

LONGITUDINAL ASSOCIATIONS BETWEEN MARITAL QUALITY AND MATERNAL
PSYCHOLOGICAL WELL-BEING: THE MEDIATING ROLE OF COPARENTING IN US-
BORN AND NON-US-BORN PARENTS

by

YASEMIN CAVA TADIK

(Under the Direction of Geoffrey L. Brown)

ABSTRACT

Maternal psychological well-being has a significant impact on both parents' health and children's developmental outcomes. While understanding the family and socio-contextual factors that lead to healthy psychological adjustment for mothers is crucial, little is known about the mechanisms responsible for transmitting early marital quality to later psychological well-being. The proposed study examined the coparenting relationship as an explanatory mechanism in pathways from marital quality to mothers' stress and depressive symptoms. Data were drawn from an ethnically and socioeconomically diverse sample of parents who participated in the Supporting Healthy Marriage (SHM) Project. Marital satisfaction and conflict were assessed using surveys at baseline study enrollment (Wave 1; $N=6231$), coparental conflict was assessed using surveys and semi-structured observations, respectively, at the 12-month follow-up visit (Wave 2; $N=5114$), and mothers reported on stress and depressive symptoms at 30-month follow-up (Wave 3; $N=4864$). Path analyses for the sample as a whole indicated that higher initial levels of marital satisfaction and lower levels of conflict were linked to less coparental conflict and fewer maternal depressive symptoms. Significant indirect effects indicated that paths

from marital quality to both maternal stress and depressive symptoms were mediated through coparental conflict. Exploratory analyses of multi-group models revealed that all four significant indirect pathways held for US-born parents, but only one was significant for Hispanic immigrant parents. Further, one pathway was moderated by group membership, such that higher marital satisfaction was more strongly related to reduced coparental conflict in US-born relative to Hispanic immigrant parents. Findings provide support for the coparenting relationship as a mechanism by which marital functioning affects maternal psychological well-being, while also documenting unique pathways for US-born parents and Hispanic immigrant parents.

INDEX WORDS: Marital Quality, Coparenting Relationships, Maternal Stress, Maternal Depressive Symptoms, Couple Relationships, Immigrant Parents

LONGITUDINAL ASSOCIATIONS BETWEEN MARITAL QUALITY AND MATERNAL
PSYCHOLOGICAL WELL-BEING: THE MEDIATING ROLE OF COPARENTING IN US-
BORN AND NON-US-BORN PARENTS

by

YASEMIN CAVA TADIK

B.S., Dicle University, Turkey, 2010

M.S., University of Cincinnati, 2014

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2020

© 2020

Yasemin Cava Tadik

All Rights Reserved

LONGITUDINAL ASSOCIATIONS BETWEEN MARITAL QUALITY AND MATERNAL
PSYCHOLOGICAL WELL-BEING: THE MEDIATING ROLE OF COPARENTING IN US-
BORN AND NON-US-BORN PARENTS

by

YASEMIN CAVA TADIK

Major Professor: Geoffrey L. Brown

Committee Margaret Caughy
Assaf Oshri

Electronic Version Approved:

Ron Walcott
Interim Dean of the Graduate School
The University of Georgia
August 2020

DEDICATION

I dedicate this work to Harun Tadik (my deepest love, my greatest support, my biggest comfort, my forever), Ikra and Ayla (my precious daughters), and all of the other hard-working immigrants doing their best to care for their families.

ACKNOWLEDGEMENTS

I am truly indebted and thankful to many that have supported me on the completion of this Ph.D. First and foremost, I owe sincere gratitude to my academic advisor, Dr. Geoffrey Brown, for all his support, patience, understanding, and guidance throughout my Ph.D. Without his inspiring mentorship and continuous support, I would not have achieved my goals. Thank you for believing in my potential. I have grown in so many ways because of your mentorship. My appreciation is extended to the other members of my committee: Dr. Margaret Caughy and Dr. Assaf Oshri. Their support, guidance, and suggestions were immensely valuable in completing this final product.

I would also like to express my thankfulness to Dr. Jay Mancini for being my academic dad. His wealth of knowledge, wisdom, and insights have guided me through many aspects of this Ph.D. His warmth and encouragement have supported me in overcoming many challenges on this journey. I will never forget our breakfast times. Thank you to Dr. Denise Lewis (my academic role model) for her guidance, thoughtfulness, and enormous support when I needed it most. To Dr. Maria Bermudez and Dr. Bertranna Muruthi for encouragement and always being there with a listening ear. I appreciate the opportunity to know each of you!

Thank you to my friends and parents for their love, support, patience, and prayers. In particular, I would like to thank my beloved, smart, sensitive, caring sister, Elif Ezel, for helping me during difficult times and supporting me every step of the way.

The biggest thanks goes to my husband, Harun Tadik, who has been with me every step of the way through this difficult journey. Thank you for your willingness to be patient, taking

care of our family, holding my hand and making me feel special all the time. You and our daughters have been the focus and inspiration to keep me going on this long journey.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	v
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
CHAPTER	
1 INTRODUCTION.....	1
Stress and Depression as Key Elements of Maternal Psychological Well-Being.....	2
Associations Between Marital Quality and Maternal Psychological Well-Being.....	4
Coparenting as A Mediating Mechanism.....	5
Associations among Study Variables for US-Born versus Non-US-Born Parents.....	7
Theoretical Frameworks Informing This Study.....	9
2 LITERATURE REVIEW	13
Links between Marital Quality and Maternal Psychological Well-Being.....	13
Links between Marital Quality and Coparenting.....	16
Liks between Coparenting and Maternal Psychological Well-Being.....	18

	US-Born versus Hispanic Immigrant Parents.....	20
	Summary.....	27
3	METHODS.....	28
	Participants.....	28
	Procedure.....	30
	Measures.....	31
	Planned Analyses.....	33
4	RESULTS.....	35
	Descriptive Characteristics and Bivariate.....	35
	Path Analyses.....	35
	Conditional Indirect Effects.....	38
	Supplementary Analysis of Hispanic US-Born Parents.....	39
5	DISCUSSION.....	41
	Direct Associations among Marital Quality, Coparental Conflict, and Maternal Psychological Well-Being.....	41
	The Mediating Role of Coparenting Conflict.....	43
	Comparison among Us-Born vs. Hispanic Immigrant Parents.....	44
	Limitations and Future Directions.....	46
	Implications for Practice / Policy.....	48
	Conclusion.....	49
	REFERENCES.....	51
	APPENDIX.....	86

LIST OF TABLES

	Page
Table 1: Comparison of Demographic Characteristic	88
Table 2: Bivariate Correlation Matrix, Means and Standard Deviations of Model Variables.....	89
Table 3: Path Coefficient Comparisons for Whole Sample, US Born, and Hispanic Immigrant Parents.....	90
Table 4: Path Coefficient Comparisons for Hispanic US Born and Hispanic Immigrant Parents.....	91
Table 5: Comparisons of Indirect Effects for Whole Sample, US Born, and Hispanic Immigrant Parents.....	92
Table 6: Indirect Effects for Hispanic US Born Parents.....	93

LIST OF FIGURES

	Page
Figure 1: Conceptual Model of Direct and Indirect associations of Marital Quality, Coparenting and Maternal Psychological Well-Being.....	94
Figure 2: Structural Equation Model for Whole Sample.....	95
Figure 3: Structural Equation Model for US-Born Parents Only.....	96
Figure 4: Structural Equation Model for Hispanic Immigrant Parents Only.....	97

CHAPTER 1

INTRODUCTION

Maternal psychological well-being has important consequences for both parents' and children's developmental outcomes (e.g., Choe et al., 2013; El-Sheik & Elmore-Staton, 2004; Mughal et al., 2019; Noonan et al., 2018). As such, understanding the family and socio-contextual factors that lead to healthy psychological adjustment for mothers is critical. An emerging body of research has linked marital satisfaction to more adaptive individual, psychological well-being (e.g., Proulx et al., 2007). Nonetheless, the mechanisms responsible for transmitting early marital quality to later maternal psychological well-being have not been fully elucidated. Informed by family systems theory, ecological systems theory, and the family stress model, the proposed study examined the coparenting relationship as an explanatory mechanism in pathways from marital quality to mothers' psychological well-being. In particular, this dissertation is designed to test the hypothesis that coparenting may mediate the longitudinal associations from marital quality (both satisfaction and conflict) to critical aspects of maternal psychological well-being (stress and depression).

Moreover, motivated by the lack of attention to immigrant families in the current fatherhood literature, and evidence of culturally distinct norms for immigrant fathers and families (e.g., D'Angelo et al., 2012), this dissertation also explored differences in proposed pathways for US-born versus Hispanic immigrant parents. Exploratory analyses examined the extent to which associations among primary study variables differ for families with Hispanic immigrant parents vs. US-born parents.

Stress and Depression as Key Elements of Maternal Psychological Well-Being

The psychological well-being of mothers plays an important role in the quantity and quality of their interactions with young children (Dib et al., 2019; Dubois-Comtois et al., 2013; Leckman-Westin et al., 2009). Better psychological well-being has been linked to more adaptive parenting behaviors (Choi & Becher, 2019; Gouveia et al., 2016; Hoffman et al., 2006; Villodas et al., 2015; Wilson & Durbin, 2010), with positive consequences for children's subsequent developmental outcomes (Goodman et al., 2011; Rohanachandra et al., 2018; Villodas et al., 2015; Yan & Dix, 2014). Although maternal psychological well-being is multi-faceted, two of the most widely studied aspects of mothers' psychological well-being are stress and depressive symptoms. Literature on the role of stress and depressive symptoms for parenting and child outcomes is summarized briefly in the following sections.

Maternal Depressive Symptoms

Meta-analytic evidence suggests that mothers with higher levels of depressive symptoms also engage in less adaptive interactions with their children (Field, 2010; Lovejoy et al., 2000). Depression most likely has a negative impact on parenting because it limits these parents' ability to be emotionally available to children's psychological needs (Hoffman et al., 2006). Depressive symptoms have also been linked to a wide variety of other maladaptive parenting behaviors, including greater use of punitive discipline techniques (Choe et al., 2013; Dette-Hagenmeyer & Reichle, 2014; Leung & Slep, 2006; Marchand-Reilly, 2012; Venta et al., 2016), physical punishment (Callender et al., 2012), psychological control (Aunola et al., 2015; Mark et al., 2005; Herr et al., 2007), verbal aggression (Barra et al., 2019), as well as increased conflict, hostile behavior, rejection (Cummings et al., 2005; Giallo et al., 2014; Leung & Slep, 2006; Villodas et al., 2015; Wilson & Durbin, 2010), and decreased sensitivity and warmth in parent-

child interactions (Villodas et al., 2015; Giallo et al., 2014; Wilson & Durbin, 2010). These associations are not unique to parents who are clinically depressed but have been widely documented among parents who exhibit sub-clinical levels of depressive symptoms (Brennan et al., 2000; Goodman & Tully, 2009).

In addition to the wide-ranging consequences of depression for parenting, maternal depression may impact child development both directly and indirectly through its influence on the quality of mother-infant interactions. Indeed, maternal depression is related to a host of detrimental cognitive, social-emotional, and behavioral outcomes in children (Charrois et al., 2019; Goodman et al., 2011; Johnson & Flake, 2007). For example, previous studies have shown that maternal depression is related to long-term negative consequences for children, including behavior problems, increased psychopathology, and social maladjustment (Allen et al., 2019; davis et al., 2020; Goodman et al., 2011; Gravener et al., 2012; Rohanachandra et al., 2018; Yan & Dix, 2014; West et al., 2019; Villodas et al., 2015)

Given the widespread impact of maternal stress and depressive symptoms for parenting and subsequent child adjustment, it is critical to better understand the family-level correlates of these two aspects of psychological well-being. One potential aspect of family life that may be influential is the quality of the marital relationship. Proposed associations between marital quality and subsequent maternal stress and depression are reviewed in the following section.

Maternal Stress

Conceptual models of the determinants of parenting (e.g., Abidin, 1992; Belsky, 1984) have identified parenting stress as a key mechanism linking intrapersonal and socio-contextual factors to parenting behavior. Although most adults report some level of stress in their lives (Mental Health Foundation, 2020), the psychological, emotional, and physical demands of

parenting can place some parents at increased risk for persistent stress (Barboza, 2020; Bloomfield & Kendall, 2012). Though it is considered normal to experience some parenting stress (Crnic & Greenberg, 1990), persistent, elevated stress can negatively affect the way that parents interact with children (Abidin, 1992; Anthony et al., 2005; Belsky, 1984; Cain & Combs-Orme, 2005; Choi & Becher, 2019; Gouveia et al., 2016; Rodgers, 1998; Vanschoonlandt et al., 2013), thus leading to less adaptive or harmonious parent-child relationships (Crnic et al., 2005; Crnic & Low, 2002; Garcia et al., 2017; Newland & Crnic, 2017). For example, emerging data on early childhood suggests that mothers with higher levels of stress are less engaged with their young children (Berryhill, 2016; Bronte-Tinkew et al., 2010). Other studies with older children have found that parenting stress is related to more negative and harsh parenting (Choi & Becher, 2019; Le et al., 2017; Whiteside-Mansell et al. 2007), and less supportive and nurturing interactions with their children (Whiteside-Mansell et al., 2007).

The negative consequences of stress for parenting behavior and parent-child interactions have downstream consequences for children's developmental outcomes as well. Parental stress has been consistently implicated in higher levels of both externalizing and internalizing behavior problems (Choi & Becher, 2019; Crnic & Low, 2002; Royal et al., 2017; Silinskas et al., 2020). Further, other consequential developmental outcomes such as lower academic achievement, emotion regulation abilities, and social competence have been linked to the less positive and more negative parenting behaviors associated with parental stress (Belsky & Fearon, 2002; Dishion et al., 2008; Leerkes et al., 2009).

Associations Between Marital Quality and Maternal Psychological Well-Being

As an important developmental and relational milestone for many adults, the quality of the marital relationship is thought to have a long-term impact on personal well-being (Proulx et

al., 2007). Indeed, empirical research has shown that higher marital quality is positively related to subjective well-being, and this association is usually stronger among women than men (Jackson et al., 2014; Proulx et al., 2007). Some studies have also documented associations between higher quality marital relationships and lower levels of stress and/or depression (Carr et al., 2014; Fincham & Beach, 2010; Proulx et al., 2007; Oosterhouse et al., 2020; Wang et al., 2019). However, the association among these variables is often examined concurrently rather than longitudinally. As a result, marital quality is most frequently conceptualized as an outcome of parental stress (Lavee et al., 1996; Kwok et al., 2015), and more rarely considered as a longitudinal predictor of later maternal psychological functioning.

There are a limited number of studies that suggest marital functioning leads to changes in mothers' psychological well-being. Although parental stress is multiply determined, research on mothers has indicated that inter-parental relationships such as marital (Carr et al., 2014; Fincham & Beach, 2010; Proulx et al., 2007), and coparenting (Bronte-Tinkew et al., 2010; Krishnakumar & Buehler, 2000; Solmeyer & Feinberg, 2011; Sturge-Apple et al., 2003) quality could be important predictors of parenting stress. However, the mechanisms responsible for linking marital relationships to psychological well-being for mothers are not yet well-established.

The proposed study considers the coparenting relationship as one potential mediating mechanism. Specifically, we posit that poor marital quality can inhibit adaptive parenting partnerships with one's spouse, which in turn may result in decreased maternal psychological well-being. Conceptual and empirical support for this proposition is reviewed briefly in the section below.

Coparenting as a Mediating Mechanism

Coparenting is the level of support, cooperation, and unity between couples in parenting-related matters, the degree of conflict in these parenting efforts, and the degree of active participation in both partners' engagement with the child (Cowan & McHale, 1996; McHale, 1995). As explained in detail by Feinberg (2003), high-quality coparenting involves support and coordination among individuals who share the responsibility of raising children. Previous studies have highlighted the importance of marital satisfaction for a supportive, early coparenting relationship (Christopher et al., 2015; McHale, et al., 2004; Schoppe-Sullivan, et al., 2008; Schoppe-Sullivan & Mangelsdorf, 2013). Although conceptual frameworks for understanding coparenting relationships have emphasized the potential impact of coparenting quality on parenting stress and maternal depression (Feinberg, 2003), empirical findings linking coparenting to psychological well-being are lacking. Moreover, no studies to date have examined longitudinal associations among these variables simultaneously to determine whether coparenting may mediate associations between marital quality and psychological well-being. The present study was designed to meet this need.

Limited studies have directly considered the mediational effects of coparenting in family dynamics in general (Bonds & Gondoli, 2007; Pedro et al., 2012; Peltz et al., 2018; Solmeyer et al., 2014). However, documented links between marital quality and coparenting (Schoppe-Sullivan et al., 2008; Schoppe-Sullivan & Mangelsdorf, 2013; McHale et al., 2004), and between coparenting and maternal psychological well-being (e.g., depressive symptoms and stress) (Solmeyer & Feinberg, 2011) suggest that this may be a promising explanatory mechanism. Thus, the proposed study is intended to test a mediational model in which initial marital quality (Wave 1) among mothers affects both Wave 3 mothers' psychological well-being (stress and depressive symptoms) via coparenting conflict at Wave 2.

Associations among Study Variables for US-Born versus Non-US-Born Parents

Given the importance of considering socio-cultural diversity in family dynamics (Campos & Kim, 2017), this study also intends to conduct exploratory analyses comparing strengths of associations among proposed pathways for parents born in and outside of the United States. Although the knowledge base on the experience of immigrant families has grown exponentially, previous research on coparenting focuses predominantly on middle-class, white families (Feinberg, 2003), and information on the coparenting relationship among immigrant parents remains limited. This failure to include immigrant parents remains an important limitation in coparenting research (Feinberg et al., 2009). Moreover, a robust body of literature has described and examined immigrants' parenting practices (Alaazi et al., 2018; Cheah et al., 2016; Parra-Cardona et al., 2017), but only scant studies have focused on the predictors of immigrant mothers' parenting stress (Nomaguchi & House, 2013; Oh & Oh, 2018; Xu et al., 2018), and depressive symptoms (Ornelas & Perreira, 2011; Ornelas et al., 2009).

Parents who have left their home countries for a new life in the United States experience a myriad of cultural, social, psychological and physical changes (Berry, 1997). Many Hispanic immigrants in particular experience various challenges and psychological distress while transitioning to a new cultural context (Levitt et al., 2005; Ryder et al., 2000). Unlike daily dilemmas or minor stressors, immigration is a unique life experience that may cause extreme stress. Experiencing stressors related to immigration such as discrimination, isolation, language barriers and cultural differences, job related difficulties, missing family members who have remained behind in the homeland (Cervantes et al., 2012; Falconier et al., 2013), deportation fears or undocumented status, acculturative stress, poverty, familial separation, violence or trauma, lack of access to health care services (Cervantes et al., 2012), and the loss of social

support systems (Finch & Vega, 2003) may contribute to psychological distress, depressive symptoms, and parenting stress among immigrants.

The relatively high levels of stress and mental health struggles reported by Hispanic immigrant parents suggests on the one hand that variation in family dynamics such as coparenting may be less critical as a determinant of psychological well-being than it would be in non-immigrant families. Given the sometimes traumatic consequences of the immigrant experience and acculturative stress (DiGangi et al., 2016; Rettger et al., 2016), it may be that coparenting and other relationship dynamics are less important as determinants of maternal psychological well-being than they are in non-immigrant families.

On the other hand, in the context of numerous other stressors and contributors to stress, immigrant mothers could be more likely to benefit from the presence of a supportive partner. Conceptual frameworks of immigrant families have postulated that childrearing in a new country is twice as hard for immigrant parents because of the struggle to balance both the mainstream culture's expectations and their original culture's standards (Leyendecker et al., 2018). Those challenges may well call for increased cooperation and support among married, immigrant parents to mitigate psychological challenges for mothers. One study has shown that weak coparenting relationship with the other parent (Cabrera et al., 2009) is a significant problem among Mexican American mothers who report low levels of acculturation. However, the extent to which coparenting in immigrant families is related to maternal stress and depression is not yet known.

Associations among family dynamics (i.e., marital and coparenting) and parenting stress and depressive symptoms may play out differently based on the unique cultural backgrounds of ethnically diverse parents. As such, exploratory analyses examined whether the proposed

mediational model differs among US-born vs. Hispanic immigrant families, with particular attention to whether coparenting is a stronger or weaker mediator of associations between marital quality and maternal psychological well-being among Hispanic theimmigrant as compared to non-immigrant families.

Theoretical Frameworks Informing This Study

The proposed model and hypothesized associations in this study were informed by several complementary theoretical perspectives. In the section below, I review the following theoretical frameworks and their relevance for the current study: Bowen Family System Theory (Bowen, 1968), Bronfenbrenner's Ecological System Theory (1992) and the Family Stress Model (McCubbin & Patterson, 1983).

Bowen Family System Theory

The aim of General Systems Theory (GST) is to explain the importance of mutual interaction and interactive relationships between all systems in all fields of science (von Bertalanffy, 1968). Among others, Bowen (1978) applied the principles of general systems theory to research and practice in the family context. According to family systems theory, the experiences of any family member or family relationship affect – and are affected by – all other family members and relationships (Cox & Paley, 1997).

