

EXAMINING THE INFLUENCE OF CULTURAL VALUES ON PATHWAYS TO  
STRENGTHEN RESPONSIBLE FATHERHOOD AMONG MEXICAN-ORIGIN FATHERS

by

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A Dissertation Submitted to the Faculty of the

NORTON SCHOOL OF FAMILY AND CONSUMER SCIENCES

In Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

In the Graduate College

THE UNIVERSITY OF ARIZONA

2016

THE UNIVERSITY OF ARIZONA  
GRADUATE COLLEGE

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## ACKNOWLEDGEMENTS

Support for this project was provided by a Family Strengthening Scholars Grant (*dissertation fellowship*) from the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services (90PD0281). The contents are solely the responsibility of the author and do not necessarily represent the official views of the Office of Planning, Research and Evaluation, the Administration for Children and Families or the U.S. Department of Health and Human Services. A Research and Project Grant from the Graduate and Professional Student Council of the University of Arizona (RSRCH-604FY'15) and a Dissertation Award from the Division of Family Studies and Human Development at the University of Arizona also provided funding for this project.

A special thanks to all of the fathers who participated in this study. I wish to thank Melissa A. Barnett, Melissa A. Curran, Bruce J. Ellis, and Daniel A. McDonald for their helpful comments and feedback on earlier drafts of this dissertation. Many thanks to my practitioner partner of this project, Cary Chatham-Hahn, and to all of my dedicated and hardworking undergraduate student research assistants: Jake Cohen, Ayana Blackey, Daisy Arevalo, Diego Coronado, Abdulmajed Mohammed, Cassandra Camacho, Jesus Casillas, and Ericka Encinas – they all truly were the engine of this research project. Thank you all for helping to make this project such a success!

## DEDICATION

I dedicate this achievement to the two most inspirational figures in my life: my mom (Josefina Gonzalez) and my dad (Adolfo Gonzalez). Both as individuals, and together as a couple, showed me the true meaning of love and success in life. I am forever grateful for the sacrifices they have made in the past and the ones they continue to make in the present to help make the impossible possible. I believe my path towards my academic career began at the six-person kitchen table in the home where I grew up in Boyle Heights (Los Angeles): from the kitchen table where I sat down and worked on my third-grade history homework – to my high school years where I sat in my room reading Shakespeare or Twain for AP English or doing my physics homework while listening to Metallica – to my days spent in the reading halls of Shields Library at UC Davis or coding at the PCIT lab in Sacramento, and now, – to present years in the Sonoran desert working on my dissertation as a graduate student with a team of undergraduate student researchers at the University of Arizona. I am also grateful for having the best brothers a guy can ask for: Adolfo, David, and Anthony. You all continue to bring joy in my life. Also, a gigantic THANK YOU and a big HUG to all of my many wonderful *primos y primas* – I am fortunate to have so many of you and I continue to cherish our years growing up together and playing hide-and-seek at all of our family get-togethers. Another ginormous thank you: to the familia Gonzalez and Quintero; to my love, Ashley Adison, who always was there to make me laugh and smile; to my *abulietos* and *abuelitas* who paved the pathway towards me being here; to my familia in Guanajuato y Oaxaca; to my wonderful teachers and professors at Roosevelt High, UC Davis, and UofA, who made a real difference; to my friends and colleagues throughout high school, college, and graduate school; and to all those I did not get to mention who supported me throughout this long journey. This achievement and these three letters next to my name will always be meaningful

and dear to me – they are my vehicle to promoting the much needed social justice. Thank you all for your love and support! Si Se Pudo!

You are the reason why this was possible:

**Henry Gonzalez, Ph.D.**

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## ABSTRACT

Understanding the potential promotive effects of cultural values is particularly relevant for studies on Mexican-origin fathers who are at risk for exposure to multiple sociocultural contextual stressors. Studies, however, have yet to account for specific sociocultural contextual stressors that are particularly pertinent to Mexican-origin groups, such as immigrant- and ethnic-based discrimination and acculturative stress. According to the Family Stress Model, stressors undermine parenting through psychological dysfunction. Using a community sample of Mexican-origin biological fathers ( $N = 85$ ) of 3 to 6 year-old children, this study aimed to: first, test the linkages between sociocultural contextual stressors and psychological distress; second, test the linkages between psychological distress and parenting practices; and lastly, consider whether cultural values, namely, *familismo*, *respeto*, and *caballerismo*, moderate these associations. Findings from hierarchical linear regression analyses indicated that immigrant-based discrimination stress was positively related to psychological distress only when fathers strongly endorsed familismo and respeto. In addition, a positive relationship between economic hardship and psychological distress existed only when fathers endorsed high levels of familismo. Findings also showed that the inverse relationship between psychological distress and supportive coparenting quality was substantiated when fathers endorsed low levels of familismo. An inverse link between psychological distress and father accessibility was also observed when fathers reported low levels of respeto. Examining how culturally specific risks and strengths inform future responsible fatherhood intervention work among Mexican-origin families is discussed.

*Keywords:* cultural values, family stress, fathers, Mexican Americans, parenting, psychological distress.

## **CHAPTER I**

### **Introduction**

The ultimate goals of this study are to identify specific pathways to improve the lives of children and parents. One viable approach to strengthen families is to focus on fathers. There is a growing body of research documenting the significant role fathers play in promoting child and family resilience, including children's positive health, behavioral and emotional outcomes (Bögels & Phares, 2008; Lamb, 2010; Leidy, Schofeld, & Parke, 2013; Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008) and supportive and cohesive family relationships (Parke, 2002; Schoppe-Sullivan, Brown, Cannon, Mangelsdorf, & Sokolowski, 2008). Although much work has been done in testing pathways in which fathers influence families, more knowledge is needed on factors promoting and inhibiting positive parenting among low-income, ethnic minority fathers.

Mexican-origin families, which encompass families who reside in the U.S. with either one parent born in Mexico or one parent born in the U.S. with Mexican heritage extending back to one or more generations, are an important and interesting group to study. Mexican-origin families are also the largest and fastest growing Hispanic group in the United States, and therefore, represent a large segment of ethnic minority families (Pew Research Center, 2013). For instance, at the turn of the 21st century, Hispanics became the largest minority group living in the United States, with Mexicans representing the largest subgroup (Pew Research Center, 2013). Nearly one-third of Mexican origin families live in low-income households (Pew Research Center, 2013) and are disproportionately at risk for exposure to discrimination (Flores et al., 2008). At the same time, Mexican-origin fathers often parent within two-parent, stable households (Murphey, Guzman, & Torres, 2014).

Given these demographic trends, researchers in several fields (e.g., Education, Health, Psychology, Public Policy, and Social Work) have become increasingly interested in understanding the normative behaviors and adaptive strategies of Latino parents. Some researchers, for example, have taken steps to identify cultural and contextual stressors that are specific to Mexican-origin parents (Finch, Kolody, & Vega, 2000; Rodriguez, Myers, Mira, Flores, & Garcia-Hernandez, 2002; Zeiders, Umaña-Taylor, Updegraff, & Jahromi, 2015), and have investigated the prevalence of these stressors (e.g., acculturative stress; racism; xenophobia) among this group of parents (Perez, Fortuna, & Alegria, 2008; Viruell-Fuentes, 2007). Researchers (Cook, Alegría, Lin, & Guo, 2009; Flores et al., 2008; Torres, Driscoll, & Voell, 2012) have also noted the considerable diversity regarding exposure to and responses to stressors within this group of parents. Nativity, that is, whether or not they were born in the U.S., is an important demographic variable in research with Mexican-origin parents. For instance, some research suggests Mexican-born parents in comparison to U.S.-born parents are exposed to greater immigrant-based discrimination and acculturative stress (Finch et al., 2000; Krieger, Kosheleva, Waterman, Chen, & Koenen, 2011; Pérez, Fortuna, & Alegria, 2008; Thomson & Hoffman-Goetz, 2009). There may also be differences in mental health (Alegria et al., 2007a, 2007b; Alegria et al., 2008) and parenting quality (Altschul & Lee, 2011; Mistry et al., 2008) between U.S.-born and foreign-born Mexican-origin parents.

At the same time, burgeoning stress-transmission research asserts that psychological dysfunction serves as a primary mechanism linking contextual stressors to parenting quality (Emmen et al., 2013; Newland, Crnic, Cox, & Mills-Koonce, 2013; Riley, Scaramella, & McGoron, 2014). Across this literature, a variety of contextual stressors (e.g., economic hardship; unemployment; work stress) were linked cross-sectionally and longitudinally to

parental psychological dysfunction, and in turn, were linked to parenting quality (e.g., Hill & Herman-Stahl, 2002; Kotchick, Dorsey, & Heller, 2005). In fact, just recently researchers have extended some of this work and applied it to study homogenous ethnic groups of parents, such as parents of Mexican-origin (e.g., Parke et al., 2004; White, Roosa, Weaver, & Nair, 2009). In light of the stress processes elucidated by research with Mexican-origin samples, some studies have also accounted for the saliency of cultural values among Mexican-origin families and its associations with psychological functioning (Ayon, Marsiglia, & Bermudez-Parsai, 2010; Barnett, Mortensen, Tilley, & Gonzalez, 2013; Umaña-Taylor, Updegraff, & Gonzales-Backen, 2011). Another body of work with Mexican-origin parents also finds cultural values related to family relationships (Calzada, Fernandez, & Cortes, 2010; Calzada, Tamis-LeMonda & Yoshikawa, 2012; Li-Grining, 2012), including positive parenting (Fuller & Garcia Coll, 2012; Taylor, Larsen-Rife, Conger, & Widaman, 2012). However, among this extant research, researchers have taken few steps to test these processes among fathers. Although much of the work on cultural values have shown variability in endorsement of cultural values, particularly by nativity (Almeida, Molnar, Kawachi, & Subramanian, 2009; Rodriguez et al., 2007), most of these findings originate from studies with Hispanic, and specifically Mexican-origin, mothers (Romero & Ruiz, 2007; Umaña-Taylor et al., 2011). Whether cultural value endorsement produces similar variability in parenting, specifically in promoting positive parenting among fathers, is still less well-understood. Also, whether levels of cultural value endorsement vary by nativity among fathers as they do for mothers is also an uncertainty.

These gaps in our understanding of the functioning of cultural values among Mexican-origin fathers and their applicability to other non-maternal parents stem largely from the fact that studies on cultural values have been largely focused on mothers or are often limited to samples

of mothers. In turn, researchers targeting mothers when studying cultural values have been barred from identifying and empirically testing additional cultural values that are both relevant to Mexican-origin families and specific to men and fathers. Further, researchers have yet to identify potential moderators of these associations that may be counteracting the effects of contextual stressors on fathers' psychological functioning, and consequently, fathers' parenting. Given the benefits of cultural values that were just highlighted, examining potential protective effects of cultural values on psychological functioning and parenting is particularly important in studies with socioeconomically disadvantaged, Mexican-origin fathers who are at risk for exposure to multiple sociocultural contextual stressors.

Therefore, the goal of this study is to examine cultural values as moderators within a well-validated framework linking sociocultural contextual stressors to parenting – by testing an adapted Family Stress Model (e.g., Conger, Conger, Martin, 2010) with a community sample of Mexican-origin fathers. Identifying and empirically testing moderators of impacts and understanding effective measurement of relevant constructs for Mexican-origin men in particular, will help strengthen positive father involvement among Mexican-origin fathers. Analyzing the role cultural values play among Mexican-origin fathers can help identify specific processes that researchers and practitioners can target and capitalize on when working with fathers and their families. Pinpointing these specific moderators as the potential markers strengthening these families will help inform policy decision-making related to future intervention research serving a large segment of ethnic minority fathers and families in the U.S. population.

## **Family Stress Model**

According to the Family Stress Model, high levels of stress associated with economic disadvantage trigger parental psychological dysfunction, which in turn undermines interparental relationships and positive parenting strategies, and ultimately leads to compromised child development (e.g., Conger et al., 2010). In other words, the Family Stress Model explains how psychological dysfunction mediates associations between contextual stressors, with an explicit focus on those stressors stemming directly from economic disadvantage, and compromised family functioning and child development. A large body of research supports the Family Stress Model in diverse samples (see Conger et al., 2010). By identifying the general family-based mechanisms through which child development may be compromised in socioeconomically disadvantaged families, this model has highlighted key pathways for intervention and prevention programs targeting low-income families.

A series of studies testing Family Stress Model have demonstrated how fathers' psychological dysfunction stemming from economic hardship can directly undermine paternal involvement. Specifically, the work from Parke and colleagues (2004) and White and colleagues (2009) have provided compelling evidence of the applicability of Family Stress Model to Mexican-origin fathers and their families, which has historically been exclusively tested among White and African-American families (e.g., Barnett, 2008; Elder, Eccles, Ardel, & Lord, 1995; Hill & Herman-Stahl, 2002; Kotchick et al., 2005). In fact, as critical next steps, White and Roosa (2012) made a call for research that identifies specific moderators for these pathways undermining responsible fatherhood among Mexican-origin fathers. Studies testing these associations would serve to provide practitioners working with Mexican-origin fathers with

information to inform and guide their parenting programs working to promote responsible fatherhood.

### **Why Sociocultural Contextual Stressors Are Pertinent to Fatherhood**

In the present study, the Family Stress Model is also adapted to account for sociocultural stressors in addition to economic hardship. Mexican-origin fathers are disproportionately exposed to a myriad of sociocultural contextual stressors, including poverty. Additionally, many Latinos speak a language other than English at home. For instance, over 70% of Mexican-origin families living in the U.S. speak a language other than English at home, and many of them do not speak English well (Shin & Bruno, 2003). Thus, English-competency pressures are disproportionately common among many Mexican Americans (Torres, 2010), and these pressures may be further compounded for Mexican-origin families living in states with recent and/or long-standing history of English-only sentiments, including legislation deemed anti-immigrant by some scholars (Bills, Chávez, & Hudson, 1995; Rubio-Hernandez & Ayón, 2016; Santoro, 1999; Santos & Menjivar, 2013; Santos, Menjivar, & Godfrey, 2013). The majority of Mexican-origin fathers and their families reside in the Southwestern region of the United States, where Spanish is becoming an increasingly common spoken language, particularly in destinations characterized as Latino and immigrant enclaves (Moore & Pinderhughes, 1993). These traditional destinations in the United States for Mexican immigrants can afford families the capacity to navigate their social ecology with mostly Spanish and little English, though they may still face stressors associated with the pressures to speak the English language well. The pressures to speak English well for groups of Mexican-origin are often grounded in the experience of encountering and confronting both ethnic- and immigrant-based discrimination, which has been shown to be psychologically distressing (Ayon et al., 2010; Falicov, 1998).

