



2010

Stretched Too Thin: Low-Income Mothers' Work-Family Conflict and Preschoolers' Socioemotional Adjustment

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LOYOLA UNIVERSITY CHICAGO

STRETCHED TOO THIN: LOW-INCOME MOTHERS' WORK-FAMILY CONFLICT
AND PRESCHOOLERS' SOCIOEMOTIONAL ADJUSTMENT

A THESIS SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
MASTER OF ARTS

PROGRAM IN DEVELOPMENTAL PSYCHOLOGY

BY

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CHICAGO, IL

DECEMBER 2010

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ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my primary thesis advisor, Dr. Christine P. Li-Grining, for her continued guidance, support, and enthusiasm throughout this process. I would also like to thank my additional committee member, Dr. Amy Bohnert, for her thoughtful suggestions and advice.

Special thanks to my fellow graduate students for helping me navigate the thesis process. In particular, I extend my appreciation to Valerie Flores, whose support and friendship proved invaluable as I pursued this venture.

Finally, I am forever indebted to my parents and John for their endless patience and understanding. Without their constant encouragement and reassurance, my ambition to pursue a graduate education would not have been realized.

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ABSTRACT

The purpose of the current study was to further our understanding of the association between low-income mothers' work-family conflict and their children's socioemotional adjustment, with a particular focus on externalizing and internalizing symptoms. To do so, the present study tested the mediating roles of mothers' psychological distress and positive parenting practices in the relation between work-family conflict and children's adjustment over time. Contrary to hypotheses, the linkage between low-income mothers' experience of conflict between their work and family roles and preschoolers' adjustment was not explained by mothers' symptoms of psychological distress or their use of positive parenting practices. Similarly, the main pathway of interest (i.e., mothers' work-family conflict → psychological distress → parenting practices → children's adjustment) was not supported by the results yielded in this study. However, as hypothesized, the mothers' work-family conflict was significantly related to preschoolers' later externalizing and internalizing symptoms. Moreover, mothers' anxiety symptoms partially explained the association between work-family conflict and preschoolers' subsequent internalizing symptoms, after controlling for a variety of child and family background characteristics. The implications of these results are discussed in relation to modern work-family policies and programs.

CHAPTER ONE

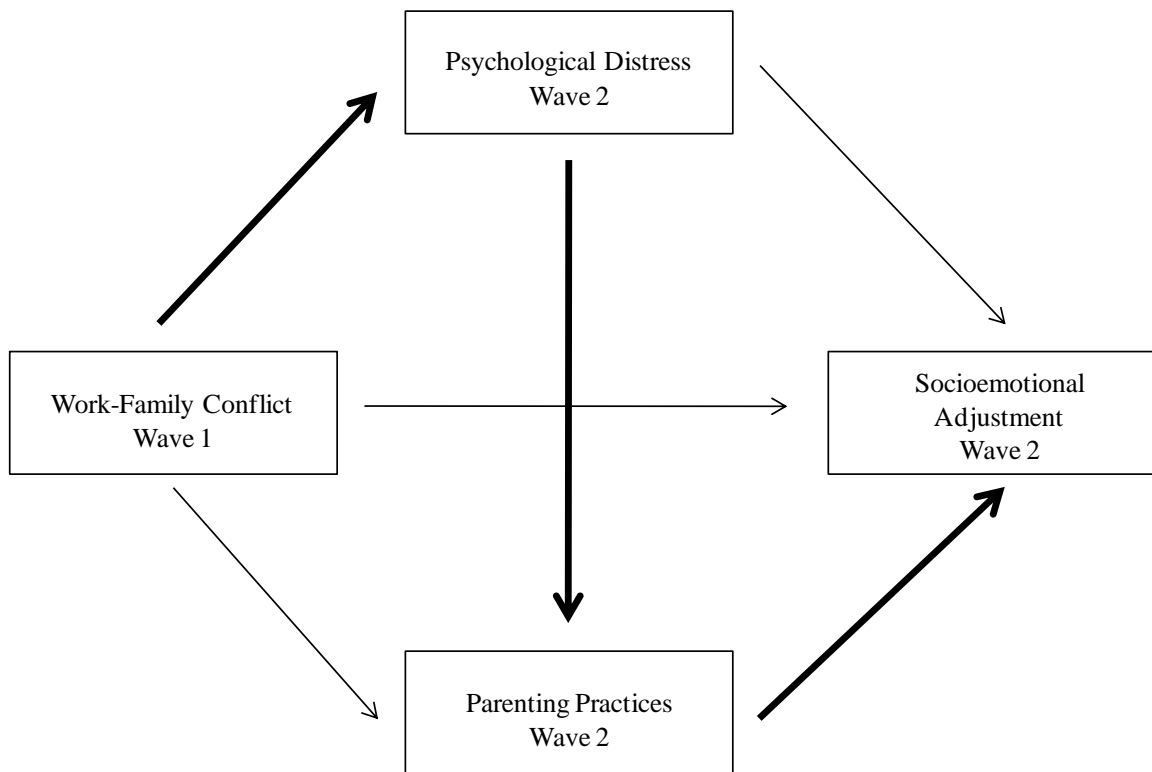
INTRODUCTION

Employment among mothers with young children has grown substantially over the last several decades. Currently, nearly two-thirds of mothers with children under the age of six are employed outside the home (U.S. Bureau of Labor Statistics, 2009). In response to the influx of mothers into the workforce, a growing body of research has considered the work-family interface, particularly the role of occupational stress on family functioning. The existing literature suggests that work stressors may negatively impact families when they result in feelings of conflict between work and family roles (Perry-Jenkins, Repetti, & Crouter, 2000). Furthermore, the potentially harmful influence of mothers' experience of work-family conflict may be especially prevalent for children from low-income families. Low-wage, blue-collar workers are particularly vulnerable to work-related stress and subsequent mental health concerns (Griffin, Fuhrer, Stansfeld, & Marmot, 2002). This suggests that children from economically disadvantaged households are more likely to be exposed to mothers' work-family conflict.

The purpose of the current study was to further our understanding of the association between low-income mothers' work-family conflict and their children's socioemotional adjustment, with a particular focus on externalizing and internalizing symptoms. To do so, I examined maternal and family processes through which mothers'

work-family conflict may influence the adjustment of young children growing up in low-income households (see Figure 1). Specifically, the present study tested the mediating roles of mothers' psychological distress and positive parenting practices in the relation between work-family conflict and children's adjustment over time.

Figure 1. Hypothesized full mediation model predicting children's socioemotional adjustment (bolding indicates full mediation pathway of interest).



Low-Income Preschoolers' Externalizing and Internalizing Symptoms

Why study the link between work-family conflict and low-income preschoolers' socioemotional adjustment, in particular? The preschool age is a salient developmental period that presents children with several developmental challenges that are foundational to their future socioemotional development. From three to five years of age, children

develop skills that are necessary for their future linguistic, cognitive, socioemotional, moral, and academic success (Shonkoff & Phillips, 2000). Not yet independent, preschoolers rely on caregivers to meet their needs and to scaffold them to a point where they can successfully navigate their developmental challenges. When young children's needs are met by their parents, they thrive. When their needs are not met, preschoolers' capabilities may be compromised across a variety of domains, including socioemotional development (Cooper, Masi, & Vick, 2009).

Examples of the developmental challenges facing preschoolers include forming and maintaining secure attachments with their caregivers and learning to successfully regulate their emotions (Ainsworth, 1989; Bowlby, 1969; Cole & Deater-Deckard, 2009). These important milestones occur in an increasingly complex set of contexts, where children may spend more time with nonparental caregivers and in more educational programs. The schedules of child care arrangements and early childhood education programs then need to be coordinated with mothers' work schedules, which can be especially difficult for economically disadvantaged families. The low-wage, high-turnover positions typically held by low-income mothers often force them to rely on child care that is patched together across various contexts, even during the course of a single day (Scott, Hurst, & London, 2003).

What aspects of low-income preschoolers' socioemotional adjustment deserve attention? This study specifically addressed preschoolers' externalizing and internalizing symptoms given the wide range of negative outcomes associated with such adjustment difficulties during the preschool age (Campbell, 2006). This is of particular concern for

children from economically disadvantaged backgrounds as they are more likely to develop externalizing and internalizing symptoms than their middle- or upper-class peers (Duncan, Brooks-Gunn, & Klebanov, 1994).

Following early work by Achenbach and Edelbrock (1978), children's socioemotional adjustment difficulties are typically classified along two global groupings. Conceptualized as *externalizing* or *internalizing*, these groupings identify related clusters of problematic behaviors or symptoms. Those symptoms characterized as externalizing, or undercontrolled, typically manifest in children's outward behavior, reflecting conflicts with other people and with their expectations for children's behavior (Achenbach & Rescorla, 2000; Liu, 2004). Externalizing problems typically feature behaviors marked by defiance, disruptiveness, and aggression (Hinshaw, 1992).

Externalizing symptoms have been linked to lower academic achievement and basic cognitive deficits in such areas as attention, motor coordination, and reading recognition skills (Ackerman, Smith, & Koback, 2009; Breslau et al., 2009; Hinshaw, 1992). These externalizing symptoms have also been associated with poor socioemotional functioning that persists into adolescence. Early externalizing behaviors, particularly those that are stable from preschool to school entry, are more likely to develop into conduct disorders or related juvenile delinquency problems in adolescence and adulthood (Boyd et al., 2005; Campbell, 1995; Farrington & Coid, 2003).

In contrast to the patterns associated with externalizing problems, internalizing (or overcontrolled) symptoms reflect children's internal psychological state, indicating problems within the self (Achenbach & Rescorla, 2000). This cluster of symptoms is

evidenced by anxiety, guilt, fear, and worry (Campbell, Shaw, & Gilliom, 2000; Zahn-Waxler, Klimes-Dougan, & Slatterly, 2000). Children's internalizing symptoms place them at risk for a variety of negative outcomes later in life. These symptoms have been associated with deficits in children's executive functioning (e.g., problem-solving skills) and reading skills (Ackerman, Izard, Kobak, Brown, & Smith, 2007). Additionally, children with serious internalizing symptoms early in life are more likely to develop clinical psychopathologies like major depression and anxiety in adulthood as compared to those children without internalizing symptoms (American Psychiatric Association, 2000). In contrast to externalizing behaviors, internalizing symptoms tend to be less stable over time and more responsive to intervention (Hinshaw, 1992; Shaw, Keenan, & Vondra, 1994).

Low-Income Mothers' Work-Family Conflict

This study sought to understand processes that explain individual differences in low-income preschoolers' externalizing and internalizing symptoms. The primary focus of this research was low-income mothers' work-family conflict, which refers to the extent of interference that exists between work role and family role demands (Frone, 2000; Greenhaus, Callanan, & Godshalk, 2010). Though women's roles within the family could be defined in various ways (e.g., caring for an aging parent), the current study focused on women's roles as mothers to young children because of the importance of mother-child dyads during early childhood (Bornstein & Sawyer, 2006).

Women's experience of this interference between work and family roles has likely become more prevalent as a result of their increased presence in the labor force. In

1950, only 34% of women were part of the labor force, while 60% of women reported employment in 2008 (U.S. Bureau of Labor Statistics, 2009). A similar trend was seen among single, low-income mothers, whose employment rates increased substantially in the mid-to-late 1990s, likely in response to the booming economy and new welfare-to-work policies (Sherman, Fremstad, & Parrott, 2004).

At the same time, women are still largely responsible for household chores and are far more likely than men to serve as children's primary caregiver (Baxter, 2000; Coltrane, 2003; Stohls, 2000). At the end of their work shift, women employed for pay begin what sociologists refer to as their "second shift" of unpaid work, consisting of household chores and care for their children (Hochschild, 2003). This "second shift" has likely increased the amount of conflict between mothers' responsibilities on the job and at home. Among single-parent families, who are disproportionately low-income (Koball & Douglas-Hall, 2004), their "second shift" occurs by default, as they do not have a partner who could potentially take over additional work at home.