One tenet of family systems theory relevant to the current study is the focus on examining multiple levels of family functioning. In particular, a family systems perspective calls for the consideration of relationship among 1) individuals, 2) dyadic (2-person), and 3) triadic (3-person) levels of family functioning (Cava-Tadik et al., 2020; Scott et al., 2018; Williams, 2018). From the perspective of Family Systems Theory, individual, dyadic, and triadic relationships involving the child are inexorably intertwined. In the present study we examine associations

among each level of family functioning by considering maternal psychological well-being (individual), dyadic (i.e., mother-father) marital quality, and triadic (i.e., mother-father-child) coparenting relationship quality. A quality coparenting relationship has been characterized as the most significant dynamic of the family system (Beaton et al., 2012; Feinberg, 2003), due to its potential as an explanatory mechanism in the link between couple relationship quality and individual psychological well-being relevant for parenting (Solmeyer & Feinberg, 2011; Wilson & Fales, 2015). Consistent with family systems propositions that coparenting is the “executive subsystem” (e.g., McHale, 1995) we specifically propose that the coparenting relationship may mediate spillover from the marital relationship to mothers’ psychological adjustment.

Bronfenbrenner’s Ecological Systems Theory

Bronfenbrenner’s Ecological Systems Theory (1992) provides an additional framework for elucidating immigrant families’ experiences. Adjustment to a new cultural environment is a part of the developmental process for immigrant individuals and families. Based on Bronfenbrenner’s Ecological System Theory (1992), developmental outcomes during the adjustment process are linked to interactions between individuals and their environments. Experiences with divergent socio-cultural contexts may play an important role in shaping which events are perceived by parents as challenging and stressful, and the extent to which those experiences ultimately affect the stress and well-being of immigrant mothers. Both family dynamics (i.e. marriage and coparenting) and parenting stress operate differently based on the unique cultural elements of the macrosystem. As such, it is important to understand how the determinants of parental stress differ among mothers adjusting to a new sociocultural context.

Consequently, the health and well-being of mothers depend not only on family functioning such as marital and coparental relationships, but also contextual factors that may

differ among US-born vs. Hispanic immigrant parents, such as social status, ethnicity, SES, or social norms (Habib, 2012,) as well as time spent in the U.S., which in turn shapes the acculturation process with implications for subsequent health and well-being. The current study considers this issue by comparing associations among family system elements for both immigrant and non-immigrant families.

The Family Stress Model

Many mothers are at risk for developing depressive symptoms and stress because of the changes and demands associated with the mothering role. Existing empirical studies highlighted that even highly satisfied mothers often experience parenting as a stressful process (Parkes et al., 2015; Belsky et al., 1995), including feeling incapable in the parenting role, and tired or overwhelmed with the demands of parenting. Resources at the level of dyadic and triadic family relationships may well be useful for helping mothers cope with stressors. These resources include high-quality marital or coparenting relationships between parents.

Previous studies have documented the link between maternal parenting stress and family relationships and interactions involving fathers (Belsky et al., 1995; Bronte-Tinkew et al., 2010; Randall & Bodenmann, 2009). Engaging effectively in those relationships may be particularly stressful for fathers in immigrant families. For example, Hispanic immigrant fathers may have to develop their involvement practices in a host country without the support of generational cultural knowledge, even within mainstream communities that sustain fatherhood practices. During this process, they might experience multiple, additional stressors due to their citizenship status, economic hardship, lack of social support, language barriers, and acculturation stress, all of which might have a negative impact on immigrant fathers' involvement with their children (Berry et al., 1987; Shimoni et al., 2003; Wong et al., 2005; Martinez, 2006; Brontie -Tinkew et

al., 2007; Rivera et al. 2008), with implications for the quality of the marriage, coparenting partnership, and mothers' stress and depressive symptoms. Based on McCubbin and Patterson's Family Stress Model (1983), family characteristics, structures and experiences may also help parents become resistant to stress-inducing changes and crisis situations. Identifying the unique family processes that might support mental health in immigrant (vs. non-immigrant) families is an important step in line with this perspective.

Taken together, the immigration experience has consequences for overall health and well-being. Economic, social, and language difficulties in particular might serve as risk factors for psychosocial stress including depression and anxiety among mothers. Negative immigration experiences and associated mental health problems may also affect the father's involvement in parenting and lead to negative relationships involving fathers in the family system (Behnke et al., 2008; Cabrera & Bradley, 2012), thus leading to feedback loops and persistent patterns of family stress. Therefore, identifying the relational aspects of family life that can mitigate or alleviate maternal stress for these parents is vital.

CHAPTER 2

LITERATURE REVIEW

The conceptual model for the current study hypothesizes that 1) higher initial levels of marital quality will be linked to lower levels of maternal stress and depression, 2) initial marital quality will also be related to less coparental conflict, 3) less coparental conflict will be related to less maternal stress and depression and mediate associations between marital quality and stress and depression. This conceptual model is presented in Figure 1. In the sections that follow, I present background literature relevant for this study, followed by support for the hypothesized associations among primary study variables.

Links Between Marital Quality and Maternal Psychological Well-Being

For many adults, marriage is the most important long-term relationship commitment, with extensive effects on personal well-being (Proulx et al., 2007) and individual health (Robles et al., 2014). Indeed, empirical data suggests that psychological well-being is more strongly associated with the quality of the marital relationship than other close relationships, such as those with friends or family. (Antonucci et al., 2001; Walen & Lachman 2000). A large body of prior research has documented positive associations between marital quality and various forms of psychological well-being (Carr et al., 2014; Fincham & Beach, 2010; Proulx et al., 2007; Oosterhouse et al., 2020; Wang et al., 2019).

Unsurprisingly, research with mothers specifically has found similar associations between marital quality and maternal mental health. (Kingsbury et al. 2015; Robles et al., 2014; Schmied et al. 2013). In general, the majority of these studies have examined this association

concurrently or considered poor marital quality as an outcome of maternal psychological distress. According to meta-analytic evidence from Proulx, Helms and Buehler (2007), however, when marital quality is an independent variable, the strength of the relationship between personal well-being and marital quality is stronger than when marital quality is an outcome. Further empirical support comes from several studies that have documented longitudinal associations between marital relationship quality and subsequent psychological well-being in mothers (Bener et al., 2012; Mackenzie et al., 2014; Najman et al., 2014; Papp, 2010). Below we consider evidence for the role of marital quality in maternal depressive symptoms and stress in particular.

Maternal Depressive Symptoms

Evidence from the clinical literature suggests that marital dissatisfaction may well be a risk factor for diagnostic depression. Specifically, poor marital quality can increase the risk of early signs of major depression (Goldfarb & Trudel, 2019; Whisman & Bruce, 1999), and leads to a greater likelihood of major depressive incidents among women, even after controlling for a previous depression history and demographic factors (Whisman, 2007; Whisman Sheldon & Goering, 2000). Supporting evidence comes from Whisman's (2001) systematic analysis of 26 cross-sectional studies, which found that marital dissatisfaction was highly related to depression, with that association being particularly strong in the few studies that focused exclusively on mothers (Herr et al., 2007; Vento & Cobb, 2011). Data from this meta-analysis also suggests that the likelihood of a diagnosis of clinical depression increases roughly 25 times for women who are in an unhappy marriages (Weissman, 1987).

The risks associated with marital distress appear to extend to non-clinical samples as well. Numerous prior studies have shown significant associations between marital conflict and sub-clinical depressive symptoms (Beach et al., 2003; Rehman et al., 2008; Whisman, 2007).

Some of these studies have shown an association between marital satisfaction and fewer depressive symptoms (Fagan, 2009; Goldfarb & Trudel, 2019; Hollist et al., 2007; Miller et al., 2013; Vento & Cobb, 2011; Proulx et al. 2007). Others found that those in conflictual marriages had elevated depressive symptoms (Du Rocher Schudlich et al., 2011; Fink & Shapiro, 2013; Parker et al., 2013; Peterson-Post et al., 2014; Whisman & Uebelacker, 2009). Again, the effects of poor marital quality on depressive symptoms appear to be stronger among women than men (Hollist et al., 2007; Kingsbury et al., 2014; Whisman, 2007; Whisman et al. 2000). Thus, we expected poor marital quality to be related to elevated levels of depressive symptoms among mothers in the present study.

Maternal Stress

Stress is a multidimensional concept (Crnic et al., 2009; Crnic & Low, 2002) that affects individual well-being in a variety of ways (Lazarus, 1999). Stress can affect physical health, emotional well-being, and family relationships (Falconier et al., 2015; Randall & Bodenmann, 2017). Parenting stress is a specific form of stress that can be distinguished from stress in other areas of life (e.g., marital stress, work-related stress, etc.). Parenting stress is conceptualized as an affective and/or physiological response that occurs when a parent perceives that the difficulties related to parenting exceed their available resources to meet those difficulties (Deater-Deckard, 2008). Although the way parents handle stress varies substantially (Bronte-Tinkew et al., 2010), all parents experience some degree of parenting stress (Hakvoort et al., 2010). Not surprisingly, mothers experiencing high levels of stress report more psychological distress and lower life satisfaction than those with low stress levels (Crnic & Greenberg, 1990; Thompson et al., 1993).

Dyadic stress is defined as a stressful event or encounter that affects both partners either directly when challenged by the same stressful event, or indirectly when one of the partners' stress impacts the relationship (Bodenmann, 2005). Marital conflict may represent one example by which dyadic stress in the context of one family relationship (marital) is transmitted to stress in the context of another family relationship (parent-child). Empirical findings have shown that higher levels of marital conflict or intimate partner violence predicts higher levels of parental stress (Hughes & Huth-Bocks, 2008; Huth-Bocks & Hughes 2008; Wieland & Baker 2010). Conversely, a high-quality romantic relationship may be a protective factor against the experience of stress and distress (Simpson & Rholes, 2012), particularly in the parenting context (Shapiro, 2014). For instance, several studies have shown that couple relationships characterized by warmth and emotional support are associated with lower parental stress (Camisasca et al., 2014; Muslow et al., 2002).

Though this association exists for both parents, the relationship between parenting and contextual stress factors is likely to be stronger for mothers than fathers (Grolnick et al., 1996). Even though modern families are increasingly likely to value egalitarian gender roles, parenting continues to be a gendered activity, with mothers showing more daily parenting efforts than fathers in all domains (Dush et al., 2018). Societal expectations of mothers that place excess demands on caregiving and household labor means that parenting stress is likely to be inevitable for most American mothers (Crnic & Low, 2002; Rafferty & Griffin, 2010). Given the implications of parenting stress for disrupted family systems and developmental competence in children (Anthony et al., 2005; Crnic et al., 2005), a better understanding of stress and its determinants may be critical for elucidating family system pathways to maternal well-being.

Links Between Marital Quality and Coparenting

In two-parent families, marital and coparenting relationships are related, but distinct, family subsystems. The marital relationship is couple-centered in focus and can include a number of dimensions – including intimacy, affection, commitment, respect, emotional support, communication, positive conflict management, and loyalty – that are distinct from the parental role (Adler-Baeder et al., 2004). The coparenting relationship is more narrowly focused on the quality of the relationship between partners working together to raise the child (Feinberg, 2003; Margolin et al., 2001; McHale, 1995; McHale et al., 2000). A supportive coparenting partnership is sometimes considered the “executive sub-system” within family systems, as it characterizes the quality of the interparental relationship specifically around parenting-related issues (McHale, 1995). A positive or supportive coparenting relationship reflects collaborative and supportive interactions, common values and expectations, and a mutually satisfying division of childcare duties and responsibilities between parents (Feinberg, 2003). Coparenting has been widely studied and is important for many domains of family functioning, including partner relationship quality, father engagement (Fagan & Palkovitz, 2011), parent-child relationship quality, and marital quality (Holland & McElwain, 2013). High levels of supportive coparenting and lower levels of undermining or conflictual coparenting are also directly related to child outcomes such as fewer internalizing and externalizing symptoms, better social functioning of children, secure attachment (Teubert & Pinquart, 2010; Schoppe et al., 2001), more adaptive social-emotional development (Ren & Xu, 2019), and lower rates of behavior problems (Choi & Becher, 2019).

Clearly, there is substantial overlap between marital and coparenting relationship quality, with these variables typically showing modest to moderate concordance in the literature (McHale et al., 2004; Merrifield & Gamble, 2013). Nonetheless, these are not redundant constructs, and some prior research has attempted to disentangle the direction of effects among these

relationships (Christopher et al., 2015; Liu & Wu, 2018; Morrill et al., 2010; Pedro et al., 2012; Schoppe-Sullivan & Mangelsdorf, 2013). In general, this body of research has emphasized the importance of early marital satisfaction on the subsequent coparenting relationship (Schoppe-Sullivan et al., 2008; Schoppe-Sullivan & Mangelsdorf, 2013) since some features of the coparenting partnership (e.g. teamwork, collaboration, and family warmth) are affected by couples' positive marital relationship qualities (McHale et al., 2004). Based on this body of work, it seems likely that marital satisfaction may be a significant factor for a high-quality coparenting relationship (Fan, Ren & Li, 2020). Similarly, the research in this area has documented associations between marital distress and coparental conflict (Baril et al., 2007; Camisasca et al. 2014; Camisasca et al., 2016; Kitzmann, 2000; McHale, 1995; Stroud et al., 2011). Kolak & Volling (2007), however, suggest that there may be a high degree of variability in this association, with parents who are more emotionally positive, and those that express themselves more clearly, perhaps being less susceptible to problematic coparenting despite marital distress (Kolak & Volling, 2007). Nonetheless, the bulk of prior evidence suggests that lower marital satisfaction and higher marital conflict will be related to more conflictual coparenting.

Links Between Coparenting and Maternal Psychological Well-Being

Research and conceptual writings from a family systems perspective have outlined the ways in which the coparenting relationship may affect child and/or family relationship functioning. The question of whether coparenting quality has implications for mothers' intrapersonal health and well-being has been considered much less often in the empirical research literature. Nonetheless, a small body of research does point to the role of the coparenting partnership in facilitating more adaptive maternal functioning. For instance, in prior

research undermining coparenting has been linked to maternal psychological distress, (Dorsey et al., 2007), and supportive coparenting has been associated with less stress (Feinberg, 2003). The sections below discuss in more detail possible associations between coparenting quality and depressive symptoms and maternal parenting stress.

Maternal Depressive Symptoms

Given family systems theoretical propositions that individuals within families are interdependent (O'Brien, 2005), and the coparenting partnership's critical role as the "executive sub-system" within families (McHale, 1995), it seems likely that this relationship may affect individual development in addition to family relationship functioning. However, although the extant literature has established that depressive symptoms have detrimental effects on coparenting quality (Favez et al., 2016; Feinberg, 2003; Tissot et al., 2016; Tissot et al., 2017), far less attention has been devoted to the impact of coparenting on maternal depressive symptoms (Feinberg 2003; Solmeyer & Feinberg, 2011). One exception comes from research linking supportive coparenting to reduced depressive symptoms for both mothers and fathers, and coparental conflict to elevated levels of depressive symptoms (Solmeyer & Feinberg, 2011). Although the effect of coparenting on maternal depressive symptoms remains under-elaborated, there is also evidence that lack of paternal support is linked to maternal depressive symptoms (Smith & Howard, 2008). In this way, a supportive father in the coparenting relationship is thought to contribute to mothers' psychological well-being by helping to decrease the burden faced by many mothers when parenting their children.

Maternal Stress

According to Dunning and Giallo (2012), parental stress describes challenges related specifically to the parenting role, such as daily childcare tasks, creating rules and routines, and

managing behavior. New challenges often begin with changes in the child's wants or needs, and at times when children are claiming more autonomy, which can increase feelings of stress for mothers (e.g., Shanahan et al., 2007; Wuyts et al., 2017). The child-rearing experience can generate compelling stressors and difficulties for many parents, causing a rise in parental psychological distress (Nomaguchi, 2012; Umberson et al., 2010) as parents attempt to form and maintain cohesive coparenting partnerships. According to Kanter and Proulx (2019) when partners are more cooperative and support one another, parental stress is reduced. Indeed, supportive coparenting, including shared decision-making and less conflict, decreases parenting stress over time (Fagan & Lee, 2014). In addition to affecting parental stress directly, supportive coparenting may also serve as a protective factor that buffers them from the negative effects of stress (Durtschi et al., 2017; Feinberg, 2003).

Though both parents in married couples are likely to experience some level of stress, parenting stress tends to be higher among mothers, who are more likely to be children's primary caregivers regardless of employment status (Bianchi et al., 2006). Fathers' contributions to parenting – including involvement in routine childcare responsibilities and having an emotional connection with their children – have been associated with less maternal stress (Coley & Schindler, 2008). However, limited research has focused directly on relations between fathers' support or conflict in the coparenting relationship and maternal parenting stress (Harmon & Perry, 2011; Nomaguchi et al., 2017). Given the prior findings, however, we expect that father's cooperation with mothers (e.g., less coparental conflict) would facilitate mothers' ability to cope with the burdens of parenting and thus would be linked to lower maternal stress over time.

US-Born versus Hispanic Immigrant Parents

Immigrants in the U.S. are defined as people born outside of the United States but currently residing in the country. This group may include those who hold naturalized citizenship, legal permanent resident status, a visa for work or education, the status of an asylee or refugee, and others with undocumented status (Migration Policy Institute, 2017). The U.S. has the largest immigrant population in the world (Connor & López, 2016), with about 44.7 million immigrants (Migration Policy Institute, 2018). This represents 13.4 percent of the total population, showing a threefold increase since 1970 (López & Bialik, 2017). Approximately 20 million of these immigrants (more than 44%) are Hispanic/Latino (Migration Policy Institute, 2018), primarily from Mexico (25%) (Pew Research Center, 2017). The number of immigrants in the United States is expected to reach 44.1 million by 2065, which would constitute an 88% growth rate among immigrants and their offspring since 1965 (Lopez et al., 2015).

Despite these large numbers, the family and social mechanisms responsible for well-being and psychological adaptation among Hispanic immigrant parents are still not well-understood. One mechanism worthy of attention might be the impact of marital quality on family dynamics (e.g. coparenting) as well as the well-being of individuals (e.g. maternal psychological well-being), given that more children in immigrant households are growing up with a married father and mother compared to children of US-born parents (Zill, 2016). Some research to date has endeavored to comprehend the effects of the immigration process on family adjustment, challenges, and parenting practices among the Latino population (Leidy et al., 2010; Leyendecker et al., 2018; Perreira et al., 2006). Despite increased scholarly interest in Hispanic immigrant family dynamics (Bonds & Gondoli, 2007; Bögels et al., 2014), the effects of marital quality or coparenting on these immigrant parents remains an understudied topic.

Maternal Psychological Well-Being

When people settle into a different cultural environment, challenges and adjustments with regard to values, culture, attitudes, behaviors, and stressors are inevitable (Ryder et al., 2000). Stressors among Hispanic immigrants are multi-faceted, including discrimination, isolation, language barriers and cultural differences, job related difficulties, missing family members who have remained behind in the homeland (Cervantes et al., 2012; Falconier et al., 2013), deportation fears or undocumented status, lack of acculturation, poverty, familial separation, experiencing violence or trauma, lack of access to health care services (Cervantes et al., 2012), and the loss of social support systems (Finch & Vega, 2003). Any combination of these factors can cause psychological as well as parenting stress among immigrants.

Experiencing problems as a result of the interaction between an individual's original culture and the host culture is called *acculturative stress* (Berry, 2006). Mental health studies of immigrants link their economic difficulties, discrimination, and language barriers to acculturative stress (Berry et al., 1987; Martinez, 2006). Some acculturation stressors, including legal status stress associated with a perceived lack of social support from the community, inversely affect the overall health of immigrant families (Behnke et al., 2008; Cabrera & Bradley, 2012; Finch & Vega, 2003). Acculturative stress is a noteworthy cause of mental health issues including depressive symptoms and suicidal thoughts (Hovey, 2000).

Previous research indicates that acculturative stress (Negy et al., 2010) and negative life circumstances, because of negative immigration experiences (Falconier et al., 2013), are significant factors in decreased relationship satisfaction as well. Each spouse's stress-related experiences not only increase the other spouse's stress but also decrease the couple's relationship satisfaction (see Randall & Bodenmann, 2009 for a review); and when immigrant women are not satisfied with their relationships, they may become more vulnerable to immigration stressors

(Falconier et al., 2013). Taken together, the immigration experience can have consequences for health and well-being, including depression and anxiety among immigrant mothers.

Additionally, a poor family atmosphere may exacerbate mental health issues in Hispanic immigrant families (Rivera et al., 2008). As such, it is particularly critical to understand the determinants of maternal psychological well-being in immigrant families and consider the extent to which those determinants may differ among US-born and Hispanic immigrant parents.

