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Informed by previous research on the family stress model, the current study extends past research by exploring the role of cultural risk and resilience processes for Latina mothers facing economic hardship in a semi-rural emerging immigrant community in the U.S. Southeast. One hundred seventy-five mothers of adolescents recruited from the 7th and 8th grades of 2 middle schools completed in home interviews and questionnaires. The vast majority of mothers immigrated to the United States (98%), while the majority of their adolescent children (87%) were born in the United States. As hypothesized, economic stress mediated the relationship between economic hardship and maternal depressive symptoms. Also consistent with hypotheses, cultural based stress (i.e., discrimination and a lack of English language proficiency) was related to greater maternal depressive symptoms. Religious beliefs, material success values and familism obligation and support values failed to buffer against the detrimental effects of economic hardship and economic pressure. Immigrant mothers face the challenge of simultaneously navigating a new culture in which they may not feel welcomed and struggling to make ends meet for their families. Overall, this study suggests the family stress model is applicable to Latino families in an emerging immigrant community. Thus, the results suggest interventions should target increased access to community resources, greater educational opportunities for adults, managing experiences of discrimination, and improving Latina mothers' ability to cope with stress.

CULTURAL AND CONTEXTUAL RISK AND RESILIENCE PROCESSES

IN THE FAMILY STRESS MODEL FOR LATINO FAMILIES

by

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CHAPTER I

INTRODUCTION

The Latino population has grown from 9.6 million in 1970 to 56.6 million in 2016 (U.S. Census, 2016). Latinos currently constitute about 17.6% of the United States population and are expected to constitute about 29% of the U.S. population (119 million) by the year 2060 (U.S. Census, 2016). Although many Latinos immigrate to the United States for greater economic opportunities, Latino families experience greater economic struggles compared to non-Latino Whites in the United States (U.S. Census, 2016). For example, 28.6% of Latino children in the United States were living in poverty in 2015 compared to 11.5% of White non-Latino children (U.S. Census, 2015). Additionally, Latino adolescents experience a number of negative mental health outcomes including elevated depressive symptoms (Twenge & Nolen-Hoeksema, 2002), worse school outcomes (LeCroy & Krysik, 2008; McWhirter, Torres, Salgado, & Valdez, 2007), and poorer health outcomes (Vega, Rodriguez, & Gruskin, 2009) compared to non-Latino Whites.

Despite these statistics suggesting Latinos experience high rates of poverty and greater risk for negative adolescent outcomes, little research has examined the specific culturally informed processes by which economic disadvantage contributes to poor psychosocial outcomes for Latino youth. An important pathway in the transmission of risk to Latino adolescents may be via the mothers' psychological functioning in the face

of economic stress (Behnke et al., 2008; Mistry, Vandewater, Huston, & McLoyd, 2002; Parke et al., 2004; Taylor et al., 2012). The family stress model provides a theoretical framework of the stress transmission process through parental psychological functioning that subsequently influences parenting practices leading to adolescent psychological outcomes (R. D. Conger & Conger, 2008).

Family Stress Model

The family stress model builds on research dating back to the Great Depression years of the 1930s, which found that severe economic hardship negatively affects the lives of both parents and children via family functioning and socialization practices (R. D. Conger & Conger, 2008). Research testing the family stress model proposed by R. D. Conger, Ge, Elder, Lorenz and Simons (1994) has provided ample evidence of the detrimental effects of poverty and economic hardship on children in both chronically and acutely poor families due to disturbances in parental mental health, marital functioning, and parenting (R. D. Conger et al., 2002; Wadsworth et al., 2013). The original family stress model suggested that parental perceptions of economic pressure led to parental depressed mood exacerbating martial conflict (see Figure 1). In turn, these parental problems increased parent hostility and disruptive parenting which contributed to children's and adolescents' poor psychological and physical health problems (R. D. Conger et al., 1994; R. D. Conger et al., 2002).

A central component of the family stress model is the fact that economic hardships exert negative influences on parents' emotional and behavioral functioning indirectly through what R. D. Conger et al. (1994) term, "economic pressure." Conger

and his colleagues refer to economic pressure as a way to make "psychological meaning" of living in poverty (K. J. Conger, Rueter, & Conger, 2000; R. D. Conger & Conger, 2002; R. D. Conger & Donnellan, 2007; R. D. Conger et al., 1994). The purpose of this construct is to capture the day to day influences economic hardship has on the family (R. D. Conger et al., 1994). Measures of economic pressure include unmet material needs involving necessities (e.g., food and clothing), the inability to pay bills or make ends meet, and having to cut back on necessary expenses (e.g., health insurance and medical care) (R. D. Conger & Conger, 2008). R. D. Conger et al. (2008) suggest that it is the psychological stress encompassed in the construct "economic pressure" that increases parents' risk for developing depressive symptoms by negatively influencing family functioning rather than the poverty, per se.

Although not the focus of the current project, it is important to note that these disruptions are hypothesized to lead to negative outcomes in youth (R. D. Conger et al., 2008). In the context of this economic hardship and pressure, R. D. Conger et al. (2002) argued that parenting disruptions caused by parental depressed mood and marital conflict were the main reason children exhibited poor outcomes including greater internalizing and externalizing symptoms and less positive adjustment (i.e., school behaviors, persistence on difficult tasks and positive affect). R. D. Conger et al. (2002) defined nurturant—involved parenting as "(a) the involvement of the parent with the child through appropriate monitoring, discipline, and standard setting and (b) the parent's supportiveness of the child while avoiding overly harsh or punitive behavior" (p. 182).

They conceptualized hostility as the frequency in which parents engage in hostile behaviors such as criticizing or getting angry (R. D. Conger et al., 2002).

The family stress model was first proposed and evaluated with a sample of 451 rural Iowa families with children in the seventh grade in 1989 from the Iowa Youth and Families Project (R. D. Conger et al., 1994). Two parent families, who were impacted by the agricultural economic crisis in the 1980s, were included in the study (R. D. Conger et al., 1994). Given the ethnic composition in rural Iowa at the time, all of the families in the study were of European origin (R. D. Conger et al., 1994). Overall, the authors found support for the model with this sample (R. D. Conger et al., 1994). Although the original model was conducted with a sample with limited diversity, subsequent examinations of the family stress model have generally found support in more diverse samples in the United States (R. D. Conger & Conger, 2008) including African Americans (R. D. Conger & Conger, 2002), Chinese Americans (Benner & Kim, 2010) and Latinos (Parke et al., 2004; Taylor et al., 2012) as well as families in Finland (Solantaus, Leinonen, & Punamäki, 2004) in China (J. W. Yeung & Chan, 2010) and Turkish minority families in the Netherlands (Emmen et al., 2013). In addition, research has suggested the family stress model operates similarly in urban areas as well as rural areas (R. D. Conger et al., 2002; W. J. Yeung, Linver, & Brooks-Gunn, 2002). Although replication of the family stress model does suggest this is a "reasonably good heuristic model," additional culturally sensitive research allowing for variation by ethnicity is critical to draw conclusions about the applicability of this model to other samples (R. D. Conger & Conger, 2008).

Family Stress Model in Latino Families

Few studies have examined the family stress model in Latino families (Behnke et al., 2008; Mistry et al., 2002; Parke et al., 2004; Taylor et al., 2012). Some of these studies suggest the family stress model may operate somewhat similarly in Latino families compared to models with African Americans and non-Latino White families (Mistry et al., 2002; Taylor, Umaña-Taylor, Updegraff, & Gonzales-Backen, 2011), while others have found key differences in the family stress processes for Latino families compared to non-Latino Whites (Behnke et al., 2008; Parke et al., 2004). The inconsistencies in the research on the family stress model with Latino families may be due to the fact that few studies with Latino families have examined culturally and contextually relevant risk and resilience processes (such as Dennis, Parke, Coltrane, Blacher, & Borthwick-Duffy, 2003; Parke et al., 2004; Umaña-Taylor et al., 2011). Instead, these studies have focused on replicating the family stress model in a Latino population with little consideration for the unique historical, cultural and contextual factors that may influence how economic hardship influences family processes and, in turn, child outcomes (Dennis et al., 2003; Parke et al., 2004; Taylor et al., 2011). The purpose of the current study is to extend previous work in this area and examine specific components of the family stress model from a culturally informed perspective integrating research on cultural risk and resilience, focusing on the first part of the model (i.e., relationship between economic hardship, economic pressure and maternal depressive symptoms).