Assessing mothers' experience of conflict between their work and family roles captures the subjective, psychological component of the interference between two roles. This is distinct from more objective measures of maternal employment, such as whether or not a mother is employed or the number of hours per week she works outside the home. Research that limits assessments of mothers' employment experiences to such objective measures may not be accounting for the full range of experiences and stressors facing employed women (Barling & Van Bart, 1984). Mothers' work-family conflict, in

contrast, measures an individual's own perception of their employment experiences, particularly the stress associated with juggling work and family responsibilities.

Which subgroup of mothers is most vulnerable to the experience of work-family conflict? Existing research points toward low-income mothers as being particularly at risk by virtue of their tendency to work irregular or swing shift hours, to rely on less stable employment, and to experience more frequent job transitions than do women who hold higher-paying jobs (Parcel & Menaghan, 1997). Furthermore, low-income women are more likely to experience higher levels of work-family conflict as they are less likely to have access to resources that would buffer against such strain. Indeed, in a study considering working mothers' stress from balancing multiple roles, low-income mothers reported greater levels of stress in comparison to married and single mothers with higher-paying jobs (Shiple & Coats, 1992). However, the work-family conflict literature has mainly focused on women in dual-earner relationships (e.g., Erdwins, Buffadri, Casper, & O'Brien, 2001; Grandey & Cropanzano, 1999; Greenberger & O'Neil, 1993), leaving the link between single, low-income mothers' work-family conflict and children's development much less understood.

In addition to the stress that mothers may experience, holding roles in both work and family domains may contribute positively to women's mental, physical, and relationship health by allowing them to accumulate both material (e.g., increased income) and psychological resources (e.g., opportunities for success, development of a sense of self-efficacy) (Barnett & Hyde, 2001). Research supporting this expansionist view has found that rewarding job and career experiences are associated with beneficial effects on

women's overall well-being (Lindsey, 2005; Nelson & Burke, 2002). This "role accumulation" theory maintains that a strong commitment to one role does not preclude a similar commitment to another, separate role. Furthermore, it may be that the benefits and resources associated with one role function as a buffer against the strains associated with another role. Low-income mothers, however, are less likely to accumulate such resources and benefits, making them especially vulnerable to work-family conflict.

Work-Family Conflict and Low-Income Preschoolers' Development

The first aim of the present study was to examine the direct association between low-income mothers' work-family conflict and preschoolers' adjustment. Few studies have considered the link between work-family conflict and children's development, but given the importance of early experiences to preschoolers' development, such research is warranted. Despite nearly 50 years of interdisciplinary interest in the interplay between work and family contexts (Perry-Jenkins et al., 2000), limitations in the extant literature make it difficult to draw firm conclusions about the relation between mothers' work-family conflict and preschoolers' adjustment. First, most studies of the association between mothers' experience of work-family conflict and children's socioemotional development have been based on samples of adolescents (e.g., Bird & Kemerait, 1990; Crouter, Bumpus, Maguire, & McHale, 1999; Galambos, Sears, Almeida, Kolaric, 1995; MacDermid & Williams, 1997). Very few have focused solely on those families with preschool-aged children, even though preschoolers may be especially vulnerable to work-family conflict given they are more dependent on caregivers than are adolescents.

There is evidence supporting the direct link between mothers' work-family conflict and preschoolers' behavior based on only a few studies. An early study found that mothers' interrole conflict, defined as strain between work and family roles, was positively linked to boys' conduct problems and girls' immaturity in early childhood (Barling & Van Bart, 1984). Similarly, Jackson (1994) has found that single, African American mothers experiencing high levels of strain between work and home perceive their preschool-aged sons significantly more negatively than their daughters in terms of problem behaviors. Additional studies, which have considered working mothers' experience of work- and family-related daily hassles and demands, have found links to children's negative behavioral adjustment (Goldberg, Greenberger, Hamill, & O'Neil, 1992; MacDermid & Williams, 1997; Pett, Vaughan-Cole, & Wampold, 1994). Finally, while Jackson (1994) has considered the experience of mothers who were former recipients of welfare, none of the other studies explicitly considered the experience of low-income families in general, even though all low-income mothers are likely more vulnerable to work-family conflict.

Though these early studies provided support for the link between mothers' work-family conflict and preschoolers' adjustment, some methodological constraints limit the findings. Barling and Van Bart's (1984) study included mothers' reports of their children's behavior. To address concerns of common method variance, which can artificially inflate correlations, analyses were also performed with teacher-reports of children's behavior. Their results, however, were based on a limited sample of

approximately 100 South African families and are therefore not necessarily generalizable to U.S. children.

Additionally, the regression analyses conducted in virtually all these studies included a relatively limited number of control variables (e.g., sex and age of the child). Excluded from these earlier studies are various factors that play important roles in family functioning and child development. Existing studies that do not include a comprehensive range of covariates that more fully characterize families' attributes and experiences (e.g., mothers' educational attainment) face the threat of "third" variables (Ackerman, Schloff, Levinson, Youngstrom, & Izard, 1999). Such variables may confound the relation between work-family conflict and preschoolers' behavior, and bias estimates of the association, where estimates of the linkage may be too large, if models do not control for confounding factors. In other words, without a comprehensive set of control variables, studies may conclude that work-family conflict is more salient for preschoolers than it may truly be. Economists refer to this bias as "omitted variable bias" (Duncan, Magnuson, & Ludwig, 2004), and one approach in dealing with this issue in analyses is to control for a host of relevant characteristics that include early adjustment. By doing so, the current study attempted to yield less biased estimates of the hypothesized relations tested.

The Mediating Roles of Mothers' Psychological Distress and Parenting Practices

While further testing the direct association between work-family conflict and preschoolers' behavior is an important step, a more comprehensive understanding of the mechanisms by which work-family conflict may influence preschoolers' adjustment is

also needed. As such, the current research examined two sets of mediators (i.e., mothers' psychological distress and parenting practices) in the pathway from mothers' work-family conflict to preschoolers' adjustment.

Why consider the mediating roles of mothers' psychological distress and parenting practices, in particular? Work-family conflict may influence children via direct effects on maternal psychological distress and in turn mothers' abilities to engage in effective parenting practices (Cummings, Davies, & Campbell, 2000; Downey & Coyne, 1990; Woodruff Borden, Morrow, Bourland, & Cambron, 2002). This conceptualization, as illustrated in Figure 1, is partly informed by the family stress model, which focuses on caregivers' emotional state and parenting practices as mediators of the association between economic hardship and children's adjustment (Conger et al., 2001; McLoyd, Jayaratne, Ceballo, & Borquez, 1994). Building on the family stress model, this study focused on mediators of the relation between preschoolers' development and mothers' feelings of work-family conflict, a salient aspect of the lives of women facing economic hardship.

Work-family conflict may heighten low-income mothers' experience of stress, which may in turn undermine the quality of their caregiving. Indeed, work-family conflict has been correlated with mothers' overall mental well-being, including their symptoms of depression and anxiety (Crouter et al., 1999; Frone, 2000; Frone, Russell, & Barnes, 1996; Galambos et al., 1995; Greenberger, O'Neil, & Nagel, 1994; MacEwen & Barling, 1991; Repetti & Wood, 1997). Specifically, individuals who experienced higher levels of work-family conflict were more likely to have a mood or anxiety disorder than

were those mothers reporting lower levels of work-family conflict (Frone, 2000). In other words, mothers whose resources are drained by their overlapping work and family roles tend to experience heightened distress in the form of increased symptoms of depression and anxiety.

Mothers' Psychological Distress

Mothers' depressive symptoms. Depression and anxiety are two of the most common forms of psychological distress among women, particularly single mothers. Generally, symptoms of depression are characterized by specific alterations in mood (i.e., sadness, loneliness, apathy), a negative self-concept, and regressive and self-punitive wishes (Beck, 1967; Zahn-Waxler, Duggal, & Gruber, 2002). As documented by several reviews (Nolen-Hoeksema, 1995; Sprock & Yoder, 1997), the significantly higher rate of depression among women as compared to men is one of the most robust findings in epidemiological research (Moussavi et al., 2007; Seedat et al., 2009). Given women's tendency to be primary caregivers, many children are thus vulnerable to the symptoms of maternal depression (Nylen, Moran, Franklin, & O'Hara, 2006).

A number of reviews have documented the negative relation between maternal depression and children's adjustment (Cummings & Davies, 1994; Downey & Coyne, 1990; Wachs, Black, & Engle, 2009), and specifically their socioemotional development (Dawson et al., 2003). Children of depressed mothers have a heightened risk of developing externalizing and internalizing symptoms (Brennan et al., 2000; Forbes et al., 2003; Goodman & Gotlib, 2002). Indeed, compared to children of nondepressed parents, two-year-olds being raised by a depressed mother displayed more out of control

aggression (Zahn-Waxler, Iannotti, Cummings, & Denham, 1990). Though internalizing symptoms have received less attention, research has also found an increasing trend in the prevalence of internalizing problems among children with remitted, currently depressed, and chronically depressed mothers, particularly among families living below the poverty line (Trapolini, McMahon, & Ungerer, 2007).

Mothers' anxiety symptoms. Importantly, this study also highlighted the hypothesized mediating role of mothers' anxiety symptoms. Along with the wealth of research identifying the maladaptive outcomes among children whose mothers display depressive symptoms, mothers' experience of anxiety symptoms has also been identified as a risk factor. Although depression and anxiety can co-occur, recognition of non-overlapping depressive and anxiety disorders has increased substantially over the last decade (Hirschfeld, 2001). Unlike depressive symptoms, which in part reflect sadness, anxiety symptoms reflect "...feelings of tension, apprehension, nervousness, and worry, and activation of the autonomic nervous system" (Spielberger & Rickman, 1990, p.69).

Why focus on mothers' anxiety? Individuals have recognized anxiety for centuries, but Spielberger and Rickman (1990) referred to the end of the 20th century in particular as the "age of anxiety", acknowledging that individuals are now significantly more anxious than they were in previous years. Using meta-analysis, Twenge (2000) found that rates of anxiety in children and adults increased nearly one standard deviation between 1952 and 1993. If anxiety has continued to increase throughout the 1990s and early 2000s, this could have serious implications for women and their children's development. Epidemiological research has consistently found that anxiety disorders are

far more common among women than men, similar to depressive disorders (Pigott, 1999). Moreover, anxiety symptoms have been linked to a multitude of negative emotional, cognitive, physical, and behavioral outcomes among children (Bernstein, Borchardt, & Perwien, 1996).

Existing research has demonstrated a link between mothers' symptoms of anxiety and children's internalizing symptoms, net of depression and poverty (Spence, Najman, Bor, O'Callaghan, & Williams, 2002). There is also evidence of an association between maternal anxiety and children's externalizing symptoms (Meadows, McLanahan, & Brooks-Gunn, 2007). Specifically, compared to their non-anxious counterparts, mothers with an anxiety disorder reported higher levels of disruptive behavioral difficulties in their children (Chilcoat & Breslau, 1997; Najman, et al., 2000). Given that juggling work and family demands may heighten low-income mothers' anxiety, it is striking, that to my knowledge, no study of the relation between work-family conflict and child adjustment has tested mothers' anxiety symptoms as a mediator.