Marital Quality

Recognizing and understanding cultural differences in marital norms and attitudes is crucial to fully understanding the impact of marital satisfaction in diverse populations. (Arends-Tóth & Van de Vijver, 2008). One particularly salient aspect of marital quality for immigrant families may be gender role attitudes and beliefs. Egalitarian beliefs and attitudes in marriage are positively associated with marital satisfaction, whereas traditional gender role beliefs tend to create problematic marital relationships among immigrant couples (Jain, 2014). Traditional gender roles are defined by gender-stereotyped beliefs, where tasks are allocated differently by gender, reflecting inequality between men and women. On the contrary, gender neutrality supports the elimination of gender differences and promotes equality between men and women (Baber & Tucker, 2006). Gender roles are culturally appropriate behaviors expected from men and women, and thus may well be expected to differ as a function of one's cultural norms (Frank & Hou, 2015). It is thus possible that Hispanic immigrant parents' gender role ideologies may be different than those of mainstream US society based on aspects of their cultural background. For example, when immigrants who have a more traditional family culture settle into a more egalitarian cultural environment, it is possible that they will still hold onto their traditional values and beliefs. In particular, immigrant men who have a traditional gender role ideology may find it

difficult to honor an egalitarian arrangement that may negatively impact their marital relationships (Jain, 2014).

In addition to the sociocultural processes that shape marital interactions among immigrant parents, some attention has been paid to unique demographic characteristics of immigrant couples. For instance, approximately 80 % of children in immigrant households have two parents living with them, a rate much higher than native households (Kids Count Data Center, 2017). Of these, 75 % are married parents (Zill, 2016). However, research to date has not generally considered culturally-specific associations between marital quality and maternal well-being. Some limited recent research has suggested that marital conflict may be linked to high levels of anxiety and depression among both Caucasian and Mexican American couples (Hammett et al., 2016). And Helms, Supple and Proulx (2011) have provided a theoretical foundation for examining the relations between marital well-being and contextual stressors among Mexican-origin immigrants. Informed by this theoretical approach, Mexican-origin women's sociocultural stress during the cultural adaptation process may impact marital quality of themselves and their spouses (Helms et al., 2014), which in turn may cause poor family function linked to depression among immigrant women (Wu & Chow 2013; Zlotnick et al., 2000). Overall, this work suggests that marital quality is likely to affect maternal stress and depression in Hispanic immigrant as well as US-born families, though there is little indication of whether the strength of these associations may vary between these populations of parents.

Coparenting

Despite considerable gains in our understanding of the coparenting relationship, coparenting research has mainly focused on white, two-parent, and middle-income families (Dorsey et al., 2007; Van Egeren & Hawkins, 2004). This oversight is particularly striking given

that the coparenting relationship is largely shaped by parents' values, beliefs, expectations, and desires; these are formed by the dominant culture and subculture themes within ethnic, religious, socioeconomic, and racial groups (Feinberg, 2003). Therefore, we might expect this family process in ethnically and culturally diverse families to be different. In contrast, applied work with psycho-educational (Feinberg et al., 2009) and intervention programming (Solmeyer et al., 2014) has argued for the universality of the coparenting relationship across sociocultural contexts. This perspective suggests we might also expect coparenting to have similar correlates across ethnically diverse families due to the universal features of the coparenting relationship.

The understanding of coparenting in diverse populations is informed by Berry's (1997) conceptual framework, which considers the process of immigration, acculturation and adaptation during resettlement. In this framework, *acculturation* is defined as a psychological adaptation process whereby two individuals from different cultures interact with each other (Berry, 1997). Latino immigrant parents, for example, believe that being a role model for the socialization of their children is crucial (Aldoney & Cabrera, 2016). Specifically, one of the main parenting goals for Latino immigrant parents is to raise bicultural children and teach them the importance of both their original and the mainstream cultural values (Suárez-Orozco, 2001) in order to adjust to the majority culture (Aldoney & Cabrera, 2016). Some recent theoretical and empirical research suggests that the acculturation process may be linked to coparenting quality. For instance, a lack of supportive parenting (Cabrera et al., 2006) and a weak coparenting relationship with the other parent (Cabrera et al., 2009) was related to particularly significant problems among Mexican American mothers who reported low levels of acculturation. In contrast, immigrant fathers who have high levels of acculturation show more involvement in childcare, and presumably more supportive coparenting interactions (Capps et al., 2010). These findings suggest that the

coparenting partnership may be especially relevant for immigrant families as they navigate the process of acculturation.

Another positive cultural concept that helps Latino immigrant parents to engage with their family members is *familismo*. Familismo is a concept that expresses the importance of family interdependence, cohesiveness, responsibility, and loyalty to one another in traditional Latino culture (Behnke et al., 2008; Cardoso & Thompson, 2010). Familismo in the family system of Latino families is likely to tighten the bonds among family relationships, and potentially amplify associations between dynamics in various family subsystems (Calzada et al., 2013; Stein et al., 2014; Zeiders et al., 2013). Indeed, familismo appears to be a beneficial factor that helps parents become more supportive and develop high-quality coparenting relationships (Calzada et al., 2013; Fuller & García Coll, 2010). Collectively, family demographics in which couples are more likely to reside together, acculturative processes that require coordination among parents, and cultural norms that encourage the interconnectedness of family sub-systems all suggest that the coparenting relationship may be critical in linking marital quality and maternal mental health in Hispanic immigrant families.

In contrast, the numerous stressors across all ecological systems experienced by immigrant parents may well over-shadow or mitigate the importance of the coparenting partnership in this population of parents. For example, the demand of maintaining work-family balance is a supplementary stressor for parenting practices among all parents including Latino immigrants (Aldoney & Cabrera, 2016). Compared to other immigrants, Latino immigrants in the U.S have the greatest level of poverty and the lowest level of income (Brown & Patten 2014). Therefore, both parents usually work outside the home to attain financial stability, although it may create disruptions in family functioning, such as decreased parent-child engagement in

regular family activities (Aldoney & Cabrera, 2016). It has been theorized that engaging in multiple roles to manage work-family responsibilities could contribute to poor parental well-being (Greenhaus & Powell, 2006), in particular, among low-income parents (Coontz, 2017). The need to provide financially for children may make coordination around coparenting issues particularly difficult for Hispanic immigrant families, and thus this relationship may be less important for intra-personal well-being.

The collective effects of economic, cultural, and psychological stress on immigrant families can be monumental. Relative to the largely white, middle-class families in which coparenting has been widely studied, the importance of a coparenting relationship may be diminished in this context. Coparenting could be less critical when immigrant parents are facing additional stressors while simultaneously adjusting to a new cultural environment. The proposed study tested the competing hypotheses discussed in this section. That is, whether the coparenting relationship is a more or less strong mediator of hypothesized associations between marital quality and maternal stress and depression in Hispanic immigrant vs. US-born families.

Summary

In summary, the present study hypothesizes that: 1) higher initial levels of marital quality will be linked to lower levels of maternal stress and depression, 2) initial marital quality will also be related to less coparental conflict, 3) less coparental conflict will be related to less maternal stress and depression, and mediate associations between marital quality and stress and depression. This model, presented graphically in Figure 1, also examined separately for US-born vs. Hispanic immigrant families to test for differences in these pathways across these two samples of parents.

CHAPTER 3

METHODS

Participants

Data were drawn from the families who participated in the Supporting Healthy Marriage (SHM) Project. The SHM project was designed to strengthen the marriages of low-to-modest income married couples who were either expecting or recently had a child who was under the age of 18 as an approach to improve the family environment and well-being of parents and their children. The SHM was a multisite study in seven different states sponsored by the Administration for Children and Families (ACF) of the U.S. Department of Health and Human Services. Participating couples had to meet the following criteria: (a) couple had to be married; (b) both partners were at least 18 years of age; (c) the couple had an annual income below \$50,000; (d) the couple was expecting a baby or had a child under 18 years old; (e) both partners understood either English or Spanish.

The present study utilizes data from baseline (Wave 1) ($N=6231$), the 12- month follow-up (Wave 2) ($N=5114$), and the 30- month follow-up (Wave 3) ($N=4864$) of the SHM Project. When selected, couple members were randomly assigned to either a local SHM group that received an intervention designed to improve couple relationship quality (49.4%; $N=2819$) or a control group (56.6%; $N=2882$) that was not provided SHM services but was allowed to access other services available in the community. Both intervention and control groups were similar in their background characteristics. One child was selected as the primary focus of survey items, such that no participating children were nested within families. A total of 3340 (54%) of couples

in the sample were both US-born, 1098 (18%) had one parent who was US-born, and 1760 (28%) of couples had two non-US-born partners. Participants were racially and ethnically diverse: 2723 (43%) identified as Hispanic, most of Mexican ancestry, 1284 (21%) identified as White, 706 (11%) identified as African American and 1558 (25%) were of other races. Of the sample parents, 2858 (46%) were born outside of the US and had lived in the country 5 years or fewer, 485 (8%) had lived in the US between 6 to 9 years, 422 (7%) had lived in the US between 10 to 14 years, and 751 (12%) had lived in the US states 15 years or longer at baseline. Fathers' mean age was 31.48 (SD = 6.35; Range = 21–40), mothers' mean age was 29.74 (SD = 6.28; Range = 21–40), and children's mean age was 6.6 years (SD = 4.20; Range = 1.5–18 years). The couples' incomes ranged from less than \$4,999 to more than \$35,000 per year, with almost 84% of couples reporting an average annual family income of less than \$35,000. Seventy three percent of men had a less than a high school degree (less than 12 years education). Sixty seven percent of women had a less than a high school degree (less than 12 years education).

The sample of mothers who were born outside of the US were largely of Latin American heritage, with 50 % identifying as Hispanic (the SHM dataset utilized “Hispanic” rather than “Latino/Latina/Latinx” to identify ethnic heritage. Half of those mothers (25%) reported Mexico as their country of origin, with 12% Puerto Rican, and 13 % other Spanish/Hispanic/Latino. Similarly, 49% of fathers who were born outside of the US identified as Hispanic. Just over half of those fathers (25%) reported Mexico as their country of origin, with 12% Puerto Rican, and 12 % other Spanish/Hispanic/Latino. To reduce heterogeneity and allow for interpretable comparisons with US-born parents, analyses examining sub-group comparisons focused solely on couples in which both parents identified as Hispanic ($N=746$). Table 1 provides comparisons of demographic characteristics for the full sample and both sub-samples. For the sample as a

whole, participants that completed all 3 waves of data collection were significantly older ($t = -2.11, p = .035$) and more educated ($t = -2.59, p = .01$) than those that were lost to attrition.

Procedure

The SHM project was implemented at eight sites in seven states within the US. Each site (Florida, Kansas, New York, Oklahoma, Pennsylvania, Texas and Washington) recruited about 800 families with diverse racial and ethnic backgrounds from local organizations, marketing campaigns, speaking directly with families in the community, and encouraging enrolled families to refer friends during the period of 2003 to 2013. These sites used different intervention group curricula and supplemental activities that were adapted for low-income families based on enhancing their understanding of marriages, increasing positive interaction and decreasing negative interaction. In general, results of the intervention failed to result in significant differences in primary study outcomes for experimental vs. control groups. However, the SHM project had small positive impacts on couple's relationships. The intervention group reported decreased marital distress and infidelity, increased marital happiness, better positive communication, warmth and support than control group. Because the intervention programs generally failed to produce significant effects for primary intended outcomes, family researchers have used the SHM dataset to examine associations among study variables (McCormick et al., 2017; Ross et al., 2019; Williamson et al., 2016). The proposed study will adopt this same approach, while using intervention/control group status as a control variable in statistical models.

Both fathers and mothers completed a series of surveys (and one home observation) at three time points: when families first enrolled in the SHM project baseline (W1), approximately 12 months (W2) and 30 months (W3) after the families first enrolled in the project. Full surveys are included in the appendix.

Baseline Data

The first wave of data was collected when families first enrolled in the SHM study, before being randomly assigned to the program or control group. Both fathers and mothers completed a set of baseline instruments that included assessments of socio-demographic characteristics and marital quality.

12-Month Follow-Up Data

The second wave of data assessing the coparenting relationship was collected 12 months after families first enrolled in the study. Both fathers and mothers completed survey measures of coparental conflict independently.

30-Month Follow-Up Data

Surveys about psychological well-being were collected approximately 30 months after families first entered the study. Mothers completed assessments of psychological well-being (e.g., stress and depressive symptoms) at this 30-month follow-up.

Measures

Demographic Questionnaire

This short questionnaire was designed for the current study to obtain background information about the parents, including age, gender, SES, child's age, ethnicity, languages spoken in the family, parental educational levels, occupations, time spent in the U.S., and birth country.

Marital Quality (Wave 1)

Marital Satisfaction. Marital satisfaction was measured with a seven-item questionnaire. Fathers and mothers reported on their satisfaction, which asked about how satisfied the partners were with certain areas of their relationship and were scored on a 4-point scale (*all of the time* =

1, *most of the time* = 2, *some of the time* = 3, *none of the time* = 4; e.g., “My spouse and I get along well together”). Responses across all items were summed to create a composite score on marital satisfaction. Cronbach’s alpha for marital satisfaction scores were .76 for mothers and .74 for fathers.

Marital Conflict. Marital conflict was assessed with a nine-item questionnaire. Both mothers and fathers were asked to report the frequency of their arguments about common problems in the marriage (*never* = 1, *hardly ever* = 2, *sometimes* = 3, *often* = 4; e.g., “How often do you and your spouse have arguments about household chores?”). Responses across all items were summed to create a composite score on marital conflict. Cronbach’s alpha for marital conflict scores were .78 for mothers and .79 for fathers.

Coparenting (Wave 2)

Coparental Conflict. Coparental conflict was measured with a 5-item scale. At the 12-month follow-up survey, mothers and fathers were asked to report the frequency of disagreement about child-related tasks on a four-point response scale ranging from *often* (1) to *never* (4). An example of the items is: “How often do you disagree about who does childcare tasks?”. Responses across all items were summed to create a composite score on coparental conflict. Cronbach’s alphas for reported coparental conflict scores were .75 for mothers and .76 for fathers.

Maternal Psychological Well-Being (Wave 3)

Maternal Depressive Symptoms. Depressive symptoms were measured by a 6-item survey. At the 30-month follow-up survey, mothers were asked to report the frequency of experiencing depressive symptoms over the past 30 days on a four-point response scale ranging from *often* (1) to *never* (4). An example from this scale is: “How often did you feel so sad that

nothing could cheer you up?”. Responses across all items were summed to create a composite score on depressive symptoms. Cronbach’s alpha for maternal depressive symptoms was .85.

Maternal Stress. Stress was measured by a 4-item scale. Mothers were asked to report the frequency of experiencing stress in the last month on a four-point response scale ranging from *often* (1) to *never* (4). Sample item included: “How often have you felt that you are unable to control the important things in your life?”. Responses across all items were reversed and summed to create a composite score, where a lower score represents greater stress. Cronbach’s alpha for maternal stress was .69.

Planned Analyses

The statistical model presented in Figure 2 was tested with a series of path analyses as implemented in Mplus v. 8.0 (Muthen & Muthen, 2017). The overall fit of the model was assessed with the Comparative Fit Index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). An RMSEA index less than or equal to .06, SRMR values below .08, and a CFI value greater than or equal to .90 indicate a good model fit (Hu & Bentler, 1999). Bootstrapped confidence intervals were used to examine the strength of indirect effects from marital quality to outcome variables via coparenting. All models controlled for the effects of income, mothers’ age, mother’s education, child age, and intervention group status.

We first examined our proposed mediational model using path analyses for the entire sample. This model examined direct effects presented in Figure 2, as well as the strength of indirect pathways from marital quality to maternal outcomes via coparenting. To test for moderated mediation, a series of multi-group models then examined conditional indirect effects and differences in individual pathways as a function of immigrant status. A freely estimated

multi-group path model allowed for comparisons of the strength of indirect effects for US-born vs. Hispanic immigrant families. Following protocols for testing moderated mediation (Preacher et al., 2007), we then examined a series of multi-group models in which individual paths were constrained to equality across groups. A significant decrement in model fit for a constrained model (relative to the freely estimated multi-group model) would indicate significant differences in the strength of path coefficients between the two groups.

CHAPTER 4

RESULTS

Descriptive Characteristics and Bivariate Correlations

Means, standard deviations, and bivariate correlations among all study variables are presented in Table 2. Correlations among demographic covariates and primary study variables indicated that mothers' education was related to more depressive symptoms, and mothers' age was associated with fewer depressive symptoms. Participants in the control group reported more depressive symptoms than those in the intervention group. None of the demographic covariates were significantly correlated with maternal stress.

Correlations among scores for marital satisfaction, marital conflict, coparental conflict, maternal depressive symptoms and maternal stress indicated numerous significant associations among study variables. Marital satisfaction and marital conflict were negatively related to one another. Higher levels of initial marital satisfaction were related to lower coparental conflict and maternal stress, as well as fewer maternal depressive symptoms. Greater marital conflict was associated with elevated levels of coparental conflict and maternal depressive symptoms but was not significantly related to maternal stress. Greater coparental conflict was related to higher levels of both stress and maternal depressive symptoms. There was no significant correlation between maternal stress and maternal depressive symptoms.

Path Analyses

In order to investigate the indirect effect of marital quality on maternal psychological well-being via coparenting, a mediational model with the entire sample was tested using path analysis in Mplus v. 8.0 (Muthen & Muthen, 2017). To examine hypotheses regarding moderated mediation, analyses were conducted through sequential steps to test whether individual paths in the model were significantly different among US-born and Hispanic immigrant parents.

Figure 2 shows the results from the hypothesized mediational model of the associations between marital quality (marital satisfaction and marital conflict) on maternal depressive symptoms and maternal stress via coparental conflict. The full set of path coefficients including all demographic covariates is also presented in Table 3. The overall model fit the data well. Consistent with hypotheses, mothers reported fewer depressive symptoms when couples had less marital conflict and more marital satisfaction. In contrast, there were no significant direct effects from either aspect of marital quality to mothers' reported stress. Furthermore, couples with higher levels of marital conflict and lower levels of satisfaction showed greater coparental conflict. In turn, coparental conflict predicted both more stress and more depressive symptoms for mothers.

All four indirect paths from independent variables (marital satisfaction and marital conflict) to maternal psychological well-being outcomes (maternal depressive symptoms and maternal stress) were significant. Estimates and 95% bootstrapped confidence intervals for all indirect effects are presented in Table 5. Indirect effects via coparental conflict from marital satisfaction and marital conflict to maternal depressive symptoms were both significant. Likewise, significant indirect effects were also found from marital satisfaction and marital conflict to maternal stress through coparental conflict. Taken together, these findings indicate

that for the sample as a whole coparental conflict consistently mediated pathways from marital satisfaction and conflict to both maternal stress and depressive symptoms.

US-Born vs. Hispanic Immigrant Comparisons of the Mediation Model

A multi-group path model was conducted to compare equality of paths in the model across US-born vs. immigrant parents. To eliminate heterogeneity in the sample of immigrant parents and to provide a more interpretable comparison, the sample of US-born parents was compared only against the sample of immigrant parents in which both parents in the family identified as Hispanic. The overall, freely estimated multi-group model showed adequate fit to the data ($\chi^2(10) = 41.3, p = 0$; CFI = .943; RMSEA = .053; SRMR = .016), with the US-born sample contributing nearly 3 times as much to the overall chi-square model fit as the Hispanic immigrant sample (30.25 vs. 11.05). Figures 3 and 4 present the results of each model for US- Born and Hispanic immigrant parents, respectively. Full comparisons of all path coefficients for these sub-samples including demographic covariates are also presented in Table 3.

US-Born Parents. As shown in Figure 3, US-born parents showed a nearly identical pattern of results as what was observed in the sample as a whole. Specifically, the direct effect of marital conflict on maternal depressive symptoms was significant, as were paths from marital conflict and satisfaction to coparental conflict. Additionally, and consistent with the overall sample, coparental conflict mediated the relationship between all predictors and the maternal outcomes among US-born parents. In particular, significant indirect effects were found between marital satisfaction and maternal depressive symptoms and between marital conflict and maternal depressive symptoms

through coparental conflict. Likewise, indirect effects from marital conflict and marital satisfaction to maternal stress via coparental conflict were both significant (see Table 4).

Hispanic Immigrant Parents. As shown in Figure 4, Hispanic immigrant parents showed a pattern of results that differed somewhat from US-born parents. None of the direct effects of marital quality on maternal psychological well-being were significant. Consistent with the US-born sample, marital conflict and satisfaction were both related to higher levels of coparental conflict among Hispanic immigrant parents. Further, coparental conflict also predicted greater maternal depressive symptoms, and mediated the relationship between marital conflict and maternal depressive symptoms. In contrast to US-born parents, coparental conflict did not mediate the relationship between marital quality and maternal stress. Moreover, unlike in the US-born sample, there were no direct associations between coparental conflict and mothers' stress among Hispanic immigrant parents, and indirect effects from marital quality (marital satisfaction and marital conflict) to maternal stress were non-significant (see Table 4).