Comparative Designs Examining the FSM with Latino Families

The majority of previous studies that have used ethnic comparative designs to examine the family stress model have found different strengths of association of paths for non-Latino Whites and African American families compared to Latino families (Behnke et al., 2008; Iruka, LaForett, & Odom, 2012; Parke et al., 2004). In particular, the relationship between economic hardship and economic stress was found to be stronger for European Americans compared to Latinos (Parke et al., 2004). The findings may be due to a lack of variability of income for Latinos in studies on the family stress model (Behnke et al., 2008; Iruka et al., 2012; Parke et al., 2004). Parke et al. (2004) suggest the weaker relationship between economic hardship and economic stress in Mexican American families may be explained by a restriction of range problem since the Mexican Americans in their sample did not have the same income variability as the European American families. However, the weaker relationship between economic hardship and economic pressure may also suggest cultural resilience factors in Latino families (e.g., collectivism and religiosity) and/or other cultural based stressors may be more salient than poverty for Latinos (Mistry et al., 2004). Similarly, Parke et al. (2004) also posit that cultural factors such as a non-U.S. frame of reference and a more collectivistic orientation towards sharing resources among Mexican American families may have weakened the relationship between economic hardship and economic pressure. Although the researchers in these studies hypothesize why the strengths of association may vary by ethnicity, they fail to examine processes that may contribute to these differences (Behnke et al., 2008; Iruka et al., 2012; Parke et al., 2004).

Although limited, some research with comparative designs has found that cultural factors such as acculturation (i.e., a multidimensional process involving changes in attitudes, awareness, values, and behavior resulting from exposure to a new culture; Sam & Berry, 2010) and cultural values (i.e., familism defined as a strong attachment to family, reciprocated loyalty and obligation, a subjugation of self to one's family, and maintenance of respect for parental desires and expectations; Lugo Steidel & Contreras, 2003) might be especially important to consider when examining the family stress model in Latino families. Parke et al. (2004) found maternal acculturation was associated with greater marital problems and lower hostile parenting among Mexican American families. The authors argue that acculturation may lead to more equalitarian power relationships in the family that would potentially disrupt cultural scripts leading to more marital conflict. In the same vein, Behnke et al. (2008) tested whether a component of familism (i.e., family cohesion) mediated the relationship between economic stress and parenting behaviors (e.g., hostile control, nurturing acceptance, and inconsistent discipline) in the family stress model in a sample of European American and Mexican American parents. Supporting the notion that familism may influence these relationships, the authors found that perceived stress appeared to be more detrimental on family cohesion, and, in turn, on nurturing and consistent parenting behaviors for European American compared to Mexican American parents (Behnke et al., 2008). For Mexican American fathers, economic pressure was significantly and *positively* related to family cohesion suggesting Mexican American fathers turn towards their families for support during economically stressful situations. When family cohesion was high, Mexican American mothers

reported being more consistent with their discipline and more nurturing and accepting of their children compared to European American mothers (Behnke et al., 2008). Unfortunately, the measure of familism (i.e., family cohesion) only captured one component of familism and failed to include measurement of value endorsement which has been the focus of the majority of the familism literature (Stein et al., 2014) thereby limiting conclusions that can be drawn about the role of familism across both groups. Behnke et al. (2008) showed how a cultural specific resilience process (i.e., family cohesion) buffered against economic stress negatively influencing parenting behaviors, while Parke et al. (2004) demonstrated how acculturation can impact the strengths of relations in the family stress model. Taken together, these findings highlight the complexity in the role of acculturation and Latino cultural values in the family stress model. While high values of Latino cultural values and low acculturation may lead to a greater closeness with the family, higher levels of acculturation are also associated with less hostile parenting (Behnke et al., 2008; Parke et al., 2004). Thus, more research is needed to understand how culturally specific risk and resilience may operate in the context of poverty for Latino families.

Although the majority of research on the family stress model with Latino families has found it operates in a relatively similar way, important differences are seen between ethnicities. Economic hardship appears to be more consistently related to economic pressure for non-Latino families (Dennis et al., 2003). Marital conflict appears more detrimental for Latino children compared to non-Latino White children (Parke et al., 2004). Family cohesion appears to withstand economic stress in Latino families

compared to non-Latino White families and exerts a greater protective effect for Latino children (Behnke et al., 2008). Similar to how acculturation and family cohesion influenced how poverty affected family functioning in the aforementioned studies (Behnke et al., 2008; Parke et al., 2004), culturally specific risk and resilience processes may better explain the variability in the strengths of association for the paths in the family stress model for Latino families. Taken together, these comparative designs suggest economic strain may differentially influence family functioning, and, in turn, child outcomes for Latino families. However, the nature of these comparative studies did not allow for an in-depth examination of culturally specific factors, which can be better understood using within group designs (Cabrera, 2013).

**Ethnic Homogenous Designs Examining the
Family Stress Model with Latino Families**

While ethnic homogenous designs are unable to compare the strengths of relationships between ethnic groups, such studies are better suited to explore culturally specific processes such as acculturative stress and familism as well as examining contextual influences such as neighborhoods (Cabrera, 2013; Helms et al., 2014; White, Roosa, Weaver, & Nair, 2009). Although the majority of the studies using ethnic homogenous designs only examined parts of the family stress model, not the whole model, they focused on gender differences in familial relationships patterns when experiencing economic hardship. The following studies examine how nativity (e.g., immigrant status), cultural stress and protection (e.g., acculturative stress and familism), one's perception of their situation (i.e., cognitive lens) and traditional gender values influence family stress model processes in Latino families.

Few studies have examined family stress model constructs in samples of first-generation Latino parents (Dennis et al., 2003; Helms et al., 2014; Taylor et al., 2012). Using an immigrant sample allows researchers to investigate processes that may be unique to this group compared to other Latinos whose risk processes may be distinct. Consistent with the immigrant paradox (García Coll & Marks, 2012), the relationship between economic hardship and economic pressure may be even weaker for recent immigrants as their religious and collectivistic values may be more central to their identity and, in turn, more protective compared to later generations (Dennis et al., 2003). Dennis et al. (2003) examined the impact of economic hardship and economic pressure on the adjustment of 56 immigrant mothers and their 4 to 13 year old children. The relationship between income-to-needs ratio and maternal economic pressure was not significant, but was in the hypothesized direction. The authors indicate the power of the study may be too low to detect a small correlation. However, the lack of correlation may indicate that recent immigrants do not view their financial situation as stressful due to their unique perception of the world (e.g., dual-frame of reference and cultural values).

Further supporting the notion that one's perception of their situation may influence family stress model processes, Taylor et al. (2012) found dispositional optimism (e.g., "a relatively stable, general tendency of individuals to expect positive events or conditions in life") buffered the relationship between economic pressure and internalizing symptoms for Mexican-origin mothers with a sample of 674 Mexican-origin mothers and their fifth-grade children from the California Families Project. Although Taylor et al. (2012) view optimism as a trait instead of state, the findings suggest being

optimistic about one's future may alleviate distress due to economic pressure. Since immigrants are more likely to have feelings of hope for the future compared to later generations (García Coll & Marks, 2012), a unique cognitive lens may be particularly protective for this population.

Despite these findings that cultural factors may be protective for Latino families facing economic hardship, cultural based stressors may contribute to risk. For example, with a sample of 120 first-generation Mexican immigrant couples, Helms et al. (2014) found cultural stressors specific to immigrants (e.g., pressure to acculturate, enculturative stress and English competency) contributed to depressive symptoms in addition to economic pressure. In this study, cultural adaptation stressors encompassed pressure to acculturate, enculturative stress, and English competency using subscales on the Multidimensional Acculturative Stress Inventory (Rodriguez, Myers, Mire, Flores, & Garcia-Hernandez, 2002). Enculturative stress is defined as pressure to maintain customs, language and familiarity with one's heritage culture (Rodriguez et al., 2002). Experiencing cultural-based stress in conjunction with economic stress may partially explain why Latinos may experience high levels of depressive symptoms compared to non-Latino European Americans despite feeling less economic stress (Helms et al., 2014).