Parenting Practices

What mechanisms may link mothers' psychological distress (i.e., depressive and anxiety symptoms) to children's development? Prior studies have found that depressive and anxiety symptoms interfere with a mother's ability to respond to her child in a consistent, sensitive, positive, and warm manner (Dodge, 1990; Fox & Gelfand, 1994; Gelfand & Teti, 1990; Turner, Beidel, Roberson-Nay, & Tervo, 2003; Woodruff Borden et al., 2002; Wright, George, Burke, Gelfand, & Teti, 2000). MacDermid and Williams (1997), for example, found that less nurturing parenting explained the association

between women's difficulty with managing work and family demands and their children's increased problem behaviors. Building on this previous work, the present study focused on two salient dimensions of parenting: mother-child connectedness and family routines.

Mother-child connectedness. Mother-child, or dyadic connectedness, is a feature of positive or competent parenting marked by mutual engagement, shared pleasure, and reciprocity between the mother and child (Harrist, Pettit, Dodge, & Bates, 1994; Isabella & Belsky, 1991). Mother-child connectedness may be manifested in a variety of ways, including nonverbal communication (e.g., physical gestures and body positioning), as well as shared laughter, warmth, and closeness. Children with earlier positive, synchronous interactions may find it less challenging to manage their own behavior (Feldman, Greenbaum, & Yirmiya, 1999; Moore & Calkins, 2004) and therefore display fewer behavioral difficulties (Fiese et al., 2002), especially in the context of high risk (Raver, 1996). Although mothers' distress may jeopardize their ability to maintain connectedness with their children, no study has investigated whether connectedness plays a mediating role in the pathway from mothers' work-family conflict and psychological distress to children's adjustment.

Family Routines. Mothers' distress may not only compromise mothers' connectedness with their children, but may also disrupt family routines. Family routines are defined as patterned interactions that are repeated over time – often daily and/or weekly – and are embedded within the context of family life (Fiese et al., 2002; Wolin & Bennett, 1984). Family routines include regular mealtimes and bedtimes, all of which

provide order and consistency to daily life (Boyce, Jenson, James, & Peacock, 1983; McLoyd, Toyokawa, & Kaplan, 2008). The limited existing research on family routines suggests that they may buffer a child from adverse circumstances, thereby fostering more positive child outcomes (Churchill & Stoneman, 2004).

Furthermore, although research on the link between parents' psychological well-being and family routines is particularly limited (Denham, 2002), routines have been negatively predicted by mothers' symptoms of depression (Churchill & Stoneman, 2004). Only one study has examined family routines as a mediator in the association between work-family conflict and children's adjustment (McLoyd et al., 2008). The current study builds on McLoyd et al. (2008), and contributes to the broader literature, by examining the mediating roles of both mother-child connectedness and family routines, as well as mothers' depressive and anxiety symptoms.

The Full Mediation Model

Guided by the extant literature, work-family conflict was hypothesized to pose a risk to low-income mothers' experience of increased depressive and anxiety symptoms. In turn, greater depression and anxiety symptoms were expected to disrupt mother-child connectedness and family routines, leading to preschoolers' greater externalizing and internalizing symptoms. Only two previous studies have tested similar models. MacEwen and Barling (1991) tested whether the association between work-family conflict and children's behavior (i.e., attention/immaturity, conduct disorder, and anxiety/withdrawal) was mediated by mothers' negative mood and use of punitive parenting practices among elementary school-aged children. Similarly, McLoyd et al.

(2008) considered the mediating roles of mothers' depressive symptoms and family routines in the link between work-family conflict and children's behavior.

In light of these existing studies, the current research made the following contributions. First, in contrast to previous studies that have focused on older children, the present investigation tested whether a comprehensive mediation model holds among preschoolers, for whom connectedness and routines are especially salient. Second, this research provided a fuller view of mothers' psychological distress, investigating both depressive and anxiety symptoms as mediators. A third contribution of the present investigation is that neither MacEwen and Barling (1991) nor McLoyd et al. (2008) investigated the role of mother-child connectedness, which is an important dimension of the mother-child relationship that is not necessarily reflected in broader family routines.

The current investigation made two methodological contributions as well. First, the few existing studies that had investigated the link between work-family conflict and child adjustment did not include a comprehensive set of control variables. Second, both MacEwen and Barling (1991) and McLoyd et al. (2008) relied on cross-sectional data. Utilizing longitudinal data, the present study predicted preschoolers' later externalizing and internalizing symptoms from mothers' earlier work-family conflict, while controlling for preschoolers' earlier adjustment.

Research Questions

The present study sought to fill a gap in the existing literature by examining the association between low-income mothers' work-family conflict and preschoolers' adjustment using data from *Welfare, Children, and Families: A Three-City Study*.

Ordinary Least Squares (OLS) regression analyses were conducted to examine whether low-income mothers' work-family conflict was associated with preschoolers' adjustment across two waves of data. Four main research questions were addressed by this study.

- 1) What is the relation between low-income mothers' work-family conflict and preschoolers' adjustment, defined in terms of externalizing and internalizing symptoms?
- 2) Does mothers' psychological distress (i.e., depressive and anxiety symptoms) mediate the relation between work-family conflict and children's adjustment?
- 3) Do mothers' parenting practices (i.e., connectedness and family routines) mediate the relation between work-family conflict and children's adjustment?
- 4) Do both psychological distress and parenting practices mediate the link between work-family conflict and preschoolers' adjustment? More specifically,
 - 4a) Does mothers' psychological distress (i.e., depressive and anxiety symptoms) mediate the relation between mothers' work-family conflict and parenting practices?
 - 4b) Do mothers' parenting practices mediate the relation between psychological distress and children's adjustment?

CHAPTER TWO

METHOD

Participants

The data for this investigation were drawn from the first two waves of Welfare, Children, and Families: A Three City Study, a longitudinal, multimethod study of low-income, ethnic minority children and their families. The Three City Study was designed to provide information on the health, cognitive, behavioral, and socioemotional development of children as well as their primary caregivers' labor force behavior, welfare experiences, family lives, and psychological well-being. The stratified, random-sample survey was administered in Boston, Chicago, and San Antonio to 2,402 children (aged 0-4 years and 10-14 years) and their primary caregivers. In the majority of families, the primary caregiver was the biological mother (90%).

From more than 40,000 screened households, families were randomly selected for participation in the main survey component of the Three City Study (screening rate of 90%). Of those households, families were deemed eligible for the study if they had a child between the ages of 0-4 years or 10-14 years and had an income below 200% of the poverty line. One focal child per household was then randomly selected, and wave 1 interviews were conducted in 1999 (response rate of 82%), bringing the overall response rate to 74%. In 2000-2001, wave 2 interviews were administered approximately 16 months later (response rate of 88%).

In addition to the main survey component, families with children between the ages of 2 and 4 were asked to participate in the Embedded Developmental Study (EDS; wave 1 response rate of 85%, wave 2 response rate of 88%). The EDS was designed to provide a more detailed, rich view of preschool-aged children, their caregivers, and their early environments. Extensive interviews and videotaped interactions between mothers and their children were conducted with 626 participants in wave 1 and 587 participants in wave 2.

In the current study, the analytic sample was drawn from those participants who reported on their experience of work-family conflict at wave 1 ($n = 385$). From this total, cases were only selected if they had complete data across all wave 1 predictors, wave 2 mediators, and wave 2 ratings of mothers' reports of children's adjustment ($n = 262$). Additionally, parallel analyses were conducted with child care provider-reports of children's adjustment in order to address concerns of shared method variance or reporter bias, given that mothers reported on their work-family conflict and their children's adjustment. This separate analytic sample included cases with complete data on all wave 1 predictors, wave 2 mediators, and wave 2 ratings of child care provider-reports of children's adjustment ($n = 117$).

Procedure

The first two waves of the Three City Study involved a total of four home visits conducted by trained, professional interviewers. The initial visit consisted of a 2-hour interview with the focal child's primary caregiver, and it included questions on families' demographic information as well as child and family functioning. The interviewers

entered participants' responses directly into a laptop computer using computer-assisted personal interviews (CAPI). For those families with a focal child between the ages of 2 and 4, the second home visit involved an additional one-hour EDS interview with the primary caregiver, which focused on more detailed questions on child and family functioning. At this time, interviewers also administered process-oriented measures that provided information not easily collected in standard surveys, including videotaped tasks for the child and mother to complete together, as well as a visit to the child's primary child care provider (other than the mother). Approximately 16 months later, interviewers returned to collect another round of main survey data from the families during a third home visit. Finally, during the fourth home visit, interviewers collected an additional wave of EDS survey and observational data.

Measures

Preschoolers' Adjustment

Mothers' reports of children's adjustment were assessed by age-appropriate versions of the Child Behavior Checklist (CBCL; Achenbach, 1991, 1992). The parent-version of the CBCL, a well-respected and valid measure of children's social functioning, asked parents to rate 99 problem items along a 3-point scale (0 = *not true*, 1 = *somewhat or sometimes true*, 2 = *very true or often true*). In the current study, two standardized scores (i.e., externalizing and internalizing) were used to assess children's adjustment. Item responses were summed into externalizing (CBCL/2-3 $\alpha_{T1} = .91$; CBCL/4-18 $\alpha_{T1} = .90$), and internalizing (CBCL/2-3 $\alpha_{T1} = .83$; CBCL/4-18 $\alpha_{T1} = .88$) subscales at wave 1. Subscales at wave 2 were also summed into externalizing (CBCL/2-3 $\alpha_{T2} = .90$; CBCL/4-

18 $\alpha_{T2} = .90$), and internalizing (CBCL/2-3 $\alpha_{T2} = .83$; CBCL/4-18 $\alpha_{T2} = .88$) aggregates. In order to conduct analyses on all children in the analytic sample, t-scores from both age versions of the CBCL (i.e., CBCL/2-3 and CBCL/4-18) were collapsed into a single externalizing score and internalizing score at each wave.

To address the issue of common method variance, additional analyses were conducted with t-scores of child care provider reports of children's adjustment using the Caregiver Teacher Report-Form (CTR-F; Achenbach, 1997). The CTR-F measures caregiver and teacher reports of children's social functioning from 100 items. Item responses were summed into externalizing ($\alpha_{T1} = .95$, $\alpha_{T2} = .95$), and internalizing ($\alpha_{T1} = .88$, $\alpha_{T2} = .88$) subscales. The CTR-F asked child care providers to report on children's adjustment in the last two months using items with a 3-point metric (0 = *not true*, 1 = *somewhat or sometimes true*, 2 = *very true or often true*).

Mothers' Work-Family Conflict

The Work and Family Questionnaire (Greenberger, 1989) was created to assess mothers' broader experience of interference between multiple roles in their lives. The items assess parents' different roles (e.g., parent, spouse, employee), and their relationship to one another in regards to the extent of interference that each role has on another (e.g., to what extent does work interfere with parenting and vice versa). Responses were reported along a four-point scale (1 = *strongly disagree*, 4 = *agree strongly*). Based on factor analyses with the original data, the Three-City team created the work-family conflict composite for Wave 1 ($\alpha_{T1} = .94$) from the mean of 32 items, such as "*my work/educational schedule(s) are flexible when I need to attend to family*

needs such as taking my child/children to the doctor” (see Appendix A for the complete set of work-family conflict items).

Mothers' Psychological Distress

The mediating role of mothers' psychological distress was tested using the 18-item Brief Symptom Inventory (BSI-18; Derogatis & Savitz, 2000). The BSI-18, a self-report inventory, detects psychological symptom patterns along major indices, including six items assessing *depressive symptoms* and another six items assessing *anxiety symptoms*. Respondents indicated the frequency they experienced symptoms along a 5-point scale (0 = *not at all*; 5 = *in the past 7 days*). Scores for the depressive symptom ($\alpha_{TI} = .83$) and anxiety symptom ($\alpha_{TI} = .83$) subscales were calculated by summing each of their six relevant items.