Conditional Indirect Effects

Tests of conditional indirect effects were performed following protocols for testing moderated mediation (Preacher et al., 2007). Specifically, a series of models were examined in which individual paths among marital quality, coparental conflict, and maternal well-being outcomes were one-by-one constrained to equality across the two groups (US-born vs. Hispanic immigrant parents). A significant decrement in model fit (as measured by a chi-square difference test) relative to the freely estimated multi-group model indicates a significant difference in the magnitude of that path across the two groups.

Results of these tests are summarized in Table 3. Analyses found no significant differences between US-Born and Hispanic immigrant parents in the strength of paths from

either marital or coparental quality to maternal depressive symptoms or stress. Thus, although these paths differed in magnitude across the two groups they were not significantly moderated by group membership. However, the link between marital satisfaction and coparental conflict was moderated by group membership, such that this path was significantly stronger among US-born parents relative to Hispanic immigrant parents.

Supplementary Analysis of Hispanic US-Born Parents

Given some documented differences between Hispanic immigrants and the full sample of US-Born parents, supplementary analyses were also conducted in an effort to disentangle the effect of birth country status (i.e., being born in the US vs. elsewhere) and ethnicity (i.e., being Hispanic or not) on model pathways. This approach involved examining the hypothesized model for Hispanic US-Born parents only, as well as separate multi-group path model that compared Hispanic US-born parents with Hispanic immigrant parents born outside of the United States. Path differences between these two groups were compared in a similar manner, by constraining individual paths to equality and examining decrement in model fit relative to a freely estimated model.

Path coefficients for the Hispanic US-born parents are presented in the first column of Table 4. This model indicated that the direct effect of marital conflict on maternal depressive symptoms was significant, as were paths from marital conflict and satisfaction to coparental conflict. Consistent with the full US-Born sample, significant indirect effects were found between marital satisfaction and maternal depressive symptoms and between marital conflict and maternal depressive symptoms through coparental conflict. Consistent with the Hispanic

immigrant sample, indirect effects indicated that coparental conflict did not mediate the relationship between marital quality and maternal stress (see Table 6).

Tests of moderated mediation among Hispanic immigrant vs. Hispanic US-born parents were again tested by constraining individual paths to equality and comparing model fit with the freely estimated multi-group model. Decrements in model fit as measured by a chi-square difference test are presented in the second column of Table 4. These analyses were entirely consistent with comparisons between Hispanic immigrant parents and the full sample of US-Born parents. Specifically, the path from marital satisfaction to reduced coparental conflict was significantly stronger among Hispanic US-Born parents than among Hispanic Immigrant parents. Other model paths did not differ significantly among the two groups.

CHAPTER 5

DISCUSSION

This study adds to our understanding of how marital quality affects mothers' stress and depressive symptoms via coparental conflict among US-born versus Hispanic immigrant parents. Overall, findings highlight the role of the coparenting relationship in linking marital quality to maternal psychological well-being. In particular, lower marital satisfaction and higher marital conflict were directly related to more maternal depressive symptoms, and indirectly related to both depressive symptoms and maternal stress via coparental conflict. US-born parents generally showed a pattern of findings that was similar to the sample as a whole. For Hispanic immigrant parents, coparental conflict only mediated the association between marital conflict and depressive symptoms but was unrelated to maternal stress and failed to mediate other pathways from marital quality to stress and depressive symptoms. This pattern of results speaks to the importance of couple relationship functioning in both the marital and coparental context for maternal psychological well-being, with potentially unique pathways for US-born and Hispanic immigrant couples. In the sections that follow I discuss these findings further in the context of the extant theoretical and empirical literature, followed by a discussion of study limitations, future directions, and implications of this work.

Direct Associations among Marital Quality, Coparental Conflict, and Maternal Psychological Well-Being

Consistent with expectations, both high marital satisfaction and low marital conflict were directly related to maternal depressive symptoms in bivariate analyses and the final model.

Although prior research has shown that depressive symptomology can affect marital functioning (Herr et al., 2007; Pruchno et al., 2009; Renshaw et al., 2010; Witton et al., 2007), these results indicate that marital distress was a risk factor for depressive symptoms among mothers 2.5 years later. Though depression and anxiety are often considered intrapersonal characteristics of the individual, study findings strongly suggest that internalizing trajectories of psychopathology may also be shaped by the quality of interpersonal relationships with one's spouse.

Interestingly, marital quality did not show similar direct associations with mothers' stress. The impact of marital relationship functioning on stress appeared to operate indirectly through coparental conflict. Specifically, both low marital conflict and high marital satisfaction predicted less conflictual coparenting interactions one year later. Within family systems the marital and coparental relationships are interrelated constructs (Liu & Wu, 2018; Schoppe-Sullivan & Mangelsdorf, 2013). As such, associations among these aspects of interparental functioning are undoubtedly bidirectional. But the longitudinal associations documented here hint at potential spillover from the marital relationship – often formed well before couples have children – to the coparental partnership as couples learn to navigate the demands of cooperative childrearing (Cowan & Cowan, 2000).

In turn, higher levels of coparental conflict were associated with both reduced maternal stress and fewer maternal depressive symptoms. These findings add to a growing body of research on the unique effects of coparenting quality for multiple domains of the family system (Beaton et al., 2012; Feinberg, 2003; Peltz et al., 2018). However, the present study extends that work by being among the first investigations to document the deleterious effects of a conflictual coparenting relationship for mothers' psychological outcomes. Given the many demands of parenting, disagreements specifically around childrearing related issues – over and above the

contributions of marital quality – may play a particularly salient role in fostering anxiety, stress, and emotional challenges for mothers.

The Mediating Role of Coparental Conflict

Of the four mediational paths tested with the full sample, all of them indicated the presence of significant indirect effects from marital quality to maternal psychological well-being via coparental conflict. These findings affirmed study hypotheses, thus providing support for the notion that the coparenting relationship could be an important mediator of the association between marital quality and maternal stress and depression. Undoubtedly numerous mechanisms both within and outside the family may play a role in transmitting couple relationship quality to individual well-being. These findings, however, suggest that parents' ability to work together as partners (in contrast to being adversaries) around the complex tasks of parenting may occupy a particularly important place in linking couple and intrapersonal functioning (Jackson et al., 2014; McHale, 1995; Proulx et al., 2007; Wang et al., 2019).

More broadly, these findings support the theoretical propositions of family systems theory (Bowen, 1978), which propose that subsystems of the family are interdependent with one another. Consistent with the tenets of family systems theory, couple relationship quality may affect couple's interactions in the context of parenting, and subsequently mothers' psychosocial well-being. Numerous recent studies on mothers have also attempted to determine how interparental relationships such as marital (Carr et al., 2014; Clout & Brown, 2016; Goldfarb et al., 2019; Thomas et al., 2019) and coparenting (Lau & Power, 2019; Solmeyer & Feinberg, 2011; Tissot et al., 2017) might affect psychological well-being. The present study is unique in simultaneously examining both dyadic (marital) and triadic (coparental) relationship quality as predictors of maternal outcomes. In doing so, these findings provide empirical support for

theoretical calls to integrate multiple levels (e.g., individual, dyadic, triadic) of family functioning into research studies that take a family systems perspective (e.g., Cox & Paley).

Comparisons Among US-Born vs. Hispanic Immigrant Parents

Comparisons of US-born vs. Hispanic immigrant parents yielded some similarities as well as key differences among the two sub-groups. Among US-born parents the pattern of associations among primary study variables was identical to what was found for the sample as a whole. Further, just as in the complete sample, all four indirect pathways from marital quality to maternal psychological well-being via coparental conflict were statistically significant. Perhaps unsurprisingly, it appears to be the case that findings in the overall sample of both immigrant and non-immigrant parents also held true when considering only US-born parents.

Consistent with these results, among Hispanic immigrant parents there was also a significant indirect effect from marital conflict to maternal depressive symptoms via coparental conflict. Thus, this particular pathway appeared to be relatively universal regardless of sociocultural background. Despite unique cultural attributions toward depression in Hispanic immigrant vs. native US cultures (Ornelas & Perreira, 2011; Ornelas et al., 2009) there appears to be similar patterns in which marital conflict may promote coparental conflict, which in turn elevates depressive symptoms in mothers across both groups.

However, other indirect pathways via coparental conflict were non-significant among Hispanic immigrant parents. The coparenting relationship has been studied in predominantly European American families, and far less frequently considered among Hispanic immigrants (Barnett et al., 2016; Jones, 2011). The relatively less powerful mediating influence of coparenting quality among Hispanic immigrants lends support to the notion that current

conceptualizations and measurements of coparenting may not adequately capture the full range of family dynamics among culturally diverse families (Jones, 2011; McHale, 2011).

Tests of conditional indirect effects found that marital satisfaction (but not marital conflict) was a significantly weaker predictor of coparental conflict among Hispanic immigrant parents vs. US-born parents. The contradictory findings for satisfaction and conflict speak to the complex multidimensionality of marital quality, and suggest the need to consider various elements of relationship quality independently, particularly among immigrant parents whose relationships – as a result of life circumstances and the immigration experience – may be especially multifaceted (Helms et al., 2014; Llerena-Quinn & Bacigalupe, 2009; Stinson et al., 2017).

Most strikingly, documented pathways linking coparental conflict to heightened maternal stress in US-born families were not evident among Hispanic immigrants. The potentially detrimental effect of triadic family conflict did not in this study extend to those born outside the US. Coupled with the lack of direct effects from marital quality to stress, family relationship variables measured in this study failed to account for substantial variance in Hispanic immigrant mothers' stress. It seems plausible that many of these families are likely to be facing numerous stressful circumstances outside of the family (Cervantes et al., 2012; Falconier et al., 2013; Ryder et al., 2000), including language barriers, cultural differences (Falconier et al., 2013), fear of deportation, family separation, discrimination and social isolation (Dillon et al., 2012; Torres et al., 2012). These unique stressors in other ecological systems represent one key difference between immigrant and non-immigrant parents. For parents facing additional demands that include adaptation to a new culture, navigating language challenges, or any number of other risk factors, the coparental relationship may take on less significance in the face of ecological stress

that can be burdensome at best and overwhelming at worst (Cervantes et al., 2019; Driscoll & Torres, 2019). Future investigations that more fully consider determinants of stress external to the family would shed additional light on this interpretation.

Given that Hispanic immigrant parents are likely to face unique contextual circumstances as a result of both immigration experiences and their Hispanic cultural background, supplementary analyses also considered paths among Hispanic US-born parents. Direct and indirect paths from marital quality to depressive symptoms were generally similar to the US-born sample as a whole. Further, marital satisfaction also appeared to be a significantly better predictor of lower coparental conflict for Hispanic US-born parents relative to Hispanic immigrant parents. However, marital and coparental quality largely failed to account for variance in Hispanic US-born parents' levels of stress, similar to what was observed among Hispanic immigrants. Findings suggest that the impact of these family relationship variables on Hispanic US-born parents may depend highly on the outcome being assessed. Specifically, family processes leading to depressive symptoms might be universal among US-born parents regardless of ethnicity, whereas pathways to maternal stress could be shared among Hispanic parents born both within and outside of the United States.

Limitations and Future Directions

Although this longitudinal study has taken one step toward elucidating an understudied area in the family science literature, it does suffer from a number of key limitations. Importantly, generalizability may be somewhat limited to due to several factors. Although the sample is reasonably racially and ethnically diverse, sample participants were mainly low income and less educated. Because the SHM project aimed to understand the experience of low-income parents, it remains to be seen whether these findings are specific to low-SES couples or would generalize

to a wider range of socioeconomic circumstances. Moreover, the sample was comprised exclusively of different-gender, married couples with biological children. Other diverse forms of families such as same-sex couples, unmarried or divorced couples, or adoptive parents may demonstrate divergent patterns of association. Future studies would be well-served by examining the associations among marital quality, coparenting, and maternal psychological well-being in samples with more diverse characteristics and family structures.

Similarly, the distinction between US-born vs. Hispanic immigrants in the present study masks some variability among parents born outside of the United States. Although most parents in this sample immigrated to the U.S. relatively recently, there is undoubtedly a range of circumstances, immigration experiences, and acculturation processes among Hispanic immigrants. Still other immigrant couples include parents of different ethnicities and/or different countries of origin from each other. Overall, future research should move beyond group-level comparisons that treat Hispanic immigrants as a homogenous group to better understand the diversity of immigrant parents' lived experiences, and the ways in which those experiences may contribute to unique family interaction patterns and health consequences.

Relatedly, differential effects observed among US-born vs. Hispanic immigrant families in this study fail to elucidate the causal mechanisms that may underlie these differences. The SHM data set has many strengths, including a large and ethnically diverse sample, and longitudinal data on multiple family members and relationships. However, detailed information on sociocultural factors that might explain unique associations for Hispanic immigrant families is lacking. Researchers who examine family relationships and health outcomes in immigrants should focus in more detail on the socio-cultural context of pre- and post-immigration

experiences to better understand family and mental health circumstances specific to this population.

Finally, this study relies entirely on self-report data, which can lead to spurious associations among study variables as a result of shared method variance. Further, interpretations of causal directions among study variables is largely speculative despite the longitudinal design. Research design approaches that include assessments of these variables from multiple sources (i.e., couple and/or coparenting observations, time diary assessments of stress and mental health) and more sophisticated longitudinal designs (i.e., parallel data on all variables collected at multiple timepoints) would lead to greater confidence in causal inferences.

Implications for Practice/Policy

Results from this study have implications for policy and practice with couples, families, and children. Practitioners working with families should recognize the interconnectivity of intrapersonal (i.e., psychological well-being), dyadic (i.e., marital satisfaction), and triadic (i.e., coparenting) levels of family functioning. These results affirm and extend past work that shows that marital satisfaction and early coparenting (Christopher et al., 2015; Schoppe-Sullivan & Mangelsdorf, 2013), and coparenting and maternal psychological well-being (e.g., depressive symptoms and stress) (Solmeyer & Feinberg, 2011) are intertwined. As such, this study highlights the importance of understanding maternal psychological well-being as a product of family system influences. It is important for clinicians working to enhance maternal mental health to consider intervention and prevention approaches that target not just mothers' intrapersonal factors but also family subsystem relationships (e.g., the coparenting and marital relationships). Furthermore, family and relationship education could play a critical role in

promoting marital quality as a means for simultaneously fostering both more supportive coparenting partnerships for couples as well as increasing individual psychological well-being.

The current study speaks to the importance of the coparenting alliance as an especially critical context for promoting maternal mental health. Applied work in this field may benefit from preventive interventions aimed specifically at strengthening the coparenting alliance (e.g., Feinberg, 2003) as a means for helping parents better cope with the stressors and demands that can often accompany parenthood. Rather than designing programming for mothers exclusively, interventions targeting fathers' roles as coparents may be especially beneficial. For example, educational materials for fathers that promote men's empathy and understanding of the high burden and emotional challenges that often accompany the maternal role may be fruitful. Relatedly, working to help men establish patterns of—and expectations for—relatively equitable divisions of childcare-related tasks may in turn have potential downstream benefits for mothers' stress and depression.

But the same practices that may be impactful in one socio-cultural context may not be as effective in others. Although the present study provides few concrete answers regarding the source of differences among US-born vs. Hispanic immigrant parents, increased attention to cultural competence in the clinical realm is critical. As research in this domain continues, awareness of documented ethnic and cultural differences in family system pathways to individual psychological health may translate into outreach, clinical practices, and points of intervention that are more precisely targeted. Research, practice, and policy should continue to consider the distinct socio-contextual circumstances, life histories, and relationship dynamics of immigrant parents that are involved in programs designed to serve children and families.

Conclusion

In summary, the present study contributes to empirical research and theory-building in family science by elucidating longitudinal pathways from marital quality to coparenting conflict and maternal psychological well-being across ethnically diverse, low SES families.

The patterns of association among study variables provide support for the notion that family dynamics such as marital and coparenting relationships have significant consequences on maternal stress and depression (e.g., Ribeiro & Shelton, 2012; Peltz et al., 2018; Solmeyer et al., 2014). They also speak to the important role of the coparenting relationship in mediating associations between couple relationship dynamics and mothers' mental health. Although findings for US-born parents mirrored those for the sample as a whole, findings for Hispanic immigrant parents suggest some similarities and several key differences for this population. Particularly in the somewhat diminished role of coparenting conflict as a mediator and the relative inability of marital or coparental relationship quality to explain substantial variance in Hispanic immigrant mothers' self-reported stress. Take as a whole, these findings provide some directions for future research focused on the interconnectivity of family system dynamics, and future practice serving the relational and mental health needs of diverse families.

REFERENCES

- Abidin, R. R. (1992). The determinants of parenting behavior. *Journal of Clinical Child Psychology*, 21(4), 407-412. https://doi.org/10.1207/s15374424jccp2104_12
- Adler-Baeder, F., Higginbotham, B., & Lamke, L. (2004). Putting empirical knowledge to work: Linking research and programming on marital quality. *Family Relations*, 53(5), 537-546. <https://doi.org/10.1111/j.0197-6664.2004.00063.x>
- Alaazi, D. A., Salami, B., Yohani, S., Vallianatos, H., Okeke-Ihejirika, P., & Nsaliwa, C. (2018). Transnationalism, parenting, and child disciplinary practices of African immigrants in Alberta, Canada. *Child Abuse & Neglect*, 86, 147-157. <https://doi.org/10.1016/j.chiabu.2018.09.013>
- Aldoney, D., & Cabrera, N. J. (2016). Raising American citizens: Socialization goals of low-income immigrant Latino mothers and fathers of young children. *Journal of Child and Family Studies*, 25(12), 3607-3618. <https://doi.org/10.1007/s10826-016-0510-x>
- Allen, T. A., Oshri, A., Rogosch, F. A., Toth, S. L., & Cicchetti, D. (2019). Offspring personality mediates the association between maternal depression and childhood psychopathology. *Journal of Abnormal Child Psychology*, 47(2), 345-357. <https://doi.org/10.1007/s10802-018-0453-3>
- Anthony, L. G., Anthony, B. J., Glanville, D. N., Naiman, D. Q., Waanders, C., & Shaffer, S. (2005). The relationships between parenting stress, parenting behaviour and preschoolers' social competence and behaviour problems in the classroom. *Infant and*

Child Development: An International Journal of Research and Practice, 14(2), 133-154.

<https://doi.org/10.1002/icd.385>

Arends-Tóth, J., & Van de Vijver, F. J. (2008). Family relationships among immigrants and majority members in the Netherlands: The role of acculturation. *Applied*

Psychology, 57(3), 466-487. <https://doi.org/10.1111/j.1464-0597.2008.00331.x>

Aunola, K., Ruusunen, A. K., Viljaranta, J., & Nurmi, J. E. (2015). Parental affection and psychological control as mediators between parents' depressive symptoms and child distress. *Journal of Family Issues*, 36, 1022–1042.

<https://doi.org/10.1177/0192513X13494825>

Baber, K.M., & Tucker, C.J. (2006). The social roles questionnaire: A new approach to measuring attitudes toward gender. *Sex Roles*, 54 (7-8), 459–467.

<https://doi.org/10.1007/s11199-006-9018-y>

Barboza, G. E. (2020). Cognitive readiness to parent, stability and change in postpartum parenting stress and early childhood aggression: A second order growth curve mediation model. *Children and Youth Services Review*, 113, 104958.

<https://doi.org/10.1016/j.childyouth.2020.104958>

Baril, M. E., Crouter, A. C., & McHale, S. M. (2007). Processes linking adolescent well-being, marital love, and coparenting. *Journal of Family Psychology*, 21(4), 645-654.

<https://doi.org/10.1037/0893-3200.21.4.645>

Barnett, M. A., Mortensen, J. A., Gonzalez, H., & Gonzalez, J. M. (2016). Cultural factors moderating links between neighborhood disadvantage and parenting and coparenting among Mexican origin families. In *Child & Youth Care Forum*, 45 (6), 927-945.

