types of negative parenting behaviors, and considering the potential draw-backs of self-report measures, future studies may benefit from having parents and children interact in a structured setting and having trained observers use validated parent-child interaction coding systems to assess parenting behavior and children's responses to them.

Clinical Implications

Based on the results of this study, there are several implications for clinical work. First, this study illuminates the power of positive parenting tactics on child wellbeing. While harsh parenting and other negative parenting behaviors have been

shown to negatively influence youth outcomes, the findings of this study indicate the protective function of positive parenting and the importance of parental acceptance (warmth, praise, and parent's ability to be emotionally present with their children) with regard to youth emotional and psychological wellbeing. The parental acceptance measure used in the present study indicates that parents who are more attuned to their children's needs are able to be emotionally present with their children, providing comfort and security through warmth and praise. Praise is particularly important when it comes to parental acceptance because it encourages the parent to focus on the child's positive traits. Parental acceptance is a core construct among many attachment-based therapeutic interventions such as Theraplay (Lender, Booth, & Lindaman, 2012) (which is typically helpful for families with younger children) and Attachment Based Family Therapy (Diamond, Russon, & Levy, 2016), which has been particularly effective in families of depressed teens.

The present findings indicate that attachment-based interventions may be particularly useful in the clinical setting when working with Latino immigrant families. Consequently, it is important for clinicians to present convincing rationales for the use of positive parenting strategies to parents who have focused on using aversive parenting behaviors. Parenting skills programs (e.g., Kazdin, 2008) commonly emphasize decreasing use of harsh and aggressive behavior and increasing parents' attention to and reinforcement of positive child behavior.

Secondly, with regard to parenting, clinicians should be aware of the cultural context that may influence family dynamics and parenting practices. Research on parent socialization practices identifies cultural components that influence parenting

practices (Pagano et al., 2003). In many collectivist cultures, including Latin-American cultures, the family is central to an individual's sense of self, thus family loyalty is one of the most important values among Latinos. When it comes to the parent-child relationship, Latin-American cultures have a strong tradition regarding issues of respect for parental authority and parenting practices (Harwood, Leyendecker, Carlson, Asencio, & Miller, 2002). One example of this is the Puerto Rican cultural construct of *respeto* (obedience to authority, deference, decorum, and public behavior), which has been identified in prior research as a core value among Latino families in the U.S. (Calzada, Fernandez, & Cortes, 2010). Therefore, when working with immigrant families it is important to understand how values and behaviors may differ based on cultural norms. In understanding these differences, clinicians ensure that they do not impose their own values onto their clients, and that the focus of the therapeutic process remains on the client and the client's needs.

Finally, the present findings highlight the importance of addressing psychological distress in parents. The parents in this sample enrolled in a parenting skills program, so they were motivated to examine their parenting behaviors and learn new skills. However, the present results suggest that in parenting intervention programs it also is important for clinicians to provide psycho-education to parents on the nature of anxiety and depression and how psychological functioning impacts parenting. Specifically it is important to bring to light how symptoms of anxiety and depression may lead to less nurture, less understanding, and less praise towards their child. This in turn, affects children's psychological functioning. It is important for

clinicians to highlight how parental acceptance positively affects child emotional development and psychological functioning.

Conclusion

The results of this study provided a systemic context for understanding the impact of the parent-child relationship on youth wellbeing, while also highlighting the role of parental acceptance as a protective factor against more negative parenting behaviors (harsh parenting). While this study adds to the existing research investigating mother-child relationships, it also adds to the growing body of literature on Latino-immigrant families in the U.S.

This being said, much of the available prior research on parenting lacks data on fathers' role in the family system, and how that affects child wellbeing and psychological functioning. Expanding on the relevant knowledge pertaining to this topic, researchers should aim to further investigate how parenting practices are influenced by gender, culture, age, family support, and other systemic factors that contribute to family wellbeing.

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