Parenting Practices

In terms of mothers' parenting, mediation analyses focused on two salient dimensions, namely *mother-child connectedness* and *family routines*. To capture mother-child connectedness, children and mothers participated in the Puzzle Task, which was administered and videotaped in families' homes by trained interviewers at wave 1 and 2 of the EDS. The Puzzle Task was revised for use with low-income, minority families (Chase-Lansdale, Brooks-Gunn, & Zamsky, 1989; Easterbrooks & Goldberg, 1984; Owen & Henderson, 1988; Sroufe, Matas, & Rosenberg, 1980). Interviewers asked children to complete a set of four puzzles of increasing difficulty and told mothers that they could assist children when necessary. Connectedness was rated on a 4-point scale (1 = *none*; 2 = *mild*; 3 = *moderate*; 4 = *high*). Approximately 25% of tapes were double

coded for interrater reliability ($\kappa_1=.67$ when comparing none/mild ratings with moderate/extreme ratings).

Regarding family routines, mothers were asked a series of questions relating to their families' adherence to strength-promoting family routines. These questions were based on the Family Routines Inventory (FRI; Boyce et al., 1983), which asks participants to respond to questions along a 4-point scale (1 = *never*; 4 = *always/everyday*). Based on factor analyses, a family routines composite ($\alpha_{T1} = .66$) was created from the sum of five items such as "*children go to bed at the same time each night*" and "*family eats dinner/supper at the same time each night*".

Child and Family Background Characteristics

Basic child and family background characteristics at wave 1 were included as covariates in analyses. Child age was measured in years, and child gender was represented by a dummy variable with male coded as 1 and female coded as 0. Children's race/ethnicity was represented by three dummy variables for African American (omitted), Latino, and European American/other race/ethnic background. Mothers' educational attainment was modeled using a series of dummy variables representing whether mothers had less than a high school diploma (omitted), a high school diploma or GED, or greater than a high school diploma. Similarly, mothers' employment was represented by dummy variables indicating whether mothers worked 0-10 hours per week (omitted), 11-29 hours per week, or 30 or more hours each week. Additionally, family structure was represented by dummy variables indicating whether the child's mother was single (omitted) or married/cohabiting. Mothers' caregiving

burden was represented by a continuous measure of the number of minors living in the household. Families' income-to-needs-ratio, which is total family income divided by the poverty threshold specific to a family's size, was also included as a covariate.

Finally, mothers' experience of financial strain (Financial Strain Index; Chase-Lansdale, Pittman, & Coley, 1998; McLoyd et al., 1994), which is mothers' perception of their economic hardship, was included as a covariate. Low-income mothers are more likely to experience financial strain, given their tendency to hold low-wage, low-prestige jobs, and financial strain may be related to work-family conflict and preschoolers' behavior. Following factor analyses with the original data, the Three-City team created a financial strain composite for wave 1 ($\alpha_{T1} = .94$) from the mean of five items, such as "*I have had difficulty paying bills in the last year*".

Analytical Strategy

Initially, descriptive analyses were conducted for each of the survey and observational measures described in the previous section. Means and standard deviations were calculated for the continuous measures, and percentages were calculated for the categorical variables. Additionally, Pearson product-moment correlations were calculated between each of the main variables of interest.

Next, to address the first research question, associations between low-income mothers' work-family conflict and preschoolers' adjustment were modeled using OLS regression. As presented in Equation 1, the first regression model predicted children's wave 2 externalizing symptoms from wave 1 measures of mothers' work-family conflict,

while controlling for children's earlier externalizing symptoms and a series of important background characteristics.

$$1) \quad \text{Preschoolers' Externalizing Symptoms}_{\text{Wave 2}} = B_0 + B_1 \text{ Mothers' Work-Family Conflict}_{\text{Wave 1}} + B_2 \text{ Preschoolers' Externalizing Symptoms}_{\text{Wave 1}} + B_3 \text{ Child and Family Background Characteristics}_{\text{Wave 1}} + \epsilon$$

Similarly, the second regression model predicted children's wave 2 *internalizing* symptoms from mothers' work-family conflict, children's internalizing symptoms, and multiple child and family background characteristics, which were all collected at wave 1. The coefficients on the independent variables in these residualized models are interpreted as the effects of each independent variable on changes in rates of child functioning over time (Kessler & Greeneberg, 1981).

Wave 1 measures of children's externalizing and internalizing symptoms were included as covariates to address the threat of omitted variable bias. While previous research has established the link between mothers' work-family conflict and children's adjustment (MacEwen & Barling, 1991; Jackson, 1993; McLoyd et al., 2008; Repetti & Wood, 1997), an important next step is to verify whether this association is robust to more rigorous tests. Along those lines, a methodological advantage of including an earlier measure of the outcome of interest is that it reduces the influence of unmeasured, omitted variables that are related to child functioning as well as mothers' work-family stress (Duncan et al., 2004; NICHD Early Child Care Research Network & Duncan,

2003). In other words, the measure of children's earlier adjustment is used as a proxy for heterogeneity in children that is not captured by the covariates included in the models. As such, these models help obtain less biased estimates of the link between work-family conflict and children's adjustment (Cain, 1975).

To further minimize bias, all regression models included a series of wave 1 child and family background characteristics which may be related to mothers' work-family conflict, psychological distress, parenting practices, and children's adjustment over time. Specifically, I controlled for children's age, gender, and race/ethnicity; mothers' education, employment, and marital status; number of minors in the household, families' financial strain, and income-to-needs ratio. Collectively, the inclusion of these covariates allows me to more conservatively test the link between work-family conflict and children's adjustment.

Next, to assess mediation in the full model presented in Figure 1, each of the four proposed mediation pathways was evaluated separately. Traditionally, four conditions must be met in order to conclude that any given model contains a mediated pathway (Baron & Kenny, 1986; Holmbeck, 1997). First, the predictor variable must be significantly related to the outcome variable. Second, the predictor must be correlated with the proposed mediator. Third, the mediator must be significantly related to the outcome variable, while controlling for the predictor. Lastly, a significant attenuation of the effect of the predictor on the outcome variable should occur when the mediator is included in the final model.

A variant of this approach argues that tests of Baron and Kenny's (1986) steps two and three are the only necessary criteria for mediation (Cohen & Cohen, 1983; Kenny, Kashy, & Bolger, 1998; MacKinnon, 2008). This variant addresses the concern that even when the direct link between the predictor and outcome is not significant, it is still possible for substantial mediation to occur. The requirement that there has to be a significant relation between the independent and dependent variables excludes models (e.g., suppression models) in which the indirect effect and direct effect have opposite signs and may cancel each other out (MacKinnon, Krull, & Lockwood, 2000; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Still, all four steps will be tested here, in order to take a more comprehensive approach to testing for mediation. Furthermore, analyses will continue even if the first mediation criterion is not met, as there may be a suppressor effect to report.

In order to account for the multiple indicators of the proposed mediators (i.e., psychological distress is represented by depressive and anxiety symptoms), MacKinnon's (2008) simple extension of Baron and Kenny's (1986) four mediation criteria will be used. In step four, an attenuation of the effect of the predictor on the outcome variable must occur when *both* indicators of the proposed mediator (i.e., depressive and anxiety symptoms) are included in the final model. Finally, estimates of the significance of the mediated relations will be assessed using the Sobel test (Sobel, 1982). A highly recommended procedure (MacKinnon et al., 2002), the Sobel test is a conservative measure of the significance of the attenuation of the effect of the predictor on the outcome variable, after including the mediators in the final model.

Using the approaches above, analyses addressed the second research question, which considered the role of mothers' psychological distress (i.e., depressive and anxiety symptoms) as a mediator in the relation between work-family conflict and children's adjustment. Specifically, the first mediation criterion, whether mothers' work-family conflict was associated with children's adjustment, was tested. Next, the second criterion, that work-family conflict should be associated with mothers' depressive symptoms and their anxiety symptoms, was assessed separately. Then, the third criterion, whether depressive and anxiety symptoms were predictive of children's adjustment after controlling for work-family conflict, was examined. Finally, the fourth mediation criterion was considered by examining whether the attenuation of the relation between work-family conflict and children's adjustment was significant. To clarify, these models focused only on mothers' depressive and anxiety symptoms, and excluded measures of connectedness and family routines. Furthermore, these models were examined with children's externalizing and internalizing symptoms as outcomes.

The third research question, whether mothers' parenting practices mediate the relation between work-family conflict and preschoolers' adjustment, was tested in a similar manner. After testing the first mediation criterion (i.e., was work-family conflict directly associated with children's adjustment), consideration was given to the second criterion of the relation between work-family conflict and both connectedness and family routines. The third mediation criterion, whether connectedness and family routines predicted children's adjustment above and beyond work-family conflict, was then examined. Finally, the fourth mediation criterion was considered by examining whether

attenuation of the association between work-family conflict and children's adjustment was significant. Notably, these models were examined with connectedness and family routines only, and depressive and anxiety symptoms were excluded.

The fourth research question addresses the full mediation model involving two sets of mediators. Specifically, this question tested whether mother's psychological distress mediated the link between work-family conflict and parenting, which in turn was hypothesized to mediate the link between distress and children's adjustment. This final research question was broken down into its two component paths. First, the mediating role of mother's psychological distress in the link between work-family conflict and parenting practices was assessed, following the four criteria outlined above. More specifically, work-family conflict was the predictor of interest, depressive and anxiety symptoms were tested as mediators, and connectedness and family routines were the outcomes of interest. Next, the mediating role of mothers' parenting practices in the link between psychological distress and children's adjustment was tested. Here, both depressive and anxiety symptoms were the predictors of interest, connectedness and family routines were tested as mediators, and children's adjustment was the outcome of interest, controlling for work-family conflict. The final step was to examine whether all of the path coefficients were significant. If all the component path coefficients were significant, the whole indirect path (from work-family conflict to distress, from distress to parenting, and from parenting to adjustment) could be taken as significant (Cohen & Cohen, 1983; Kline, 1998).

CHAPTER THREE

RESULTS

Descriptive Statistics

Table 1 presents the means, standard deviations, and ranges for the continuous measures, and percentages for the categorical measures. Pearson product-moment correlations between the main study variables are displayed in Table 2. On average, children were 3-years-old ($SD = 0.84$) and 55.3% were male. A majority of children were of a minority racial/ethnic background (53.1% African American, 39.7% Latino, and 7.3% European American/other). The mean t-scores for children's wave 1 externalizing symptoms ($M = 52.55$, $SD = 11.21$) and internalizing symptoms ($M = 52.04$, $SD = 10.50$) were nearly identical. Similar results were also found for children's wave 2 externalizing ($M = 52.32$, $SD = 10.76$) and internalizing symptoms ($M = 49.55$, $SD = 9.88$).

Regarding maternal characteristics, mothers reported a mean of 2.06 ($SD = 0.61$) on the work-family conflict measure. Substantively, this indicates that, on average, mothers reported relatively low levels of work-family conflict as the measure was scored from one to four, with higher numbers indicating greater conflict. In terms of their educational attainment, just over one-fourth of mothers had less than a high school diploma (26.0%), while 29.4% reported having a high school diploma or GED, and

44.7% reported having attained more than a high school degree. Regarding their work experience, just under half of the mothers in the analytic sample worked 10 or fewer hours each week (45.8%), while 17.2% reported working 11-29 hours per week, and 37.0% of mothers reported 30 or more hours of work each week. Additionally, a majority of mothers were single parents (74.8%), while only about a quarter were married or cohabiting with a partner (25.2%).

Finally, in terms of family characteristics, the average number of minors in the household was 2.46 ($SD = 1.18$). The mean financial strain score was -0.04 ($SD = 0.69$) and the average income-to-needs ratio was 0.92 ($SD = 0.51$). This indicates that most families reported an income that placed them just below the federal poverty line.