Helms et al. (2014) found Latina mothers may be particularly vulnerable to developing depressive symptoms when experiencing stress both from within and outside the family (Dennis et al., 2003; Helms et al., 2014). In this study, while husbands' reports of marital negativity and depressive symptoms influenced wives' reports of the

marital relationship, wives' reports did not impact husbands' reports of the marital relationship. Thus, wives may be particularly vulnerable to both their own and their husbands' depressive symptoms and marital negativity. Gendered cultural proscriptions (i.e., marianismo) to maintain harmony in the family even if it means self-silencing and making personal sacrifices may lead to wives feeling responsible for the negativity in the marriage and internalize this distress (Castillo, Perez, Castillo, & Ghosheh, 2010).

Taken together, these studies emphasize the importance of examining cultural risk and resilience processes in research on the family stress model with Latino families (Dennis et al., 2003; Helms et al., 2014; Umaña-Taylor et al., 2011; White et al., 2009). The possibility of a "cultural lens" buffering against economic stress in the face of economic hardship was supported by the non-existent relationship between these constructs in a sample of immigrant mothers (Dennis et al., 2003). Umaña-Taylor et al. (2011) provided further evidence that one's view of their situation can influence family stress model processes by showing that dispositional optimism protected against depressive symptoms. In addition, mothers were found particularly vulnerable to stress and negative in their perceptions of their parenting perhaps due to cultural proscriptions (e.g., marianismo) that they self-sacrifice for the family.

Informed by previous research on the family stress model with Latino families and the literature on cultural risk and resilience, the following sections will examine each key element of the family stress model in more detail. Specific risk and resilience processes have been selected because of their theoretical relevance to the family stress model in Latino families (see Figure 2).

Parental Perceptions of Economic Hardship

Research on the family stress model has suggested that the detrimental effects of objective economic hardship are due to parental perceptions of economic pressure (i.e., the subjective feelings of distress or strain due to the perception of inadequate financial resources to cover expenses (e.g., stress associated with the inability to pay bills or meet basic material needs for food, clothing, etc.) (R. D. Conger et al., 2002; R. D. Conger & Elder, 1994; Wadsworth, Raviv, Compas, & Connor-Smith, 2005; W. J. Yeung et al., 2002). Economic hardship was measured by objective measures such as income, education and occupational status (R. D. Conger & Conger, 2008). Research showed a strong link between objective measures of financial hardship and economic pressure for European American and African American families (R. D. Conger et al., 2002; R. D. Conger & Elder, 1994; Wadsworth et al., 2005; W. J. Yeung et al., 2002). In fact, K. J. Conger et al. (2000) refer to the relationship between economic pressure and emotional distress as a "fundamental connection." However, as highlighted above, the link between objective measures of economic hardship and poor mental health outcomes is not as consistently shown for Latino families (Alegría et al., 2007; Crouter, Davis, Updegraff, Delgado, & Fortner, 2006).

The inconsistencies in the research may be due in part to a weaker association between objective economic hardship and parental perceptions of economic stress for Latinos (Parke et al., 2004). Research demonstrated that per capita family income is more strongly associated with economic pressure in European American families compared to Mexican American families (Dennis et al., 2003; Parke et al., 2004). Some

research even found no significant relationship between income and perceptions of economic stress for Latina mothers (Dennis et al., 2003). Comparing perceptions of economic stress in European American versus Mexican American families found that on only one out of three measures of economic stress (i.e., material needs) did Mexican Americans report stress significantly higher than European American families despite having average incomes less than half that of the European American families (Parke et al., 2004).

Methodological issues with the measurement of economic hardship and economic stress with Latinos families may contribute to the lack of relationship between these measures in the aforementioned studies (Dennis et al., 2003; Parke et al., 2004). In particular, the scales that have traditionally been used in family stress model research to assess perceptions of economic stress may not adequately capture this construct in a Latino population since they were developed for use with a non-Latino European American population. Despite the methodological flaws in the current research on the family stress model with Latino families, Latinos may also be less likely to perceive economic stress in the face of economic hardship for a number of reasons. Latinos may have a unique cognitive lens in which they view their economic situation. For example, a more collectivistic perspective on money may lead to viewing money as a method of holding the family together in contrast to American ideals of individualism and materialism (Falicov, 2001). In addition, religious beliefs may lead to Latinos viewing living in poverty as pious (De la Torre, 2002).

While U.S. American culture tends to view earning money as a prerequisite to happiness and status, Latino culture does not value material success in the same way (Falicov, 2001). Falicov (2001) suggests, "money is a fundamental 'glue' that holds the Latino family together and maintain bonds for life" (p. 6). Compared to European Americans, Latinos share money with extended family members more frequently and this reinforces familial bonds. Although Latinos earn and save money individually, they often exchange gifts, favors and loans with extended family members. Whereas European Americans tend to view asking family members for money as a sign of weakness, Latinos view the exchange of money as a part of life. Many Latinos believe not sending money back to their families in their country of origin would be disgraceful. In addition, spending money on family rituals (e.g., quinceañeras and weddings) is a symbolic expression of the importance of family. Parents will often spend large sums of money to have lavish celebrations for their children believing that the purpose of money is to demonstrate how much their children mean to them (Falicov, 2001). In contrast to mainstream European American beliefs about money conferring status and happiness, Latinos may have a more instrumental view of money in order to reinforce family solidarity. Since the familial boundaries of sharing money are more flexible, the consequence of one individual's misfortune in terms of money may be less dire as they may receive support from other family members (Falicov, 2001).

Although material success values have not been evaluated directly in the Latino family stress model, Crouter et al. (2006) found mothers' acculturation moderated the negative association between fathers' income and spouses' depressive symptoms in

predominately low-wage families. Fathers' income was negatively associated with depressive symptoms only in highly acculturated families. For less acculturated mothers (i.e., less oriented toward Anglo culture), fathers' income was not related to either spouses' depressive symptoms suggesting that objective indicators of economic hardship are most detrimental for individuals with strong ties to Anglo culture (Crouter et al., 2006). Crouter et al. (2006) argue this finding is due to cultural differences such that individuals with strong ties to Anglo culture, which emphasizes material gain and individualism, may have greater psychologically detrimental effects of objective indicators of poverty.

Religious beliefs also likely influence the interpretation of one's financial situation. According to Espinosa, Elizondo, and Miranda (2003), 93% of Latinos identified with the Christian faith and about 70% identified themselves as Roman Catholic, while 22% considered themselves Protestant. Dunn and O'Brien (2009) found that Latino participants reported that they often use religion to cope with life stressors. In fact, Hovey (2000) showed that more frequent church attendance was related to lower rates of depression and suicidal ideation among Mexican immigrants.

Latino theological literature suggests that "spirituality is conceptualized as a personal self-actualizing struggle that is not individualistic, but rather entails a lifelong collective responsibility for the well-being of self, family, and community" (Campesino & Schwartz, 2006). Many Latino Christians feel in solidarity with Jesus through their poverty and deprivation as "Jesus was born into, lived and died in poverty" (De la Torre, 2002, p. 108). De La Torre (2002) states, "the radicalness of the incarnation is not so

much that the Creator of the universe became a frail human, but rather, that God chose to become poor, to take the form of a slave. As such, Jesus willingly assumed the role of the ultradisenfranchised" (pp. 108–109). Many Latinos view the Virgin of Guadalupe as a symbol of hope and aspiration as the Virgin is represented as a bronzed woman of color, as she ceases to be a European White figure. As she first appeared to economic and racial outcasts, many Latinos view her as providing dignity to the oppressed (De la Torre, 2008). Thus, religious beliefs likely alleviate some of the stress and stigma associated with poverty by promoting humility and selflessness.

In sum, it is unclear whether the lack of relationship between objective measures of economic hardship and reports of perceived economic stress in studies on the family stress model with Latino families are due to problems with measurement or appropriately reflect culturally specific processes in Latino families (Dennis et al., 2003; Parke et al., 2004). In terms of measurement, the previous studies did not use measures developed and normed on Latino populations (Dennis et al., 2003; Parke et al., 2004; Umaña-Taylor et al., 2011). Despite these measurement problems, it is also possible that Latinos, in fact, perceive less stress in the face of economic hardship. For example, having a more collectivistic/less materialistic view of money and having religious beliefs that shape one's perception of poverty may contribute to Latinos experiencing less psychological distress about economic hardship. Thus, Latinos may possess a unique "cognitive lens" in which they perceive economic hardship.