Moreover, the pressure to acculturate to the mainstream culture is common among Mexican Americans, which can be a profoundly stressful psychological process (Berry, 1997; Rodriguez et al., 2007; Torres, 2010). In sum, Mexican-origin groups are at an increased risk for psychological distress in the U.S., which has been shown to be, in part, due to not only their exposure to poverty, but also to cultural mismatch with the community and xenophobia from the mainstream social ecology (Flores, Tschann, Dimas, Pasch, & de Groat, 2010; Flores et al., 2008; Greenfield & Kates, 1975; Parra-Cardona, Bullock, Imig, Villarruel, & Gold, 2006).

### **Psychological Distress and Parenting in Mexican-origin Families**

Several individual characteristics and proximal processes, including parental psychological distress, have been investigated as mediators of the associations between contextual risks and negative outcomes for Mexican-origin fathers' parenting. Parenting behaviors are critical shapers of child development (Colder, Mott, Levy, & Flay, 2000; Kilgore, Snyder, & Lentz, 2000), and there is abundant evidence linking parental psychopathology to impairments in parenting behaviors (Connell & Goodman, 2002; Goodman, 2008; Kane & Garber, 2004). Specific implications of parental psychological distress include the inability to be warm and consistent, lack of meaningful interactions, feelings of rejection and hostility, and lack of parenting self-efficacy (Downey & Coyne, 1990). Parental depression also can disrupt parents' ability to be accessible to their children (Goodman & Gotlib, 1999, 2002; Jones, Forehand, Brody, & Armistead, 2003) and be positively engaged as parents (Hill & Herman-Stahl, 2002; Kotchick et al., 2005).

Father involvement is a multidimensional construct. In the present study, I consider two domains of fathers' parenting, and one aspect of fathers' coparenting. Accessibility and engagement are two important and well-documented forms of involvement among fathers (Pleck,

2010). As conceptualized in the tripartite model of father involvement (see Lamb et al., 1985), *accessibility*, that is parental accessibility to the child, is a domain of involvement that signifies the quantity of physical involvement in the care of the child, such as being at home to put the child to bed. *Engagement* involves the quality of one-on-one interaction with the child, including playing or helping the child with homework. Both engagement and accessibility are two important parenting domains because they are disproportionately affected by psychological distress (e.g., depression; Shannon, Cabrera, Tamis-LeMonda, & Lamb, 2009; Wilson & Durbin, 2010), and are particularly relevant targets for intervention (Cowan, Cowan, Pruett, Pruett, & Wong, 2009; Fagan & Iglesias, 1999; Rienks, Wadsworth, Markman, Einhorn, & Moran Etter, 2011; Robbers, 2009; Roggman, Boyce, Cook, & Cook, 2002; Roggman & Cabrera, 2011). Further, given that Mexican-origin fathers often parent within two-parent households, it is also important to account for their roles as co-parents by measuring the ways in which fathers support and work with mothers to raise their children, typically referred to as supportive coparenting (e.g., Feinberg, 2003). Burgeoning research elucidates the importance of fathers as supportive coparents in promoting child and family functioning (Cabrera, Scott, Fagan, Steward-Streng, & Chien, 2012; Carlson & Högnäs, 2011; McHale et al., 2012; Palkovitz, Fagan, & Hull, 2013; Schoppe-Sullivan et al., 2008), yet, very little research has examined the link between psychological distress and fathers' supportive co-parenting (e.g., Bronte-Tinkew, Horowitz, & Carrano, 2010; Bronte-Tinkew, Moore, Matthews, & Carrano, 2007), particularly among Mexican-origin fathers.

### **Linking Sociocultural Adaptations and Risks to Psychological Distress and Parenting**

Most of the research linking psychological distress and parenting was conducted with non-Latino groups, and largely with mothers. Because sociocultural contextual risks are

disproportionately experienced by Mexican-origin families, and some of these risks are specific to Mexican-origin populations living in the United States, research is needed to understand the simultaneous effects of multiple contextual risk factors on parental psychopathology and parenting strategies in this group. The Family Stress Model posits that the relations between contextual stressors and impaired parenting are mediated by parent psychological distress. To date, much of the research employing the Family Stress Model has examined the impact of low-income status and economic hardship on psychological distress and parenting (e.g., Conger, Rueter, & Conger, 2000; Conger et al., 2002; Taylor et al., 2012). These studies, however, have yet to account for more specific sociocultural contextual stressors that are particularly pertinent to Mexican-origin groups, such as immigrant- and ethnic-based discrimination and acculturative stress.

An extension of the Family Stress Model to account for stressors above and beyond economic stress may also prove useful in adapting the model for use with Mexican-origin families. Specifically, the stressful experiences that occur as part of the process of adapting to the lifestyles, rules, and conventions of another country and exposure to discrimination based on ethnicity and immigration status may also be important sources of stress that produce within-group variation in psychological distress and parenting among Mexican-origin fathers (Parke et al., 2004; Torres et al., 2012; White et al., 2009).

### **Cultural Values as Promotive Factors for Responsible Fatherhood**

Culture may influence the ways in which individuals react when exposed to sociocultural contextual stressors. From an ecodevelopmental perspective, individuals and families are embedded within a cultural context, and how individuals interact with their environment depends on culture (Szapocznik & Kurtines, 1993). Further, parenting behaviors and beliefs are

influenced by and a reflection of context and culture (Bornstein, 1995; Raj & Raval, 2013). For Mexican-origin families, parenting is shaped by interactions among traditional beliefs and practices and U.S. cultural and contextual demands (e.g., Fuller & Garcia Coll, 2010; Tamis-LeMonda, Niwa, Kahana-Kalman, & Yoshikawa, 2008). The ways in which Mexican-origin families cope with sociocultural contextual stressors may be rooted in sociocultural patterns (Berkel et al., 2010; Romero, Gonzalez, & Smith, 2015; Roosa et al., 2002; White et al., 2013).

There is a burgeoning literature documenting how father involvement and wellbeing varies by fathers' characteristics, including cultural beliefs about the importance of families and the role of fathers in children's lives (Cabrera, Aldoney, & Tamis-LeMonda, 2013). In particular, cultural values such as *familismo*, *respeto*, and *caballerismo*, the focus of the present study, are important for Latino fathers (Arciniega, Anderson, Tovar-Blank, & Tracey, 2008; Cabrera & Garcia-Coll, 2004; Coltrane, Parke, & Adams, 2004; Fuller, & Garcia Coll, 2010; Gonzales, Deardorff, Formoso, Barr, & Barrera, 2006; Parke et al., 2003; Taylor & Behnke, 2005), and a growing body of work provides evidence for the role of cultural values as linked to behaviors that encourage the fulfillment of family roles (Cauce & Domenech-Rodriguez, 2002; Cruz et al., 2011; Glass, & Owen, 2010; Grau, Azmitia, & Quattlebaum, 2009).

Specifically, *familismo* is a set of normative beliefs that emphasize the centrality of the family and obligations to meet the needs of the family first before one's own. The central aspects of *respeto*, however, emphasize reverence, dignity, and consideration of others as essential for maintaining healthy relationships with family and others (Knight et al., 2009). Lastly, *caballerismo*, often described as a positive derivative of *machismo*, is conceptualized as affiliation, emotional connectedness, and psychological well-being as related to values and beliefs about fathers' roles and responsibilities in the family. Traditional Machismo is often

misconceptualized as encompassing violent and aggressive qualities, and scholars who operationalize machismo commonly represent it as linked to positive relatedness to the family. Arciniega and colleagues (2008), however, have extrapolated caballerismo as a dimension of machismo to represent the interpersonal and affiliation dimensions of machismo. Thus, caballerismo is more closely and meaningfully related with family relationships as responsibilities as a father. Moreover, caballerismo is closely and semantically related with family relationships as responsibilities as a father, such as believing that “men should be affectionate with their children” (Arciniega et al., 2008).

Some recent studies with Latino and Mexican-origin samples of parents are beginning to elucidate sociocultural mechanisms, including cultural value endorsement, that may operate as resiliency factors against negative mental health outcomes (Barnett et al., 2013; Gallo et al., 2009). For example, Ayon and colleagues (2010) found that among a sample of Mexican-origin mothers living in the southwest, greater endorsement of familismo was an indicator of improved mental health. Although one study has positively linked caballerismo to self-esteem among Mexican-origin men (Ojeda & Piña-Watson, 2014), there is yet to be a study explicitly linking other core cultural values (e.g., respeto) among Mexican-origin fathers to mental health. Thus far this body of work has been limited to studies linking familismo and mental health among mothers; if and how other cultural values in addition to familismo promote mental health is still unknown, especially among fathers.

At the same time, a growing body of research has delineated how cultural values and parenting intertwine, particularly among Mexican-origin parents (e.g., Taylor et al., 2012). Researchers agree that for Mexican-origin parents, parenting is shaped by interactions among traditional beliefs and practices and U.S. cultural and contextual demands (e.g., Fuller & Garcia

Coll, 2010; Tamis-LeMonda et al., 2008). Further, researchers have noted that the processes in which parents engage in different domains of parenting may be rooted in sociocultural patterns. As such, researchers repeatedly characterize cultural values as key elements driving these sociocultural mechanisms that help shape parenting strategies across multiple domains of parenting. For instance, some research linking the cultural value of *familismo* and parenting show that endorsement of attitudinal familismo beliefs may encourage parents to take active, child-centered approaches to parenting (Calzada et al., 2012; Fuller & Garcia Coll, 2012; Li-Grining, 2012), and to approach parenting as a collaborative process, that is parenting with coparents to meet mutually agreed upon goals for child socialization. Albeit, scant, some research in this area also suggests that endorsement of familismo beliefs is linked with greater more parental monitoring of adolescents (e.g., Romero & Ruiz, 2007).

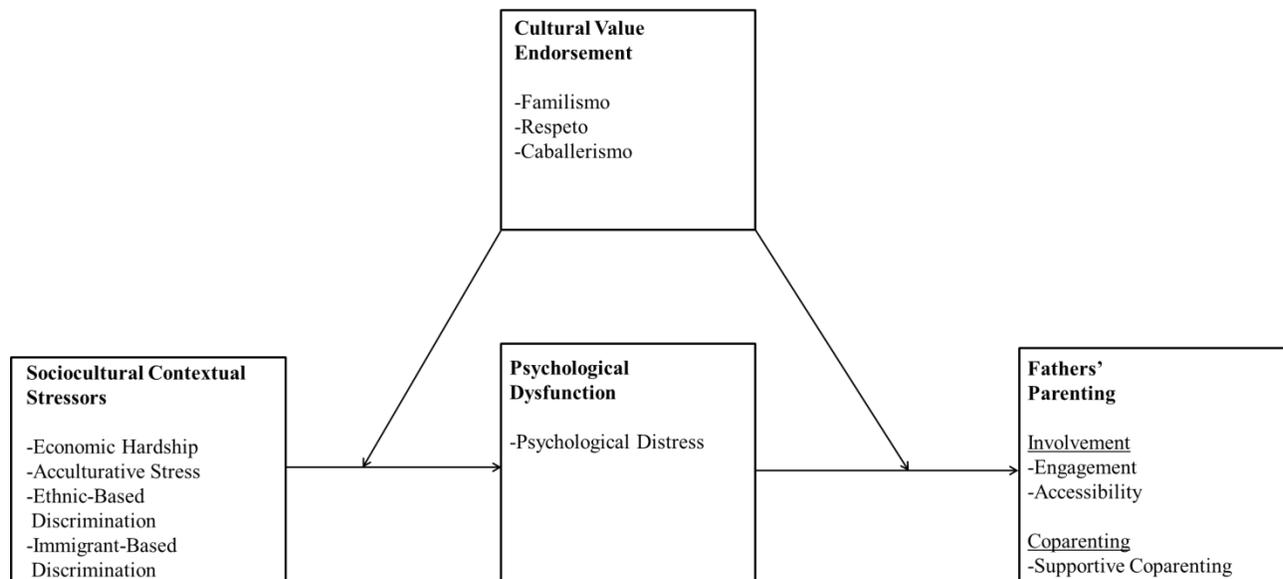
However, this research has rarely focused on fathers and Mexican-origin parents with young children (Calzada et al., 2012; Cruz et al., 2011; Li-Grining, 2012). In the few studies that have considered links between familismo beliefs and coparenting quality during childhood, endorsement of familismo beliefs has been positively linked to coparenting cooperation (Caldera, Fitzpatrick & Wampler, 2002; Sotomayor-Peterson, Figueredo, Christensen, & Taylor, 2011). However, the two other cultural value constructs of *respeto* and *caballerismo* have rarely been considered in the context of Mexican-origin fathers' parenting (Calzada, 2010, 2012; Glass & Owen, 2010), particularly with young children (Cruz et al., 2011). As echoed by White and Roosa (2012), an investigation explicitly measuring cultural values, specifically relevant to Mexican-origin men, as potential moderators within the Family Stress Model has yet to be empirically examined. In part, this need is also reflected by some investigators who have urged researchers to move beyond simple main effect designs and study the complexity of the

conditions under which core cultural values represent a source of strength and/or weakness for Latino families (Cauce & Domenech-Rodriguez, 2002).

### Adapted Family Stress Model

This study aims to develop and test an adapted Family Stress Model that includes a specific set of stressors (i.e., risks) and potential moderators (i.e., protective factors). See Figure 1 for the conceptual model.

Figure 1. Conceptual Moderation Model of an Adapted Family Stress Model



Economic pressure, acculturative stress, and ethnic- and immigrant-based discrimination are chronic stressors that Mexican-Americans often face on a daily basis (Attar, Guerra, & Tolan, 1994; Flores et al., 2010; Perez et al., 2008). Although some studies have demonstrated associations between contextual stressors like the ones mentioned above and parental psychological distress and parenting (e.g., Conger et al., 2002; Elder et al., 1995; Hill & Herman-Stahl, 2002; Kotchick et al., 2005), all of these studies involved samples of African-American, European-American, or mixed origin families, and have only examined maternal psychological

distress. Only a handful of studies have extended and replicated these models to test these associations among fathers, especially among Mexican-origin or Latino fathers (e.g., Cruz et al., 2011; White et al., 2009). For instance, Elder and colleagues (1995) reported that economic pressure, indirectly through parental depressed mood, reduced Mexican-origin fathers' sense of parenting efficacy and, for some, the quality of their parenting behavior. Further, even fewer studies have examined the role of cultural values as potential moderators of the associations conceptualized in the Family Stress Model (e.g., Taylor et al., 2012), and not one study has tested multiple sociocultural contextual stressors and cultural values simultaneously, including the relatively understudied value of *caballerismo*.