Table 1. Descriptive Statistics for Analyses Using Maternal-Reports of Children's Adjustment (n = 262)

	<i>M</i>	<i>SD</i>	%	Range
Child Characteristics				
Age	3.00	0.84		2 - 5
Male			55.3%	
Race/ethnicity				
African American			53.1%	
Latino			39.7%	
European American/other			7.3%	
Socioemotional Adjustment - Wave 1				
Externalizing symptoms	52.55	11.21		30 - 92
Internalizing symptoms	52.04	10.50		30 - 78
Socioemotional Adjustment - Wave 2				
Externalizing symptoms	52.32	10.76		30 - 86
Internalizing symptoms	49.55	9.88		30 - 76
Maternal Characteristics				
Work-Family Conflict	2.06	0.84		1 - 3.44
Educational Attainment				
Less than a high school diploma			26.0%	
High school diploma or GED			29.4%	
Greater than a high school diploma			44.7%	
Employment				
0-10 hours worked per week			45.8%	
11-29 hours worked per week			17.2%	
30 or more hours worked per week			37.0%	
Marital Status				
Not married			74.8%	
Married or cohabiting			25.2%	
Psychological Distress				
Depressive symptoms	1.05	0.90		0 - 3.14
Anxiety symptoms	0.76	0.82		0 - 3.18
Parenting Practices				
Mother-child connectedness	3.32	0.76		1 - 4
Family routines	2.96	0.58		1 - 4
Family Characteristics				
Number of minors in household	2.46	1.18		1 - 7
Financial strain	-0.04	0.69		-1.52 - 1.88
Income-to-needs ratio	0.92	0.51		0 - 2.89

Table 2. Intercorrelations Between Mothers' Work-Family Conflict, Psychological Distress, Parenting Practices, and Maternal-Reports of Children's Adjustment

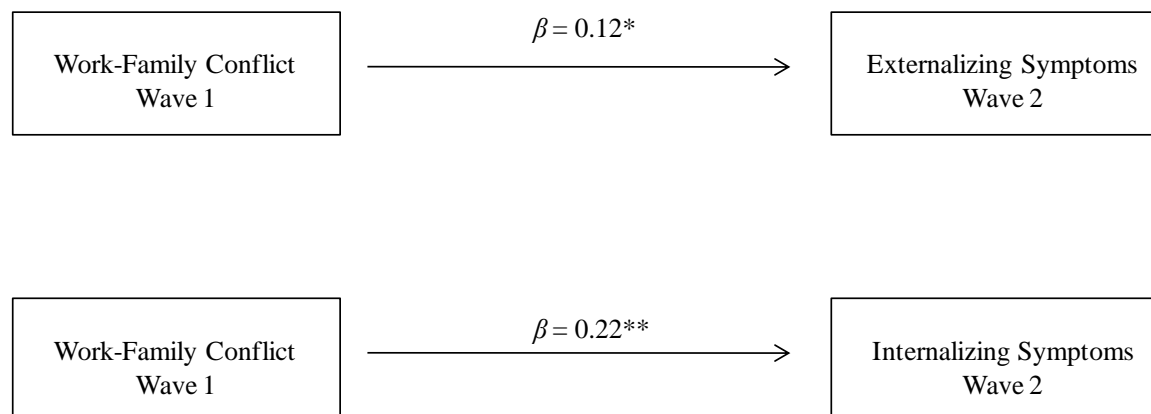
Variables	1	2	3	4	5	6	7
1. Mothers' work-family conflict	-						
2. Mothers' depressive symptoms	0.33 ***	-					
3. Mothers' anxiety symptoms	0.36 ***	0.74 ***	-				
4. Mother-child connectedness	0.03	0.02	0.00	-			
5. Family routines	-0.11	-0.15 *	-0.12	0.02	-		
6. Children's externalizing symptoms	0.20 **	0.23 ***	0.24 ***	-0.14	-0.2 **	-	
7. Children's internalizing symptoms	0.27 ***	0.28 ***	0.35 ***	-0.07	-0.17 **	0.65 ***	-

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

Direct Relation Between Mothers' Work-Family Conflict and Preschoolers' Adjustment

As displayed in Figure 2, the first research question asked whether low-income mothers' work-family conflict was significantly associated with children's externalizing and internalizing symptoms at wave 2. The purpose of these initial regression models was to extend previous research by considering whether work-family conflict accounted for *unique* variance in children's adjustment, after controlling for a comprehensive list of child and family background characteristics. In particular, I tested whether mothers' work-family conflict was longitudinally associated with children's later externalizing and internalizing symptoms, net of children's earlier adjustment.

Figure 2. Mothers' work-family conflict predicting preschoolers' externalizing and internalizing symptoms.



In the first regression model, predictor variables drawn from wave 1 were used to predict children's externalizing symptoms at wave 2. Overall, the predictors in this model accounted for 34.9% of the variance in children's externalizing symptoms ($F(14, 261) = 9.48, p < .001$). Specifically, mothers' work-family conflict was positively associated with children's later externalizing symptoms ($\beta = 0.12, p < .05$), above and beyond their earlier externalizing problems and other background characteristics. Standardized betas are reported here in the text as well as in the figures. In this model, a one standard deviation increase in work-family conflict is associated with a 0.12 standard deviation increase in children's externalizing symptoms at wave 2.

In the second model, the predictors accounted for 33.3% of the variance in children's wave 2 internalizing symptoms ($F(14, 261) = 8.80, p < .001$). Mothers' work-family conflict was positively associated with ratings of children's internalizing symptoms ($\beta = 0.22, p < .001$), above and beyond earlier internalizing problems and other background characteristics. As compared to children's externalizing symptoms, a one standard deviation increase in work-family conflict was associated with a 0.22 standard deviation increase in children's internalizing symptoms. Since this increase is greater than that found for externalizing symptoms, it suggests that mothers' work-family conflict has a greater relative association with children's internalizing symptoms than their externalizing symptoms.

In addition to examining direct links, the hypothesized model presented in Figure 1 contains multiple mediation pathways. First, mothers' psychological distress (i.e., depressive symptoms and anxiety symptoms) was hypothesized to mediate the direct link

between work-family conflict and children's adjustment. Next, parenting practices (i.e., connectedness and family routines) were also hypothesized to mediate the link between mothers' work-family conflict and preschoolers' adjustment. Finally, the full mediation model involving all four sets of variables (i.e., mothers' work-family conflict → psychological distress → parenting practices → children's adjustment) was hypothesized to be significant.

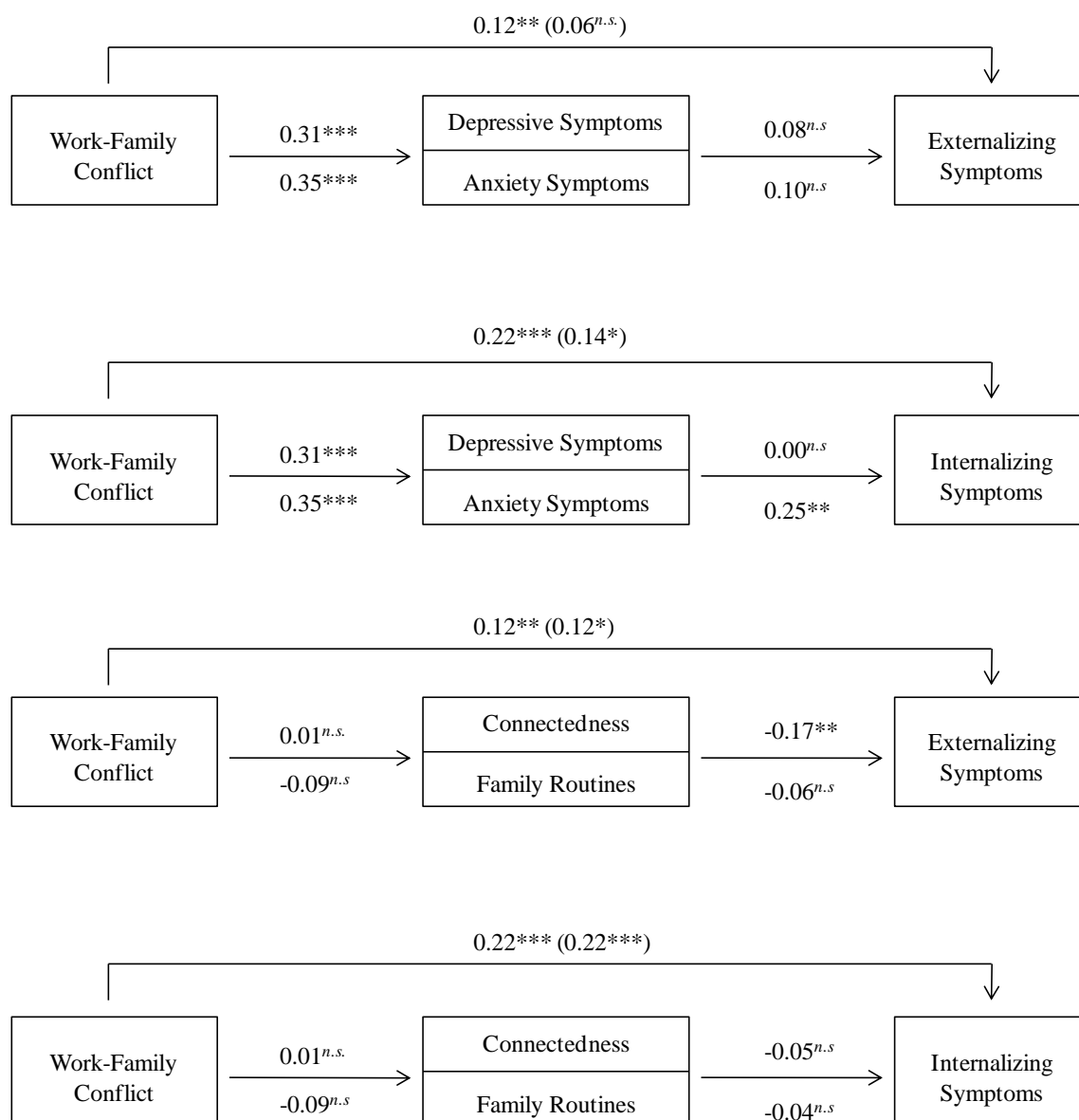
Mothers' Psychological Distress as a Mediator

Mothers' depressive symptoms and anxiety symptoms were first considered as possible mediators of the direct link between work-family conflict and preschoolers' externalizing and internalizing symptoms. The results for each of the regression models used to test these hypothesized mediation pathways are presented in Figure 3. The first mediation criterion (work-family conflict → externalizing symptoms) was met and indicated that higher levels of work-family conflict were associated with higher ratings of children's externalizing symptoms (WFC $\beta = 0.12$, $p < .01$). Regarding the second mediation criterion (work-family conflict → depressive symptoms; work-family conflict → anxiety symptoms), mothers' higher levels of work-family conflict were positively associated with higher levels of depressive symptoms (WFC $\beta = 0.31$, $p < .001$) and anxiety symptoms (WFC $\beta = 0.35$, $p < .001$), after controlling for child and family covariates. The third mediation criterion (depressive symptoms → externalizing symptoms; anxiety symptoms → externalizing symptoms), however, was not met for either depressive symptoms (DEP $\beta = 0.08$, *n.s.*) or anxiety symptoms (ANX $\beta = 0.10$, *n.s.*). There was no need to explicitly test whether the attenuation of the linkage between

work-family conflict and adjustment was significant because the third mediation criterion was not met. Collectively, these results indicate that mothers' depressive symptoms and anxiety symptoms do not completely or partially mediate the link between work-family conflict and children's externalizing symptoms.