- Barra, M., May, S., Baharudin, R., Zulkefly, N. S., Yahya, A. N., & Madon, Z. (2019). Stressful life events, parental verbal aggression and depressive symptoms in Malaysian adolescents: The moderating role of parental warmth. *Pertanika Journal of Social Sciences & Humanities*, 27(3), 1903-1925.
- Beach, S. R., Katz, J., Kim, S., & Brody, G. H. (2003). Prospective effects of marital satisfaction on depressive symptoms in established marriages: A dyadic model. *Journal of Social and Personal Relationships*, 20(3), 355-371.
<https://doi.org/10.1177/0265407503020003005>
- Behnke, A. O., Taylor, B. A., & Parra-Cardona, J. R. (2008). "I hardly understand English, but...": Mexican origin fathers describe their commitment as fathers despite the challenges of immigration. *Journal of Comparative Family Studies*, 39(2), 187-205.
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 51(1), 83-96.
- Belsky, J., & Fearon, R. P. (2002). Early attachment security, subsequent maternal sensitivity, and later child development: Does continuity in development depend upon continuity of caregiving?. *Attachment & Human Development*, 4(3), 361-387.
<https://doi.org/10.1080/14616730210167267>
- Bener, A., Gerber, L. M., & Sheikh, J. (2012). Prevalence of psychiatric disorders and associated risk factors in women during their postpartum period: a major public health problem and global comparison. *International Journal of Women's Health*, 4, 191-200. [https://doi: 10.2147/IJWH.S29380](https://doi.org/10.2147/IJWH.S29380)
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, 46(1), 5-34. <https://doi.org/10.1111/j.14640597.1997.tb01087.x>

- Berry, J. W. (2006). Stress perspectives on acculturation. *The Cambridge handbook of acculturation psychology, 1*, 43-57. <https://doi.org/10.1017/CBO9780511489891.007>
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review, 21*, 491-511.
<https://doi.org/10.1177/019791838702100303>
- Berryhill, M. B. (2016). Mothers' parenting stress and engagement: Mediating role of parental competence. *Marriage & Family Review, 52*(5), 461-480.
<https://doi.org/10.1080/01494929.2015.1113600>
- Bianchi, S. M., Robinson, J. P., & Milke, M. A. (2006). *The changing rhythms of American family life*. Russell Sage Foundation. <https://doi.org/10.1080/15267430902773337>
- Bloomfield, L., & Kendall, S. (2012). Parenting self-efficacy, parenting stress and child behaviour before and after a parenting programme. *Primary Health Care Research & Development, 13*(4), 364-372. <https://doi.org/10.1017/S1463423612000060>
- Bodenmann, G. (2005). Dyadic Coping and Its Significance for Marital Functioning. In T. A. Revenson, K. Kayser, G. Bodenmann, T. A. Revenson (Ed), K. Kayser (Ed), & G. Bodenmann (Ed) (Eds.), *Couples coping with stress: Emerging perspectives on dyadic coping*. (pp. 33–49). American Psychological Association.
<https://doi.org/10.1037/11031-002>
- Bögels, S. M., Hellemans, J., van Deursen, S., Römer, M., & van der Meulen, R. (2014). Mindful parenting in mental health care: Effects on parental and child psychopathology, parental stress, parenting, coparenting, and marital functioning. *Mindfulness, 5*(5), 536-551.
<https://doi.org/10.1007/s12671-013-0209-7>

- Bonds, D. D., & Gondoli, D. M. (2007). Examining the process by which marital adjustment affects maternal warmth: The role of coparenting support as a mediator. *Journal of Family Psychology, 21*(2), 288-296. <https://doi.org/10.1037/0893-3200.21.2.288>
- Brennan, P. A., Hammen, C., Andersen, M. J., Bor, W., Najman, J. M., & Williams, G. M. (2000). Chronicity, severity, and timing of maternal depressive symptoms: Relationships with child outcomes at age 5. *Developmental Psychology, 36*(6), 759-766. <https://doi.org/10.1037/0012-1649.36.6.759>
- Bronte-Tinkew, J., Horowitz, A., & Carrano, J. (2010). Aggravation and stress in parenting: Associations with coparenting and father engagement among resident fathers. *Journal of Family Issues, 31*(4), 525-555. <https://doi.org/10.1177/0192513X09340147>
- Brown & Patten. (April 29, 2014). *2012, Foreign-Born Population in the United States Statistical Portrait*. Pew Research Center. <https://www.pewresearch.org/hispanic/2014/04/29/2012-statistical-information-on-immigrants-in-united-states/>
- Cabrera, N. J., & Bradley, R. H. (2012). Latino fathers and their children. *Child Development Perspectives, 6*(3), 232-238. <https://doi.org/10.1111/j.1750-8606.2012.00249.x>
- Cabrera, N. J., Shannon, J. D., & La Taillade, J. J. (2009). Predictors of coparenting in Mexican American families and links to parenting and child social emotional development. *Infant Mental Health Journal: Official Publication of the World Association for Infant Mental Health, 30*(5), 523-548. [https://doi: 10.1002/imhj.20227](https://doi:10.1002/imhj.20227)
- Cabrera, N. J., Shannon, J. D., Mitchell, S. J., & West, J. (2009). Mexican American mothers and fathers' prenatal attitudes and father prenatal involvement: Links to mother–infant

interaction and father engagement. *Sex Roles*, 60(7-8), 510-526.

<https://doi.org/10.1007/s11199-008-9576-2>

Cabrera, N. J., Shannon, J. D., West, J., & Brooks-Gunn, J. (2006). Parental interactions with Latino infants: Variation by country of origin and English proficiency. *Child Development*, 77(5), 1190-1207. <https://doi.org/10.1111/j.1467-8624.2006.00928.x>

Cain, D. S., & Combs-Orme, T. (2005). Family Structure Effects on Parenting Stress and Practices in the African American Family. *Journal of Sociology and Social Welfare*, 32(2), 19–40.

Callender, K. A., Olson, S. L., Choe, D. E., & Sameroff, A. J. (2012). The effects of parental depressive symptoms, appraisals, and physical punishment on later child externalizing behavior. *Journal of Abnormal Child Psychology*, 40(3), 471-483. <https://doi.org/10.1007/s10802-011-9572-9>

Calzada, E. J., Tamis-LeMonda, C. S., & Yoshikawa, H. (2013). Familismo in Mexican and Dominican families from low-income, urban communities. *Journal of Family Issues*, 34(12), 1696-1724. <https://doi.org/10.1177/0192513X12460218>

Camisasca, E., Miragoli, S., & Di Blasio, P. (2014). Is the relationship between marital adjustment and parenting stress mediated or moderated by parenting alliance?. *Europe's Journal of Psychology*, 10(2), 235-254. <https://doi.org/10.5964/ejop.v10i2.724>

Camisasca, E., Miragoli, S., & Di Blasio, P. (2016). Families with distinct levels of marital conflict and child adjustment: Which role for maternal and paternal stress?. *Journal of Child and Family Studies*, 25(3), 733-745. <https://doi.org/10.1007/s10826-015-0261-0>

- Campos, B., & Kim, H. S. (2017). Incorporating the cultural diversity of family and close relationships into the study of health. *American Psychologist*, 72(6), 543-554.
<https://doi.org/10.1037/amp0000122>
- Capps, R. C., Bronte-Tinkew, J., & Horowitz, A. (2010). Acculturation and father engagement with infants among Chinese and Mexican-origin immigrant fathers. *Fathering: A Journal of Theory, Research & Practice about Men as Fathers*, 8(1), 61-92.
<https://doi.org/10.3149/fth.0801.61>
- Cardoso, J. B., & Thompson, S. J. (2010). Common themes of resilience among Latino immigrant families: A systematic review of the literature. *Families in Society*, 91(3), 257-265. <https://doi.org/10.1606/1044-3894.4003>
- Carr, D., Freedman, V. A., Cornman, J. C., & Schwarz, N. (2014). Happy marriage, happy life? Marital quality and subjective well-being in later life. *Journal of Marriage and Family*, 76(5), 930-948. [https://doi: 10.1111/jomf.12133](https://doi:10.1111/jomf.12133)
- Cervantes, R. C., Gattamorta, K. A., & Berger-Cardoso, J. (2019). Examining difference in immigration stress, acculturation stress and mental health outcomes in six Hispanic/Latino nativity and regional groups. *Journal of immigrant and minority health*, 21(1), 14-20.
- Cervantes, R. C., Goldbach, J. T., & Padilla, A. M. (2012). Using qualitative methods for revising items in the Hispanic Stress Inventory. *Hispanic Journal of Behavioral Sciences*, 34(2), 208-231. <https://doi.org/10.1177/0739986312442495>
- Charrois, J., Côté, S. M., Paquin, S., Séguin, J. R., Japel, C., Vitaro, F., ... & Herba, C. M. (2019). Maternal depression in early childhood and child emotional and behavioral outcomes at school age: Examining the roles of preschool childcare quality and current

- maternal depression symptomatology. *European Child & Adolescent Psychiatry*, 29(5), 637-648. [https://doi: 10.1007/s00787-019-01385-7](https://doi.org/10.1007/s00787-019-01385-7)
- Cheah, C. S., Yu, J., Hart, C. H., Özdemir, S. B., Sun, S., Zhou, N., ... & Sunohara, M. (2016). Parenting hassles mediate predictors of Chinese and Korean immigrants' psychologically controlling parenting. *Journal of Applied Developmental Psychology*, 47, 13-22. [https://doi: 10.1016/j.appdev.2016.09.005](https://doi.org/10.1016/j.appdev.2016.09.005)
- Choe, D. E., Olson, S. L., & Sameroff, A. J. (2013). Effects of early maternal distress and parenting on the development of children's self-regulation and externalizing behavior. *Development and Psychopathology*, 25(2), 437-453. [https://doi: 10.1017/S0954579412001162](https://doi.org/10.1017/S0954579412001162)
- Choi, J. K., & Becher, E. H. (2019). Supportive coparenting, parenting stress, harsh parenting, and child behavior problems in nonmarital families. *Family Process*, 58(2), 404-417. [https://doi: 10.1111/famp.12373](https://doi.org/10.1111/famp.12373)
- Christopher, C., Umemura, T., Mann, T., Jacobvitz, D., & Hazen, N. (2015). Marital quality over the transition to parenthood as a predictor of coparenting. *Journal of Child and Family Studies*, 24(12), 3636-3651. <https://doi.org/10.1007/s10826-015-0172-0>
- Clout, D., & Brown, R. (2016). Marital relationship and attachment predictors of postpartum stress, anxiety, and depression symptoms. *Journal of Social and Clinical Psychology*, 35(4), 322-341. [https://doi:10.1521/jscp.2016.35.4.322](https://doi.org/10.1521/jscp.2016.35.4.322)[org/10.1007/s10826-015-0172-0](https://doi.org/10.1007/s10826-015-0172-0)
- Coley, R. L., & Schindler, H. S. (2008). Biological fathers' contributions to maternal and family functioning. *Parenting: Science and Practice*, 8(4), 294-318. [https://doi: 10.1080/15295190802522814](https://doi.org/10.1080/15295190802522814)

- Coontz, S. (2017). Strengthening the Case for Policies to Support Caregiving. *Signs: Journal of Women in Culture and Society*, 42(2), 547-549.
- Crnic, K. A., & Greenberg, M. T. (1990). Minor parenting stresses with young children. *Child Development*, 61(5), 1628-1637. <https://doi.org/10.2307/1130770>
- Crnic, K. A., Gaze, C., & Hoffman, C. (2005). Cumulative parenting stress across the preschool period: Relations to maternal parenting and child behaviour at age 5. *Infant and Child Development: An International Journal of Research and Practice*, 14(2), 117-132. <https://doi.org/10.1002/icd.384>
- Crnic, K., & Low, C. (2002). Everyday stresses and parenting. *Handbook of parenting volume 5 practical issues in parenting*, 242.
- Crnic, K., y Arbona, A. P., Baker, B., & Blacher, J. (2009). Mothers and fathers together: Contrasts in parenting across preschool to early school age in children with developmental delays. *International Review of Research in Mental Retardation*, 37, 3-30. [https://doi: 10.1016/S0074-7750\(09\)37001-9](https://doi: 10.1016/S0074-7750(09)37001-9)
- Connor, P., & López, G. (2016, May 18). *5 facts about the U.S. rank in worldwide migration*. Pew Research Center. <http://www.pewresearch.org/fact-tank/2016/05/18/5-facts-about-the-u-s-rank-in-worldwide-migration/>
- Cowan, P. A., & McHale, J. P. (1996). Coparenting in a family context: emerging achievements, current dilemmas, and future directions. *New directions for child development*, 74, 93-106. <https://doi: 10.1002/cd.23219967408>
- Davis, J. A., Alto, M. E., Oshri, A., Rogosch, F., Cicchetti, D., & Toth, S. L. (2020). The effect of maternal depression on mental representations and child negative affect. *Journal of affective disorders*, 261, 9-20. <https://doi.org/10.1016/j.jad.2019.09.073>

- Davis, R. N., Caldwell, C. H., Clark, S. J., & Davis, M. M. (2009). Depressive symptoms in nonresident African American fathers and involvement with their sons. *Pediatrics*, 124(6), 1611-1618. <https://doi.org/10.1542/peds.2009-0718>
- D'Angelo, A. V., Palacios, N. A., & Chase-Lansdale, L. (2012). Latino immigrant differences in father involvement with infants. *Fathering: A Journal of Theory, Research & Practice about Men as Fathers*, 10(2), 178–212. <https://doi.org/10.3149/fth.1002.178>
- Deater-Deckard, K. (2008). *Parenting stress*. 8 (5), Yale University Press. <https://doi.org/10.12987/yale/9780300103939.001.0001>
- Delvecchio, E., Sciandra, A., Finos, L., Mazzeschi, C., & Riso, D. D. (2015). The role of co-parenting alliance as a mediator between trait anxiety, family system maladjustment, and parenting stress in a sample of non-clinical Italian parents. *Frontiers in Psychology*, 6, 1177. <https://doi.org/10.3389/fpsyg.2015.01177>
- Detle-Hagenmeyer, D. E., & Reichle, B. (2014). Parents' depressive symptoms and children's adjustment over time are mediated by parenting, but differentially for fathers and mothers. *European Journal of Developmental Psychology*, 11(2), 196–210. <https://doi.org/10.1080/17405629.2013.848789>
- Dib, E. P., Padovani, F. H. P., & Perosa, G. B. (2019). Mother-child interaction: Implications of chronic maternal anxiety and depression. *Psicologia: Reflexão e Crítica*, 32(1), 10. <https://doi.org/10.1186/s41155-019-0123-6>
- DiGangi, J. A., Goddard, A. J., Miller, S. A., Leon, G., & Jason, L. A. (2016). Differences in PTSD symptomatology among Latinos with childhood and adult trauma: The moderating effect of acculturation. *HSOA Journal of Addiction & Neuropharmacology*, 3.

- Dillon, F. R., De La Rosa, M., & Ibañez, G. E. (2013). Acculturative stress and diminishing family cohesion among recent Latino immigrants. *Journal of Immigrant and Minority Health, 15*(3), 484-491. <https://doi.org/10.1007/s10903-012-9678-3>
- Dishion, T. J., Shaw, D., Connell, A., Gardner, F., Weaver, C., & Wilson, M. (2008). The family check-up with high-risk indigent families: Preventing problem behavior by increasing parents' positive behavior support in early childhood. *Child Development, 79*(5), 1395-1414. <https://doi.org/10.1111/j.1467-8624.2008.01195.x>
- Dorsey, S., Forehand, R., & Brody, G. (2007). Coparenting conflict and parenting behavior in economically disadvantaged single parent African American families: The role of maternal psychological distress. *Journal of Family Violence, 22*(7), 621-630. <https://doi.org/10.1007/s10896-007-9114-y>
- Driscoll, M. W., & Torres, L. (2019). The protective roles of Latinx intercultural competence and acculturation on acculturative stress and depression: A brief longitudinal study. *Journal of Latinx Psychology, 8*(2), 161-177. <https://doi.org/10.1037/lat0000138>
- Du Rocher Schudlich, T. D., Papp, L. M., & Cummings, E. M. (2011). Relations between spouses' depressive symptoms and marital conflict: A longitudinal investigation of the role of conflict resolution styles. *Journal of Family Psychology, 25*(4), 531. <https://doi.org/10.1037/a0024216>
- Dubois-Comtois, K., Moss, E., Cyr, C., & Pascuzzo, K. (2013). Behavior problems in middle childhood: The predictive role of maternal distress, child attachment, and mother-child interactions. *Journal of Abnormal Child Psychology, 41*(8), 1311-1324. <https://doi.org/10.1007/s10802-013-9764-6>

- Dunning, M. J., & Giallo, R. (2012). Fatigue, parenting stress, self-efficacy and satisfaction in mothers of infants and young children. *Journal of Reproductive and Infant Psychology*, 30(2), 145-159. <https://doi.org/10.1080/02646838.2012.693910>
- Durtschi, J. A., Soloski, K. L., & Kimmes, J. (2017). The dyadic effects of supportive coparenting and parental stress on relationship quality across the transition to parenthood. *Journal of Marital and Family Therapy*, 43(2), 308-321. <https://doi.org/10.1111/jmft.12194>
- Dush, C. M. K., Yavorsky, J. E., & Schoppe-Sullivan, S. J. (2018). What are men doing while women perform extra unpaid labor? Leisure and specialization at the transitions to parenthood. *Sex Roles*, 78(11-12), 715-730. <https://doi.org/10.1007/s11199-017-0841-0>
- El-Sheikh, M., & Elmore-Staton, L. O. R. I. (2004). The link between marital conflict and child adjustment: Parent-child conflict and perceived attachments as mediators, potentiators, and mitigators of risk. *Development and Psychopathology*, 16(3), 631-648. <https://doi.org/10.1017/S0954579404004705>
- Fagan, J. (2009). Relationship quality and changes in depressive symptoms among urban, married African Americans, Hispanics, and Whites. *Family Relations*, 58(3), 259-274. <https://doi.org/10.1111/j.1741-3729.2009.00551.x>
- Fagan, J., & Lee, Y. (2014). Longitudinal associations among fathers' perception of coparenting, partner relationship quality, and paternal stress during early childhood. *Family Process*, 53(1), 80-96. <https://doi.org/10.1111/famp.12055>
- Fagan, J., & Palkovitz, R. (2011). Coparenting and relationship quality effects on father engagement: Variations by residence, romance. *Journal of Marriage and Family*, 73(3), 637-653. <https://doi.org/10.1111/j.1741-3737.2011.00834.x>

- Falconier, M. K., Nussbeck, F., & Bodenmann, G. (2013). Immigration stress and relationship satisfaction in Latino couples: The role of dyadic coping. *Journal of Social and Clinical Psychology, 32*(8), 813-843. <https://doi.org/10.1521/jscp.2013.32.8.813>
- Falconier, M. K., Nussbeck, F., Bodenmann, G., Schneider, H., & Bradbury, T. (2015). Stress from daily hassles in couples: Its effects on intradyadic stress, relationship satisfaction, and physical and psychological well-being. *Journal of Marital and Family Therapy, 41*(2), 221-235. <https://doi: 10.1111/jmft.12073>
- Fan, J., Ren, L., & Li, X. (2020). Contributions of child temperament and marital quality to coparenting among Chinese families. *Children and Youth Services Review, 108*, 104610. <https://doi: 10.1016/j.chldyouth.2019.104610>
- Favez, N., Tissot, H., Frascarolo, F., Stiefel, F., & Despland, J. N. (2016). Sense of competence and beliefs about parental roles in mothers and fathers as predictors of coparenting and child engagement in mother–father–infant triadic interactions. *Infant and Child Development, 25*(4), 283-301. <https://doi.org/10.1002/icd.1934>
- Feinberg, M. E. (2003). The internal structure and ecological context of coparenting: A framework for research and intervention. *Parenting: Science and Practice, 3*(2), 95-131. https://doi: 10.1207/S15327922PAR0302_01
- Feinberg, M. E., Kan, M. L., & Goslin, M. C. (2009). Enhancing coparenting, parenting, and child self-regulation: Effects of family foundations 1 year after birth. *Prevention Science, 10*(3), 276-285. <https://doi: 10.1007/s11121-009-0130-4>
- Field, T. (2010). Postpartum depression effects on early interactions, parenting, and safety practices: A review. *Infant Behavior and Development, 33*(1), 1-6. <https://doi: 10.1016/j.infbeh.2009.10.005>

- Finch, B. K., & Vega, W. A. (2003). Acculturation stress, social support, and self-rated health among Latinos in California. *Journal of Immigrant Health*, 5(3), 109-117. [https://doi: 10.1023/a:1023987717921](https://doi.org/10.1023/a:1023987717921)
- Fincham, F. D., & Beach, S. R. (2010). Marriage in the new millennium: A decade in review. *Journal of Marriage and Family*, 72(3), 630-649. <https://doi.org/10.1111/j.1741-3737.2010.00722.x>
- Fink, B. C., & Shapiro, A. F. (2013). Coping mediates the association between marital instability and depression, but not marital satisfaction and depression. *Couple and Family Psychology: Research and Practice*, 2(1), 1–13. <https://doi.org/10.1037/a0031763>
- Frank, K., & Hou, F. (2015). Source-country gender roles and the division of labor within immigrant families. *Journal of Marriage and Family*, 77(2), 557-574. <https://doi.org/10.1111/jomf.12171>
- Fuller, B., & García Coll, C. (2010). Learning from Latinos: contexts, families, and child development in motion. *Developmental Psychology*, 46(3), 559 –565. <https://doi.org/10.1037/a0019412>
- Garcia, A. S., Ren, L., Esteraich, J. M., & Raikes, H. H. (2017). Influence of child behavioral problems and parenting stress on parent–child conflict among low-income families: The moderating role of maternal nativity. *Merrill-Palmer Quarterly*, 63(3), 311-339. <https://doi.org/10.13110/merrpalmquar1982.63.3.0311>
- Giallo, R., Cooklin, A., Wade, C., D'Esposito, F., & Nicholson, J. M. (2014). Maternal postnatal mental health and later emotional-behavioural development of children: The mediating role of parenting behaviour. *Child: Care, Health and Development*, 40(3), 327-336. [https://doi: 10.1111/cch.12028](https://doi.org/10.1111/cch.12028)