## **CHAPTER II**

### **Present Study**

The goals of this study are to: (1) extend our current understanding of the influence of sociocultural contextual stressors on Mexican-origin fathers' psychological distress, and consequently, parenting; and (2) add to the body of knowledge on the role of cultural values as moderators of the influence of sociocultural contextual stressors on Mexican-origin fathers' psychological distress, and parenting. To accomplish these aims, an adapted Family Stress Model was tested.

Specifically, I consider the extent to which specific sociocultural contextual stressors are independently associated with fathers' levels of psychological distress. Each of the stressors included in the model have been documented to be linked to psychological distress among Mexican-origin parents (Cruz et al., 2011; Flores et al., 2008; Elder et al., 1995; Parra-Cardona et al., 2006; Perez, et al., 2008). Psychological distress was selected as an indicator of psychological dysfunction because it presents a pernicious, complex risk to parenting and family functioning (Wilson & Durbin, 2010), especially among economically disadvantaged Mexican-origin fathers (White et al., 2009). In fact, this set of common sociocultural contextual stressors is often overlooked in studies examining pathways undermining fathers' parenting in Latino, and especially, Mexican-origin samples.

In summary, the large body of research supporting the Family Stress Model (see Conger, Conger & Martin, 2010 for a review) has highlighted the pathways by which contextual stressors influence parental psychological distress and parenting. Studies have only recently begun to test this framework among Mexican-origin fathers, and these studies have yet to account for specific sociocultural contextual stressors that are particularly pertinent to Mexican-origin groups (White

et al., 2009; White & Roosa, 2012). This study will contribute to this growing area of research by analyzing simultaneously the influence of multiple sociocultural contextual stressors on fathers' parenting via paternal psychological distress in a sample of Mexican-origin fathers. Moreover, this study will extend this socioculturally and ecologically valid approach (Knight, Roosa, & Umaña-Taylor, 2009) to studying Mexican-origin families by considering how cultural values, specifically *familismo*, *respeto*, and *caballerismo*, may serve as key buffers for fathers experiencing these stressors and related psychological distress.

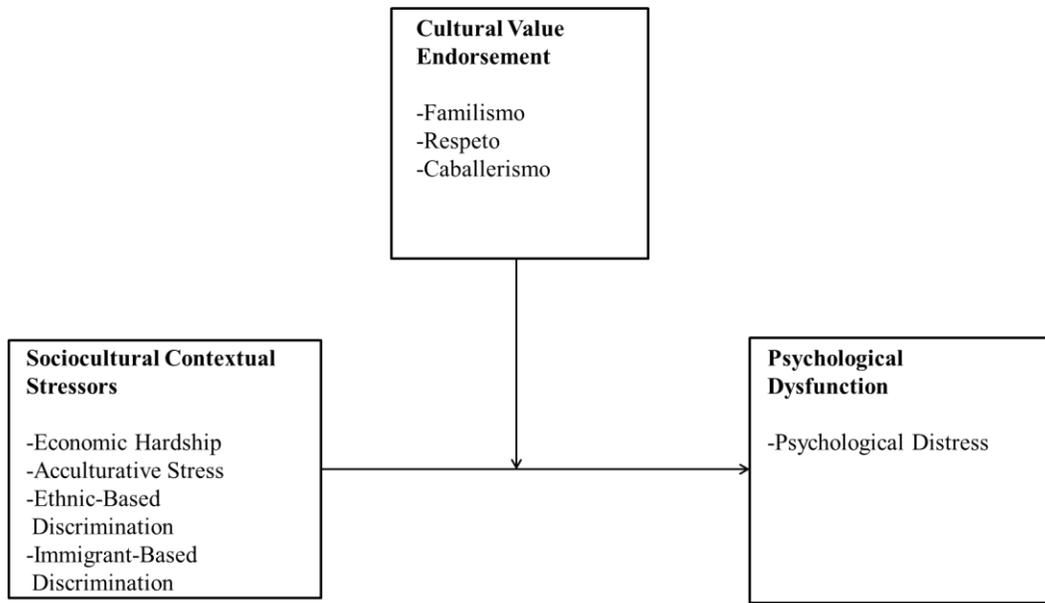
This project includes two specific aims.

**Aim 1:** Identify the extent to which three cultural values (*familismo*, *caballerismo*, and *respeto*) buffer Mexican-origin fathers' psychological distress from the influence of four sociocultural contextual stressors (economic hardship, acculturative stress, ethnic-based discrimination, and immigrant-based discrimination). See Figure 2. Based on the tenets of the Family Stress Model, this study proposes the following two hypotheses:

*Hypothesis 1a:* Higher levels of each form of sociocultural contextual stressor will be associated with greater psychological distress.

*Hypothesis 1b:* Endorsement of each of the three cultural values will moderate associations between each form of sociocultural contextual stressor and psychological distress, such that the sociocultural contextual stressors will only be associated with greater psychological distress among fathers endorsing low-levels of cultural values.

Figure 2. Hypothesized Model of Cultural Value Endorsement as a Moderator of the Association Between Sociocultural Contextual Stressors and Psychological Distress.

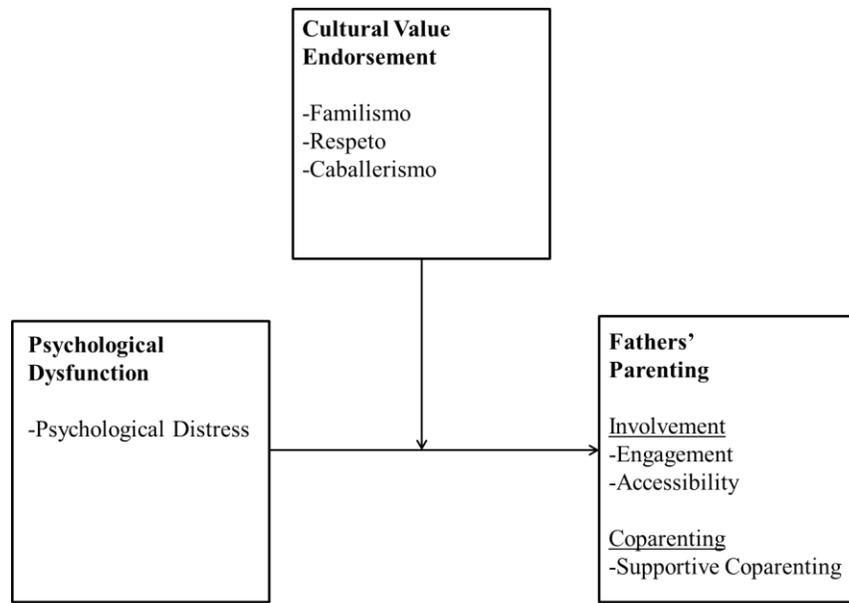


**Aim 2:** Examine the extent to which cultural values (*familismo, respeto, caballerismo*) moderate the associations between Mexican-origin fathers' psychological distress and fathers' parenting (engagement, accessibility, supportive coparenting) (see Figure 3).

*Hypothesis 2a:* Psychological distress will be inversely related to fathers' engagement, accessibility, and supportive coparenting.

*Hypothesis 2b:* Endorsement of each of the three cultural values will moderate associations between psychological distress and the three parenting outcomes, such that greater levels of psychological distress will only be associated with unfavorable parenting outcomes among fathers reporting low levels of cultural values.

Figure 3. Hypothesized Model of Cultural Value Endorsement as a Moderator of the Association Between Psychological Distress and Parenting



## Method

### Participants

Participants were a community sample of 85 biological fathers self-identified as Mexican or Mexican American of typically developing children residing in a medium-sized city in Arizona. All fathers were residing with the child's mother, and approximately 62% ( $n = 53$ ) of them were married. On average fathers had two biological children ( $M = 2.59$ ,  $SD = 1.37$ ). Slightly over half ( $n = 43$ , 51%) of all fathers reported that they were born in Mexico, and all but seven of the children were born in the United States. Fathers born in Mexico had lived on average, 16.46 years ( $SD = 9.45$ ) in the United States, ranging from 1 to 40 years. About a quarter ( $n = 21$ , 25%) of all fathers reported not possessing a driver's license or state-issued identification card at the time of the interview. This is a rough proxy for documentation status. English and Spanish speakers were eligible; 50 (59%) fathers chose to be interviewed in English. Fathers were on average 35.83 years old ( $SD = 7.30$ ), and child age ranged from 3 to 6 years for

a mean age of 4.61 years ( $SD = 1.13$ ). At the time of the interview, more than half (59%) of the fathers were working full-time (30 or more hours per week), 29% were working part-time or on temporary/contractual jobs, and 12% were not employed/working for pay. The majority of fathers in this sample were blue-collar workers employed in construction, labor, and skilled labor. Fathers' annual income ranged from less than \$5,000 to over \$92,000. Specifically, a portion of participants ( $n = 29$ , 34%) reported an annual income less than \$15,000; however, 32% ( $n = 27$ ) had an annual income of \$15,000–\$30,000, 20% ( $n = 17$ ) had an annual income of \$30,000–\$45,000, 5% ( $n = 4$ ) had an annual income of \$45,000–\$60,000, and 7% ( $n = 6$ ) had an annual income greater than \$60,000. Nearly two-thirds ( $n = 55$ , 65%) of fathers earned at least a high school diploma or equivalent. See Table 1 for more sample descriptives.

### **Procedures**

Data were collected from 2015 to 2016. Fathers were recruited primarily through distribution of English and Spanish flyers and announcements at local swap meets (or flea markets), online community ads, local community events, and multiple community locations, including libraries, laundromats, barber shops, churches, auto body shops, community college campuses, community centers, and child care centers. Eligibility criteria included self-identification by the fathers as Mexican or Mexican American, being the biological father of a typically developing 3 to 6 year-old child, and living with and in a committed romantic relationship with the mother of the target child. In cases where fathers had more than one child in this age range they were asked to complete the measures on the oldest child. All participants were required to reside in the United States.

All materials (informed consent; measures; flyers) were translated into Mexican Spanish unless a Spanish version previously validated with Mexican Americans was available.

Translations were made by professional translators from a local university translation services center. One native Spanish speaker who is bilingual reviewed the English and Spanish versions and resolved any inconsistencies. Fathers were given the option of responding in English or Spanish. Fathers were compensated \$30 in cash for participation in a one-time, 60- to 90-minute in-person interview consisting of a questionnaire and a semi-structured audiotaped interview. All interviews were conducted by trained, male interviewers of the research team who marked down the participants' responses and read each survey question and possible responses aloud in either Spanish or English to reduce problems associated with variations in literacy levels. Participants followed along with their own copy of the questionnaire. Spanish interviews were conducted by bilingual interviewers of the research team who are native Spanish speakers. Fathers had the option of selecting the location of the interview. Interviews took place primarily at a library, a community center, the study's lab office, or at the participant's home or work office. If an interview took place at the participant's home, interviewers were trained to conduct the interview in separate rooms and/or out of the hearing of other family members. All procedures were approved by, and in compliance with, the sponsoring institution's Institutional Review Board.

## **Measures**

### ***Sociocultural Contextual Stressors***

*Economic Hardship.* Items from the Basic Needs – Ability to Meet Expenses section of the Survey of Income and Program Participation (SIPP, 1991 and 1992) and the Social Indicators Survey (SIS, 1997 and 1999) were used to examine economic hardship. This adapted scale as used by other researchers (e.g., White et al., 2009) consists of 13 items (e.g., “was child ever hungry, but you just couldn't afford more food?”). Fathers responded with either a *yes* (1) or *no* (0) if they had faced any problems making ends meet because there was not enough money in the

past twelve months. Items were averaged so that higher scores correspond to greater levels of economic hardship; possible scores ranged from 0 to 1. This adapted scale has established construct validity in prior work with Mexican-origin fathers (White et al., 2009) and demonstrated good internal reliability ( $\alpha = .76$ ) in the current study.

*Acculturative Stress.* The Pressure to Acculturate subscale of the Multidimensional Acculturative Stress Inventory (Rodriguez et al., 2002) was used to examine fathers' acculturative stress. Specifically, this subscale assesses severity of acculturative stress related to pressures to acculturate to the majority culture. This subscale consists of 7 items (e.g., "It bothers me when people pressure me to follow the American ways of doing things") on a 5-point scale ranging from 0 (*not true*) to 4 (*very true*). Items were averaged so that higher scores correspond to greater acculturative stress; possible scores ranged from 0 to 4. This subscale has established construct validity in prior work with Mexican-origin parents (Rodriguez et al., 2007; Torres et al., 2012; Umaña-Taylor et al., 2011; White et al., 2009) and demonstrated good internal reliability ( $\alpha = .89$ ) in the current study.

*Ethnic-Based Discrimination.* The Perceived Discrimination Scale (Finch et al., 2000) was used to examine ethnic-based discrimination. This scale consists of 4 items ("How often do people treat you unfairly because you are Mexican or of Mexican-origin?") on a 4-point scale ranging from 0 (*never*) to 3 (*a lot*). Items were averaged so that higher scores reflected greater levels of ethnic-based discrimination; possible scores ranged from 0 to 3. This scale has demonstrated construct validity in prior work with Mexican-origin parents (Finch & Vega, 2003; Viruell-Fuentes, 2007) and has good internal reliability ( $\alpha = .84$ ) in the current study.

*Immigrant-Based Discrimination.* The 5-item Immigrant version of the abbreviated Hispanic Stress Inventory (Cavazos-Rehg, Zayas, Walker, & Fisher, 2006) was used to examine

immigrant-based discrimination. Fathers indicated how stressful immigrant-related experiences and pressures were to them (“I have thought that if I went to a social or government agency I would be deported”) on a 5-point scale ranging from 0 (*not at all stressful*) to 4 (*extremely stressful*). Items were averaged so that higher scores reflected greater immigrant-based discrimination; possible scores ranged from 0 to 4. This scale demonstrated good internal reliability ( $\alpha = .91$ ) in the current study.