Also displayed in Figure 3 are the results from the regression models examining depressive symptoms and anxiety symptoms as mediators of the link between work-family conflict and preschoolers' *internalizing* symptoms. The first mediation criterion (work-family conflict → internalizing symptoms) was met and suggested that higher levels of work-family conflict were positively linked to ratings of children's internalizing symptoms (WFC $\beta = 0.22$, $p < .001$). As reported previously, evaluation of the second mediation criterion (work-family conflict → depressive symptoms; work-family conflict → anxiety symptoms) indicated that work-family conflict was linked to depressive symptoms and anxiety symptoms, after controlling for the covariates. The third mediation criterion (depressive symptoms → internalizing symptoms; anxiety symptoms → internalizing symptoms) was met for anxiety symptoms (ANX $\beta = 0.25$, $p < .01$) but not depressive symptoms (DEP $\beta = 0.00$, *n.s.*). In terms of the fourth mediation criterion, the direct link between work-family conflict and internalizing symptoms was reduced when anxiety symptoms were added to the final model. Post-hoc Sobel tests revealed that this reduction was significant (ANX $z = 3.01$, $p < .01$). Overall, these results indicate that mothers' anxiety symptoms partially mediate the link between work-family conflict and children's internalizing symptoms, whereas their depressive symptoms do not.

Figure 3. Mothers' psychological distress and parenting practices as mediators of the link between work-family conflict and children's adjustment



In sum, Figure 3 displays the overall results from the analyses testing the second research question of this study. Collectively, these results indicate that mothers' depressive symptoms and anxiety symptoms do not mediate the direct link between work-family conflict and preschoolers' adjustment. The one exception to these findings

was that mothers' anxiety symptoms partially mediated the link between work-family conflict and children's internalizing symptoms.

Mothers' Parenting Practices as a Mediator

Testing research question three, the second set of mediation analyses examined the mediating role of mothers' parenting practices (i.e., connectedness and family routines) in the link between work-family conflict and adjustment. In this set of mediation analyses, the first mediation criterion (work-family conflict → externalizing symptoms) again indicated that work-family conflict was related to children's externalizing symptoms (WFC $\beta = 0.12$, $p < .01$). The second mediation criterion (work-family conflict → connectedness; work-family conflict → family routines), however, was not met for either connectedness (CON $\beta = 0.01$, *n.s.*) or family routines (FR $\beta = -0.09$, *n.s.*). Since the second mediation criterion was not met for either connectedness or family routines, the results indicate that there is no mediated effect or indirect effect to report. Therefore, the third and fourth mediation criteria were not explicitly evaluated.

Next, these models were repeated for children's internalizing symptoms as the outcome of interest. As reported above, the first mediation criterion was met (work-family conflict → internalizing symptoms). As previously reported, evaluation of the second mediation criterion revealed that mothers' work-family conflict was not significantly associated with either connectedness or family routines. Similar to the previous set of models predicting children's externalizing symptoms, these results indicate that there is no mediated effect or indirect effect to report, given that the second mediation criterion was not significant for either connectedness or family routines.

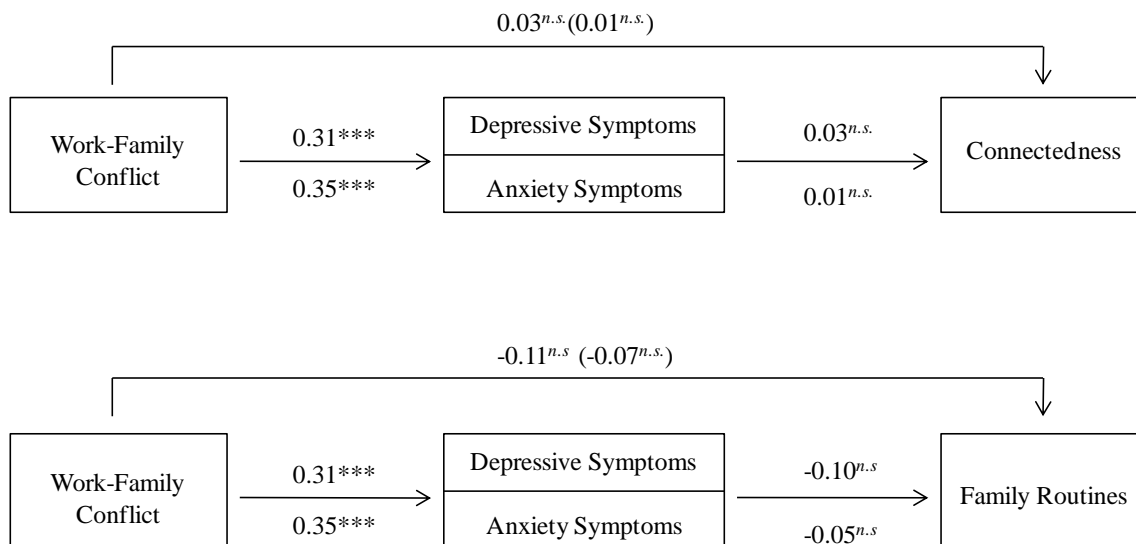
Therefore, the third and fourth criteria for mediation were not explicitly tested because the second criterion was not met. Overall, the second set of mediation analyses indicated that mothers' parenting practices did not partially or completely mediate the direct relation between work-family conflict and preschoolers' adjustment.

The Full Mediation Model

Finally, two sets of mediation analyses were used to test the fourth research question which involved the full mediation model presented in Figure 1. This final question asked whether mothers' psychological distress, and in turn parenting practices, mediated the direct link between work-family conflict and preschoolers' externalizing and internalizing symptoms. To test this question, I first examined whether mothers' psychological distress (i.e., depressive and anxiety symptoms) mediated the relation between mothers' work-family conflict and parenting practices. Second, I tested whether mothers' parenting practices (i.e., connectedness and family routines) mediated the relation between psychological distress and children's adjustment, while controlling for mothers' work-family conflict.

Figure 4 displays the results from the first set of mediation analyses which tested mothers' psychological distress as a mediator of work-family conflict and parenting practices. For those models predicting mother-child connectedness, the first mediation criterion was not met, indicating that work-family conflict is not significantly related to mother-child connectedness.

Figure 4. Mothers' psychological distress as a mediator of the link between work-family conflict and parenting practices



Despite the null findings for the first mediation criterion, I tested the second and third mediation criteria because, if those were met, it would provide sufficient evidence for a completely indirect path (Baron & Kenny, 1986). The second mediation criterion (work-family conflict → depressive symptoms; work-family conflict → anxiety symptoms) did, in fact, indicate that work-family conflict was positively linked to mothers' depressive symptoms (WFC $\beta = 0.31$, $p < .001$) and anxiety symptoms (WFC $\beta = 0.35$, $p < .001$). Testing the third mediation criterion (depressive symptoms, anxiety symptoms → connectedness), however, revealed that neither depressive symptoms nor anxiety symptoms were significantly linked to mother-child connectedness (DEP $\beta = 0.03$, $n.s.$; ANX $\beta = 0.00$, $n.s.$). Taken as a whole, these results indicate that there is no mediating or purely indirect effect involving depressive symptoms or anxiety symptoms

as mediators in the relation between work-family conflict and mother-child connectedness.

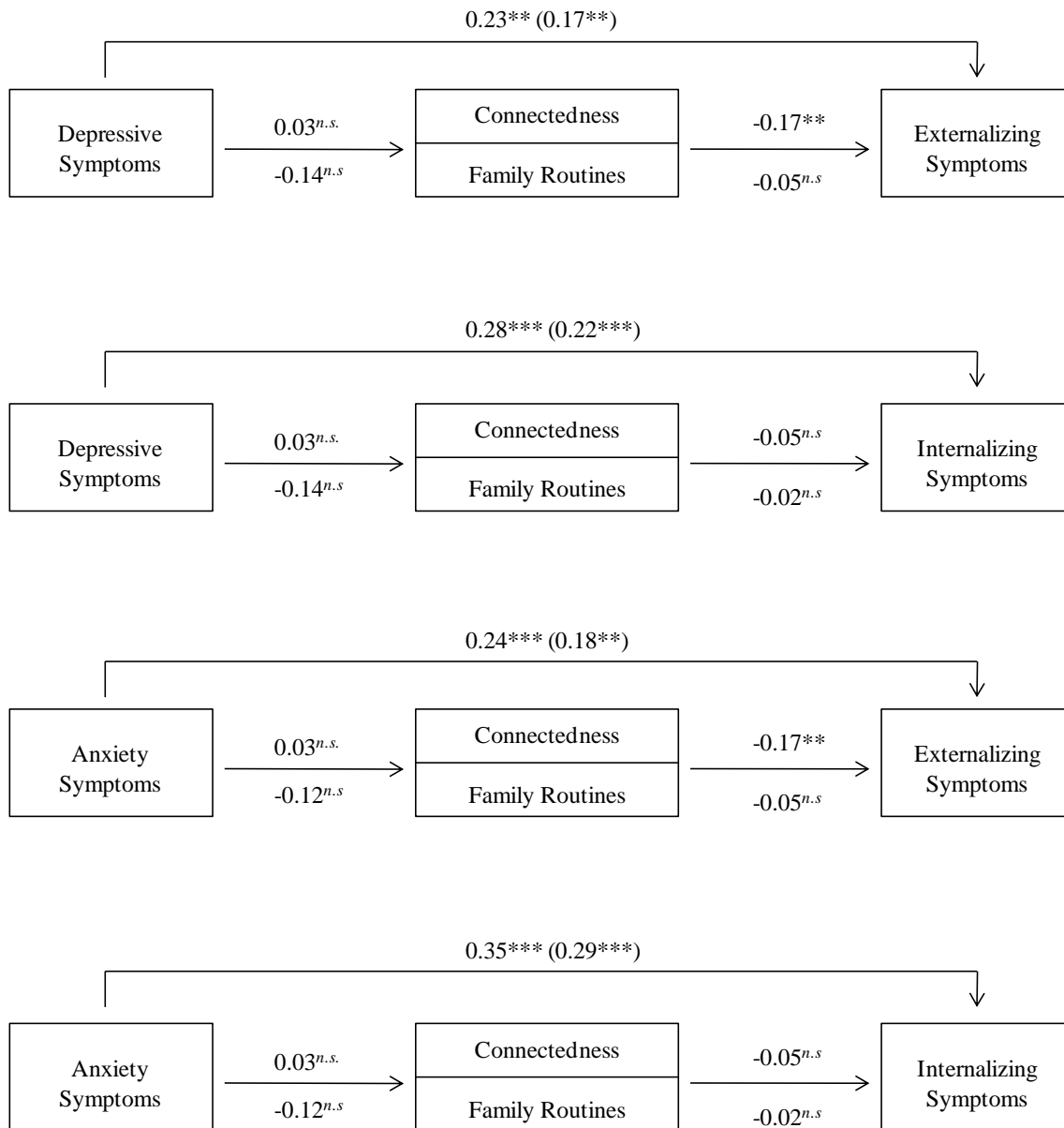
Similar results were found for those models predicting family routines, which are also displayed in Figure 4. The first mediation criterion (work-family conflict → family routines) indicated that work-family conflict was not related to family routines as the overall F -test was again not significant ($F(1,261) = 3.40, n.s.$). Despite the first criterion not being met, I tested the second and third criteria in order to evaluate whether a purely indirect effect was occurring. As previously reported, the second mediation criterion revealed that work-family conflict predicted mothers' depressive symptoms (WFC $\beta = 0.31, p < .001$) and anxiety symptoms (WFC $\beta = 0.35, p < .001$). Evaluation of the third mediation criterion (depressive symptoms, anxiety symptoms → family routines), however, showed that neither depressive symptoms nor anxiety symptoms were significantly linked to family routines (DEP $\beta = -0.10, n.s.$; ANX $\beta = -0.05, n.s.$). Collectively, these results suggest that there is no mediating or purely indirect effect involving depressive symptoms or anxiety symptoms as mediators in the link between work-family conflict and family routines.