- Goldfarb, M. R., & Trudel, G. (2019). Marital quality and depression: a review. *Marriage & Family Review*, 55(8), 737-763. <https://doi.org/10.1080/01494929.2019.1610136>
- Goodman, S. H., & Tully, E. C. (2009). Recurrence of depression during pregnancy: Psychosocial and personal functioning correlates. *Depression & Anxiety*, 26(6), 557–567. <https://doi.org/10.1002/da.20421>
- Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., & Heyward, D. (2011). Maternal depression and child psychopathology: A meta-analytic review. *Clinical Child and Family Psychology Review*, 14(1), 1-27. <https://doi.org/10.1007/s10567-010-0080-1>
- Gouveia, M. J., Carona, C., Canavarro, M. C., & Moreira, H. (2016). Self-compassion and dispositional mindfulness are associated with parenting styles and parenting stress: The mediating role of mindful parenting. *Mindfulness*, 7(3), 700-712. <https://doi.org/10.1007/s12671-016-0507-y>
- Gravener, J. A., Rogosch, F. A., Oshri, A., Narayan, A. J., Cicchetti, D., & Toth, S. L. (2012). The relations among maternal depressive disorder, maternal expressed emotion, and toddler behavior problems and attachment. *Journal of Abnormal Child Psychology*, 40(5), 803-813. <https://doi.org/10.1007/s10802-011-9598-z>
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31(1), 72-92. <https://doi.org/10.5465/amr.2006.19379625>
- Grolnick, W. S., Weiss, L., McKenzie, L., & Wrightman, J. (1996). Contextual, cognitive, and adolescent factors associated with parenting in adolescence. *Journal of Youth and Adolescence*, 25(1), 33-54. <https://doi.org/10.1007/BF01537379>

- Hakvoort, E. M., Bos, H. M., Van Balen, F., & Hermanns, J. M. (2010). Family relationships and the psychosocial adjustment of school-aged children in intact families. *The Journal of Genetic Psychology, 171*(2), 182-201. <https://doi.org/10.1080/00221321003657445>
- Hammett, J. F., Castañeda, D. M., & Ulloa, E. C. (2016). Predicting mental health based on partners' marital distress: a latent profile analysis. *The Family Journal, 24*(3), 205-215. <https://doi.org/10.1177/1066480716648685>
- Harmon, D. K., & Perry, A. R. (2011). Fathers' unaccounted contributions: Paternal involvement and maternal stress. *Families in Society, 92*(2), 176-182. <https://doi.org/10.1606/1044-3894.4101>
- Herr, N. R., Hammen, C., & Brennan, P. A. (2007). Current and past depression as predictors of family functioning: A comparison of men and women in a community sample. *Journal of Family Psychology, 21*, 694-702. <https://doi.org/10.1037/0893-3200.21.4.694>
- Hoffman, C., Crnic, K. A., & Baker, J. K. (2006). Maternal depression and parenting: Implications for children's emergent emotion regulation and behavioral functioning. *Parenting: Science and Practice, 6*(4), 271-295. https://doi.org/10.1207/s15327922par0604_1
- Holland, A. S., & McElwain, N. L. (2013). Maternal and paternal perceptions of coparenting as a link between marital quality and the parent-toddler relationship. *Journal of Family Psychology, 27*(1), 117. <https://doi.org/10.1037/a0031427>
- Hollist, C. S., Miller, R. B., Falceto, O. G., & Fernandes, C. L. C. (2007). Marital satisfaction and depression: A replication of the marital discord model in a Latino sample. *Family Process, 46*(4), 485-498. <https://doi.org/10.1111/j.1545-5300.2007.00227.x>

- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- Huang, C. Y., Roberts, Y. H., Costeines, J., & Kaufman, J. S. (2019). Longitudinal trajectories of parenting stress among ethnic minority adolescent mothers. *Journal of Child and Family Studies*, 28(5), 1368-1378. <https://doi.org/10.1007/s10826-019-01356-1>
- Huth-Bocks, A. C., & Hughes, H. M. (2008). Parenting stress, parenting behavior, and children's adjustment in families experiencing intimate partner violence. *Journal of Family Violence*, 23(4), 243-251. <https://doi.org/10.1007/s10896-007-9148-1>
- Jain, A. (2014). *Gender role attitudes and marital satisfaction among Asian Indian couples living in the US: An exploratory study*. [Doctoral dissertation, Rutgers University-Graduate School of Applied and Professional Psychology]. <https://doi.org/10.7282/T30P0XGF>
- Jackson, J. B., Miller, R. B., Oka, M., & Henry, R. G. (2014). Gender differences in marital satisfaction: A meta-analysis. *Journal of marriage and family*, 76(1), 105-129. <https://doi.org/10.1111/jomf.12077>
- Johnson, P. L., & Flake, E. M. (2007). Maternal depression and child outcomes. *Pediatric Annals*, 36(4). <https://doi.org/10.3928/0090-4481-20070401-08>
- Jones, D. J. (2011). *Coparenting in extended kinship systems: African American, Hispanic, Asian heritage, and Native American families*. (K. M. Lindahl, Ed.). In J. P. McHale & K. M. Lindahl (Eds.), *Coparenting: A conceptual and clinical examination of family systems* (p. 61–79). American Psychological Association. <https://doi.org/10.1037/12328-003>

- Kane, P., & Garber, J. (2004). The relations among depression in fathers, children's psychopathology, and father-child conflict: A meta-analysis. *Clinical Psychology Review, 24*(3), 339-360. <https://doi.org/10.1016/j.cpr.2004.03.004>
- Kanter, J. B., & Proulx, C. M. (2019). The longitudinal association between maternal parenting stress and spousal supportiveness. *Journal of Family Psychology, 33*(1), 121-131. <https://doi.org/10.1037/fam0000478>
- Kim, S.Y., Wang, Y., Orozco-Lapray, D., Shen, Y., & Murtuza, M. (2013). Does “tiger parenting” exist? Parenting profiles of Chinese Americans and adolescent developmental outcomes. *Asian American Journal of Psychology, 4*(1), 7-18. <https://doi.org/10.1037/a0030612>
- Kingsbury, A. M., Hayatbakhsh, R., Mamun, A. M., Clavarino, A. M., Williams, G., & Najman, J. M. (2015). Trajectories and predictors of women's depression following the birth of an infant to 21 years: A longitudinal study. *Maternal and Child Health Journal, 19*(4), 877-888. <https://doi.org/10.1007/s10995-014-1589-6>
- Kitzmann, K. M. (2000). Effects of marital conflict on subsequent triadic family interactions and parenting. *Developmental Psychology, 36*(1), 3-13. <https://doi.org/10.1037/0012-1649.36.1.3>
- Kolak, A. M., & Volling, B. L. (2007). Parental expressiveness as a moderator of coparenting and marital relationship quality. *Family Relations, 56*(5), 467-478. <https://doi.org/10.1111/j.1741-3729.2007.00474.x>
- Krishnakumar, A., & Buehler, C. (2000). Interparental conflict and parenting behaviors: A meta-analytic review. *Family Relations, 49*(1), 25-44. <https://doi.org/10.1111/j.1741-3729.2000.00025.x>

- Kwok, S. Y., Cheng, L., Chow, B. W., & Ling, C. C. (2015). The spillover effect of parenting on marital satisfaction among Chinese mothers. *Journal of Child and Family Studies*, 24(3), 772-783. <https://doi.org/10.1007/s10826-013-9888-x>
- Lau, E. Y. H., & Power, T. G. (2019). Coparenting, Parenting Stress, and Authoritative Parenting among Hong Kong Chinese Mothers and Fathers. *Parenting*, 1-10. <https://doi.org/10.1080/15295192.2019.1694831>
- Lavee, Y., Sharlin, S., & Katz, R. (1996). The effect of parenting stress on marital quality: An integrated mother-father model. *Journal of Family Issues*, 17(1), 114-135. <https://doi.org/10.1177/019251396017001007>
- Le, Y., Fredman, S. J., & Feinberg, M. E. (2017). Parenting stress mediates the association between negative affectivity and harsh parenting: A longitudinal dyadic analysis. *Journal of Family Psychology*, 31(6), 679. <https://doi.org/10.1037/fam0000315>
- Leckman-Westin, E., Cohen, P. R., & Stueve, A. (2009). Maternal depression and mother-child interaction patterns: Association with toddler problems and continuity of effects to late childhood. *Journal of Child Psychology and Psychiatry*, 50(9), 1176-1184. <https://doi.org/10.1111/j.1469-7610.2009.02083.x>
- Leerkes, E. M., Blankson, A. N., & O'Brien, M. (2009). Differential effects of maternal sensitivity to infant distress and nondistress on social-emotional functioning. *Child Development*, 80(3), 762-775. <https://doi.org/10.1111/j.1467-8624.2009.01296.x>
- Leidy, M. S., Guerra, N. G., & Toro, R. I. (2010). Positive parenting, family cohesion, and child social competence among immigrant Latino families. *Journal of Family Psychology*, 24(3), 252-260. <https://doi.org/10.1037/a0019407>

- Leung, D. W., & Slep, A. M. S. (2006). Predicting inept discipline: The role of parental depressive symptoms, anger, and attributions. *Journal of Consulting and Clinical Psychology, 74*, 524–534. <https://doi.org/10.1037/0022-006X.74.3.524>
- Leyendecker, B., Cabrera, N., Lembcke, H., Willard, J., Kohl, K., & Spiegler, O. (2018). Parenting in a New Land. *European Psychologist, 23*(1), 57–71. <https://doi.org/10.1027/1016-9040/a000316>
- Levitt, M. J., Lane, J. D., & Levitt, J. (2005). Immigration stress, social support, and adjustment in the first postmigration year: An intergenerational analysis. *Research in Human Development, 2*(4), 159-177. https://doi.org/10.1207/s15427617rhd0204_1
- Llerena-Quinn, R., & Bacigalupe, G. (2009). Constructions of difference among Latino/Latina immigrant and non-Hispanic White couples. *Intercultural couples: Exploring diversity in intimate relationships*, 21-30. <https://doi.org/10.1177/1066480717697680>
- Liu, C., & Wu, X. C. (2018). Dyadic effects of marital satisfaction on coparenting in Chinese families: Based on the actor-partner interdependence model. *International Journal of Psychology, 53*(3), 210-217. <https://doi: 10.1002/ijop.12274>
- López, G., & Bialik, K. (2017, May 03). *Key findings about U.S. immigrants*. Pew Research Center. <http://www.pewresearch.org/fact-tank/2017/05/03/key-findings-about-u-s-immigrants>
- Lopez, Mark Hugo, Jeffrey Passel, and Molly Rohal. (2015). *Modern Immigration Wave Brings 59 Million to U.S.* Pew Research Center. https://espas.secure.europarl.europa.eu/orbis/sites/default/files/generated/document/en/Modern-immigration-wave_REPORT.pdf

- Lorber, M. F., & O’Leary, S. G. (2005). Mediated paths to overreactive discipline: mothers' experienced emotion, appraisals, and physiological responses. *Journal of Consulting and Clinical Psychology, 73*(5), 972–981. <https://doi.org/10.1037/0022-006X.73.5.972>
- Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review, 20*(5), 561-592. [https://doi: 10.1016/s0272-7358\(98\)00100-7](https://doi: 10.1016/s0272-7358(98)00100-7)
- MacKenzie, J., Smith, T. W., Uchino, B., White, P. H., Light, K. C., & Grewen, K. M. (2014). Depressive symptoms, anger/hostility, and relationship quality in young couples. *Journal of Social and Clinical Psychology, 33*(4), 380-396. <https://doi.org/10.1521/jscp.2014.33.4.380>
- Marchand-Reilly, J. F. (2012). The role of fathers’ depressive symptoms and lax and over-reactive discipline in children’s externalizing and internalizing behaviors. *Journal of Adult Development, 19*(4), 181-189. <https://doi.org/10.1007/s10804-012-9145-3>
- Margolin, G., Gordis, E. B., & John, R. S. (2001). Coparenting: a link between marital conflict and parenting in two-parent families. *Journal of Family Psychology, 15*(1), 3–21. <https://doi.org/10.1037/0893-3200.15.1.3>
- Mark Cummings, E., Keller, P. S., & Davies, P. T. (2005). Towards a family process model of maternal and paternal depressive symptoms: Exploring multiple relations with child and family functioning. *Journal of Child Psychology and Psychiatry, 46*(5), 479-489. <https://doi: 10.1111/j.1469-7610.2004.00368.x>
- Martinez, C. R. (2006). Effects of differential family acculturation on Latino adolescent substance use. *Family Relations, 55*(3), 306-317. <https://doi.org/10.1111/j.1741-3729.2006.00404.x>

- McCormick, M. P., Hsueh, J., Merrilees, C., Chou, P., & Mark Cummings, E. (2017). Moods, stressors, and severity of marital conflict: A daily diary study of low-income families. *Family Relations*, 66(3), 425-440. <https://doi.org/10.1111/fare.12258>
- McHale, J. P. (1995). Coparenting and triadic interactions during infancy: The roles of marital distress and child gender. *Developmental Psychology*, 31(6), 985–996. <https://doi.org/10.1037/0012-1649.31.6.985>
- McHale, J. P., Kuersten-Hogan, R., & Rao, N. (2004). Growing points for coparenting theory and research. *Journal of Adult Development*, 11(3), 221-234. [https://doi: 10.1023/B:JADE.0000035629.29960.ed](https://doi.org/10.1023/B:JADE.0000035629.29960.ed)
- McHale, J. P., Kuersten-Hogan, R., Lauretti, A., & Rasmussen, J. L. (2000). Parental reports of coparenting and observed coparenting behavior during the toddler period. *Journal of Family Psychology*, 14(2), 220. [https://doi: 10.1037//0893-3200.14.2.220](https://doi.org/10.1037//0893-3200.14.2.220)
- McHale, J. P. (Ed.). (2011). *Coparenting in diverse family systems*. In J. P. McHale & K. M. Lindahl (Eds.), *Coparenting: A conceptual and clinical examination of family systems* (p. 15–37). American Psychological Association. <https://doi.org/10.1037/12328-001>
- Mental Health Foundation (n.d.). Mental Health Foundation. <https://www.mentalhealth.org.uk/>
- Merrifield, K. A., & Gamble, W. C. (2013). Associations among marital qualities, supportive and undermining coparenting, and parenting self-efficacy: Testing spillover and stress-buffering processes. *Journal of Family Issues*, 34(4), 510-533. <https://doi.org/10.1177/0192513X12445561>
- Migration Policy Institute, (2018). *State Immigration Data Profiles*. Migration Policy Institute. <https://www.migrationpolicy.org/data/state-profiles/state/demographics/US>

- Miller, R. B., Mason, T. M., Canlas, J. M., Wang, D., Nelson, D. A., & Hart, C. H. (2013). Marital satisfaction and depressive symptoms in China. *Journal of Family Psychology*, 27(4), 677. [https://doi: 10.1037/a0033333](https://doi.org/10.1037/a0033333)
- Morrill, M. I., Hines, D. A., Mahmood, S., & Cordova, J. V. (2010). Pathways between marriage and parenting for wives and husbands: The role of coparenting. *Family Process*, 49(1), 59-73. [https://doi: 10.1111/j.1545-5300.2010.01308.x](https://doi.org/10.1111/j.1545-5300.2010.01308.x)
- Mughal, M. K., Giallo, R., Arnold, P. D., Kehler, H., Bright, K., Benzies, K., ... & Kingston, D. (2019). Trajectories of maternal distress and risk of child developmental delays: Findings from the All Our Families (AOF) pregnancy cohort. *Journal of Affective Disorders*, 248, 1-12. [https://doi: 10.1016/j.jad.2018.12.132](https://doi.org/10.1016/j.jad.2018.12.132)
- Mulsow, M., Caldera, Y. M., Pursley, M., Reifman, A., & Huston, A. C. (2002). Multilevel factors influencing maternal stress during the first three years. *Journal of Marriage and Family*, 64(4), 944-956. <https://doi.org/10.1111/j.1741-3737.2002.00944.x>
- Muthén, L. K., & Muthén, B. O. (2017). Mplus: Statistical Analysis with Latent Variables: User's Guide (Version 8). Los Angeles, CA: Authors.
- Najman, J. M., Khatun, M., Mamun, A., Clavarino, A., Williams, G. M., Scott, J., ... & Alati, R. (2014). Does depression experienced by mothers leads to a decline in marital quality: a 21-year longitudinal study. *Social Psychiatry and Psychiatric Epidemiology*, 49(1), 121-132. [https://doi: 10.1007/s00127-013-0749-0](https://doi.org/10.1007/s00127-013-0749-0)
- Negy, C., Hammons, M. E., Reig-Ferrer, A., & Carper, T. M. (2010). The importance of addressing acculturative stress in marital therapy with Hispanic immigrant women. *International Journal of Clinical and Health Psychology*, 10, 5-21.

- Newland, R. P., & Crnic, K. A. (2017). Developmental risk and goodness of fit in the mother–child relationship: Links to parenting stress and children's behaviour problems. *Infant and Child Development*, 26(2), e1980. <https://doi.org/10.1002/icd.1980>
- Nomaguchi, K. M. (2012). Parenthood and psychological well-being: Clarifying the role of child age and parent–child relationship quality. *Social Science Research*, 41(2), 489-498. <https://doi.org/10.1016/j.ssresearch.2011.08.001>
- Nomaguchi, K., & House, A. N. (2013). Racial-ethnic disparities in maternal parenting stress: The role of structural disadvantages and parenting values. *Journal of Health and Social Behavior*, 54(3), 386-404. <https://doi.org/10.1177/0022146513498511>
- Nomaguchi, K., Brown, S., & Leyman, T. M. (2017). Fathers' participation in parenting and maternal parenting stress: Variation by relationship status. *Journal of Family Issues*, 38(8), 1132-1156. <https://doi.org/10.1177/0192513X15623586>
- Noonan, K., Burns, R., & Violato, M. (2018). Family income, maternal psychological distress and child socio-emotional behaviour: Longitudinal findings from the UK Millennium Cohort Study. *SSM-Population Health*, 4, 280-290. <https://doi.org/10.1016/j.ssmph.2018.03.002>
- O'Brien, M. (2005). Studying individual and family development: Linking theory and research. *Journal of Marriage and Family*, 67(4), 880-890. <https://doi.org/10.1111/j.1741-3737.2005.00181.x>
- Oh, E. J., & Oh, M. J. (2018). The effect of parenting stress and acculturative stress on parenting efficacy in Vietnamese married immigrant women. *J Korean Soc Matern Child Health*, 22(2), 96. <http://doi.org/10.21896/jksmch.2018.22.2.96>

- Oosterhouse, K., Riggs, S. A., Kaminski, P., & Blumenthal, H. (2020). The Executive Subsystem in Middle Childhood: Adult Mental Health, Marital Satisfaction, and Secure-Base Parenting. *Family Relations*, 69(1), 166-179. <https://doi.org/10.1111/fare.12408>
- Ornelas, I. J., & Perreira, K. M. (2011). The role of migration in the development of depressive symptoms among Latino immigrant parents in the USA. *Social Science & Medicine*, 73(8), 1169-1177. <https://doi.org/10.1016/j.socscimed.2011.07.002>
- Ornelas, I. J., Perreira, K. M., Beeber, L., & Maxwell, L. (2009). Challenges and strategies to maintaining emotional health: Qualitative perspectives of Mexican immigrant mothers. *Journal of Family Issues*, 30(11), 1556-1575. <https://doi.org/10.1177/0192513X09336651>
- Papp, L. M. (2010). The course and quality of intimate relationships among psychologically distressed mothers. *American Journal of Orthopsychiatry*, 80(1), 71. <https://doi.org/10.1111/j.1939-0025.2010.01008.x>
- Parker, M. L., Tambling, R. B., & Campbell, K. (2013). Dyadic adjustment and depressive symptoms: The mediating role of attachment. *The Family Journal*, 21(1), 28-34. <https://doi.org/10.1177/1066480712456674>
- Parkes, A., Sweeting, H., & Wight, D. (2015). Parenting stress and parent support among mothers with high and low education. *Journal of Family Psychology*, 29(6), 907. <https://doi.org/10.1037/fam0000129>
- Parra-Cardona, J. R., López-Zerón, G., Villa, M., Zamudio, E., Escobar-Chew, A. R., & Rodríguez, M. M. D. (2017). Enhancing parenting practices with Latino/a immigrants: Integrating evidence-based knowledge and culture according to the voices of Latino/a