### ***Psychological Dysfunction***

*Psychological Distress.* Fathers responded to two commonly used self-report symptoms checklists to assess depressive and anxious symptoms. First, fathers completed the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). This is a 20-item self-report scale designed to measure depressive symptomatology in the general population. The scale consists of four subscales, including depressive affect, lack of well-being, interpersonal difficulties, and somatic symptoms. Fathers indicated how frequently they had experienced various feelings or symptoms of depression (e.g., “You were bothered by things that usually don’t bother you”) during the last week on a 4-point scale ranging from 1 (*Rarely or None of the Time*) to 4 (*Most or All of the Time*). All four subscales were summed to create a measure of total depressive symptoms ( $\alpha = .89$ ), with greater scores reflecting more depressive symptoms. Second, fathers completed the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988) that required rating how much they have been bothered by 21 symptoms (e.g., “unable to relax”) during the past week on a 4-point scale ranging from 0 (*not at all*) to 3 (*a lot*). Items were summed to create a measure of total anxiety symptoms ( $\alpha = .88$ ). Depressive and anxiety symptoms were highly correlated ( $r = .54, p < .001$ ), and therefore the standardized scores from the two scales were summed to create a composite measure of psychological distress ( $\alpha = .91$ ),

with higher scores indicating greater levels of psychological distress. Both the CES-D and BAI have demonstrated acceptable reliability and validity with Spanish- and English-speaking Mexican-origin fathers (Crouter, Davis, Updegraff, Delgado, & Fortner, 2006; White et al., 2009), including Mexican-origin fathers living near the U.S.-Mexican border (Vaeth, Caetano, & Mills, 2015) and among Latino immigrants (Perreira, Deeb-Sossa, Harris, & Bollen, 2005).

### ***Fathers' Parenting***

*Father Accessibility.* A 12-item measure of quantity of involvement (Reichman et al., 2001) was used to measure father accessibility. Fathers indicated how many days per week they participated in a series of different activities with their child (“Put child to bed”; “Let child help you with simple household chores”) during a typical week on an 8-point scale ranging from 0 to 7 days per week. Items were averaged so that higher scores reflected greater levels of accessibility; possible scores ranged from 0 to 7. This scale has good internal reliability ( $\alpha = .82$ ) in the current study.

*Father Engagement.* The positive parenting subscale of the Alabama Parenting Questionnaire (Frick, 1991) was used to measure father engagement. This subscale consists of 6 items (“You let your child know when he/she is doing a good job with something”; “You reward or give something extra to your child for obeying you or behaving well”) on a 5-point scale ranging from 1 (*never*) to 5 (*Always*). Items were averaged so that higher scores reflected greater levels of engagement; possible scores ranged from 1 to 5. This scale has demonstrated construct validity in prior work with Mexican-origin parents (Donovick & Rodriguez, 2008; Ozer, Flores, Tschann, & Pasch, 2011) and has moderately acceptable internal reliability ( $\alpha = .65$ ) in the current study.

*Supportive Coparenting.* The coparenting support subscale of the Coparenting Questionnaire (Margolin, Gordis, & John, 2000) was used to examine supportive coparenting. This subscale consists of 8 items (“Support mother’s discipline decisions”) on a 5-point scale ranging from 0 (*never*) to 4 (*Always*). Items were averaged so that higher scores reflected greater levels of supportive coparenting; possible scores ranged from 0 to 4. This scale has demonstrated construct validity in prior work with Spanish speaking Latino families (Haack, Gerdes, Schneider, & Hurtado, 2011) and has good internal reliability ( $\alpha = .84$ ) in the current study.

### ***Cultural Values***

*Familismo.* The three familism subscales (familism – support, obligation, and referent) from the Mexican American Cultural Values Scale (Knight et al., 2009) were used to examine fathers’ adherence to Familismo attitudes. These three subscales consist of a total of 16 items (Familism support: “Parents should teach their children that the family always comes first”; Familism obligation: “If a relative is having a hard time financially, one should help them out if possible; Familism referent: “A person should always think about their family when making important decisions”) on a 5-point scale ranging from 0 (*not at all*) to 4 (*completely*). Items were averaged so that higher scores reflected greater endorsement of familismo values; possible scores ranged from 0 to 4. This scale demonstrated good internal reliability ( $\alpha = .86$ ) in the current study.

*Respeto.* The respect subscale from the Mexican American Cultural Values Scale (Knight et al., 2009) was used to examine fathers’ adherence to respeto attitudes. This scale consists of 8 items (“Children should always honor their parents and never say bad things about them”) on a 5-point scale ranging from 0 (*not at all*) to 4 (*completely*). Items were averaged so that higher

scores reflected greater endorsement of respeto values; possible scores ranged from 0 to 4. This scale demonstrated good internal reliability ( $\alpha = .74$ ) in the current study.

*Caballerismo.* The Caballerismo scale (Arciniega et al., 2008) was used to examine fathers' adherence to Caballerismo attitudes. Caballerismo is a cultural value construct described as nurturing, family centered, and chivalrous. The caballerismo scale consists of 10 items ("Men should be affectionate with their children") on a 7-point scale ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). Items were averaged so that higher scores reflected greater endorsement of caballerismo values; possible scores ranged from 1 to 7. This scale has demonstrated construct validity in prior work U.S.-born and foreign-born Mexican-origin fathers (Arciniega et al., 2008; Glass & Owen, 2010) and has acceptable internal reliability ( $\alpha = .71$ ) in the current study.

### **Analytic Strategy**

First, preliminary analyses were performed by examining the descriptive statistics and correlations among all variables. Second, independent samples *t*-tests were conducted to examine mean-level differences in key study variables by paternal nativity status and language of interview. Third, data screening procedures were used to test for outliers and normality in the dependent variables. Fourth, all continuous independent variables were mean centered. Lastly, neither the independent nor dependent variables had any missing data.

### ***Aim 1. Psychological Distress***

For the first aim in this study, a set of three hierarchical linear regression models were computed with psychological distress as the dependent variable. To increase the probability of detecting small effect sizes due to the considerable number of predictors (e.g., 19), three separate models testing each cultural value by all of the stressors were computed. Each model included

Step 1 (nativity, economic hardship, acculturative stress, ethnic-based discrimination, immigrant-based discrimination), and Step 2 (familismo, respeto, caballerismo). Cultural values were then examined as potential moderators of the effects of sociocultural contextual stressors on psychological distress. To do this, interaction terms were created as the products of three cultural values and four sociocultural contextual stressors. Step 3 was conducted separately for each of the three cultural values so each model contained the interaction terms for a single cultural stressor (e.g., familismo x cultural stressors), while continuing to control for the main effects of each cultural stressor and cultural value. Finally, statistically significant interaction terms were evaluated by plotting simple slopes of the lines defining the association between independent and dependent variables at  $-1$  SD, mean and  $+1$  SD of the moderator variables (Aiken & West, 1991; Preacher, Curran, & Bauer, 2012).

### ***Aim 2. Parenting***

For the second aim in this study, three identical hierarchical linear regression models were computed with fathers' accessibility, engagement, and supportive coparenting as the dependent variables. Each model included Step 1 (nativity, economic hardship, acculturative stress, ethnic-based discrimination, immigrant-based discrimination, target child's age, psychological distress), Step 2 (familismo, respeto, caballerismo), and Step 3 (familismo x psychological distress, respeto x psychological distress, caballerismo x psychological distress). Finally, statistically significant interaction terms were evaluated by plotting simple slopes of the lines defining the association between independent and dependent variables at  $-1$  SD, mean and  $+1$  SD of the moderator variables (Aiken & West, 1991; Preacher, Curran, & Bauer, 2012).

## **Results**

### **Descriptive Statistics and Preliminary Analyses**

Correlations, means, and standard deviations of all variables used in the current study are presented in Table 2. Consistent with the literature, psychological distress was positively associated with all of the sociocultural contextual stressors. Interestingly, except for the positive association between familismo and immigrant-based discrimination, not one cultural value was associated with a sociocultural contextual stressor or psychological distress. The three positive parenting practices were significantly associated with one another. Note that child sex was unrelated to any of the dependent and independent variables, and therefore was not included in the models used to test the hypotheses. Consistent with prior work, psychological distress was inversely associated with both accessibility and supportive coparenting. Interestingly, psychological distress was not associated with engagement. However, accessibility and engagement were both inversely associated with immigrant-based discrimination. Interestingly, non-U.S. born fathers (51%) reported greater immigrant-based discrimination and less accessibility than U.S. born fathers. No other key study variables differed by nativity status or language of interview.

Tests for normality and symmetry were conducted using the value of skewness and kurtosis. The values of asymmetry and kurtosis for psychological distress (*Skewness* = .68; *Kurtosis* = -.39) and parenting outcomes (*Skewness* = -.07 – -1.19; *Kurtosis* = -.45 – 1.28) were within the acceptable  $\pm 2.0$  range of skewness and kurtosis (George & Mallery, 2010); meeting the assumption of normality. Accordingly, the normal distribution of psychological distress scores suggests that this is a non-clinical sample. The distribution of mean scores for sociocultural contextual stressors, particularly acculturative stress (overall mean = .97 out of 4) and immigrant-based discrimination (overall mean = .88 out of 4), were quite low and not normally distributed; suggesting that the large majority of these fathers were not frequently

exposed to sociocultural contextual stressors. However, both the range and standard deviation of acculturative stress (range: 0 – 3.43;  $SD = .98$ ) and immigrant-based discrimination (range: 0 – 4;  $SD = 1.13$ ) reflected considerable variability in the sample. Meanwhile, the distribution of mean scores for cultural values, specifically respeto (overall mean = 3.37 out of 4) and caballerismo (overall mean = 6.46 out of 7), likely exhibited a ceiling effect, wherein these traditional cultural values likely appealed to the majority of fathers in this sample and with few diverting from these high mean scores for respeto (range: 1.63 – 4;  $SD = .52$ ) and caballerismo (range: 5.10 – 7;  $SD = .49$ ). Interestingly, among the attitudes and beliefs listed on the caballerismo scale, the most frequently endorsed items, that is, reporting a 7 on a 1 (*very strongly disagree*) to 7 (*very strongly agree*) scale, were related to fathers' roles and responsibilities in the family, such as “Men want their children to have better lives than themselves” (88%), “Men should be willing to fight to defend their family” (75%), and “Men should be affectionate with their children” (73%). Checks for multicollinearity of key study variables were conducted by examining the Variance Inflation Factor (VIF) and Tolerance values. A VIF of 10 or more and Tolerance values of .10 or less are suggested to be indicative of problems with multicollinearity (Cohen, Cohen, West, and Aiken, 2003). The VIF and Tolerance values of the study variables across all hierarchical linear regression models were within the suggested limits (i.e., VIF range 1.06 – 2.96, Tolerance range .34 – .94), which suggest that the assumption of multicollinearity was not violated.

### ***Aim 1: Main Effects on Psychological Distress***

To examine the associations between sociocultural contextual stressors and psychological distress, hierarchical linear regressions models were computed. First, the direct associations between sociocultural contextual stressors and psychological distress were examined in Step 1. Economic hardship ( $\beta = .27, p < .01$ ) and immigrant-based discrimination ( $\beta = .41, p < .01$ ) were

significant positive predictors of psychological distress. Interestingly, nativity was not found to be a statistically significant predictor of psychological distress. The findings in this step show the considerable amount of variation in psychological distress contributed by all of the independent variables ( $Adj. R^2 = .36, F(5, 79) = 10.52, p < .001$ ). Next, the direct associations between cultural values and psychological distress, while controlling for each cultural stressor, were examined in Step 2. Caballerismo was inversely related to psychological distress ( $\beta = -.26, p < .05$ ). This step in the model contributed to a statistically significant increase in the variance explained by the model ( $\Delta R^2 = .06, F(3, 76) = 2.77, p < .05$ ). However, some of these main effects were qualified by statistically significant interactions.

***Aim 1: Moderating Effects of Cultural Values on Psychological Distress***

The hypothesized moderating role of cultural values on the association between sociocultural contextual stressors and psychological distress was tested to understand whether these associations differed according to endorsement of cultural values. The moderation analyses were conducted separately for each of the three cultural values so each model contained the interaction terms for a single cultural stressor, while continuing to control for the main effects of each cultural stressor and cultural value. The unstandardized and standardized results of the moderation analyses for familismo are reported in Table 3, which showed that this step in the model contributed to a statistically significant increase in the variance explained by the model ( $\Delta R^2 = .08, F(4, 72) = 3.32, p < .05$ ). Interaction terms representing familismo by economic hardship ( $\beta = .19, p < .05$ ), and by immigrant-based discrimination ( $\beta = .25, p < .05$ ), each emerged as statistically significant. Simple slopes of the lines were plotted for the association between economic hardship and psychological distress with conditional values of familismo set at the mean, and 1 *SD* below and above the mean. As shown on the graph in Figure 4, when

fathers reported greater levels of familismo, there was a positive association between economic hardship and psychological distress,  $b = 6.42, t = 3.30, p < .01$ . Second, similar probing analyses showed a similar positive association between immigrant-based discrimination and psychological distress when fathers reported greater levels of familismo,  $b = 8.55, t = 4.27, p < .001$  (see Figure 5). However, these relationships were null when fathers reported lower levels (i.e., mean and 1 *SD* below the mean) of familismo. Notably, the main effect of caballerismo ( $\beta = -.28, p < .05$ ) remained statistically significant in the final step of this model.

The results of the moderation analyses for respeto are reported in Table 4, which showed that this step in the model contributed to a statistically significant increase in the variance explained by the model ( $\Delta R^2 = .06, F(4, 72) = 1.93, p < .05$ ). Interaction terms representing respeto by immigrant-based discrimination ( $\beta = .21, p < .05$ ) emerged as statistically significant. Analyses following similar probing techniques described earlier showed that when fathers reported greater levels of respeto, there was a positive association between immigrant-based discrimination and psychological distress,  $b = 9.01, t = 4.01, p < .001$  (see Figure 6); however, this relationship was null when fathers endorsed mean or lower levels of respeto. Notably, the main effects of both economic hardship ( $\beta = .28, p < .01$ ) and caballerismo ( $\beta = -.26, p < .05$ ) remained statistically significant at the final step of this model.

No statistically significant interaction effects emerged in the moderation analyses for caballerismo (see Table 5). Also, this step in the model did not contribute to a statistically significant increase in the variance explained by the model ( $\Delta R^2 = .01, F(4, 72) = .25, p = .91$ ).

### ***Aim 2: Main Effects on Parenting***

To examine the effects of psychological distress on fathers' accessibility, engagement, and supportive coparenting, three identical hierarchical linear regression equations were

computed. In addition to economic hardship, acculturative stress, and immigrant-based discrimination, nativity and target child's age were controlled for at the first step of each of the three models given some of the significant group differences and correlations observed with these two covariates.