This dissertation extends past research by addressing the methodological concerns as well as testing cultural values as moderators to the relationship between economic

hardship and economic pressure. In order to address issues of measurement, the study

used a measure that was developed specifically to test economic pressure in with Latino

populations (Barrera, Caples, & Tein, 2001). In addition, the value of material success

and importance of religion will be assessed using a measure made for assessing cultural

values in Latinos (Knight et al., 2009). Latinos who place a low emphasis on material

success may be less likely to view economic hardship as psychologically taxing. Such

Latinos may be more likely to rely on extended family members for financial and

emotional support during particularly difficult financial times (Falicov, 2001). In

addition, the centrality and importance of religion and reliance on God and one's faith

likely buffers the relationship between economic hardship and economic pressure for

Latinos. Latinos who endorse religious beliefs as a central and important part of their

lives may view poverty as pious and a way to live in solidarity with Jesus (De la Torre,

2008). Thus, Latinos "cognitive lens" or perceptions of their economic situation may be

influenced by gratefulness for all they do have (e.g., their faith and family), which they

may view as far more important than material success (Falicov, 2001).

Parental Emotional and Behavioral Problems

The majority of research with the family stress model has focused on the impact

of economic stress on parental depressive symptoms (R. D. Conger et al., 1994; Dennis et

al., 2003; Parke et al., 2004; Umaña-Taylor et al., 2011). Research on the family stress

model has consistently found that the relation between objective indicators of economic

hardship and depression is mediated by economic pressure. For European American

families, this pathway accounts for the majority of individuals because objective

indicators of poverty are highly correlated with reports of economic stress (R. D. Conger et al., 1994; R. D. Conger & Conger, 2008). However, as elucidated in the previous section, the correlation between objective indicators of poverty and reports of economic stress are much weaker for Latino families (Dennis et al., 2003; Parke et al., 2004; Umaña-Taylor et al., 2011). Therefore, other potential mediating pathways linking economic hardship and other contextual stressors to parental depression may have been overlooked in previous research with Latino families.

A study involving open-ended interview questions by Raffaelli, Tran, Wiley, Galarza-Heras, and Lazarevic (2012) found that only two out of 112 respondents reported finances to be the greatest challenge facing Latinos, while 57% reported language related issues and 12% reported issues related to legal status and documentation. This suggests that recently immigrated Latinos may experience a number of cultural based stressors in addition to economic stress, and in fact, a larger research has examined the impact of these stressors on the psychological functioning of Latino families (i.e., Araújo & Borrell, 2006; Torres, Driscoll, & Voell, 2012). The majority of research with Latinos has conceptualized "language related issues" as an acculturative stressor (Hovey, 2000; Torres, 2010), but acculturative stress is a broader construct that has been defined as difficulties an individual may experience adapting to the host culture including language difficulties but also other aspects of the experience like discrimination or perceived cultural incompatibilities (Driscoll & Torres, 2013). Research has shown that acculturative stress is related to a number of poor mental health outcomes among Latino adults including depressive symptoms (Hovey & Magaña, 2002; Torres, 2010). In

particular, both discrimination and language-based stressors (e.g., pressure to learn English and barriers due to limited English proficiency) have been specifically associated with depressive symptoms in Latino mothers (Helms et al., 2014). Some research suggests that other cultural based stressors (e.g., acculturative stress) are associated with greater depressive symptoms in Latino adults while income was not related to depressive symptoms (Torres, 2010).

Research findings that Latinos are less likely to report economic stress but more likely to endorse depressive symptoms suggest there are other cultural based risk factors that may be at play in the prediction of depressive symptoms or that these risk factors both influence depressive symptoms conjointly. As noted above, Helms et al. (2014) showed that economic pressure and cultural adaptation stressors independently predicted both wives' and husbands' depressive symptoms for Mexican-origin couples relationship was equally as strong for each predictor. Helms et al. (2014) argues that navigating a new environment for immigrant couples both in terms of stress to adapt to a new culture, retain host-culture's values, and learn a new language is stressful. White et al. (2009) also found that acculturative stress increased the risk for mother's developing depressive symptoms but did not increase father's risk for depressive symptoms. Acculturative stress in this study focused on English language pressures (i.e., pressure and difficulty learning English). The authors argue that language related difficulties may interfere with the development of relationships and females may be particularly sensitive to such relationship problems (White et al., 2009). Thus, for immigrant families in an emerging immigrant community, cultural adaptation stressors may be as potent as perceptions of

economic stress on depressive symptoms (Helms et al., 2014; White et al., 2009), and need to be considered within the family stress model.

A major strength in Latino culture is the resiliency of the family through their reciprocal reliance, support, respect, honor and love for family members. The familial centered resilience has been captured by the familial cultural value, primarily termed familism (Germán, Gonzales, & Dumka, 2009). Familism has been characterized as a strong attachment to family, reciprocated loyalty and obligation, a subjugation of self to one's family, and maintenance of respect for parental desires and expectations (Lugo Steidel & Conteras, 2003). The majority of previous research on familism has found that it is protective against a number of negative outcomes including depressive symptoms (Garza & Pettit, 2010). However, research has not examined whether familism buffers economic stress for adult parents. Studies with adolescents and adolescent mothers has found that familism does not buffer against the effects of economic stress on risky behaviors and depressive symptoms (Stein, Gonzalez, Cupito, Kiang, & Supple, 2013; Umaña-Taylor et al., 2011). Given the mixed research on familism, it is important to explore its role for Latina mothers experiencing economic stress.

Familism may buffer against depressive symptoms from economic hardship for parents for a variety of reasons (Lugo Steidel & Contreras, 2003). An emphasis on familial love and unity rather than materialistic gain may be protective against depressive symptoms (Baumann, Kuhlberg, & Zayas, 2010). In addition, emotional as well as financial support from family members at times of particular need may help diffuse the stress associated with "making ends meet" (Garza & Pettit, 2010; Lugo Steidel &

Contreras, 2003; Umaña-Taylor et al., 2011). Also, a component of familism is an expectation that children as well as parents will fulfill their obligations to the family (Lugo Steidel & Contreras, 2003). Few studies have examined the relation of specific components of familism to family outcomes (for an exception see Behnke et al., 2008). For example, as highlighted above, Behnke et al. (2008) found that economic stress was associated with increased family cohesion for Mexican American fathers suggesting they tend to turn towards their families at times of stress. Research needs to explore specific aspects of familism because it is important to discover the mechanism by which familism confers protective effects for Latino families (Stein et al., 2014).

Taken together, current research on economic hardship and depressive symptoms in Latino parents suggests that there may be other mediators and moderators for this population in addition to economic stress as well as other cultural-based stressors contributing to depressive symptoms (Dennis et al., 2003; Mistry et al., 2002). Cultural based stressors (i.e., discrimination and English language acculturative stress) may contribute to the development of parental depression in addition to economic stress. In addition, familism may buffer against maternal depressive symptoms in the context of economic stress.

Thus, the current study advances the literature by examining the role of cultural based stressors and specific components of familism (e.g., cohesion/support and obligations) in the family stress model for Latino families. I explored whether mothers' values of familism cohesion/support and obligations protect against depression for mothers experiencing economic stress. I also examined whether cultural-based stressors

such as discrimination and English language acculturative stress increase Latina mothers' risk of developing depressive symptoms in addition to economic pressure.

Emerging Immigrant Community/Contextual Considerations

In addition to the cultural considerations highlighted above, there are important contextual and within subgroup variations that need to be incorporated when examining the family stress model in Latino families. The majority of family stress model studies with Latino families have been conducted in metropolitan and/or established immigrant communities in California (Dennis et al., 2003; Parke et al., 2004; Umaña-Taylor et al., 2011). Thus, limited research on the family stress model has been done in other regions in the United States particularly non-metro emerging immigrant communities (for exceptions see Helms et al., 2014; Iruka et al., 2012; Mistry et al., 2002). The context of reception for Latino immigrant families has implications for the impact of economic hardship on families. For example, the geographic regions in the United States differ in terms of the host-culture's climate towards immigrants can all influence a Latino family's adjustment. In addition, subgroups of Latinos may be differentially influenced by family stress processes depending on their country of origin and their level of acculturation. The present dissertation extends current research by examining the Latino family stress model in an emerging immigrant community in the rural U.S. South (see Helm et al., 2014 for an exception).