The next step in testing the full mediation model, which is presented in Figure 5, involved testing whether parenting practices mediated the link between psychological distress and children's adjustment. While controlling for work-family conflict, the first mediation criterion (depressive symptoms, anxiety symptoms → externalizing symptoms, internalizing symptoms) was met, indicating that higher levels of depressive symptoms and anxiety symptoms were associated with higher ratings of externalizing symptoms

(DEP $\beta = 0.23$, $p < .001$; ANX $\beta = 0.24$, $p < .001$) and internalizing symptoms (DEP $\beta = 0.28$, $p < .001$; ANX $\beta = 0.35$, $p < .001$). The overall models testing the second mediation criterion (depressive symptoms, anxiety symptoms \rightarrow connectedness, family routines) were not significant for either connectedness ($F(14, 261) = 0.62$, *n.s.*) or family routines ($F(14, 261) = 1.54$, *n.s.*). Since the second mediation criterion was not met, the third and fourth criteria were not tested explicitly, because this indicates that there was no mediation or purely indirect effect occurring. Taken together, the null findings for the second mediation criterion indicate that parenting practices did not mediate the link between mothers' depressive symptoms/anxiety symptoms and children's adjustment.

In sum, in order to test the full mediation model involving all four sets of variables (i.e., mothers' work-family conflict \rightarrow psychological distress \rightarrow parenting practices \rightarrow children's adjustment), two final sets of mediation analyses were conducted. Results indicated that mothers' psychological distress was not a mediator of the link between work-family conflict and parenting practices. Similarly, parenting practices did not mediate the link between psychological distress and children's adjustment. Given that neither mothers' psychological distress nor parenting practices proved to be mediators, there was no statistical support for the full mediation model.

Figure 5. Mothers' parenting practices as a mediator of the link between psychological distress and children's adjustment



Parallel Analyses Conducted with Child Care Provider-Reports of Children's Adjustment

Following the previous analyses with maternal-reports of children's adjustment, parallel analyses were conducted with child care provider-reports of children's externalizing and internalizing symptoms. Descriptive statistics for the child care provider-report analytic sample data are reported in Table 3. Also, correlations between work-family conflict, mothers' psychological distress, parenting practices, and child care provider-reports of children's externalizing and internalizing symptoms are reported in Table 4.

First, initial regression models used predictor variables drawn at wave 1 to model child care provider-reports of children's adjustment. These analyses indicated that mothers' work-family conflict was not significantly associated with child care provider-reports of children's externalizing symptoms at wave 2. Similar results were found for a second model predicting children's internalizing symptoms at wave 2.

Despite these null results, the mediation analyses were continued to test for the presence of an indirect effect. The mediation analyses using child care provider-reports of children's adjustment were conducted in an identical manner to those using maternal-reports, however, none of the mediation pathways in the child care provider report analyses were significant. In sum, the results indicated that neither mothers' psychological distress nor parenting practices proved to be mediators of the link between work-family conflict and child care provider-reports of children's externalizing and internalizing symptoms.

Table 3. Descriptive Statistics for Analyses Using Child Care Provider-Reports of Children's Adjustment (n = 117)

	<i>M</i>	<i>SD</i>	%	Range
Child Characteristics				
Age	2.91	0.77		2 - 4
Male			57.3%	
Race/ethnicity				
African American			62.4%	
Latino			31.6%	
European American/other			6.0%	
Socioemotional Adjustment - Wave 1				
Externalizing symptoms	53.79	9.00		35 - 78
Internalizing symptoms	50.58	9.11		34 - 73
Socioemotional Adjustment - Wave 2				
Externalizing symptoms	52.02	8.76		35 - 82
Internalizing symptoms	49.81	9.75		34 - 81
Maternal Characteristics				
Work-Family Conflict	2.12	0.60		1 - 3.44
Educational Attainment				
Less than a high school diploma			23.1%	
High school diploma or GED			28.2%	
Greater than a high school diploma			48.7%	
Employment				
0-10 hours worked per week			36.8%	
11-29 hours worked per week			19.7%	
30 or more hours worked per week			43.6%	
Marital Status				
Not married			72.6%	
Married or cohabiting			27.4%	
Psychological Distress				
Depressive symptoms	1.05	0.84		0 - 3
Anxiety symptoms	0.73	0.81		0 - 3.18
Parenting Practices				
Mother-child connectedness	3.46	0.72		1 - 4
Family routines	2.88	0.63		1.60 - 4
Family Characteristics				
Number of minors in household	2.37	1.18		1 - 7
Financial strain	-0.02	0.73		-1.53 - 1.88
Income-to-needs ratio	0.97	0.54		0 - 2.89

Table 4. Intercorrelations Between Mothers' Work-Family Conflict, Psychological Distress, Parenting Practices, and Caregiver-Reports of Children's Adjustment

Variables	1	2	3	4	5	6	7
1. Mothers' work-family conflict	-						
2. Mothers' depressive symptoms	0.39 ***	-					
3. Mothers' anxiety symptoms	0.46 ***	0.71 ***	-				
4. Mother-child connectedness	-0.06	-0.15	-0.17	-			
5. Family routines	-0.09	-0.07	-0.06	0.06	-		
6. Children's externalizing symptoms	-0.08	-0.01	-0.01	-0.05	-0.14 **	-	
7. Children's internalizing symptoms	0.06	0.16	0.21 *	-0.06	0 **	0.73 ***	-

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

CHAPTER FOUR

DISCUSSION

Contrary to my hypotheses, the results from this study were not wholly consistent with the proposed mediation model presented in Figure 1. Overall, the linkage between low-income mothers' experience of conflict between their work and family roles and preschoolers' adjustment was not explained by mothers' symptoms of psychological distress or their use of positive parenting practices. Similarly, the main pathway of interest (i.e., mothers' work-family conflict → psychological distress → parenting practices → children's adjustment) was not supported by the results yielded in this study.

However, as hypothesized, the strain mothers experienced from their efforts to balance their work and family lives was significantly related to preschoolers' later externalizing and internalizing symptoms. Moreover, mothers' anxiety symptoms partially explained the association between work-family conflict and preschoolers' subsequent internalizing symptoms, after controlling for a variety of child and family background characteristics.

The Role of Work-Family Conflict in Preschoolers' Adjustment

Previous research indicates that mothers' difficulty in balancing work and family responsibilities contributes to their preschoolers' adjustment (Jackson, 1994; MacEwen & Barling, 1991; McLoyd et al., 2008). The current study represented a more rigorous investigation of this association using a host of important child and family background

characteristics as covariates. Various aspects of children and their families, such as race/ethnicity and mothers' educational attainment and employment status, play roles in family functioning and child development (Ackerman et al., 1999). By controlling for these and other important constructs that are related to mothers' subjective perception of their work-family incompatibility and preschoolers' adjustment, the models used in this study yielded less biased estimates of this linkage.

Furthermore, while longitudinal research is fairly common in the psychological distress and family functioning literatures, virtually all of the extant work-family conflict studies have been cross-sectional (e.g., Jackson, 1994; McLoyd et al., 2008). While such research has contributed to our understanding of age-related differences, it has done little to address the underlying processes or mechanisms through which mothers' difficulty in balancing their work and home roles influences children's adjustment. Therefore, the present investigation added to the existing, cross-sectional research by investigating the contribution of mothers' early experience of work-family conflict on children's later externalizing and internalizing symptoms. In other words, by assessing whether mothers' work-family conflict at a previous time point is related to preschoolers' adjustment at a subsequent time, this study provides a more methodologically rigorous test of the causal link between these two constructs. As such, these results suggest that we can confidently rule out the possibility that more externalizing and internalizing symptoms may lead to greater levels of mothers' work-family conflict, rather than vice versa.

An additional contribution of this study was the inclusion of a more specific measure of children's adjustment difficulties. In contrast, Jackson (1994) utilized a more

general indicator of mothers' perceptions of their children's adjustment, which distinguished between "positive" and "negative" behavior patterns. By examining the relation between mothers' work-family conflict and preschoolers' adjustment using maternal-report on the CBCL, the present investigation suggests that the link holds with more specific, clinically meaningful indicators of children's adjustment (Cicchetti & Toth, 1991; Achenbach & Edlebrock, 1982; Zigler & Glick, 1986).

One final way in which the current study extended existing research is by virtue of the unique group of children and mothers considered in this investigation. Whereas other research has focused on low-income mothers receiving welfare (Jackson, 1994) or African American mothers and their children (McLoyd et al., 2008), the data utilized for this study includes both families receiving welfare assistance and families living just above the poverty line, as well as substantial numbers of both African American and Latino families. Therefore, these results are generalizable to a broader group of children, in terms of their socioeconomic and racial/ethnic background. Still, it is important to recognize that this study was limited to low-income, mainly ethnic minority children and their mothers. Future research should investigate whether the link between mothers' work and family role incompatibility and children's adjustment holds across a wider range of socioeconomic and racial/ethnic backgrounds.

The Role of Mothers' Psychological Distress

To better understand mothers' subjective experience of conflict between work and family and its contribution to children's adjustment, it is important for research to investigate the underlying processes responsible for the relation between these constructs.

While little research focusing on work-family conflict has yet examined potential mechanisms, at least two studies have identified mothers' depressive symptoms as a key underlying process (MacEwen & Barling, 1991; McLoyd et al., 2008). Contrary to these findings, however, the current investigation found that mothers' depressive symptoms did not explain the link between mothers' work-family conflict and their reports of preschoolers' externalizing and internalizing symptoms.

This discrepancy may be due to differences between the groups of children examined in the previous studies and the current research. Participants in McLoyd et al.'s (2008) study consisted of African American mothers and their 10-12 year-old children. MacEwen and Barling (1991), in contrast, studied a slightly younger group of children whose average age was approximately 8-years-old. Both of these studies, however, are significantly older than the group of preschool-aged children focused on in the present research. Older children, as compared to their younger counterparts, may be more vulnerable to exposure to mothers' depressive symptoms because they possess cognitive and perceptive skills that are still largely absent among preschool-aged children (Weiss & Garber, 2003). In other words, older children may be more capable than younger children of observing and comprehending the complex symptoms associated with depression.

Another explanation may be related to discrepancies between the measures used to capture mothers' depressive symptoms in each study. MacEwen and Barling (1991) relied on a general measure of mothers' negative mood, while McLoyd and colleagues (2008) used a latent construct of mothers' depressive symptoms drawn from the

aggregation of two indicators. Specifically, these indicators were: (1) mothers' depressed mood (e.g., the extent to which mothers reported feeling hopeless, worthless); and (2) mothers' reverse-coded anhedonic depression (e.g., the extent to which mothers experienced pleasure reflected in feeling happy, having lots of energy). In contrast to these measures, which may be capturing more than depressive symptoms, the measure used in the current study (i.e., the BSI-18; Derogatis, 1983) captures a range of specific symptoms associated with clinical depression (e.g., dysphoric affect and mood).

Contrary to the lack of findings regarding the role of mothers' depressive symptoms, one of the few significant results in the current study found that mothers' anxiety symptoms partially explained the link between mothers' work-family conflict and preschoolers' internalizing symptoms. It will be important for future research to replicate this result. Still, this is particularly interesting given that no previous study has considered the role of mothers' anxiety symptoms in explaining the relation between mothers' difficulty balancing their work and family lives and children's adjustment. Furthermore, it was also interesting that a similar pattern was not found for children's externalizing symptoms.