#### *Main Effects Predicting Father Accessibility*

As shown in Table 6, the direct association between psychological distress and accessibility was examined in Step 1. Psychological distress ( $\beta = -.38, p < .01$ ) significantly negatively predicted accessibility. Interestingly, the main effects of nativity ( $\beta = .32, p < .05$ ) and economic hardship ( $\beta = .30, p < .01$ ) also emerged as statistically significant, such that fathers who were born in the United States reported more accessibility than fathers born in Mexico, and fathers who reported experiencing greater economic hardship also reported more involvement in child rearing tasks. The findings in this step show the considerable amount of variation in accessibility contributed by all of the independent variables ( $Adj. R^2 = .21, F(6, 78) = 4.80, p < .001$ ). Next, the direct associations between cultural values and accessibility, while controlling for Step 1 variables, were examined in Step 2; familismo was positively related to accessibility ( $\beta = .37, p < .01$ ). This step in the model contributed to a statistically significant increase in the variance explained by the model ( $\Delta R^2 = .14, F(3, 75) = 5.73, p < .05$ ).

#### *Main Effects Predicting Father Engagement*

As shown in Table 7, neither psychological distress nor any of the control variables in Step 1 independently predicted engagement ( $Adj. R^2 = .04, F(6, 78) = 1.58, p = .16$ ). The direct associations between cultural values and engagement, while controlling for Step 1 variables, were examined in Step 2; only one cultural value significantly contributed to engagement. Specifically, when fathers reported greater endorsement of caballerismo values, they also

reported higher levels of engagement ( $\beta = .28, p < .05$ ). This step in the model contributed to a statistically significant increase in the variance explained by the model ( $\Delta R^2 = .12, F(3, 75) = 3.78, p < .05$ ).

#### *Main Effects Predicting Father Supportive Coparenting*

The direct association between psychological distress and supportive coparenting was examined in Step 1 (see Table 8), which showed that no variables statistically significantly predicted supportive coparenting ( $Adj. R^2 = .04, F(6, 78) = 1.60, p = .159$ ). Next, the direct associations between cultural values and supportive coparenting, while controlling for Step 1 predictors, were examined in Step 2. Caballerismo was positively related to supportive coparenting ( $\beta = .60, p < .001$ ). This step in the model contributed to a statistically significant increase in the variance explained by the model ( $\Delta R^2 = .33, F(3, 75) = 15.03, p < .001$ ).

#### *Aim 2: Moderating Effects of Cultural Values on Parenting*

The hypothesized moderating role of cultural values on the associations between psychological distress and accessibility, engagement, and supportive coparenting were tested to examine whether these associations differed according to the endorsement of cultural values. The moderation analyses included interaction terms for a single cultural value and psychological distress for the three parenting outcomes, while continuing to control for the main effects of psychological distress and each cultural stressor and cultural value.

#### *Moderation Model Predicting Father Accessibility*

The unstandardized and standardized results of the moderation analyses predicting accessibility are reported in Table 6, which showed that this step in the model contributed to a statistically significant increase in the variance explained by the model ( $\Delta R^2 = .05, F(3, 72) = 2.35, p < .05$ ). Interaction terms representing respeto by psychological distress ( $\beta = .36, p < .05$ )

emerged as statistically significant. Simple slopes of the lines were plotted for the association between psychological distress and accessibility with conditional values of respeto set at the mean, and 1 *SD* below and above the mean. Results indicate an inverse association between psychological distress and accessibility when fathers reported lower levels of respeto,  $b = -0.85$ ,  $t = -3.07$ ,  $p < .01$ ; however, this relationship was null when fathers endorsed higher levels of respeto (see Figure 7). Notably, one cultural value (i.e., familismo) remained a statistically significant positive predictor of accessibility and another (i.e., caballerismo) emerged as statistically significant positive predictor at the final step of this model. Specifically, when fathers endorsed greater levels of familismo ( $\beta = .34$ ,  $p < .01$ ) and caballerismo ( $\beta = .27$ ,  $p < .05$ ), they also reported higher levels of accessibility. The main effects of nativity ( $\beta = .31$ ,  $p < .01$ ) and economic hardship ( $\beta = .32$ ,  $p < .01$ ) also remained statistically significant, such that U.S. born fathers reported greater levels of accessibility, along with fathers who reported higher levels of economic hardship.

#### *Moderation Model Predicting Father Engagement*

As shown in Table 7, no statistically significant interaction effects emerged predicting engagement ( $\Delta R^2 = .04$ ,  $F(3, 72) = 1.40$ ,  $p = .25$ ).

#### *Moderation Model Predicting Fathers' Supportive Coparenting*

The unstandardized and standardized results of the moderation analyses predicting supportive coparenting are reported in Table 8, which showed that this step in the model contributed to a statistically significant increase in the variance explained by the model ( $\Delta R^2 = .07$ ,  $F(3, 72) = 3.70$ ,  $p < .05$ ). Interaction terms representing familismo by psychological distress ( $\beta = .28$ ,  $p < .05$ ) emerged as statistically significant. As shown in Figure 8, when fathers reported lower levels of familismo, an inverse association between psychological distress and

supportive coparenting was observed,  $\beta = -0.28$ ,  $t = -2.30$ ,  $p < .05$ ; however, this relationship was null when fathers reported higher levels of familismo. Notably, when fathers endorsed greater levels of caballerismo ( $\beta = .66$ ,  $p < .001$ ), they also reported higher levels of supportive coparenting independent of psychological distress.

## **CHAPTER III**

### **Discussion**

There is a large body of research guided by the Family Stress Model (Conger et al., 2010) that documents the undermining effects of economic hardship on parents' psychological functioning, and consequently their parenting. Although researchers have begun to expand on the Family Stress Model to account for other important social and ecological stressors undermining psychological functioning and parenting, very little of this work has considered sociocultural and contextually-relevant stressors specific to ethnic minority parents, such as exposure to xenophobia and racial/ethnic discrimination (Williams & Mohammed, 2009). Although researchers have grown cognizant of the need for this work (Araujo & Borrell, 2006; Perez et al., 2008; Pew Hispanic Center, 2009), initial efforts have focused on mothers (Ayon et al., 2010; Pascoe & Smart Richman, 2009; Torres, et al., 2012). There is still a wide gap in our understanding of how the mechanisms within the Family Stress Model function among fathers, particularly fathers of Mexican-origin, the largest ethnic minority group in the U.S. Furthermore, most research informed by the Family Stress Model has largely ignored potential culturally and contextually-specific factors mitigating the effects of cultural stressors on fathers' psychological functioning and those buffering fathers' parenting.

Thus, the main purpose of this study was to extend our understanding of culturally-specific risk and protective factors among Mexican-origin fathers by testing an adapted Family Stress Model. With the continued growth of Mexican-origin families in the United States, and growing importance of responsible fatherhood in research and in practice, identifying the sources of strength in reducing psychological dysfunction and promoting positive parenting practices is a promising route to ultimately improve family well-being. Rarely have studies on fathers

examined the joint contributions traditional cultural values can make to disrupt the stress processes conceptualized in the Family Stress Model. The results from this study revealed a complex set of findings on the unique and cumulative contributions cultural values make to the stress pathways postulated in the Family Stress Model.

### **Aim 1**

As hypothesized, higher levels of sociocultural contextual stressors, specifically economic hardship and immigrant-related discrimination, were positively associated with psychological distress. This finding is consistent with prior research on economic hardship and stress due to anti-immigrant bias (Golding & Burnam, 1990; White et al., 2009), suggesting that Mexican-origin fathers are particularly at-risk of experiencing psychological distress when facing financial and immigrant-related stressors. Contrary to what was expected, acculturative stress and ethnic-based discrimination were not associated with psychological distress in multivariate models that included all of the stressors; however, these two cultural stressors were positively associated with psychological distress at the bivariate level. Although previous studies on psychological distress among Mexican-origin fathers have found independent effects of acculturative stress and ethnic-based discrimination (Finch et al., 2000; Gee, Ryan, Laflamme, & Holt, 2006; Torres, 2009; Torres et al., 2012), these two cultural stressors are rarely included in models with other important sociocultural contextual stressors, including economic hardship, despite robust literature linking economic hardship to fathers' impaired mental health (e.g., Conger et al., 2010). Although this sample of fathers, on average, reported little to no exposure to sociocultural contextual stressors, the findings are indicative of the saliency of economic hardship and immigrant-based discrimination for Mexican-origin fathers exposed to these stressors, and the considerable predictive power these two stressors have on psychological

distress in the presence of other sociocultural contextual stressors (i.e., acculturative stress, ethnic-based discrimination). Thus, for Mexican-origin fathers, this may mean that disproportionately high levels of economic hardship and immigrant-based discrimination are not necessary to take effect on psychological distress.

In regard to the protective effects of cultural values on psychological distress, the results did not provide support for the study hypotheses regarding the protective role of cultural values on fathers' psychological distress. In fact, the results suggest the exact opposite of what was hypothesized, and point to cultural values as potential risks for psychological fathers' functioning. As observed in the models testing familismo as a moderator of links between stressors and psychological distress, economic hardship and immigrant-based discrimination were associated with elevated psychological distress when fathers reported a greater endorsement of familismo values, and these associations remained even in the presence of respeto and caballerismo. A similar pattern of results was demonstrated in the respeto moderation model, in which fathers' reports of immigrant-based discrimination and psychological distress were positively associated only for fathers who reported high respeto beliefs.

The results of the cultural value moderation models in this study add further complexity to the larger body of findings on this topic. Although studies showing evidence for the mitigating effects of cultural values on psychological distress among Mexican-origin parents are scant, most research points to the positive main effects of cultural values, particularly familismo, on psychological functioning without testing the moderators in this study (Hernández, Ramírez García, & Flynn, 2010; Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002; Umaña-Taylor et al., 2011). Some studies, however, present mixed findings, showing cultural values as

associated with greater parental psychological dysfunction. Perhaps endorsement of cultural values in the presence of sociocultural contextual stressors can be a risk for Mexican-origin fathers' psychological functioning. As this study's results show, fathers who found familismo and respeto to be salient were at greater risk for psychological distress when they reported experiencing economic hardship and/or immigrant-based discrimination.

Still, it is important to acknowledge fathers who reported higher levels of familismo and economic hardship may have reported more symptoms of psychological distress perhaps due to greater financial pressures obstructing their abilities to meet the needs of their families. The centrality of family obligations and support within familismo may mean that the inability to meet the responsibility of providing economic support to kin in the face of economic hardship may be most distressing for fathers with strong familismo-oriented values. Further, fathers endorsing higher familismo values may have found immigrant-based discrimination stress to be particularly psychologically distressing, especially if this stress is conceptualized as an obstruction from fulfilling their family duties and roles. These explanations can also be used to help interpret the findings from the respeto moderation model, such that greater exposure to stressors from immigrant-based discrimination may have intensified fathers' symptoms of psychological distress when they strongly adhered to values of respeto that emphasize the importance of maintaining honor and respect within one's family and community. Perhaps, fathers who place great importance on honor and respect may have found the stressors from immigrant-related discrimination to be particularly distressing because discrimination is a form of disrespect that may violate assumptions about how people should regard and be regarded by others. This set of findings illuminates the complex nature of cultural values, and illustrate the importance of looking beyond the simple main effects of cultural values and analyze the interactions of cultural

values with other parent-level characteristics. Put differently, researchers investigating cultural values, stressors, and psychological distress among Mexican-origin parents may fail to capture important variability predicted by cultural values if they only account for their main effects. In light of the concerns voiced by scholars (e.g., Cauce and Domenech-Rodriguez, 2012; Taylor et al., 2012) regarding the need to move beyond simple main effect designs of cultural values and study the complex conditions under which cultural values represent sources of strength and weakness for Latino families, this study presents empirical evidence in support of this call to take on this critical analytical approach to study cultural values.

Although the results for psychological distress revealed a set of moderation associations by familismo and respeto, in contrast the main effects of caballerismo remained significant across each of the models. Specifically, greater endorsement of caballerismo independently predicted fewer symptoms of psychological distress. It may be that the central aspects of caballerismo, such as emotional awareness of self and others, family orientation, and maintaining prosocial behaviors and a positive male identity for oneself and the family, can provide fathers with a positive outlook that generalizes to and/or stems from their psychological wellbeing.

## **Aim 2**

As hypothesized, symptoms of psychological distress were inversely related with positive parenting outcomes, specifically accessibility. This finding is consistent with prior research suggesting that fathers experiencing elevated levels of psychological distress are particularly at-risk of exhibiting poor quantity of involvement (Paulson, Dauber, & Leiferman, 2006; Wilson & Durbin, 2010). Interestingly, a direct association between psychological distress and engagement was not found. It may be that for Mexican-origin fathers, psychological distress impedes fathers' capacities to be accessible to their children rather than affecting their quality of engagement with

their children, at least as conceptualized in the present study. It is also important to note that in line with other studies (Coltrane, Parke, & Adams, 2004; Tamis-LeMonda, Kahana-Kalman, & Yoshikawa, 2009; Turney & Kao, 2009), the present findings indicate that U.S.-born fathers are more accessible than their foreign-born counterparts.

In regard to the protective effects of cultural values, it was expected that the independent associations between psychological distress and positive parenting practices would be attenuated among Mexican-origin fathers who endorsed high levels of familismo, respeto, and caballerismo. The results provided partial support for the study hypotheses regarding the role of cultural values. It appears that the influence of psychological distress on accessibility is more salient for fathers with low levels of respeto. Thus, it may be the case that fathers who are experiencing psychological distress may be less accessible to their children if they do not function under a value system like respeto that emphasizes dignity as essential for maintaining healthy relationships with family. A similar pattern of findings emerged for supportive coparenting, and are in line with previous studies showing that endorsing familismo values confer benefits to Mexican-origin parents by encouraging the fulfillment of parenting roles. Specifically, the results here suggest that fathers may be less disposed to or capable of enacting supportive coparenting behaviors in the face of psychological distress when they place little regard to values that emphasize the importance of behaviors that meet family expectations and preserve family unity. There was a small minority of fathers in this study who held little regard for familismo and respeto values; as the findings here show, it was these fathers whose parenting faced the greatest threat from psychological distress.

Similar to the results for psychological distress, there were consistent direct, positive associations among caballerismo and the three parenting measures. One possible explanation for

these findings is that fathers who endorsed these values may also value the importance of being engaged and accessible to their children during a typical week because these behaviors are focal to positive male identity. Further, fathers endorsing these values may be committed to a supportive coparenting because items from *caballerismo* include “men should be affectionate with their children” and “men want their children to have better lives than themselves”.