In emerging communities, Latinos may be viewed as "taking jobs" from U.S.-born Americans leading to heightened interracial conflict (Lichter, 2012). Thus, Latinos may experience heightened discrimination in these new contexts. In addition, in less

established communities, immigrants may have less access to governmental programs that may provide aid and Latinos may have difficulties accessing these programs due to language and informational barriers (Raffaelli & Wiley, 2013). The lack of Spanish speaking teachers and professionals in the school systems create additional barriers for immigrant children in school (Marrow, 2011). Many of these children are held back a year due to lack of English proficiency suggesting this lack of resources is inhibiting students' progress (Marrow, 2011). Thus, these cultural stressors may be just as psychologically stressful as poverty in emerging communities.

In sum, emerging immigrant communities predominantly in rural areas may have slightly improved economic opportunities for immigrants, yet immigrants in these areas face unique challenges and barriers to resources, social support education, and may experience heightened discrimination (Marrow, 2011; Raffaelli & Wiley, 2013). Thus, research on the development of Latino youth in these emerging communities is imperative. In particular, the role of these cultural stressors in the family stress model can elucidate these processes impact on family functioning in addition to poverty.

Goals and Hypotheses

The present dissertation strives to integrate the current research on the family stress model with research on cultural and contextual risk and resilience processes in Latino families in an emerging immigrant community in the rural U.S. South. The current study seeks to better understand the processes that have led past research to find the family stress model operates differently in Latino families compared to non-Latino White families (Behnke et al., 2008; Iruka et al., 2012; Mistry et al., 2002; Parke et al.,

2004). As such the current study extends past research by examining components of the family stress model incorporating specific cultural values as protective factors and cultural stressors as risk factors in addition to economic stress.

Hypothesis 1

Consistent with the larger literature on the family stress model, I predicted that per capita income will be related to greater perceptions of economic stress and greater maternal depressive symptoms. I hypothesized that perceptions of economic stress will mediate the relationship between per capita income and maternal depressive symptoms.

Hypothesis 2

Given the research suggesting that the link between objective indicators of economic hardship and perceived economic pressure is weaker for Latino families (Dennis et al., 2003; Parke et al., 2004), I hypothesized that religious beliefs and the value of material success will moderate the relationship between economic hardship and economic stress. In particular, the stronger a mother's religious beliefs, the weaker the relationship between economic hardship and economic pressure will be. In addition, highly valuing material success will be associated with a greater reported economic pressure in the face of economic hardship (Knight et al., 2009). Such factors can be conceptualized as a culturally unique "cognitive lens" buffering against psychological distress associated with perceptions of economic stress by influencing how individuals interpret and make meaning out of their financial situation (see Figure 2).

Hypothesis 3

Next, mothers' familism values will buffer the relationship between economic pressure and maternal depressive symptoms (see Figure 2). Particular components of familism will be examined (e.g., cohesion/support and obligations). Mothers who endorse a high level of support from their family may be less likely to experience depressive symptoms in the face economic pressure as the support may counteract the detrimental effects of the pressure. A high value of support may indicate this mother feels socially as well as financially supported by her family. In addition, family cohesion is less likely to deteriorate in the face of economic pressure for Latino families compared to European American families (Behnke et al., 2008). Thus, this maintenance of familial cohesion may also protect against depressive symptoms in Latina mothers. Finally, mothers endorsing a great amount of familial obligations may view their role in the family as important and worthwhile (Umaña-Taylor et al., 2011). The behavioral activation involved in the caretaking of the family may in and of itself protect a mother against developing depressive symptoms as well (Umaña-Taylor et al., 2011).

Hypothesis 4

Based on research suggesting that cultural based stressors (e.g., English language acculturative stress and discrimination) increase the likelihood of experiencing depressive symptoms (Helms et al., 2014), I proposed that cultural based stressors may be psychologically taxing and contribute to the development of depressive symptoms in addition to economic stress. Previous research with Latino couples suggests this may be the case (see Figure 2) (Helms et al., 2014).

CHAPTER II

METHODS

Participants

The participants for the current study were recruited from two middle schools in a semi-rural community in North Carolina. One hundred seventy-five Latina mothers and their adolescent children in the seventh and eighth grades participated in the study. However, due to time limitations, one mother was unable to complete the interview. Of the mothers in the current study, 26% were "single, or never married," 59% were married, 1% widowed, 5% divorced and 7.4% separated. The mean age of the mothers included in the sample was 38 ($SD = 5.60$). Ninety-eight percent of the mothers in the sample were immigrants, while 87% of the adolescents in the study were born in the United States. On average, the mothers had lived in the United States for approximately 16 years ($SD = 4.61$). Eighty-eight percent of the mothers were Mexican immigrants, while all other mothers were from Puerto Rico, Guatemala, Honduras, Dominican Republic, Nicaragua, El Salvador, Columbia or Ecuador.

In terms of parental education, 45.1% of the mothers reported less than an eighth-grade education, 29.7% reported some high school, 1.7% went to a business trade or vocational school instead of high school, 15.4% reported completing high school or a GED, 2.9% reported going to a business, trade or vocational school after high school, 1.7% reported some college and only 3.4% reported graduating from college. Likewise,

mothers reported that 49.4% of fathers had less than an eighth-grade education, 33.1% some high school, 2.5% reported going to a business, vocational or trade school, only 10.6% graduated high school, and 3.1% reported at least some college. Overall, the parents in our sample reported low levels of educational attainment.

Procedure

A list of Latino middle school students including their phone number and address was provided via the school district. Research assistants also recruited families during school open-houses. In addition, the adolescents received flyers and letters describing the study during the school year. Research assistants called families and determined eligibility based on the following criteria: (a) both biological parents are Latino, (b) participating adolescent lives with the biological mother or female caregiver, and (c) the adolescent is between 11 and 14 years of age. The eligible and interested families were scheduled for 1.5- to 2-hour home visits.

Data were collected in collaboration with two middle schools in semi-rural North Carolina. A total of 597 families were targeted for recruitment via phone or door-to-door recruitment. Of these, 16 families had moved (3%) and 217 were not located (e.g., disconnected numbers, families not home; 36%). Of the families who were contacted ($n = 364$), 47 were not eligible (13%), 125 declined (34%), 16 consented but did not complete interviews (4%), and 176 families consented and completed interviews (48%). Of the 155 families that were unreachable by phone after five attempts or whose number had been disconnected or changed, 145 were contacted in person at their doorstep following a mailed notification stating that the research team would be attempting to

reach them in person unless the families returned the notification to their respective school indicating that they were opting out of being contacted for the study. Of the 145 families that were contacted at their doorstep, 22 either eventually participated in the study or completed the interview on the day they were contacted. The researchers were unable to contact 38 families) due to change of address, disconnected number, or an inability to reach the family at their doorstep following three attempts. In total, 175 students and their mothers (29% of total) assented and participated in the current study. However, two mothers were unable to complete the full interviews. Thus, 173 mothers are included in the current sample.

Research assistants interviewed the parents and assisted the adolescents with completing an online survey. In order to recruit families that were unavailable over the phone (e.g., disconnected numbers), research assistants visited potential participants homes and either (a) left a flyer if the families were not home, (b) scheduled the families for a later date, (c) conducted the interviews, or (d) removed uninterested families from the study. Research assistants made three attempts to contact families via door-to-door recruitment or until one of the aforementioned options were satisfied.

Once families agreed to participate in the study, two-person research assistant teams conducted interviews with the mothers and administered a questionnaire on a laptop to the youth. Written consent was obtained from the mothers for both the adolescent's and the mother's participation in the study. In addition, the adolescents gave their written assent to participate. The research assistants assisted the adolescent and the mother to complete the study in separate rooms of the home. A noise machine was used

to ensure privacy. The participants chose to complete the assessment in their preferred language (i.e., English or Spanish). All but one of the mothers (174) completed the interview in Spanish and all but two adolescents (173) chose to have the questionnaire in English. A Spanish-speaking research assistant interviewed the mother, while a second research assistant administered the questionnaire to the adolescent via a computer. The mothers completed the interview in a separate room from the adolescents to ensure privacy. The mothers' interviews and adolescent questionnaires were counterbalanced with stress and cultural factors. The structured interview was to ensure mothers of all education levels understood the items and helped increase personal contact and respect (Knight, Roosa, Calderón-Tena, & Gonzales, 2009). The home visits lasted about 1.5 to 2 hours. The mothers received a $20 gift card and the adolescents received a $10 gift card for their participation.