Why might mothers' anxiety symptoms underlie the link between work-family conflict and preschoolers' internalizing symptoms when their depressive symptoms did not play a mediating role? It is plausible that the experience of struggling to maintain successful work and family roles is more closely related with state-like manifestations of anxiety rather than depression (Feldman, 1993). If mothers are feeling "stretched too thin" in terms of their time and resources, mothers may be more likely to express feelings

of being 'tense' and 'worried', which more closely reflect anxiety symptoms. In comparison, women who experience work conflicts that are demeaning to their self-esteem might be more likely to experience depressive symptoms. For example, after receiving harsh criticism from co-workers, women may be more likely to express feelings of being 'miserable' or 'gloomy' than if they were experiencing strain between work and family roles.

In turn, mothers' anxiety symptoms were associated with their reports of children's internalizing symptoms. This is consistent with extant research that has linked mothers' anxiety symptoms to children's anxiety problems (Moore, Whaley, & Sigman, 2004; Whaley, Pinto, & Sigman, 2004). While genetics likely plays a role in the transmission of anxiety across generations, psychosocial factors, such as modeling, are another probable mechanism, as evidenced by observational studies of the interactions between anxious mothers and their children (Bandura, 1977; Woodruff Borden et al., 2002). Mothers' experiencing stress from their attempts to balance their work and family responsibilities may display anxiety with and around their children. By doing so, mothers may be modeling anxious symptoms as a means of coping with the stress associated with conflicting work and family roles.

Despite its relevance to children's internalizing symptoms, however, mothers' anxiety symptoms did not explain the relation to externalizing symptoms. It may be that mothers who are displaying anxiety symptoms as a result of their conflicting work and family demands are not necessarily showing externalizing behaviors as well. If mothers'

externalizing behavior is not modeled for children, we may not see children's showing externalizing behaviors themselves, in response to their mothers' anxiety symptoms.

The Role of Mothers' Parenting Practices

Along with mothers' psychological distress, it was expected that their use of positive parenting practices would underlie the relation between work-family conflict and children's adjustment. Bronfenbrenner's (1979) ecological systems theory emphasizes that there are multiple ways through which parents may influence their children. Parents not only exert an influence on their children through relatively more distal means such as modeling, but also through more proximal means like their parenting practices (Bornstein, 2002). Contrary to these expectations, however, no support was found for the role of mothers' positive parenting practices as a mechanism underlying the association between work-family conflict and children's externalizing and internalizing symptoms. It may be that the challenge of balancing competing work and family roles is more strongly linked to negative parenting practices like harsh punishment and inconsistent discipline (MacDermid & Williams, 1997) than positive parenting behavior. Future research should consider the roles of both positive and negative aspects of parenting to test this idea explicitly.

Why Was No Support Found for the Full Model?

In contrast to my hypotheses, the results of this study did not yield support for the full mediation model (i.e., mothers' work-family conflict → psychological distress → parenting practices → preschoolers' adjustment). These findings contradict those reported by McLoyd and colleagues (2008) which did offer evidence in support of a

similar comprehensive model (i.e., mothers' work-family conflict → depressive symptoms → family routines → externalizing symptoms). Methodological differences between McLoyd et al. (2008) and the current study may explain these contradictory findings. Specifically, the present research tested more conservative models (Duncan et al., 2004).

Furthermore, the group of children assessed in McLoyd et al.'s (2008) study was significantly older than the children in the current study. It may be the case that mothers' experience of work-family conflict, along with any related family processes, is less meaningful to younger children, such as those considered in the present research. Mothers' experience of this strain or distress may be less relevant for younger children because they are less perceptive than their older counterparts and many of their cognitive and socioemotional skills are still emerging (Damen & Lerner, 2006; DelCarmen-Wiggins & Carter, 2001; Goswami, 2010). Additionally, the parents of young children, recognizing their vulnerability, may make a concerted effort *not* to disrupt family routines and connectedness when struggling to balance work and family responsibilities (Bornstein, 2002).

Parallel Analyses with Child Care Provider-Reports of Children's Adjustment

Finally, parallel analyses conducted with child care provider-reports of children's adjustment surprisingly found no significant direct or indirect link between mothers' difficulty in balancing work and family responsibilities and preschoolers' externalizing and internalizing symptoms. Since existing research has indicated that mothers with higher levels of depressive symptoms tend to overreport adjustment difficulties among

their children (Fergusson, Lynskey, & Horwood, 1992), mothers experiencing higher levels of work-family conflict may also be more likely to overreport their children's adjustment symptoms. As such, examining child care provider-reports of children's externalizing and internalizing symptoms was a particularly important methodological contribution. Only one other study (MacEwen & Barling, 1991) investigated an additional source of reporting children's adjustment (i.e., teachers).

The lack of evidence noted here may be attributed to the following reasons. The current study may have lacked sufficient statistical power to detect any significant relations among the child care provider-reported children's adjustment, given the relatively small number of children with such reports. In addition, work-family conflict may manifest itself differently in child care settings where mothers are not present (Bronfenbrenner, 1979). Given this, future research could instead use mother- and father-reports of children's adjustment to address concerns regarding common method variance.

Notably, children's earlier adjustment difficulties were significantly associated with their later externalizing and internalizing symptoms. Developmental psychologists have long found that children's earlier adjustment is one of the best predictors of their later adjustment (Campbell, 2006). Furthermore, congruent with past research, the present study also found that children's externalizing symptoms were more stable than were their internalizing symptoms (Hinshaw, 1992; Shaw et al., 1994).

Directions for Future Research

Given the overwhelming lack of support for the full mediation model, a new direction for future research would be to pursue other complex processes that may be at play, such as whether mothers' struggles with conflicting work and family roles may matter more for some groups of children as opposed to others (Holmbeck, 1997). A potential moderator in the link between work-family conflict and children's adjustment is their race/ethnicity. This would answer scholars' call to recognize that developmental paths may operate in similar or different ways across children of various sociocultural backgrounds (Garcia Coll et al., 1996; Hill, Bush, & Roosa, 2003).

Currently, no study considering the relation between mothers' work-family conflict and children's adjustment has addressed the experience of Latino children. This is striking as Latino children are among one of the fastest growing immigrant groups in the United States (Flores et al., 2002), and Latina mothers have increasingly entered the workforce over the past 30 years (U.S. Bureau of Labor Statistics, 2007). More specifically, future research should conduct a test of model equivalence between racial/ethnic groups of children. It may be, for example, that in African American families with longer histories of mothers' labor force participation (U.S. Bureau of Labor Statistics, 2007), work-family conflict is more normative and thus less of a risk factor to children's behavior. Further, mothers' work-family conflict may be especially harmful to Latino children who face a number of other challenges such as acculturation, immigration, and language barriers (Flores et al., 2002).

It would also be interesting to consider how various cultures view mothers' involvement in work and family. Hispanic families, as well as Asian families, are more likely to view work and family roles as interdependent (Cheung & Halpern, 2010; Spector et al., 2004). As such, Hispanic and Asian mothers may be more likely to bring their children with them to work, and having these two roles so intertwined could be worse for children, as children may thus spend lower quality one-on-one time with their mothers (Kontos, Howes, Shinn, & Galinsky, 1995).

In contrast to Hispanic and Asian families, European-American families typically view the domains of work and family as being distinctly segregated. It is possible that this may be protective for children as such mothers may be less distracted by work when interacting with their children. It could be the case, however, that European-American mothers' tendency to view their work and home lives as being distinct from one another increases their experience of work-family conflict, which in turn, places their children at risk. The plausibility of each of these scenarios underscores the importance of empirically testing the moderating role of race/ethnicity.

Limitations

While the current study raised important new questions and directions for research, it is important to acknowledge and address its limitations as well. The few significant findings were detected using only two waves of data. The possibility of simultaneity bias exists because both anxiety symptoms (the mediator) and children's internalizing symptoms (the outcome) were measured at the same time. Without longitudinal data from three or more time points, it is not possible to confirm the time

series of events presented in Figure 1. Also, without additional data points, it is not possible to test for the potential of sleeper effects (Maurer, Mondloch, & Lewis, 2007), where mothers' work-family conflict may matter more during middle childhood because older children are more perceptive and identify more with their parents (Erikson, 1968; Weigert, Teitge, & Teitge, 1986).

Conclusions

In conclusion, it is reassuring that the conservative, comprehensive models used in this study generally found no evidence for negative associations between mothers' work-family conflict and preschoolers' socioemotional adjustment, given the prevalence of working outside the home among women with young children in the U.S. These findings are consistent with recent research indicating that maternal employment experiences are not associated with negative cognitive or socioemotional adjustment, including language skills and attachment security (Brooks-Gunn, Han, & Waldfogel, 2010). The results of the present study extend these findings by suggesting that the psychological component of mothers' work experiences is also unlikely to negatively shape children's adjustment. Furthermore, this research is consistent with the welfare reform literature, which has indicated few, if any, associations with preschoolers' well-being (Chase-Lansdale et al., 2003).

Importantly, though maternal employment itself and the conflict associated with juggling work and family demands may not be negatively linked to children's well-being, we might still design programs and policies that support low-income working parents in ways that optimize children's development. Parents in the U.S. have limited access to

public policies that are common in other industrialized nations, such as paid parental leave and the option of part-time and flexible hours (Waldfogel, 2006a; 2006b). Longer periods of paid leave for parents have been linked to better health outcomes for children outside the U.S. (Ruhm, 2000). This suggests that the emerging acceptance of the “right to request” part-time or flexible hours in the U.S. (Brooks-Gunn et al., 2010; Waldfogel, 2006b) may lead to benefits for children should that time be awarded to parents.

However, we still have much to understand about how the potential availability of flexible hours may play a role in the lives of low-income, working families and their children.

APPENDIX A:
LIST OF WORK-FAMILY COMPOSITE ITEMS

1. When I look back in years to come, I think I will regret not having spent more time with my child.
2. My involvement in my work activities/educational activities/work is stressful.
3. Things pile up at [work/school/work and school] because I have too much to do.
4. I have problems making arrangements for my child.
5. My responsibilities as a parent are taking a toll on my social life.
6. I have too much on my mind to enjoy my social life.
7. I think my [work activities/educational activities/work and educational/activities] set a good example for my child/children.
8. My responsibilities at [work/school/work and at school] take a toll on my social life.
9. I feel pulled in too many directions.
10. I sometimes feel I'm missing out on some of the best moments of my child/children's life.
11. Responsibilities at home are putting me under some strain.
12. Responsibilities at [work/school/work and school] are putting me under some strain.
13. I let things go around the house because I have too much to do.
14. My social life would be a greater source of satisfaction if I were not so involved in my [work/educational/work and educational] activities.
15. My [work/educational/work and educational] activities really help my family out.
16. When I'm relaxing, I feel guilty about the things I might be doing.
17. I envy people who have fewer commitments than I do.
18. My involvement in family life interferes with my ability to achieve my goals at [work/school/work and school].
19. The quality of my everyday family life would be better if I were less involved in my [work/educational/work and educational] activities.
20. I have as much time to myself as I want.
21. My social life would be a greater source of satisfaction if I were less involved in my child/children.
22. Too much is expected of me with respect to housework.
23. I think I [work/go to school/work and go to school] too many hours.
24. I feel that I have too much to do and not enough time or energy to do it all.
25. I feel that pressures from [work/educational/work and educational] activities carry over into my family life.
26. I feel that pressures from my family carry over into my [work/school/work and school] life.
27. My [work/school/work and school] hours interfere with my family life.
28. I wish I had more freedom.
29. I don't have the time to do as much as I'd like to with [CHILD/my children].
30. When I go to bed at night, my mind is often full of all the things I have to do tomorrow.
31. Too much is expected of me with respect to the care of [CHILD/my children].
32. Problems with childcare arrangements interfere with my schedule at [work/school/work and school].

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VITA

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