### **Adaptive Benefits and Risks of Cultural Values**

Overall, the main findings in this study demonstrate the complexity in which cultural values function. Further, the findings suggest cultural values may manifest along a continuum in which costs and benefits coexist and are in constant flux across situations as fathers negotiate the complex interactions between, and within, their families and communities. Specifically, the findings provide further evidence for the myriad and intricate functions cultural values can serve, particularly as they pertain to mental health and parenting outcomes. For psychological distress, cultural values did not appear to diminish the link between sociocultural contextual stressors and psychological dysfunction. In fact, endorsing cultural values may have contributed to risks of experiencing psychological distress among fathers experiencing high levels of cultural stressors. Interestingly, however, when measures of father involvement were the focal outcome, lack of *familismo* and *respeto* cultural value endorsement in combination with psychological distress was linked to lower levels of accessibility and supportive coparenting. The findings suggest a potentially important benefit of cultural value endorsement for parenting among fathers experiencing psychological distress. Therefore, although endorsing cultural values may place fathers at higher risk for psychological distress when exposed to sociocultural stressors, belief in these same values may protect fathers’ parenting from the influence of psychological distress. Cultural values, specifically *familismo*, have been consistently regarded as core cultural

constructs and important protective factors for positive family relationships among Mexican-origin families, and some scholars (e.g., Bernal, Jiménez-Chafey, & Domenech Rodríguez, 2009; Bernal & Sáez-Santiago, 2006; Falicov, 2003; 2009; Sue, Zane, Hall, & Berger, 2009) have urged the need to incorporate familismo into mental health interventions. Although this study corroborates the centrality and benefits of cultural values for different domains of parenting among Mexican-origin fathers, the findings related to psychological distress should caution against the notion of promoting and prescribing cultural values uniformly and across all Mexican-origin fathers, especially within the context of mental health intervention programs. In terms of practical implications, these findings should serve as a caveat for future clinicians and practitioners reminding them of the need for clinical assessments that carefully consider the extent to which cultural values may each pose a risk or offer protection within the sociocultural context in which it manifests for a given father. Ultimately, this information can serve to improve mental health services that are both culturally-sensitive and specific for Mexican-origin fathers living in the southwestern United States. In light of the present findings, I echo the call made by Taylor and colleagues (2012) urging researchers to operationalize and measure cultural values as multifaceted constructs that can function both as assets and as risks in order to understand the complexity of cultural values in the context of cultural stressors.

### **Implications of the Adapted Family Stress Model**

Although the main paths in the Family Stress Model have been supported in research in diverse samples, following the suggestions in Conger et al. (2010), and in response to White and Roosa's (2009) call for research on examining moderation in the Family Stress Model, this study considers the ways in which culture and context moderate Family Stress Model associations to further understanding of the role of culture in family stress processes. The findings in this study

provide further evidence in support of the processes delineated in the Family Stress Model, particularly the direct association between economic hardship and psychological distress. This study's findings also demonstrate the importance of expanding the Family Stress Model to include other key stressors beyond economic hardship that are relevant to the contextual realities of Mexican-origin fathers, such as immigrant-based discrimination. Although the moderation results of cultural values were complex, the findings provide evidence in support of the need for future studies to include cultural values as key moderators of the associations in the Family Stress Model, particularly in samples with Mexican-origin fathers. The results also provide evidence for the generalizability and applicability of the Family Stress Model to culturally and ethnically diverse groups of fathers.

Collectively, the findings show that examining culturally-specific and ecologically-valid risks and adaptations increase the precision of the Family Stress Model for studying Mexican-origin fathers. Ultimately, an expansion of the Family Stress Model to include cultural moderators allows for greater specificity of risks and adaptive processes as they pertain to Mexican-origin fathers.

## CHAPTER IV

### Implications for Practice and Policy

#### Implications for Mental Health Programs Serving Mexican-Origin Fathers

The present findings suggest important implications for policymakers, clinicians, and practitioners working with Mexican-origin fathers. In line with the Family Stress Model, the results in this study demonstrate that Mexican-origin fathers facing sociocultural contextual stressors experience considerable psychological distress, and this is especially the case among fathers who strongly endorse traditional cultural values that emphasize the importance of meeting family needs and expectations. Mental health practitioners and clinicians should therefore be cautious about reinforcing these values and belief systems if and when they are brought up by fathers of Mexican-origin. Because cultural values emphasize elements that contradict the reality of facing economic hardship and xenophobia, mental health professionals are encouraged to talk about traditional cultural values and learn about the experiences of discrimination and economic turmoil that their Mexican-origin clients may be facing. Perhaps Mexican-origin fathers experiencing economic hardship and immigrant-based discrimination may benefit most from clinicians who take a more culturally-specific approach in their mental health services rather than a broadly-based, culturally-sensitive one. As such, mental health clinicians who adopt techniques targeting specific cultural constructs can grant them greater accuracy and precision when deciding whether to encourage or discourage fathers from using traditional cultural values to frame their meanings behind stressful experiences. In addition, the findings in this study encourage clinicians and practitioners to move beyond economic hardship and think more broadly about other stressors impacting the lives of Mexican-origin families and communities, such as systemic racism and immigrant-based discrimination. Further, as some

scholars (e.g., Falicov, 2009) underscore, true culturally attuned therapists and treatments serving underserved minority families equally account for the role of cultural value preferences and the impact of contextual stressors.

At the same time, however, *caballerismo* alone proved to be a cultural asset against psychological distress. Therefore, mental health practitioners should be prepared to learn more about this cultural value and consider its role in mental health when designing and implementing programs for Mexican-origin fathers. Important components could include talking with fathers and gauging their degree of endorsement of traditional cultural values. Throughout this process, it is important for practitioners to keep in mind that Mexican-origin fathers face multiple sociocultural contextual stressors that threaten their mental well-being; at the same time, Mexican-origin fathers must also be recognized for their capacity for resilience in challenging circumstances and continued commitment to their parenting role. Therefore, strategies to address psychological distress among Mexican-origin fathers may necessitate a multipronged approach. At one hand, policy work should work to bolster mental health services and outreach in order to serve fathers adversely affected by poverty and immigrant-based discrimination.

### **Implications for Parenting Intervention Programs Serving Mexican-Origin Fathers**

Major findings of this study provide further knowledge on the role cultural values play in the underlying processes in which parenting is compromised by psychological distress. As the results in this study imply, psychological distress can undermine fathers' abilities to be accessible to their children and supportive coparents to the mothers when fathers are not highly endorsing cultural values such as *familismo* and *respeto*. Interestingly, in light of these findings, practitioners should strongly consider factoring in cultural values in the design and implementation phases of their intervention programs. While continuing to recognize the distress

Mexican-origin fathers face in and outside the home partly due to economic and cultural stressors, parenting intervention programs may require practitioners to include cultural values in their lesson plans to expose fathers to these normative set of beliefs that emphasize the importance of family unity and respectful relationships at home. For instance, practitioners may design culturally-specific program activities whereby fathers can practice parenting skills that are grounded on developing an appreciation for their duties and obligations within their families and a positive orientation toward maintaining family cohesion and respectful family relationships. It should be noted that fathers in this study did not differ in their levels of endorsement of cultural values by nativity status. Therefore, Mexican-origin fathers, whether U.S. born or Mexican born, can be encouraged to endorse these cultural values by identifying the benefits they can bring to their relationships with their families.

The positive linkage between caballerismo values and parenting should be further noted; specifically, its independent positive relationship with each parenting outcome. Caballerimo is a relatively new construct that has remained under-studied in fatherhood research (Cruz et al., 2011; Glass & Owen, 2010), and under-utilized in programs targeting Mexican-origin fathers. The novelty of caballerismo comes from its emphasis on gender normativity, particularly as it pertains to culturally acceptable and expected patterns of behavior associated with manhood within Mexican-origin groups. In fact, the caballerismo scale used in this study calibrates endorsement of prosocial and family-oriented behaviors that fathers believe a man is expected to follow (e.g., “Men should be willing to fight to defend their family”; “A real man does not brag about sex”). This gendered dimension of caballerismo distinguishes this construct from other more commonly measured cultural values in Latino family research, such as familismo. This calls for further attention to caballerismo when working closely with fathers to encourage further

participation in parenting roles. Father involvement in intervention may be improved by focusing on familial responsibility and positive interactions with their children as aspects of caballerismo. In fact, caballerismo may be an important social construct that fatherhood practitioners can target to encourage Mexican-origin fathers to participate in their parenting programs. Low-income, Mexican-origin fathers are often considered hard-to-reach populations in both research and practice. Therefore, fatherhood practitioners working with Mexican-origin fathers are encouraged to work closely with community leaders and local fatherhood organizations to raise awareness about the importance of fathers in the lives of children and families. This can have a substantial impact on how fathers and communities fit father involvement within their cultural constructions of manhood; making parenting a normal component of manhood and adding more positive value to the fathers' role in the family for Mexican-origin fathers.

### **Implications for Community-Based Action**

The findings in this study showing psychological distress stemming largely from exposure to economic hardship and immigrant-based discrimination underscore the urgent need to eradicate poverty and anti-immigrant sentiments. To ameliorate the social and economic conditions of Mexican-origin fathers and their families would require an all-hands-on-deck approach – from policy makers to community leaders to local business owners, and even researchers – where everyone is at the front line, putting in time and effort, to address this issue as aggressively as possible. While working on these efforts, communities must also consider the macro and micro political climate where Mexican-origin fathers live. In states such as Arizona where anti-immigrant sentiments have manifested into anti-immigrant legislation, communities must work even harder and more strategically to leverage their own political weight and exercise their capacity to inflict change in the laws that get created and passed.

### **Strengths, Limitations, and Suggestions for Future Directions**

A major strength of this study is the examination of within group differences in an ethnic minority group, which has been considered an important and rigorous approach to understanding family processes (Knight et al., 2009). More specifically, in the present study all of the fathers self-identified as Mexican origin, yet there was variability in immigration history. Importantly, fathers' reports on endorsement of cultural values did not vary by country of birth or language of interview, pointing to the saliency of these values across Mexican-origin fathers. Another noteworthy strength of this study is that data were collected directly from fathers; much research literature on fathers consists of studies that relied on mothers' reports as a proxy measure for fathers' parenting. Therefore, this study has taken an important step in achieving precision in measuring fathers' parenting. Additional strengths include the simultaneous consideration of multiple sociocultural contextual stressors and cultural values, including the relatively understudied value of *caballerismo*. Notably, few studies of this population have used multiple measures of discrimination at once. A strength of this study is also its inclusion of three distinct dimensions of father involvement, thus capturing some of the richness and complexity shaping the lives of Mexican-origin fathers and their families.

This study, however, has some important limitations that must be considered when interpreting these results. The sample was derived from a midsize city in the southwest with a heavy concentration of Mexican-origin families, and a longstanding Mexican-origin population, which limits the generalizability of the findings to Mexican-origin fathers living outside the southwestern United States. Future research should test similar associations among Mexican-origin fathers living in regions with low concentrations of Mexican-origin families. A sample of Mexican-origin fathers from other regions of the country without a heavy concentration of

Mexican-origin families may report greater variability in exposure to cultural stressors and endorsement of cultural values than this study's sample. Note that the large majority fathers in this study did not report frequently experiencing cultural stressors, and as a whole strongly endorsed traditional cultural values. Yet, the variability in exposure to stressors that was present in the sample was linked in important ways to psychological distress and parenting. In addition, this sample was predominantly low-income, with more than a third of all fathers making \$15,000 or less; thus, future research should replicate a similar study with a larger proportion of middle- and upper -class Mexican-origin fathers. Also, it is worth noting the small sample size in this study, which may have limited the power to detect potentially statistically significant findings. Nevertheless, this is one of the first few studies to test these hypotheses among fathers and among Mexican-origin families, which in research are two historically, hard-to-reach populations (see Mitchell et al., 2007). Also, the data were cross-sectional, which limit the ability to infer the directionality of the findings, particularly whether psychological distress was present prior to exposure to economic and cultural stressors. Although as noted above, the use of fathers' self-reports is a strength, at the same time, a significant limitation of this study is that only self-report measures from fathers were collected and analyzed. Future studies should collect data from multiple-reporters, including mothers, and utilize multi-method approaches to measure fathers' parenting (e.g., observational assessments). In addition, assessments should take place over time and throughout multiple time points in order to gain a clearer understanding of the associations between economic and cultural stressors, psychological distress, and parenting. Lastly, this study did not account for interparental conflict, which is a crucial component in the Family Stress Model. Future studies testing similar associations in this study should account for conflict in parental relationships.

APPENDIX A: TABLES AND FIGURES

Table 1. *Descriptives of Mexican-Origin Fathers and Child and Mother Characteristics (N = 85)*

Characteristic	N (%)	M (SD)	Min	Max
Father's age		35.83 (7.43)	23	54
Married				
Yes	53 (62)			
No	32 (38)			
Language of the interview				
English	50 (59)			
Spanish	35 (41)			
Nativity				
U.S. born	42 (49)			
Non-U.S. born	43 (51)			
Time lived in the U.S. (years)		16.46 (9.45)	1	40
Participant's father U.S. born				
Yes	20 (23)			
No	65 (77)			
Participant's mother U.S. born				
Yes	22 (26)			
No	63 (74)			
Graduated from high school				
Yes	55 (65)			
No	30 (35)			
Employed				
Full-time	50 (59)			
Part-time/Temporary	25 (29)			
Not working for pay	10 (12)			
Annual income				
<\$15,000	29 (34)			
\$15,000 – \$30,000	27 (32)			
\$30,000 – \$45,000	17 (20)			
\$45,000 – \$60,000	4 (5)			
>\$60,000	6 (7)			
Target child sex				
Male	56 (66)			
Female	29 (34)			
Target child's age		4.61 (1.13)	3	6
Target child U.S. born				
Yes	78 (92)			
No	7 (8)			
Number of biological children		2.59 (1.37)	1	8
Target child's mother is Mexican-origin				
Yes	74 (87)			
No	11 (13)			

Table 2. Correlations, Means, Standard Deviations, and Skewness and Kurtosis of Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Economic hardship	—										
2. Acculturative stress	.22*	—									
3. Ethnic-based discrimination	.22*	.49**	—								
4. Immigrant-based discrimination	.24*	.41**	.41**	—							
5. Psychological distress	.42**	.41**	.39**	.48**	—						
6. Engagement	.05	-.18	-.17	-.23*	-.20	—					
7. Accessibility	.14	-.14	.01	-.29**	-.28**	.55**	—				
8. Supportive coparenting	.06	-.03	.06	-.03	-.24*	.28**	.36**	—			
9. Familismo	.11	.14	.15	.27*	.06	.18	.27*	.34**	—		
10. Respeto	.16	.16	.14	.12	.12	.22*	.15	.32**	.62**	—	
11. Caballerismo	.02	.04	.00	-.18	-.18	.34**	.29**	.63**	.47**	.57**	—
<i>M</i>	.24	.97	1.26	.88	19.67	4.36	4.32	3.41	3.30	3.37	6.46
<i>SD</i>	.19	.98	.75	1.13	15.02	.49	1.17	.59	.49	.52	.49
Range	0-1	0-3.43	0-2.75	0-4	0-78	2.67-5	1.50-6.67	1.25-4	2.19-4	1.63-4	5.10-7
Skewness	.92	.98	-.14	1.21	.68	-1.03	-.07	-1.19	-.48	-.90	-.90
Kurtosis	1.43	-.07	-.88	.36	-.39	1.07	-.45	1.28	-.66	.75	.07

\* $p < .05$ . \*\* $p < .01$ .