- parents. *Clinical Social Work Journal*, 45(1), 88-98. <https://doi.org/10.1007/s10615-016-0589-y>
- Pedro, M. F., Ribeiro, T., & Shelton, K. H. (2012). Marital satisfaction and partners' parenting practices: The mediating role of coparenting behavior. *Journal of Family Psychology*, 26(4), 509-522. <https://doi.org/10.1037/a0029121>
- Peltz, J. S., Rogge, R. D., & Sturge-Apple, M. L. (2018). Transactions within the family: Coparenting mediates associations between parents' relationship satisfaction and the parent-child relationship. *Journal of Family Psychology*, 32(5), 553-564. <https://doi.org/10.1037/fam0000413>
- Perreira, K. M., Chapman, M. V., & Stein, G. L. (2006). Becoming an American parent: Overcoming challenges and finding strength in a new immigrant Latino community. *Journal of Family Issues*, 27(10), 1383-1414. <https://doi.org/10.1177/0192513X06290041>
- Peterson-Post, K. M., Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2014). Perceived criticism and marital adjustment predict depressive symptoms in a community sample. *Behavior Therapy*, 45(4), 564-575. <https://doi.org/10.1016/j.beth.2014.03.002>
- Pew Research Center, (2019). *Key findings about U.S. immigrants*. Pew Research Center. [https://www.pewresearch.org/fact-tank/2019/06/17/key-findings-about-u-s-immigrants/#:~:text=The%20U.S.%20foreign%2Dborn%20population,share%20\(4.7%25\)%20in%201970.](https://www.pewresearch.org/fact-tank/2019/06/17/key-findings-about-u-s-immigrants/#:~:text=The%20U.S.%20foreign%2Dborn%20population,share%20(4.7%25)%20in%201970.)
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185-227. <https://doi.org/10.1080/00273170701341316>

- Proulx, C. M., Helms, H. M., & Buehler, C. (2007). Marital quality and personal well-being: A meta-analysis. *Journal of Marriage and Family*, 69(3), 576-593. [https://doi: 10.1111/j.1741-3737.2007.00393.x](https://doi.org/10.1111/j.1741-3737.2007.00393.x)
- Rafferty, Y., & Griffin, K. W. (2010). Parenting behaviours among low-income mothers of preschool age children in the USA: implications for parenting programmes. *International Journal of Early Years Education*, 18(2), 143-157. <https://doi.org/10.1080/09669760.2010.494428>
- Randall, A. K., & Bodenmann, G. (2009). The role of stress on close relationships and marital satisfaction. *Clinical Psychology Review*, 29(2), 105-115. [https://doi: 10.1016/j.cpr.2008.10.004](https://doi.org/10.1016/j.cpr.2008.10.004)
- Randall, A. K., & Bodenmann, G. (2017). Stress and its associations with relationship satisfaction. *Current Opinion in Psychology*, 13, 96-106. [https://doi: 10.1016/j.copsyc.2016.05.010](https://doi.org/10.1016/j.copsyc.2016.05.010); [10.1016/j.cpr.2008.10.004](https://doi.org/10.1016/j.cpr.2008.10.004)
- Rehman, U. S., Gollan, J., & Mortimer, A. R. (2008). The marital context of depression: Research, limitations, and new directions. *Clinical Psychology Review*, 28(2), 179-198. [https://doi: 10.1016/j.cpr.2007.04.007](https://doi.org/10.1016/j.cpr.2007.04.007)
- Ren, L., & Xu, W. (2019). Coparenting and Chinese preschoolers' social-emotional development: Child routines as a mediator. *Children and Youth Services Review*, 107, 104549. [https://doi: 10.1016/j.childyouth.2019.104549](https://doi.org/10.1016/j.childyouth.2019.104549)
- Rettger, J. P., Kletter, H., & Carrion, V. (2016). Trauma and acculturative stress. In *Psychotherapy for Immigrant Youth* (pp. 87-105). Springer, Cham. [https://doi: 10.1007/978-3-319-24693-2_5](https://doi.org/10.1007/978-3-319-24693-2_5)

- Riina, E. M., & McHale, S. M. (2015). African American couples' coparenting satisfaction and marital characteristics in the first two decades of marriage. *Journal of family issues*, 36(7), 902-923. <https://doi.org/10.1177/0192513X13495855>
- Rivera, F. I., Guarnaccia, P. J., Mulvaney-Day, N., Lin, J. Y., Torres, M., & Alegria, M. (2008). Family cohesion and its relationship to psychological distress among Latino groups. *Hispanic Journal of Behavioral Sciences*, 30(3), 357-378. [https://doi: 10.1177/0739986308318713](https://doi.org/10.1177/0739986308318713)
- Rodgers, A. Y. (1998). Multiple sources of stress and parenting behavior. *Children and Youth Services Review*, 20(6), 525-546. [https://doi.org/10.1016/S0190-7409\(98\)00022-X](https://doi.org/10.1016/S0190-7409(98)00022-X)
- Rohanachandra, Y. M., Prathapan, S., & Wijetunge, G. S. (2018). Characteristics of mothers' depressive illness as predictors for emotional and behavioural problems in children in a Sri Lankan setting. *Asian Journal of Psychiatry*, 33, 74 –77. [https://doi: 10.1016/j.ajp.2018.03.014](https://doi.org/10.1016/j.ajp.2018.03.014)
- Ross, J. M., Karney, B. R., Nguyen, T. P., & Bradbury, T. N. (2019). Communication that is maladaptive for middle-class couples is adaptive for socioeconomically disadvantaged couples. *Journal of Personality and Social Psychology*, 116(4), 582 –597. <https://doi.org/10.1037/pspi0000158>
- Royal, K. J., Eaton, S. C., Smith, N., Cliette, G., & Livingston, J. N. (2017). The Impact of Parental Stress and Social Support on Behavioral Outcomes of Children in African American Single-Mother Households. *Journal of Black Sexuality and Relationships*, 3(4), 17-33. [https://doi: 10.1353/bsr.2017.0011](https://doi.org/10.1353/bsr.2017.0011)
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity,

- and adjustment. *Journal of Personality and Social Psychology*, 79(1), 49. [https://doi: 10.1037//0022-3514.79.1.49](https://doi.org/10.1037//0022-3514.79.1.49)
- Schmied, V., Johnson, M., Naidoo, N., Austin, M. P., Matthey, S., Kemp, L., ... & Yeo, A. (2013). Maternal mental health in Australia and New Zealand: A review of longitudinal studies. *Women and Birth*, 26(3), 167-178. [https://doi: 10.1016/j.wombi.2013.02.006](https://doi.org/10.1016/j.wombi.2013.02.006)
- Schoppe-Sullivan, S. J., Brown, G. L., Cannon, E. A., Mangelsdorf, S. C., & Sokolowski, M. S. (2008). Maternal gatekeeping, coparenting quality, and fathering behavior in families with infants. *Journal of Family Psychology*, 22(3), 389-398. <https://doi.org/10.1037/0893-3200.22.3.389>
- Schoppe-Sullivan, S. J., & Mangelsdorf, S. C. (2013). Parent characteristics and early coparenting behavior at the transition to parenthood. *Social Development*, 22(2), 363-383. <https://doi.org/10.1111/sode.12014>
- Schoppe, S. J., Mangelsdorf, S. C., & Frosch, C. A. (2001). Coparenting, family process, and family structure: Implications for preschoolers' externalizing behavior problems. *Journal of Family Psychology*, 15(3), 526–545. <https://doi.org/10.1037/0893-3200.15.3.526>
- Shanahan, L., McHale, S. M., Crouter, A. C., & Osgood, D. W. (2007). Warmth with mothers and fathers from middle childhood to late adolescence: Within-and between-families comparisons. *Developmental Psychology*, 43(3), 551. [https://doi: 10.1037/0012-1649.43.3.551](https://doi.org/10.1037/0012-1649.43.3.551)
- Shapiro, D. (2014). Stepparents and parenting stress: The roles of gender, marital quality, and views about gender roles. *Family Process*, 53(1), 97-108. [https://doi: 10.1111/famp.12062](https://doi.org/10.1111/famp.12062)

- Silinskas, G., Kiuru, N., Aunola, K., Metsäpelto, R. L., Lerkkanen, M. K., & Nurmi, J. E. (2020). Maternal affection moderates the associations between parenting stress and early adolescents' externalizing and internalizing behavior. *The Journal of Early Adolescence*, 40(2), 221-248. <https://doi.org/10.1177/0272431619833490>
- Simpson, J. A., & Rholes, W. S. (2012). *Adult attachment orientations, stress, and romantic relationships*. In P. Devine & A. Plant (Eds.), *Advances in experimental social psychology*. *Advances in experimental social psychology*, Vol. 45 (p. 279–328). Academic Press. <https://doi.org/10.1016/B978-0-12-394286-9.00006-8>
- Smith, L. E., & Howard, K. S. (2008). Continuity of paternal social support and depressive symptoms among new mothers. *Journal of Family Psychology*, 22(5), 763. <https://doi.org/10.1037/a0013581>
- Solmeyer, A. R., & Feinberg, M. E. (2011). Mother and father adjustment during early parenthood: The roles of infant temperament and coparenting relationship quality. *Infant Behavior and Development*, 34(4), 504-514. <https://doi.org/10.1016/j.infbeh.2011.07.006>
- Solmeyer, A. R., Feinberg, M. E., Coffman, D. L., & Jones, D. E. (2014). The effects of the Family Foundations prevention program on coparenting and child adjustment: A mediation analysis. *Prevention Science*, 15(2), 213-223. <https://doi.org/10.1007/s11121-013-0366-x>
- Stein, G. L., Cupito, A. M., Mendez, J. L., Prandoni, J., Huq, N., & Westerberg, D. (2014). Familism through a developmental lens. *Journal of Latina/o Psychology*, 2(4), 224 –250. <https://doi.org/10.1037/lat0000025>
- Stinson, M. A., Bermúdez, J. M., Gale, J., Lewis, D., Meyer, A. S., & Templeton, G. B. (2017). Marital satisfaction, conflict resolution styles, and religious attendance among Latino

- couples: Using the actor–partner interdependence model. *The Family Journal*, 25(3), 215-223. <https://doi.org/10.1177/1066480717710645>
- Sturge-Apple, M. L., Gondoli, D. M., Bonds, D. D., & Salem, L. N. (2003). Mothers' responsive parenting practices and psychological experience of parenting as mediators of the relation between marital conflict and mother-preadolescent relational negativity. *Parenting: Science and Practice*, 3(4), 327-355. https://doi.org/10.1207/s15327922par0304_3
- Stroud, C. B., Durbin, C. E., Wilson, S., & Mendelsohn, K. A. (2011). Spillover to triadic and dyadic systems in families with young children. *Journal of Family Psychology*, 25(6), 919-930. <https://doi.org/10.1037/a0025443>
- Suárez-Orozco, C. (2001). Afterword: Understanding and serving the children of immigrants. *Harvard Educational Review*, 71(3), 579-590. [https://doi: 10.1177/0013164401316004](https://doi.org/10.1177/0013164401316004)
- Suárez-Orozco, C., & Carhill, A. (2008). Afterword: New directions in research with immigrant families and their children. *New Directions for Child and Adolescent Development*, 2008(121), 87-104. [https://doi: 10.1002/cd.224](https://doi.org/10.1002/cd.224)
- Teubert, D., & Pinquart, M. (2010). The association between coparenting and child adjustment: A meta-analysis. *Parenting: Science and Practice*, 10(4), 286-307. <https://doi.org/10.1080/15295192.2010.492040>
- Thomas, A. L., Caughy, M. O. B., Anderson, L. A., & Owen, M. T. (2019). Longitudinal associations between relationship quality and maternal depression among low-income African American and Hispanic mothers. *Journal of Family Psychology*, 33(6), 722-729. [https://doi: 10.1037/fam0000548](https://doi.org/10.1037/fam0000548)

- Thompson Jr, R. J., Merritt, K. A., Keith, B. R., Murphy, L. B., & Johndrow, D. A. (1993). The role of maternal stress and family functioning in maternal distress and mother-reported and child-reported psychological adjustment of nonreferred children. *Journal of Clinical Child Psychology*, 22(1), 78-84. https://doi.org/10.1207/s15374424jccp2201_8
- Tissot, H., Favez, N., Frascarolo, F., & Despland, J. N. (2016). Coparenting behaviors as mediators between postpartum parental depressive symptoms and toddler's symptoms. *Frontiers in Psychology*, 7, 1912. <https://doi.org/10.3389/fpsyg.2016.01912>
- Tissot, H., Favez, N., Ghisletta, P., Frascarolo, F., & Despland, J. N. (2017). A longitudinal study of parental depressive symptoms and coparenting in the first 18 months. *Family Process*, 56(2), 445-458. <https://doi.org/10.1111/famp.12213>
- Torres, L., Driscoll, M. W., & Voell, M. (2012). Discrimination, acculturation, acculturative stress, and Latino psychological distress: A moderated mediational model. *Cultural Diversity and Ethnic Minority Psychology*, 18(1), 17–25. <https://doi.org/10.1037/a0026710>
- Umberson, D., Pudrovskaya, T., & Reczek, C. (2010). Parenthood, childlessness, and well-being: A life course perspective. *Journal of Marriage and Family*, 72(3), 612-629. <https://doi.org/10.1111/j.1741-3737.2010.00721.x>
- Van Egeren, L. A., & Hawkins, D. P. (2004). Coming to terms with coparenting: Implications of definition and measurement. *Journal of Adult Development*, 11(3), 165-178. <https://doi.org/10.1023/B:JADE.0000035625.74672.0b>
- Vanschoonlandt, F., Vanderfaeillie, J., Van Hoen, F., De Maeyer, S., & Robberechts, M. (2013). Parenting stress and parenting behavior among foster mothers of foster children with

- externalizing problems. *Children and Youth Services Review*, 35(10), 1742-1750.
<https://doi.org/10.1016/j.chldyouth.2013.07.012>
- Venta, A., Velez, L., & Lau, J. (2016). The role of parental depressive symptoms in predicting dysfunctional discipline among parents at high-risk for child maltreatment. *Journal of child and family studies*, 25(10), 3076-3082.
- Vento, P. W. P. D., & Cobb, R. J. (2011). Chronic stress as a moderator of the association between depressive symptoms and marital satisfaction. *Journal of Social and Clinical Psychology*, 30(9), 905-936. [https://doi: 10.1521/jscp.2011.30.9.905](https://doi:10.1521/jscp.2011.30.9.905)
- Villodas, M. T., Bagner, D. M., & Thompson, R. (2015). A Step Beyond Maternal Depression and Child Behavior Problems: The Role of Mother–Child Aggression. *Journal of Clinical Child & Adolescent Psychology*, 47(4), 634-641. [https://doi: 10.1080/15374416.2015.1094740](https://doi:10.1080/15374416.2015.1094740)
- Wang, H., Xu, C., & Fan, X. (2019). Effect of marital relationship on women's quality of life: Testing the mediating role of subjective well-being. *Journal of Community Psychology*, 47(2), 327-337. [https://doi: 10.1002/jcop.22123](https://doi:10.1002/jcop.22123)
- Weissman, M. M. (1987). Advances in psychiatric epidemiology: rates and risks for major depression. *American Journal of Public Health*, 77(4), 445-451. [https://doi: 10.2105/ajph.77.4.445](https://doi:10.2105/ajph.77.4.445)
- West, K. B., Oshri, A., Mitaro, E., Caughy, M., & Suveg, C. (2019). Maternal depression and preadolescent symptoms: An examination of dyad-level moderators in an economically impoverished sample. *Journal of Family Psychology*. 34(3), 333–341.
<https://doi.org/10.1037/fam0000610>

- Whisman, M. A. (2001). *The association between depression and marital dissatisfaction*. In S. R. H. Beach & S. R. H. Beach (Eds.), *Marital and family processes in depression: A scientific foundation for clinical practice*. (pp. 3–24). American Psychological Association. <https://doi.org/10.1037/10350-001>
- Whisman, M. A. (2007). Marital distress and DSM-IV psychiatric disorders in a population-based national survey. *Journal of Abnormal Psychology, 116*(3), 638–643. <https://doi.org/10.1037/0021-843X.116.3.638>
- Whisman, M. A., & Bruce, M. L. (1999). Marital dissatisfaction and incidence of major depressive episode in a community sample. *Journal of Abnormal Psychology, 108*(4), 674–678. <https://doi.org/10.1037/0021-843X.108.4.674>
- Whisman, M. A., & Uebelacker, L. A. (2009). Prospective associations between marital discord and depressive symptoms in middle-aged and older adults. *Psychology and Aging, 24*(1), 184. <https://doi.org/10.1037/a0014759>
- Whisman, M. A., Sheldon, C. T., & Goering, P. (2000). Psychiatric disorders and dissatisfaction with social relationships: Does type of relationship matter?. *Journal of Abnormal Psychology, 109*(4), 803–808. <https://doi.org/10.1037/0021-843X.109.4.803>
- Whiteside-Mansell, L., Ayoub, C., McKelvey, L., Faldowski, R. A., Hart, A., & Shears, J. (2007). Parenting stress of low-income parents of toddlers and preschoolers: Psychometric properties of a short form of the Parenting Stress Index. *Parenting: Science and Practice, 7*(1), 26–56. https://doi.org/10.1207/s15327922par0701_2
- Wieland, N., & Baker, B. L. (2010). The role of marital quality and spousal support in behaviour problems of children with and without intellectual disability. *Journal of Intellectual Disability Research, 54*(7), 620–633. <https://doi.org/10.1111/j.1365-2788.2010.01293.x>

- Williamson, H. C., Altman, N., Hsueh, J., & Bradbury, T. N. (2016). Effects of relationship education on couple communication and satisfaction: A randomized controlled trial with low-income couples. *Journal of Consulting and Clinical Psychology, 84*(2), 156. <https://doi.org/10.1037/ccp0000056>. Epub 2015 Oct 26
- Wilson, S., & Durbin, C. E. (2010). Effects of paternal depression on fathers' parenting behaviors: A meta-analytic review. *Clinical Psychology Review, 30*(2), 167-180. <https://doi.org/10.1016/j.cpr.2009.10.007>
- Wuyts, D., Soenens, B., Vansteenkiste, M., Van Petegem, S., & Brenning, K. (2017). The role of separation anxiety in mothers' use of autonomy support: An observational study. *Journal of Child and Family studies, 26*(7), 1949-1957. <https://doi.org/10.1007/s10826-017-0707-7>
- Xu, Y., Wang, X., Ahn, H., & Harrington, D. (2018). Predictors of non-US born mothers' parenting stress across early childhood in fragile families: A longitudinal analysis. *Children and Youth Services Review, 89*, 62-70. <https://doi.org/10.1016/j.childyouth.2018.04.012>
- Yan, N., & Dix, T. (2014). Mothers' early depressive symptoms and children's first-grade adjustment: A transactional analysis of child withdrawal as a mediator. *Journal of Child Psychology and Psychiatry, 55* (5), 495–504. <https://doi.org/10.1111/jcpp.12189>
- Zeiders, K. H., Updegraff, K. A., Umaña-Taylor, A. J., Wheeler, L. A., Perez-Brena, N. J., & Rodríguez, S. A. (2013). Mexican-origin youths' trajectories of depressive symptoms: The role of familism values. *Journal of Adolescent Health, 53*(5), 648-654. <https://doi.org/10.1016/j.jadohealth.2013.06.008>
- Zill, N (2016). *Most immigrant families are traditional families*. Institute for Family Studies. <https://ifstudies.org/blog/most-immigrant-families-are-traditional-families>

Appendix: Lists of All Measures and Specific Items Used in the Study

Marital Satisfaction (1 = All of the time; 4 = None of the time)

1. My spouse and I get along well together
2. Our arguments get very heated
3. My spouse and I have similar views about what is important in life
4. I am satisfied with the way we handle our problems and disagreements
5. We enjoy doing even ordinary, day-to-day things together
6. My spouse expresses love and affection toward me
7. My spouse listens to me when I need someone to talk to

Marital Conflict (1 = Never; 4 = Often)

1. How often do you and your spouse have arguments about household chores?
2. How often do you and your spouse have arguments about sex?
3. How often do you and your spouse have arguments about spending time together?
4. How often do you and your spouse have arguments about managing money, bills and debt?
5. How often do you and your spouse have arguments about in-laws, or relatives, and friends?
6. How often do you and your spouse have arguments about drinking or drugs?
7. How often do you and your spouse have arguments about other women or men?
8. How often do you and your spouse have arguments about religion?
9. How often do you and your spouse have arguments about raising children?

Coparental Conflict (1 = Often; 4 = Never)

1. How often do you disagree about setting rules for or disciplining the child(ren)?
2. How often do you disagree about the activities that the child(ren) participate in?
3. How often do you disagree about how money is spent on the child(ren)?
4. How often do you disagree about who does childcare tasks?
5. How often do you disagree about the amount of time each of you spend with the child(ren)?

Maternal Depressive Symptoms (1 = Often; 4 = Never)

1. How often did you feel so sad that nothing could cheer you up?
2. How often did you feel nervous?
3. How often did you feel restless or fidgety?
4. How often did you feel hopeless?
5. How often did you feel that everything was an effort?
6. How often did you feel worthless?