Measures

Economic Hardship

Mothers reported the range of their family income during interviews on a 9-point Likert scale ranging from "less than $5,000" to "$100,000 and up." In addition, information on how many individuals live off that income was collected by asking, "How many people altogether live off this income?" The mother's report of total family income will be divided by the number of people in the household in order to calculate per capita family income as has been done in past research (Parke et al., 2004).

Economic Pressure

Four scales assessed the psychological sense of economic hardship. All four

scales were analyzed in a cross-ethnic group including Mexican American families

(Barrera et al., 2001). Three of the scales (Economic Adjustments and Cutbacks, Not

Enough Money for Necessities, and Inability to Make Ends Meet) were adapted from

scales used in the Iowa Youth and Families Project (R. D. Conger & Elder, 1994). One

of the scales was based on a scale originally developed by the University of Michigan's

Preventive Intervention Research Center on a sample of unemployed adults (Vinokur,

Price, & Caplan, 1996). Across ethnic groups, the scales demonstrated adequate

reliability (Cronbach's alpha range = .70 to .85) and psychometric properties in previous

research (Barrera et al., 2001). The Economic Adjustment and Cutbacks scale was

modified to include fewer items about a change in financial status, rather to indicate

difficulties. The current study created a mean of all the standardized scales. The

Cronbach alpha of the scales combined in the current sample demonstrated good

reliability (Cronbach's alpha = .88).

Mexican American Cultural Values

The 50-item Mexican American Cultural Values Scale (MACVS) was

administered to assess adolescents' and mothers' cultural values (Knight et al., 2009).

The scale is available both in English and Spanish and measures constructs pertaining to

Latino and mainstream American culture. Responses are on a 5-point Likert scale

ranging from 1 (not at all) to 5 (completely).The *Religion Subscale* consists of 6 items

assessing the importance of faith in one's life. For example, "If everything is taken away,

one still has their faith in God," and "It is important to thank God every day for all one has." The religion subscale demonstrated adequate internal consistency in our sample (e.g., Cronbach's alphas = .78) (Knight et al., 2009). The *Material Success Subscale* of the MACVs consists of 5 items analyzing how important money is for happiness such as, "Owning a lot of nice things makes one very happy." This subscale also demonstrated good reliability in the current study (e.g., Cronbach's alpha = .84) (Knight et al., 2009). The *Familism Support Subscale* examined family cohesion and support (e.g., "It is always important to be united as a family"). The *Family Obligation Subscale* measured how much participants felt like they "should" care or provide for their family (e.g., "If a relative is having a hard time financially, one should help them out if possible."). Cronbach's alpha was adequate for the current study for the combined familism support and obligations subscales (Cronbach's alpha = .74).

In addition, for post-hoc analyses, the full familism scale encompassing the *Familism Respect Subscale* and *Familism Referent Subscale* in addition to the Familism Support and Obligations Subscales. The *Familism Respect Subscale* captured the value of respecting one's elder family members and unquestioning obedience of one's elder family members (e.g., "Children should follow their parents' rules, even if they think the rules are unfair."). The Familism Referent Scale measures the degree to which one believes family members represent the whole family (e.g., "Children should be taught to always be good because they represent the family). The full familism scale demonstrated good reliability in the current sample (Cronbach's alpha = .86).

The post-hoc analyses also included the *Latino Cultural Values Subscale* (i.e., familism, religious values, and traditional gender roles) and *Mainstream American Values Subscale* (i.e., material success, independence/self-reliance, competition/personal achievement). The Latino Cultural Values Subscale demonstrated good reliability in the current sample (Cronbach's alpha = .86), the Mainstream American Cultural Values demonstrated adequate reliability (Cronbach's alpha = .68).

Maternal Depressive Symptoms

The 20-item Center for Epidemiologic Studies Depression Scale (CES-D) assessed mothers' current depressive symptoms. Respondents were given a list of feelings and behaviors and were asked to indicate how often they had felt this way during the past month. Parents responded by rating from 0 to 3 (0 = never, 1 = once or twice, 2 = several times, 3 = almost every day). Sample items for this scale are "I was bothered by things that usually don't bother me" and "I did not feel like eating; my appetite was poor." Scores at or above 16 on the CES-D indicate clinically significant levels of depressive symptoms (Lyketsos et al., 1993). The CES-D has demonstrated adequate psychometric properties in a general population (Radloff, 1977) and demonstrated good reliability in the current sample (Cronbach's alpha = .91).

Cultural Based Stress

The mothers completed a 9-item Experiences of Discrimination (EOD) index (Cunningham et al., 2011; Krieger, 1990; Krieger, Smith, Naishadham, Hartman, & Barbeau, 2005). The EOD measures perceived discrimination in nine different contexts: "at school, getting a job, at work, getting housing, getting medical care, at a store or

restaurant, at a bank, on the street or in a public setting, and from the police or in the courts." If participants endorsed experiencing discrimination in these contexts, they then were asked how often (e.g., "once, two or three times, or four or more times"). Three items from the Asian American Multidimensional Acculturation Scale (AAMAS) assessed English Language Acculturative Stress. Participants responded on a 6-point Likert-type scale with 1 being "not very well" and 6 being "very well" to "How well do you speak English? How well do you understand English? How well do you read and write in English?" (Gim Chung, Kim, & Abreu, 2004). This score was reverse coded in order to have higher values represent greater English language acculturative stress. A mean score of 4.70 ($SD = 1.28$) was reported. A mean score was created of averaging the mean standardized scores of frequency of discrimination with the mean standardized reverse score of English competency. The reliability of this combined measure was good in the current sample (Cronbach's alpha = .77).

Analytic Plan

Path analysis was utilized via Mplus Version 7 to examine the adaptations to the family stress model outlined in Figure 2. All variables were indicated as manifest variables. Full information maximum likelihood (FIML) estimation allowed the use of all observations by providing unbiased estimates of model parameters for participants with missing data on predictor and covariate variables. A bootstrapping procedure (based on 1,000 bootstrap samples) was utilized to test for significance of the indirect effects in order to provide estimates of standard errors and confidence intervals of results (Preacher

& Hayes, 2004). Seven mothers declined to report the range of their income, while three mothers declined to report their age.

Observed variables were used to analyze the study hypotheses as the sample size is too small according to the standard *N:q* rule to use latent factors (Kline, 2015). Moderated mediated path models were utilized. Interaction terms were calculated by multiplying the two standardized variables of interest (e.g., religious beliefs and economic hardship, material success and economic hardship, and maternal familism and economic pressure). For all models, standardized path coefficients are reported. For a 1 standard deviation change in the predictor, the standardized path coefficient represents the estimated number of standard deviation change in the outcome. Good model fit is evidenced by a non-significant chi-square value (χ^2), a comparative fit index (CFI) greater than .90, a root-mean square error of approximation (RMSEA) less than .05 (.05 to .08 acceptable) and a standardized root mean square residual less than .05. Modification Indices were used to consider minor changes to the hypothesized model. According to Kline (2015), modification indices are an acceptable practice as long as any changes to the model are theoretically justifiable, few in number, and minor.

CHAPTER III

RESULTS

Descriptive Statistics

The modal reported annual family income range was $20,000 to $20,999 as 36% of mothers reported living off this amount of income. Thirty-five percent of mothers in our sample reported a family income of $10,000 to $19,000. In addition, 10% of the sample indicated living off of very limited means (e.g., less than $10,000). Using a midpoint created from the categorical income ranges, the average reported annual family income was $23,020.35 ($SD = $12,389.77). On average, 4.72 ($SD = 1.10$) people reported living off of the family income. The modal number of people living off the family income was 5 (34.5%), while 22.9% of families reported six or more individuals lived off the family income. The average per capita income for the sample was $5,098.57 ($SD = $3,205.27).

In terms of perceived economic stress, the mothers in our sample reported chronic perceived stress with little change or anticipation of changes in the perceived economic stress. For example, mothers reported a high level of Not Enough Money for Necessities ($M = 3.11$ on a 1 to 5 scale, $SD = .91$) and Inability to Make Ends Meet ($M=3.14$ on a 1 to 5 scale, $SD = .96$). However, the mothers reported a low level of current adjustments and cutbacks ($M=2.43$ on a 0 to 9 scale, $SD = 2.02$) were optimistic about the future not

anticipating experiencing bad times or needing to do without basic items in the future on the Financial Strain subscale (*M*=1.69 on a 1 to 4 scale, *SD* = .56).