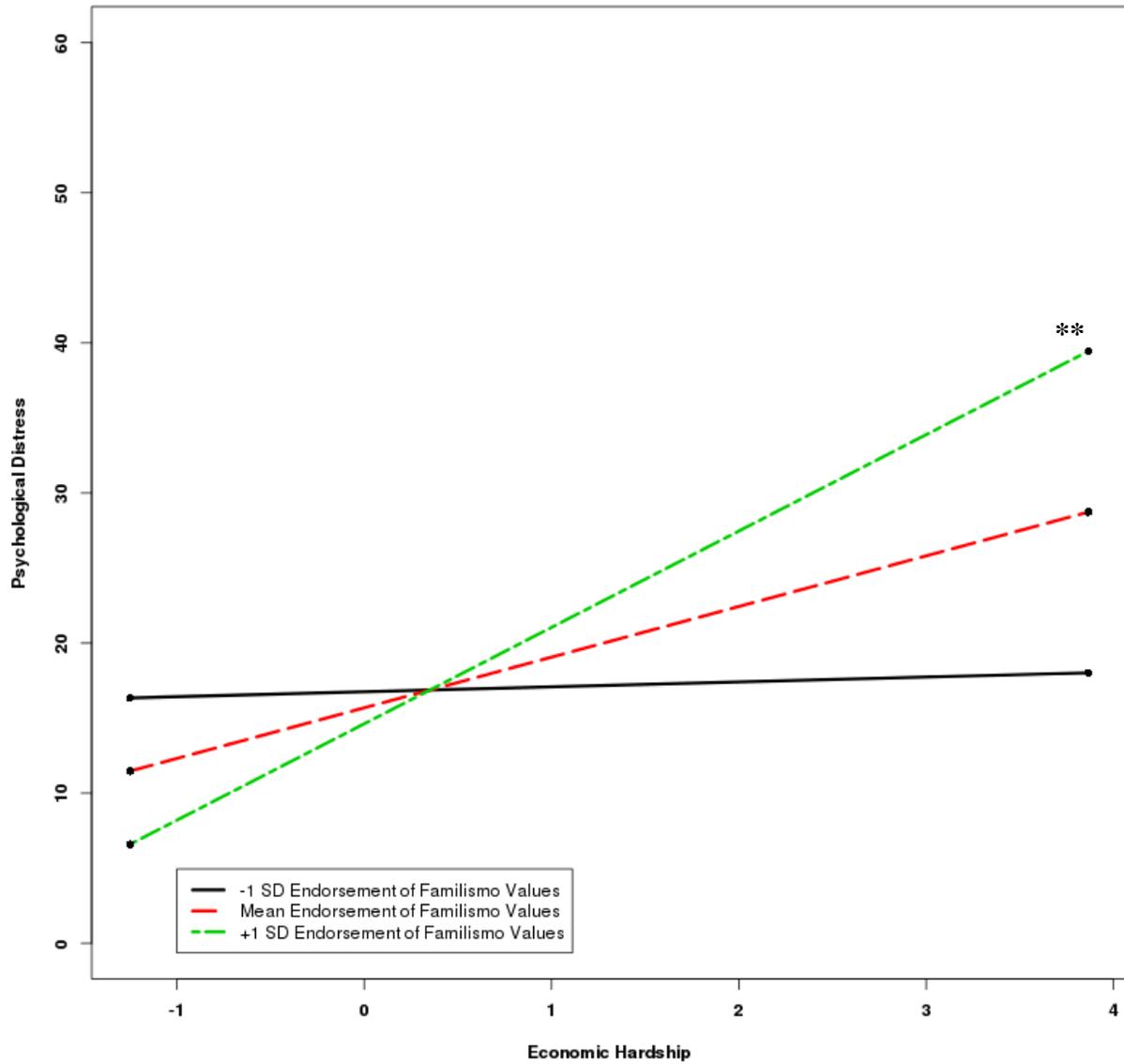
Table 3

*Cultural Value of Familismo as a Moderator of Sociocultural Contextual Stressors and Psychological Distress Among Mexican-Origin Fathers (N=85)*

Variable	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
U.S. born	5.37	3.14	.18	4.64	3.08	.15	5.56	2.93	.19
Economic hardship	4.02	1.38	.27**	3.79	1.34	.25**	3.37	1.28	.22*
Acculturative stress	2.08	1.58	.14	2.05	1.54	.14	2.10	1.60	.14
Ethnic-based discrimination	1.61	1.57	.11	1.38	1.53	.09	1.57	1.45	.10
Immigrant-based discrimination	6.12	1.81	.41**	6.30	1.81	.42**	4.45	1.89	.29*
Familismo				-1.67	1.70	-.11	-1.06	1.65	-.07
Respeto				3.12	1.80	.21	4.27	1.81	.28*
Caballerismo				-3.92	1.60	-.26*	-4.17	1.51	-.28**
Familismo x economic hardship							3.05	1.50	.19*
Familismo x acculturative stress							1.09	1.70	.07
Familismo x ethnic-based discrimination							-2.35	1.76	-.14
Familismo x immigrant-based discrimination							4.10	1.76	.25*
Constant									15.69***
$R^2$			17.01***			17.38***			.54
Adjusted $R^2$			.40			.46			.47
$\Delta R^2$			.36			.40			.08*
			.40***			.06*			

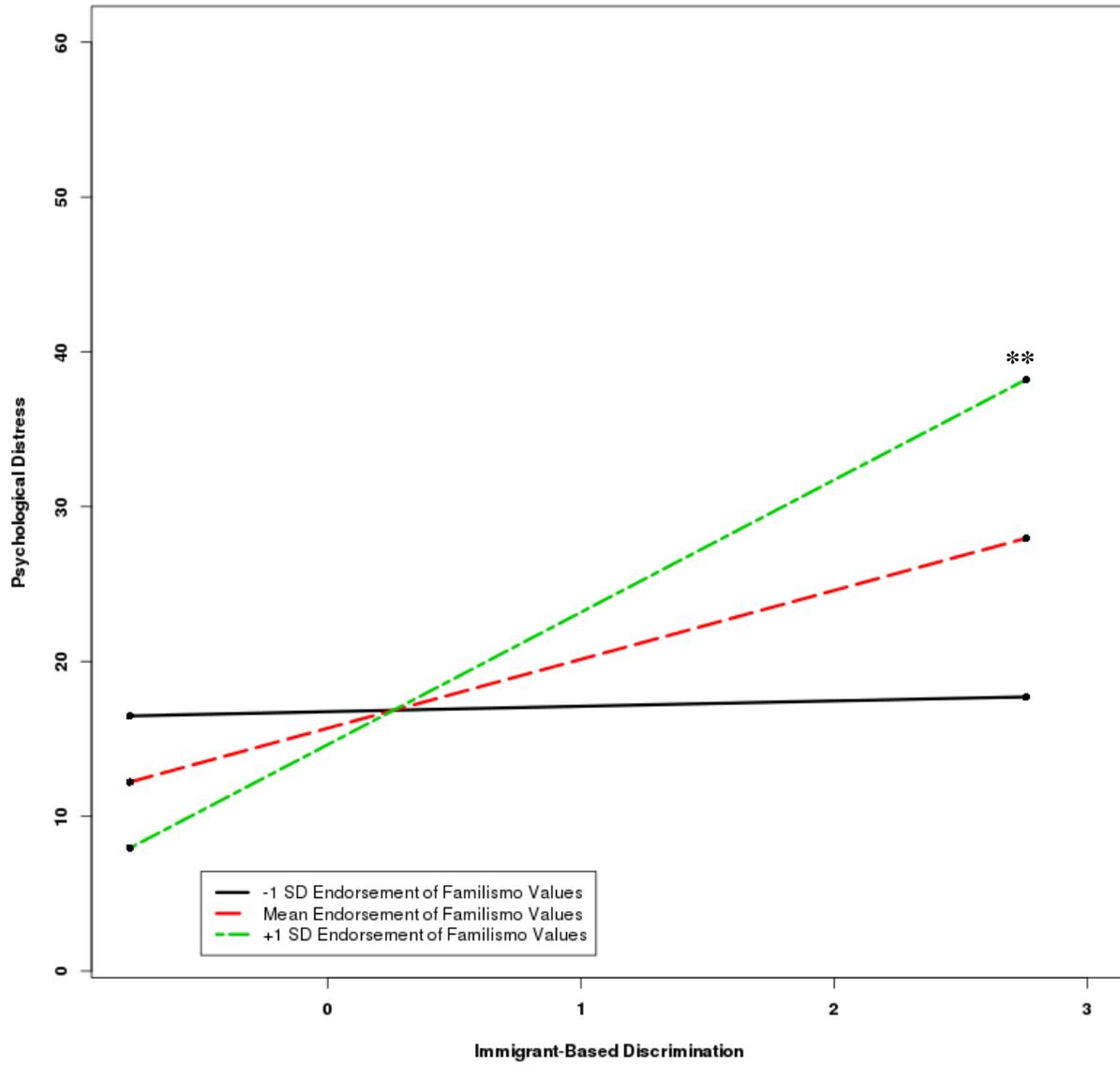
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Figure 4. *Familismo as a Moderator of the Association Between Economic Hardship and Psychological Distress*



\*\* $p < .01$ .

Figure 5. *Familismo as a Moderator of the Association Between Immigrant-Based Discrimination and Psychological Distress*



\*\* $p < .01$ .

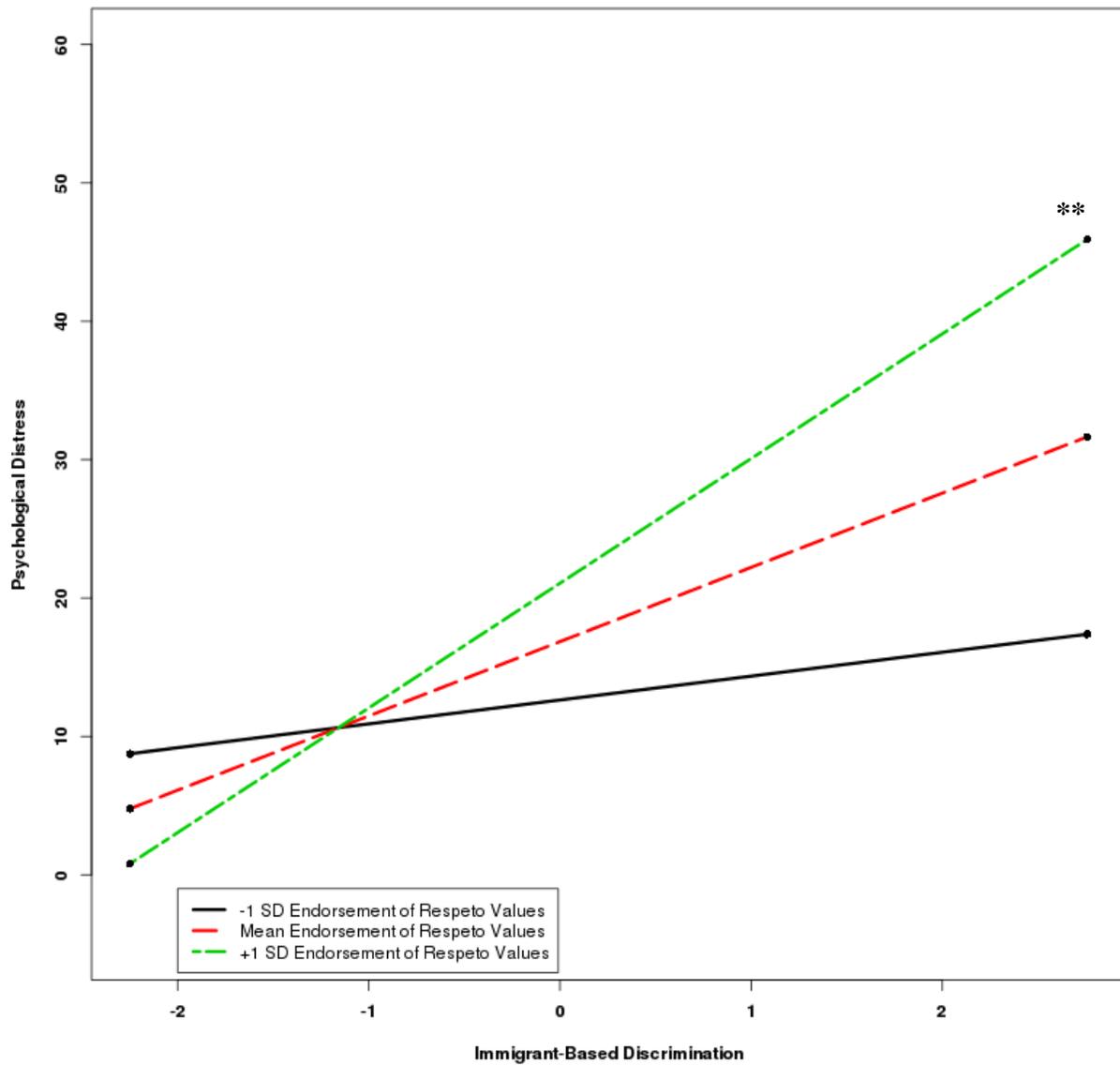
Table 4

*Cultural Value of Respeto as a Moderator of Sociocultural Contextual Stressors and Psychological Distress Among Mexican-Origin Fathers (N=85)*

Variable	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
U.S. born	5.37	3.14	.18	4.64	3.08	.15	4.44	3.16	.15
Economic hardship	4.02	1.38	.27**	3.79	1.34	.25**	4.15	1.48	.28**
Acculturative stress	2.08	1.58	.14	2.05	1.54	.14	1.25	1.59	.08
Ethnic-based discrimination	1.61	1.57	.11	1.38	1.53	.09	1.39	1.52	.09
Immigrant-based discrimination	6.12	1.81	.41**	6.30	1.81	.42**	5.37	1.84	.36**
Familismo				-1.67	1.70	-.11	-1.56	1.72	-.10
Respeto				3.12	1.80	.21	4.22	1.88	.28*
Caballerismo				-3.92	1.60	-.26*	-3.85	1.61	-.26*
Respeto x economic hardship							-.60	1.71	-.04
Respeto x acculturative stress							2.69	1.83	.16
Respeto x ethnic-based discrimination							-1.04	1.92	-.06
Respeto x immigrant-based discrimination							3.64	1.80	.21*
Constant									
			17.01***			17.38***			16.85***
$R^2$			.40			.46			.51
Adjusted $R^2$			.36			.40			.43
$\Delta R^2$			.40***			.06*			.06*

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Figure 6. *Respeto* as a Moderator of the Association Between Immigrant-Based Discrimination and Psychological Distress



\*\* $p < .001$ .