Maternal Stress (1 = Often; 4 = Never)

1. How often have you felt that you are unable to control the important things in your life?
-

-
2. How often have you felt confident about your ability to handle your personal problems?
 3. How often have you felt that things are not going your way?
 4. How often have you felt difficulties were piling up so high that you could not overcome them?
-

Table 1. *Comparison of Demographic Characteristic*

	Whole sample			Hispanic Immigrant Parents			US-Born Parents			<i>t</i>	<i>p</i>
	<i>N</i>	Mean	SD	<i>N</i>	Mean	SD	<i>N</i>	Mean	SD		
<i>Demographic Characteristic</i>											
Income	6135	6.5	13.25	726	4.40	6.15	3241	6.78	14.79	4.25	<.001
Mothers' Education	5286	2.14	1.66	614	2.10	1.63	2791	2.15	1.66	.668	.504
Mothers' Age	6298	29.74	6.27	746	29.39	6.13	3331	29.74	6.24	1.39	.164
Child Age	4636	80.49	51.28	568	91.80	52.45	2493	74.53	49.95	-7.36	<.001

Notes: Income was reported monthly on the following scale: 1 = None, 2 = \$1 to \$4.999, 3 = \$5.000 to \$9.999, 4 = \$10.000 to \$14.999, 5 = \$15.000 to \$19.999, 6 = \$20.000 to \$24.999, 7 = \$25.000 to 29.999, 8 = \$30.000 to \$34.999, 9 = \$35.000 or over. Education was reported on the following scale: 0 = Less than 12 years, 1 = GED or Equivalency Certificate, 2 = 12 years, 3 = 13 years, 4 = 14-15 years, 5 = 16 or more years. *T*-tests represent mean-level comparisons between US-born vs. Hispanic Immigrant parents.

Table 2. *Bivariate Correlation Matrix, Means and Standard Deviations of Model Variables*

	Mean	SD	1	2	3	4	5
Primary Study Variables							
1. Parents' Marital Satisfaction	2.22	.45					
2. Parents' Marital Conflict	2.16	.50	.65**				
3. Parents' Coparental Conflict	1.77	.55	.39**	.37**			
4. Mothers' Stress	1.88	.64	-.03*	-.01	-.04		
5. Mothers' Depressive Symptoms	2.98	.74	-.20**	-.23**	-.22**	-.00	
Demographic Covariates							
6. Income	6.19	13.25	—	—	—	-.01	.00
7. Mothers' Education	2.14	1.66	—	—	—	.00	.06**
8. Mothers' Age	29.80	6.28	—	—	—	.01	-.06**
9. Child Age	80.50	51.30	—	—	—	.00	.01
10. Treatment/Control Group	.49	.50	—	—	—	.01	.05**

Notes. * $p < .05$, two-tailed. ** $p < .01$, two-tailed; Treatment group coded such that 0=control; 1=treatment.

Table 3. *Path Coefficient Comparisons for Whole Sample, US Born, and Hispanic Immigrant Parents*

	Whole sample		Hispanic Immigrant Parents		US-Born Parents		Path Difference	
	Estimate	P-Value	Estimate	P-Value	Estimate	P-Value	χ^2 Diff.	P-Value
Mothers' Depressive Symptoms on								
<i>Primary Study Variables</i>								
Marital Conflict	0.122	<.001	0.112	0.090	0.139	<.001	.078	.780
Marital Satisfaction	-0.067	0.004	-0.027	0.681	-0.040	0.213	.027	.869
Coparental Conflict	0.148	<.001	0.194	0.002	0.156	<.001	.707	.400
<i>Demographic Covariates</i>								
Income	0.006	0.715	0.052	0.283	0.005	0.824	—	—
Mothers' Education	0.045	0.010	0.008	0.874	0.047	0.050	—	—
Mothers' Age	0.002	0.910	0.044	0.409	-0.013	0.604	—	—
Child Age	-0.007	0.679	-0.025	0.633	0.002	0.949	—	—
Treatment/Control Group	0.028	0.109	0.030	0.568	0.052	0.028	—	—
Maternal Stress on								
<i>Primary Study Variables</i>								
Marital Conflict	0.041	0.109	0.040	0.616	0.046	0.183	.006	.938
Marital Satisfaction	-0.023	0.375	-0.007	0.925	-0.021	0.553	.115	.734
Coparental Conflict	0.062	0.007	0.026	0.698	0.068	0.029	.235	.627
<i>Demographic Covariates</i>								
Income	-0.022	0.237	-0.002	0.974	-0.033	0.180	—	—
Mothers' Education	0.010	0.616	0.056	0.344	0.001	0.984	—	—
Mothers' Age	<.001	0.984	-0.011	0.848	-0.008	0.772	—	—
Child Age	0.014	0.481	-0.068	0.244	0.043	0.102	—	—
Treatment/Control Group	0.001	0.967	-0.054	0.347	0.007	0.796	—	—
Coparental Conflict on								
Marital Satisfaction	-0.249	<.001	-0.124	0.047	-0.272	<.001	6.949	.008
Marital Conflict	0.215	<.001	0.276	<.001	0.199	<.001	.642	.422

Notes. Significant path coefficients are bold. Path differences are change in model fit for each path constraint relative to free model.

Table 4. *Path Coefficient Comparisons for Hispanic US Born and Hispanic Immigrant Parents*

	Hispanic US-Born Parents		Path Difference vs. Hispanic Immigrants	
	Estimate	P-Value	χ^2 Diff.	P-Value
Mothers' Depressive Symptoms on				
<i>Primary Study Variables</i>				
Marital Conflict	0.144	0.002	.085	.770
Marital Satisfaction	-0.052	0.280	.078	.780
Coparental Conflict	0.111	0.013	1.909	.167
<i>Demographic Covariates</i>				
Income	0.044	0.298	—	—
Mothers' Education	0.076	0.033	—	—
Mothers' Age	-0.042	0.246	—	—
Child Age	0.047	0.187	—	—
Treatment/Control Group	0.124	0.001	—	—
Maternal Stress on				
<i>Primary Study Variables</i>				
Marital Conflict	0.008	0.877	.011	.916
Marital Satisfaction	-0.001	0.992	.005	.943
Coparental Conflict	0.039	0.399	.010	.920
<i>Demographic Covariates</i>				
Income	-0.017	0.669	—	—
Mothers' Education	-0.004	0.920	—	—
Mothers' Age	0.002	0.958	—	—
Child Age	0.047	0.236	—	—
Treatment/Control Group	-0.008	0.844	—	—
Coparental Conflict on				
Marital Satisfaction	-0.263	<.001	5.409	.020
Marital Conflict	0.199	<.001	.333	.563

Notes. Significant path coefficients are bold. Path differences are change in model fit for each path constraint relative to free model.

Table 5. Comparisons of Indirect Effects for Whole Sample, US Born, and Hispanic Immigrant Parents

	Whole sample			Hispanic Immigrant Parents			US-Born Parents		
	Estimate	<i>p</i> -value	95% <i>CI</i>	Estimate	<i>p</i> -value	95% <i>CI</i>	Estimate	<i>p</i> -value	95% <i>CI</i>
<i>Marital Satisfaction -> Coparental Conflict -> Depressive Symptoms</i>	-0.037	<.001	[-.050, -.024]	-0.024	0.102	[-.056, .002]	-0.042	<.001	[-.061, -.025]
<i>Marital Conflict -> Coparental Conflict -> Depressive Symptoms</i>	0.032	<.001	[-.044, -.020]	0.053	0.011	[-.100, -.019]	0.031	<.001	[-.046, -.017]
<i>Marital Satisfaction -> Coparental Conflict -> Maternal Stress</i>	-0.015	0.008	[-.027, -.004]	-0.003	0.703	[-.023, .014]	-0.018	0.033	[-.035, -.003]
<i>Marital Conflict -> Coparental Conflict -> Maternal Stress</i>	0.013	0.009	[-.023, .004]	0.007	0.700	[-.040, .031]	0.013	0.037	[-.027, -.002]

Notes. Significant path coefficients are bold.

Table 6. *Indirect Effects for Hispanic US Born Parents*

Hispanic US-Born Parents			
	Estimate	<i>p</i> -value	95% <i>CI</i>
<i>Marital Satisfaction -> Coparental Conflict -> Depressive Symptoms</i>	-0.029	0.033	[-.059, -.006]
<i>Marital Conflict -> Coparental Conflict -> Depressive Symptoms</i>	0.022	0.043	[-.046, -.004]
<i>Marital Satisfaction -> Coparental Conflict -> Maternal Stress</i>	-0.010	0.421	[-.035, .016]
<i>Marital Conflict -> Coparental Conflict -> Maternal Stress</i>	0.008	0.406	[-.025, .013]

Notes. Significant path coefficients are bold.

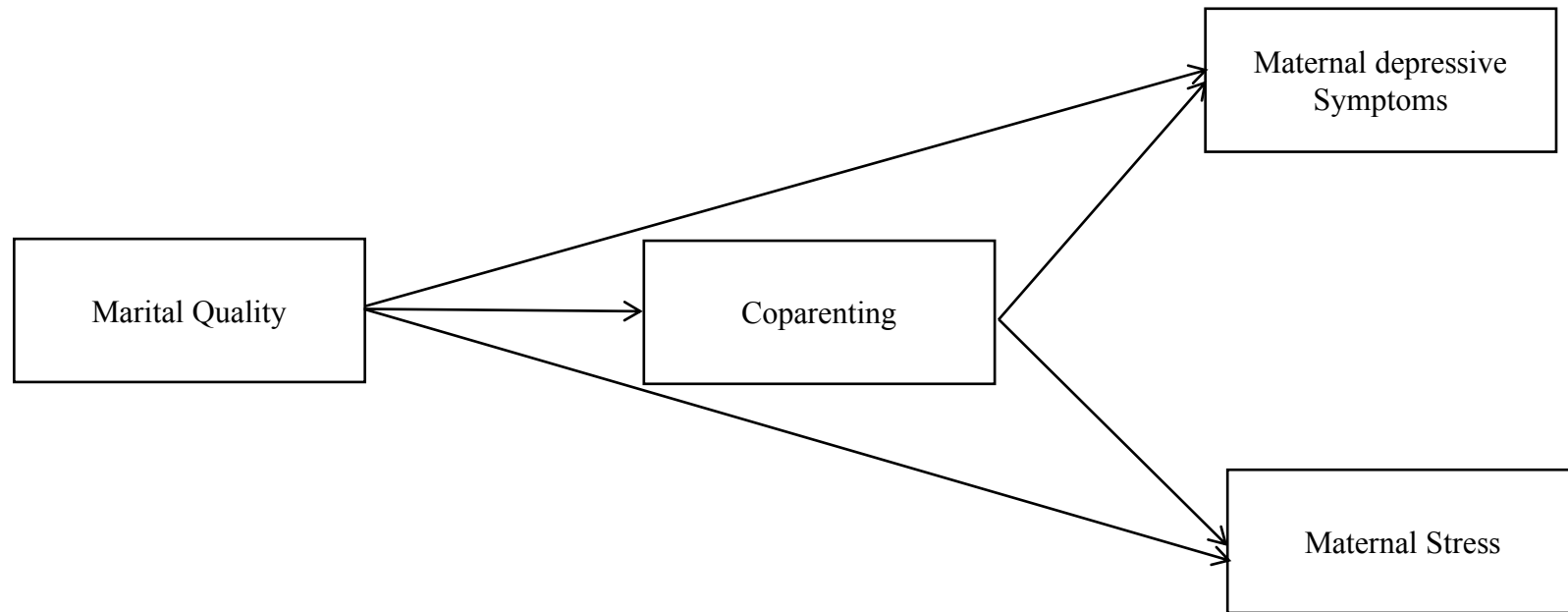


Figure 1. *Conceptual Model of Direct and Indirect Associations of Marital Quality, Coparenting and Maternal Psychological Well-Being*

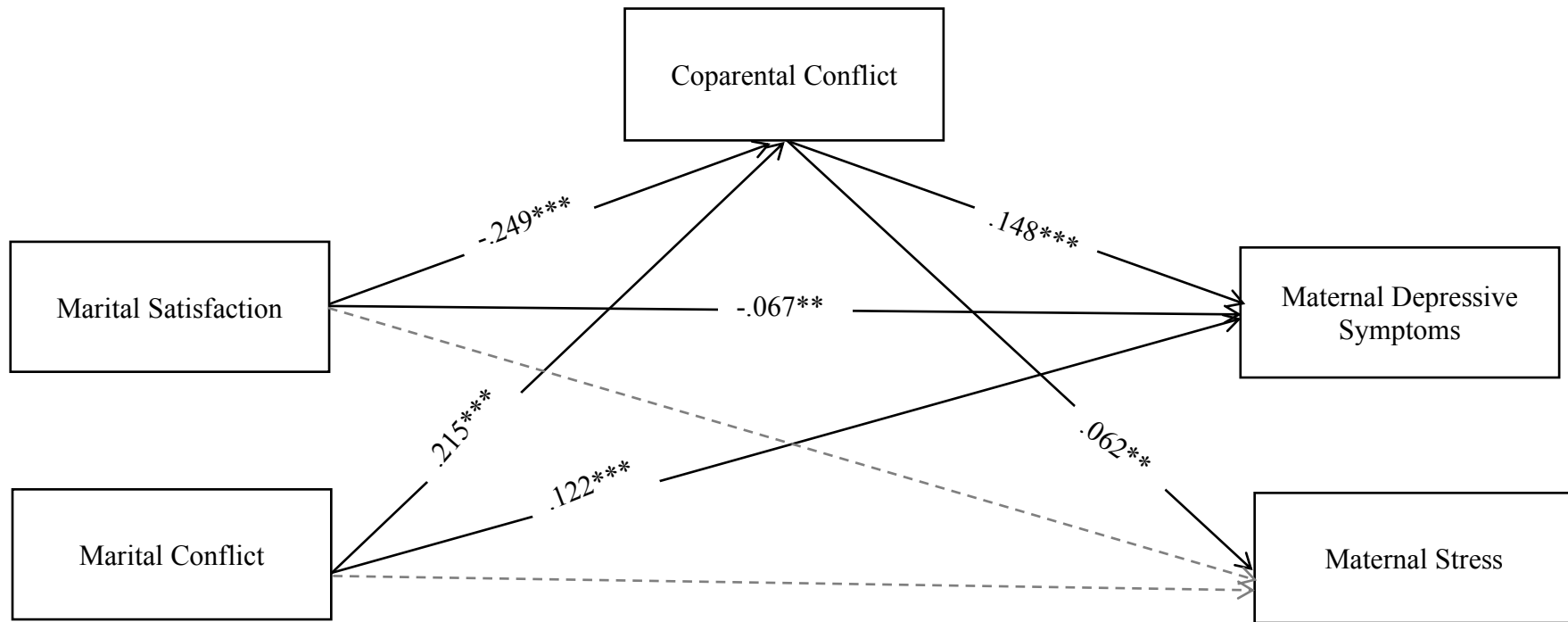


Figure 2. *Structural Equation Model for Whole Sample*

Model Fit Indices

$\chi^2(5) = 53.300, p < .001$ CFI = .943;
RMSEA = .053; SRMR = .015

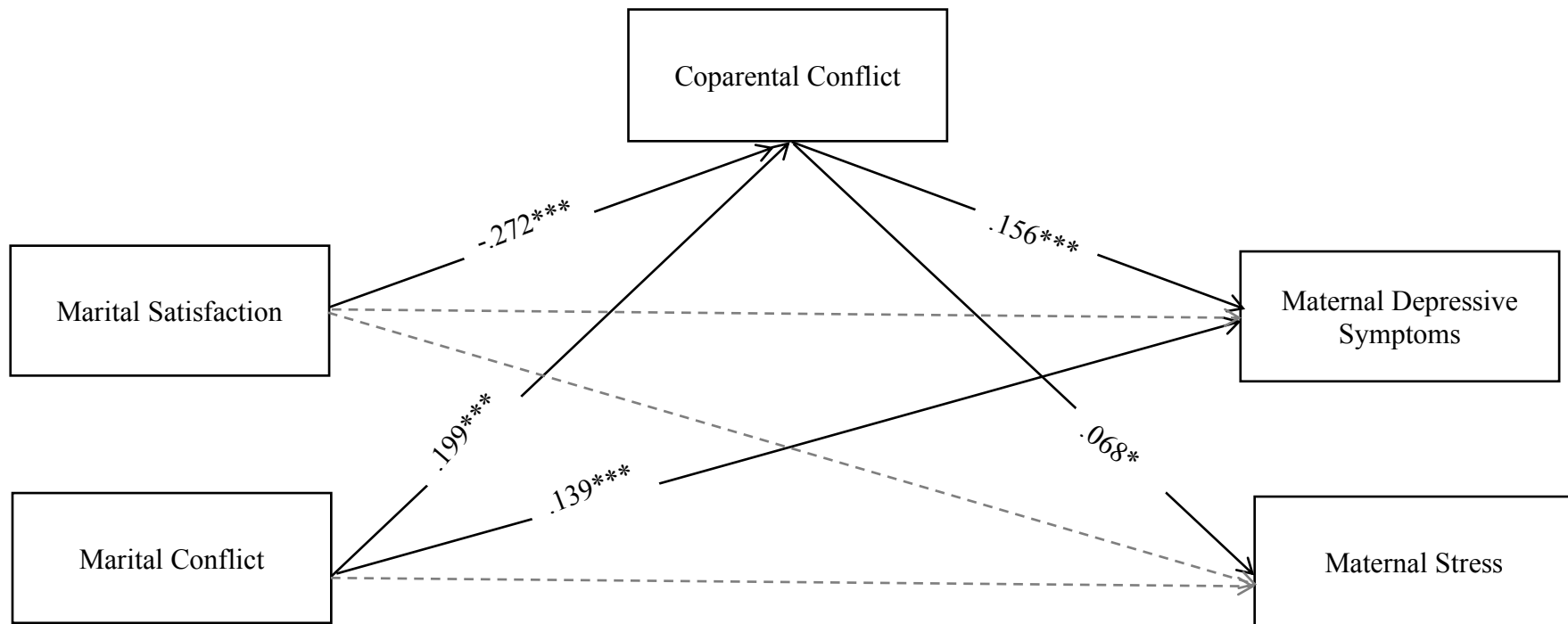


Figure 3. *Structural Equation Model for US-Born Parents Only*

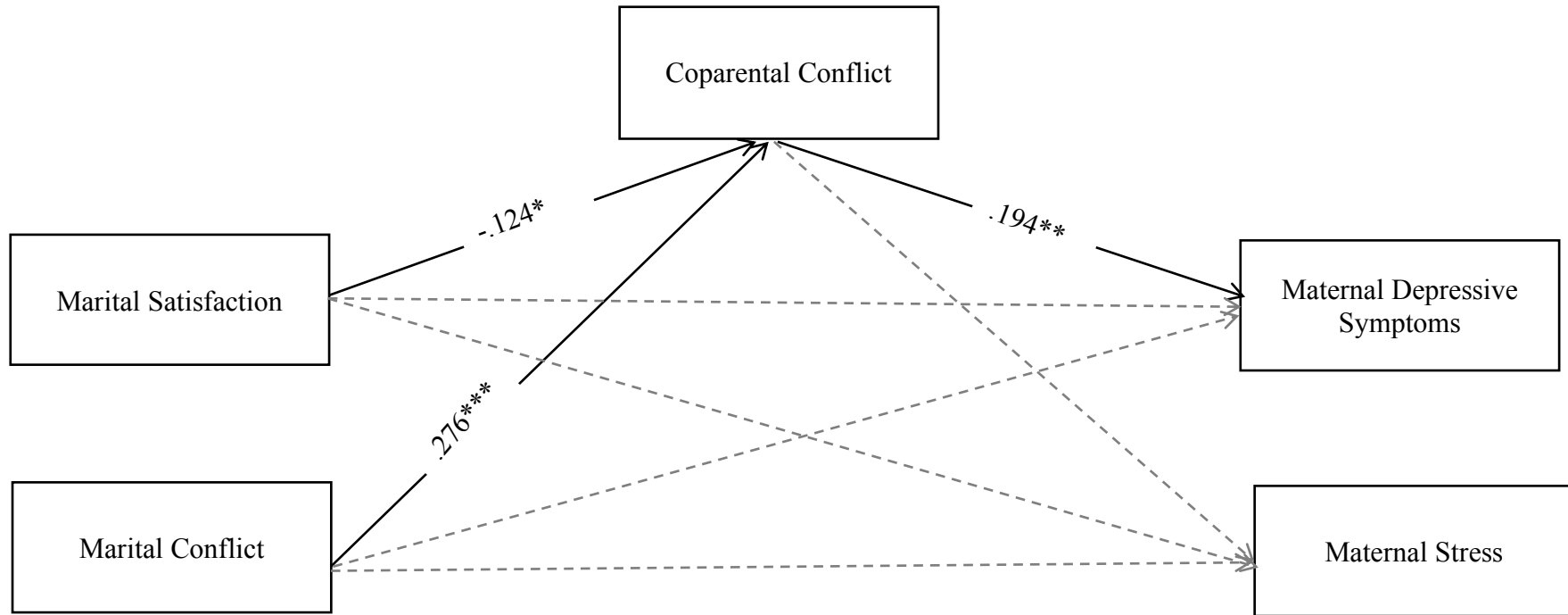


Figure 4. *Structural Equation Model for Hispanic Immigrant Parents Only*

Model Fit Indices for group comparison

$\chi^2(5) = 41.300, p < .001$ CFI = .943;

RMSEA = .053; SRMR = .016