In terms of cultural values, the mothers reported high levels of familism obligations and support (*M* = 4.44, *SD* = .42). Although the mother's reported on a 1 to 5 Likert scale, the lowest mean value reported was 3.2 suggested all mothers reported high levels of familism values. Likewise, mothers reported high familism values using the full MACVs scale (*M*=4.36, *SD* = .41). In addition, the majority of mothers reported high religious beliefs (*M* = 4.61, *SD* = .50). In addition, there was little variability on this 1 to 5 scale as well as the lowest reported average religious belief reported was 2.43. However, the mothers reported low values of material success (*M*=2.16, *SD* = .82). Overall, mothers reported high retention of Latino cultural values (*M* = 4.40, *SD* = .41) and a low level of incorporation of American mainstream values (*M* =3.18, *SD* = .62).

In addition, the mothers in the sample reported low frequency of discrimination (M=3.63, SD = 4.53) and a fair amount of variability in terms of the reports of frequency. The mother's reported high level of English acculturative stress (*M*=4.70, *SD* = 1.28). The mothers in the current study endorsed a high level of depressive symptoms (*M*=12.43, *SD* = 11.07). In fact, 28% of the mothers' scores on the CESD were above the clinical cut-off score (16) indicated they were at-risk for a diagnosis of depression. The means and correlations of study variables are shown in Tables 1 and 2.

Preliminary Analyses

Prior to running the analyses for the study hypotheses, the means, standard deviations, and distribution of normality statistics (e.g., range and outliers) were

examined. Per capita income was created using the mid-point of the range of income reported by the mothers. The estimated income was then divided by the number of individuals reported to be living off of this income. As expected, this per capita income was positively skewed and kurtotic. Therefore, the variable was log 10 transformed in order to conform to the normality assumptions (Kline, 2015).

Mother's age and number of years living in the United States were examined as potential covariates. As shown in Table 2, mother's age was significantly related to mother's value of material success ($r = .16$, $p <.05$). Therefore, mother's age was included in the analyses.

The hypothesized model demonstrated poor fit (χ^2 (5) = 20.35, $p <.01$, CFI = 0.77; RMSEA = 0.13; SRMR = 0.07). Modification indices indicated to allow cultural adaption stress to influence economic pressure, and this modification was included in the model to improve model fit. This minor modifications to the model significantly improved model fit. The modified model demonstrated good fit (χ^2 (28) = 34.42 $p = .16$, CFI = 0.90; RMSEA = 0.04, SRMR = 0.05). The standardized estimates and standard errors are presented in Table 3 and Figure 3.

Hypothesis 1

Consistent with hypotheses and previous research on the family stress model, higher per capita income was related to fewer maternal depressive symptoms (total effect: $B = -.17$, $SE = .07$, $p <.05$ CI [-0.30, -0.10]). However, when the specific indirect effect was tested, the direct relationship between per capita income and maternal depressive symptoms was no longer significant ($B= -.07$, $SE = .08$ $p = .35$; 95% CI [-0.20, 0.06]).

As hypothesized, there was a significant specific indirect relationship between per capita income and maternal depressive symptoms through perceptions of economic stress (B = -.10, SE =.04, $p<.05$; 95% CI [-0.19, -0.05]). Thus, 41% of the relationship between per capita income and maternal depressive symptoms was accounted for by the direct effect of per capita income on maternal depressive symptoms, while 59% of the total effect was indirect through perceptions of economic stress (see Table 4). This suggests that per capita income is associated with higher perceptions of economic stress, which, in turn, is associated with greater maternal depressive symptoms.

Hypothesis 2

Hypotheses regarding cultural moderation of the family stress model were not supported. The model included the direct effect of religious beliefs and material success on economic pressure as well as the interaction effect (e.g., religious beliefs X per capita income and material success X per capita income). Neither religious beliefs (β = .10, $n.s.$) nor material success (β = .03, $n.s.$) were related to economic pressure. In addition, inconsistent with hypotheses religious beliefs (β = .08, $n.s.$) and material success (β = .06, $n.s.$) failed to moderate the relationship between economic hardship and economic pressure. This indicates that religious beliefs and material success did not buffer against economic stress in the face of economic hardship.

Hypothesis 3

In order to test familism as a moderator, the model also included the direct effects of familism and the interactive effects of familism X economic pressure. Familism was not related to depressive symptoms (β = -.05, $n.s.$). Familism also failed to moderate the

relationship between economic pressure and depressive symptoms (β = -.09, *n.s.*). This means familism did not protect against mothers developing depressive symptoms when experiencing economic stress.

Hypothesis 4

In addition, as predicted, cultural based stress was associated with greater depressive symptoms (total effect: *B*= .26, *SE* = .09, *p*<.01 CI [0.10, 0.41]). Modification indices suggested testing the relationship between cultural based stress and economic pressure. When this additional path is modeled, cultural based stress is related to greater economic pressure. In addition, economic pressure partially mediated the relationship between cultural based stress and maternal depressive symptoms (indirect effect: *B* = .09, *SE* = .03 *p* < .01; 95% CI [0.04, 0.15]). When testing the indirect relationship, the direct relationship continued to be significant (*B* = .17, *SE* = .09 *p* < .05; 95% CI [0.03, 0.34]). In other words, 65% of the total effect was accounted for by the direct effect between cultural based stress and depressive symptoms, and 35% of the total effect was indirect through cultural based stress. This suggests economic pressure partially mediates the relationship between cultural based stress and maternal depressive symptoms.

Post-Hoc Analyses

The hypothesized models (Hypotheses 2 and 3) were re-analyzed including other scales of cultural values from the MACVs. This was done as the creators of the scale suggest using the larger order constructs of MACVs to assess familism, Latino Cultural Values and Mainstream American Cultural Values (Knight et al., 2009). Two models testing Hypotheses 2 and 3 were re-run using the full subscales as aggregate constructs.

Post Hoc Analyses Hypothesis 2: Moderating Effects of Latino vs. American Mainstream Cultural Values

Since my primary hypotheses revolved around whether or not mothers had a "cultural lens" influencing their view of their financial situation, I attempted to examine this lens by using the cultural orientation subscales on the MACVs. Including the full subscales from the MACVs of Latino Cultural Values and American Mainstream Cultural Values and examining each as moderators of the relationship between per capita income and economic pressure led to adequate model fit (χ^2 (18) = 25.42 p = .11, CFI = 0.89; RMSEA = 0.05, SRMR = 0.05). Neither Latino cultural values (β = .05, $n.s.$) nor American mainstream (β = .05, $n.s.$) values were associated with economic pressure. In addition, product terms were created to test the interaction between income and each cultural orientation (e.g., per capita income X Latino cultural values; per capita income X American mainstream cultural values). Latino cultural values (β = .07, $n.s.$) and American mainstream (β = .06, $n.s.$) values both failed to moderate the relationship between per capita income and economic pressure.

Post Hoc Test of Hypothesis 3: Moderating Effect of Familism

When including the full measure of familism values, the model demonstrated good fit (χ^2 (3) = 10.39 p = .32, CFI = 0.98; RMSEA = 0.03, SRMR = 0.04). Consistent with the results using the support and obligations subscales, familism values were not associated with depressive symptoms (β = -.02, $n.s.$). Familism also failed to moderate the relationship between economic pressure and depressive symptoms (β = -.02, $n.s.$). This suggests familism values do not buffer against depressive symptoms in the context of economic stress.

CHAPTER IV

DISCUSSION

The goal of the current dissertation was to examine how cultural-based risk and resilience processes impacted the experiences of economic stress in Latina mothers and how these processes jointly influenced the relationship of economic stress to psychological functioning. The ethnic homogenous research design provided a detailed test of the applicability of the family stress model to mothers in an emerging immigrant community in a semi-rural area in the Southeastern United States. The current study extends the family stress literature by testing whether an immigrant mother's "cultural lens" influences her perception of economic stress. Overall, the results suggest the family stress model operates as hypothesized in the original R. D. Conger et al. (1994) model. Cultural risk hypotheses were supported as cultural based stress increased the risk of maternal depressive symptoms. However, hypotheses involving cultural resilience factors moderating associations in the family stress model were not supported. In addition, post-hoc analyses were run in order to test alternative models. Overall, the results of the post-hoc analyses were similar to the original results.