Table 5

*Cultural Value of Caballerismo as a Moderator of Sociocultural Contextual Stressors and Psychological Distress Among Mexican-Origin Fathers (N=85)*

Variable	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
U.S. born	5.37	3.14	.18	4.64	3.08	.15	4.89	3.22	.16
Economic hardship	4.02	1.38	.27**	3.79	1.34	.25**	3.56	1.44	.24*
Acculturative stress	2.08	1.58	.14	2.05	1.54	.14	1.73	1.61	.11
Ethnic-based discrimination	1.61	1.57	.11	1.38	1.53	.09	1.63	1.62	.11
Immigrant-based discrimination	6.12	1.81	.41**	6.30	1.81	.42**	6.30	1.87	.42**
Familismo				-1.67	1.70	-.11	-1.43	1.76	-.09
Respeto				3.12	1.80	.21	3.14	1.90	.21
Caballerismo				-3.92	1.60	-.26*	-3.92	1.63	-.26*
Caballerismo x economic hardship							.47	1.47	.03
Caballerismo x acculturative stress							1.55	1.74	.10
Caballerismo x ethnic-based discrimination							-.99	1.80	-.07
Caballerismo x immigrant-based discrimination							.37	1.72	.02
Constant				17.01***			17.38***		
$R^2$				.40			.46		
Adjusted $R^2$				.36			.40		
$\Delta R^2$				.40***			.06*		

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

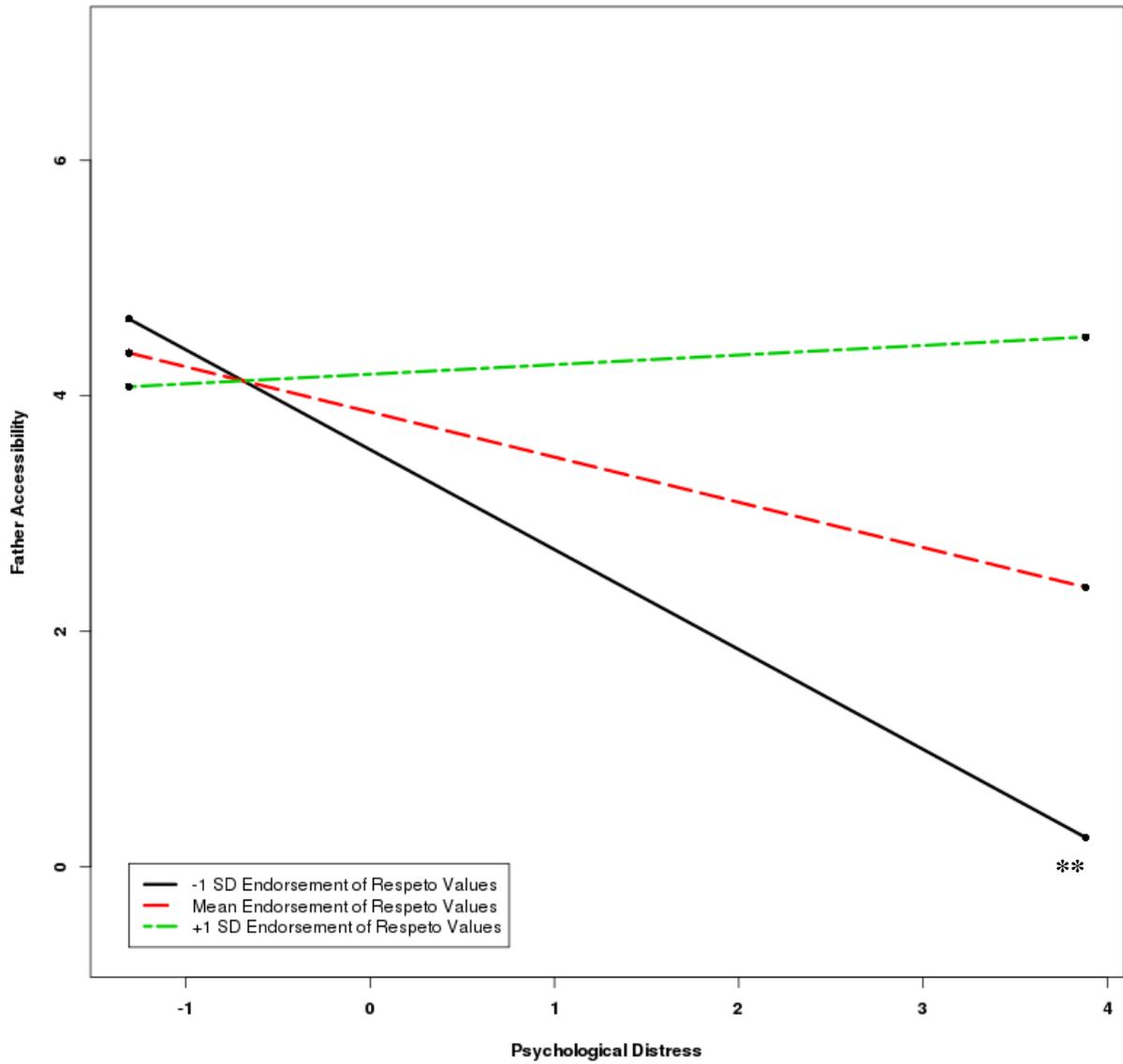
Table 6

*Cultural Values of Familismo, Respeto, and Caballerismo as Moderators of Psychological Distress and Father Accessibility Among Mexican-Origin Fathers (N=85)*

Variable	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
U.S. born	.74	.28	.32*	.65	.26	.28*	.73	.26	.31**
Economic hardship	.36	.13	.30**	.32	.12	.27**	.37	.12	.32**
Acculturative stress	-.03	.13	-.03	-.04	.12	-.04	-.03	.12	-.02
Immigrant-based discrimination	.01	.16	.01	-.15	.16	-.13	-.15	.15	-.12
Target child's age	-.08	.12	-.07	-.18	.11	-.16	-.19	.11	-.16
Psychological distress	-.45	.15	-.38**	-.30	.14	-.26*	-.38	.16	-.33*
Familismo				.43	.14	.37**	.39	.14	.34**
Respeto				-.21	.15	-.18	-.21	.15	-.18
Caballerismo				.25	.14	.21	.32	.14	.27*
Familismo x psychological distress							-.18	.16	-.15
Respeto x psychological distress							.46	.19	.36*
Caballerismo x psychological distress							-.20	.11	-.16
Constant									
		3.96***			4.00***			3.86***	
$R^2$		.27			.41			.46	
Adjusted $R^2$		.21			.33			.37	
$\Delta R^2$		.27***			.14*			.05*	

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Figure 7. *Respeto* as a Moderator of the Association Between Psychological Distress and Father Accessibility



\*\* $p < .01$ .

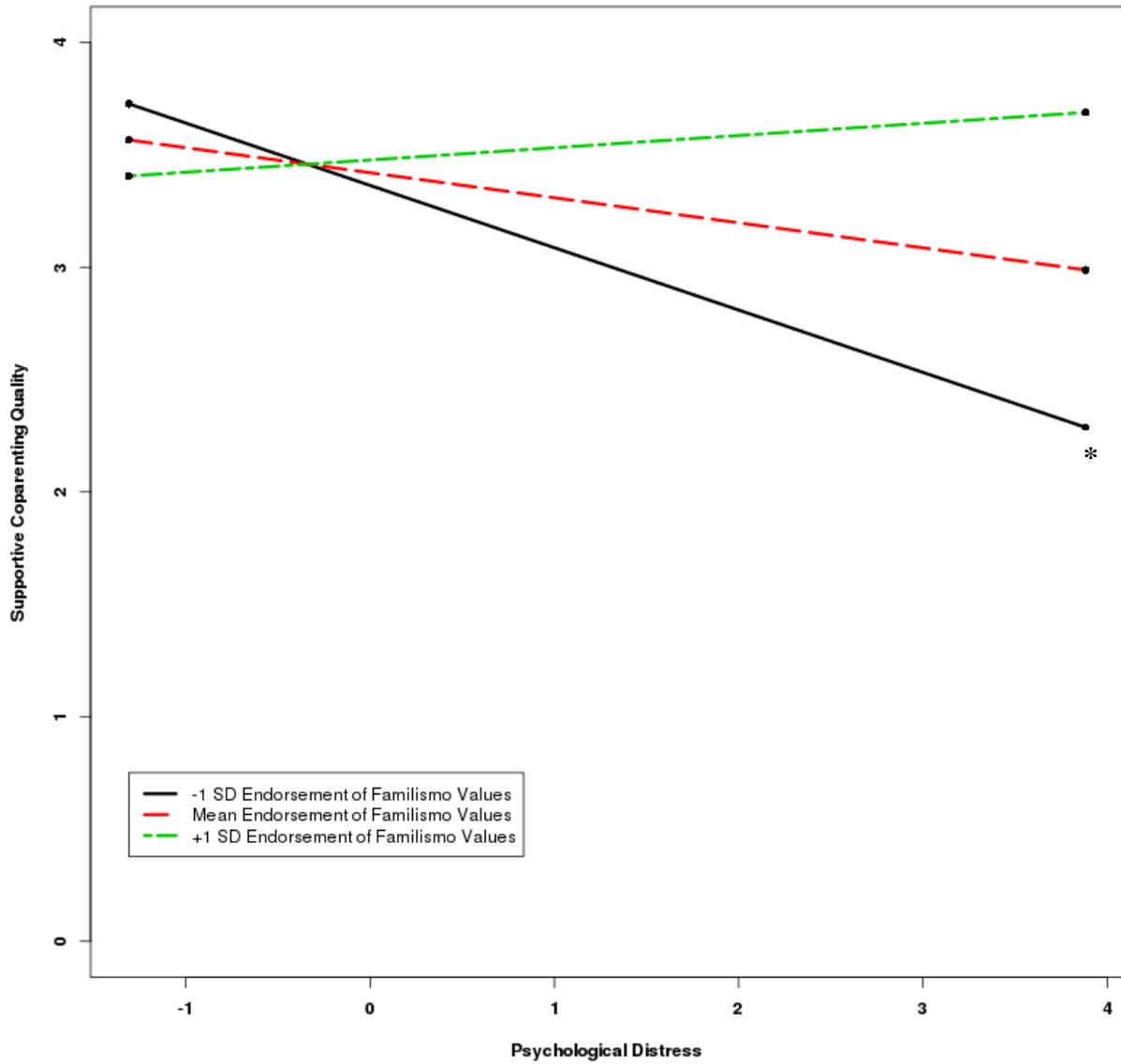
Table 7

*Cultural Values of Familismo, Respeto, and Caballerismo as Moderators of Psychological Distress and Father Supportive Coparenting Among Mexican-Origin Fathers (N=85)*

Variable	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
U.S. born	-.05	.15	-.04	-.07	.13	-.06	-.05	.12	-.04
Economic hardship	.12	.07	.20	.08	.06	.13	.07	.05	.12
Acculturative stress	.02	.07	.04	-.00	.06	-.01	.02	.06	.04
Immigrant-based discrimination	.03	.09	.04	-.03	.08	-.05	-.05	.07	-.09
Target child's age	.05	.06	.09	.01	.05	.01	.00	.05	.01
Psychological distress	-.22	.08	-.37**	-.09	.07	-.16	-.11	.08	-.19
Familismo				.07	.07	.11	.06	.07	.10
Respeto				-.05	.07	-.09	-.09	.07	-.14
Caballerismo				.35	.07	.60***	.39	.07	.66***
Familismo x psychological distress							.17	.07	.28*
Respeto x psychological distress							-.13	.09	-.21
Caballerismo x psychological distress							-.11	.07	-.18
Constant									
$R^2$		3.43***			3.44***			3.42***	
Adjusted $R^2$		.11			.44			.52	
$\Delta R^2$		.04			.38			.44	
		.11			.33***			.07*	

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Figure 8. *Familismo as a Moderator of the Association Between Psychological Distress and Supportive Coparenting*



\* $p < .05$ .

Table 8

*Cultural Values of Familismo, Respeto, and Caballerismo as Moderators of Psychological Distress and Father Engagement Among Mexican-Origin Fathers (N=85)*

Variable	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
U.S. born	.14	.13	.15	.12	.12	.12	.13	.13	.14
Economic hardship	.08	.06	.17	.06	.06	.13	.08	.06	.16
Acculturative stress	-.05	.06	-.10	-.06	.06	-.13	-.07	.06	-.15
Immigrant-based discrimination	-.03	.07	-.07	-.06	.07	-.14	-.06	.07	-.12
Target child's age	.00	.05	.00	-.02	.05	-.05	-.02	.05	-.05
Psychological distress	-.09	.07	-.19	-.04	.07	-.08	-.05	.08	-.11
Familismo				.05	.07	.11	.05	.07	.10
Respeto				.01	.07	.02	.02	.07	.05
Caballerismo				.14	.06	.28*	.14	.07	.28*
Familismo x psychological distress							-.11	.08	-.23
Respeto x psychological distress							.17	.09	.32
Caballerismo x psychological distress							-.03	.07	-.06
Constant		4.29***			4.30***			4.28***	
$R^2$		.11			.22			.27	
Adjusted $R^2$		.04			.13			.15	
$\Delta R^2$		.11			.12*			.04	

\* $p < .05$ . \*\*\* $p < .001$ .

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