Demographics of Current Sample

The mean reported annual family income range in the current sample was $20,000 to $20,999, which is lower than the mean income of samples collected among predominantly Latino immigrant families in the metropolitan Southwestern U.S. (i.e.,

average annual income was \$35,000 to \$40,000 in White and Roosa's [2012] study) and

lower than previous research in an emerging immigrant community (i.e., *M*=\$33,217 in

sample in Helms et al. [2014]). The mean per capita income in the current sample was

\$5,099 suggesting the sample is experiencing a great deal of economic hardship. The per

capita income is also slightly lower than is found in samples in the metropolitan

Southwestern United States after accounting for inflation (the Parke et al. (2004) per

capita income $M = \$5,708.45$, $SD = 4.235$, now would be approximately \$7,100). In

2014, the national poverty line was defined as an annual income less than \$11,770 for an

individual, \$24,250 for a family of four, and \$28,410 for a family of five (U.S. Census

Bureau, 2016). The mean reported income in the sample (\$23,020.35) was 51% below

the median household income in North Carolina for the years 2011-2015 (\$46,868), while

the per capita income (\$5,708.45) was 78% below the per capita income in North

Carolina for the years 2011-2015 (U.S. Census Bureau, 2016). Thus, the majority of the

current sample was living below the poverty line and reporting greater economic hardship

compared to previous studies of the family stress model with Latino families in the

Southwestern United States (Parke et al., 2004; White & Roosa, 2012) and emerging

Latino communities in the Southeastern United States (Helms et al., 2014).

In addition, the mothers in the current sample reported high levels of perceived

economic stress compared to previous samples with Latino families examining the family

stress model (i.e., Behnke et al., 2008; Helms et al., 2014; Taylor & Conger, 2014). For

example, Behnke et al. (2008) found a mean on the Inability to Make Ends Meet subscale

of 2.77 ($SD = .87$), while it was 3.14 ($SD = .96$) in the current study on the sample 1 to 5

scale. However, the mean amount of economic adjustments and cutbacks (M=2.43 out of 9 items) reported was similar to previous studies with Latino families (Behnke et al., 2008). In the current sample, the economic stress scales that measured current economic stress were higher (Not Enough Money for Necessities $M = 3.11$ out of 5, $SD = .91$; Inability to Make Ends Meet $M = 3.14$ out of 5, $SD = .96$) compared to scales that measured predicted changes ($M = 1.69$ out of 4) or current adjustments ($M = 2.43$ out of 9, $SD = 2.02$) to financial strain.

Yet, the sample had similar levels of education relative to other studies with Latino families. Mothers in the current study also reported low levels of education (45.1% less than an eighth-grade education) and education of their husbands (49.4% less than an eighth-grade education), which is similar to previous research done with the family stress model in more established Latino immigrant destinations (e.g., Parke et al. [2004] average of 9 years of education for mothers and fathers; White and Roosa [2012] fathers reported $M = 10.1$ years of education).

Despite this higher level of economic risk, the current sample was generally similar to other samples in terms of cultural value endorsement and other experiences of cultural-based risk. For example, the mean levels of familism values ($M = 4.44$, $SD = .42$) in the current sample was similar to previous family stress model studies in the metropolitan United States ($M = 4.39$, $SD = .40$; White & Roosa, 2012). The mothers in this sample also reported similar levels of material success ($M = 2.16$, $SD = .82$) and religious beliefs ($M = 4.61$, $SD = .50$) compared to previous studies with Mexican immigrant women (Knight et al., 2009). Overall, mothers reported a high endorsement of

cultural of origin values and a low level of incorporation of American values. Mothers

reported a low frequency of discrimination ($M = 3.63$, $SD = 4.53$) of discrimination,

which is consistent with previous research that suggests that less acculturated immigrants

experience less discrimination compared to their more highly acculturated immigrants

(Finch, Kolody, & Vega, 2000). The mothers in our sample reported similar English

competency skills ($M = 4.70$, $SD = 1.28$) (Helms et al., 2014; White et al., 2009). They

endorsed high depressive symptoms ($M = 12.43$, $SD = 11.07$) consistent with previous

research in emerging Latino communities (M on CESD $= 14.25$ Helms et al., 2014).

They reported greater depressive symptoms compared to mothers in more established

immigrant destinations (Parke Beck Depression Inventory (BDI) $M = 6.84$ $SD = 7.97$;

White et al., 2009 BDI $M = 1.54$, $SD = .43$).

Taken together, the current sample appears to be more economically

impoverished and stressed than previous studies (Behnke et al., 2008; Finch et al., 2000;

Helms et al., 2014; White et al., 2009). In addition, due to lack of education, the families

in the current study are unlikely to have the opportunity to improve their economic

situation (Hout, 2012). The mothers reported high levels of chronic economic stress, yet

little recent changes or predicted future increases to the perceived economic stress. This

suggests the families in our sample had chronic levels of economic strain and may not

have experienced recent changes to economic stress. Previous research has found that

ethnic minorities are more likely to be chronically and persistently poor than non-Latino

Whites (Pachter, Auinger, Palmer, & Weitzman, 2006). Thus, a significant way in which

the family stress model may operate differently in Latino families is that changes to

perceptions of economic stress may not be as relevant as the level of economic stress experienced may be constant.

The mothers in the sample endorsed similar cultural values as previous research suggesting a Latino immigrant mothers tend to endorse high levels of Latino cultural values and low mainstream American cultural values regardless of context of reception. The mothers also reported low levels discrimination and high levels of English language acculturative stress consistent with previous research. On average, mothers in less established immigrant communities tend to report greater depressive symptoms suggesting context of reception may impact the psychological functioning of immigrant women (Behnke et al., 2008; Finch et al., 2000; Helms et al., 2014; Knight et al., 2009; White et al., 2009).

Per Capita Income, Economic Pressure, and Depressive Symptoms

Consistent with previous research on the family stress model, perceptions of economic pressure mediated the relationship between per capita income and maternal depressive symptoms (K. J. Conger et al., 2000; R. D. Conger & Conger, 2002; R. D. Conger & Donnellan, 2007; R. D. Conger et al., 1994). This finding supports the theory proposed by R. D. Conger et al. (1994) that it is the psychological meaning of poverty rather than objective measures of economic hardship that leads to greater depressive symptoms. Thus, Latina mothers in an emerging Latino community are no exception to the well documented finding that it is not the actual level of income, per se, but rather the way in which such income affects one's day to day life and the perception of stress one feels related to money that is psychologically taxing.

Cultural Based Stress, Economic Pressure, and Depressive Symptoms

Unexpectedly, economic pressure also partially mediated the relationship between cultural based stress and maternal depressive symptoms. Since this effect was not originally hypothesized, it should be interpreted with caution. Nonetheless, the finding may suggest avenues for future research examining the relationship between cultural based stress and economic pressure. There may be a unique influence of cultural based stress on Latina mothers' perceived economic pressure in addition to the direct relationship with depressive symptoms found in previous research (Araújo & Borrell, 2006; Helms et al., 2014). From an intersectionality research perspective, the aspects of one's social identity (i.e., nativity, ethnicity, socioeconomic status, and employment status) are inextricably intertwined and holistically contribute to how an individual experiences the world. Therefore, the intersection of multiple social identities in our sample (e.g., gender, immigrant status, socioeconomic status) cohesively influences experiences of economic stress and the stress response more broadly (Araújo & Borrell, 2006).

On a societal level, systematic discrimination contributes to ethnic and racial socioeconomic status inequities by limiting opportunities for minority families across multiple contexts related to social mobility including inequality in employment, housing, credit and consumer markers (Pager & Shepherd, 2008). On an individual level for Latino/a workers, experiences of discrimination are associated with lower wages, less prestigious jobs, and greater depressive symptoms (Ramos, Jaccard, & Guilamo-Ramos, 2003; Ryff, Keyes, & Hughes, 2003; Stuber, Galea, Ahern, Blaney, & Fuller, 2003).

Discrimination is conceptualized not only as differential treatment of individuals based on group membership, but also as denial of opportunities such as education, employment or housing (Araújo Dawson, 2009). Thus, incorporating an intersectional approach with past research on discrimination and the current findings, unfair treatment and inequitable barriers to economic opportunities due to multiple social position factors (e.g., race/ethnicity, documentation status, social class) in additional to barriers due to low English competency likely exert a negative influence on Latino families' ability to make ends meet on a daily basis (Araújo & Borrell, 2006).

English proficiency is also a social position factor that closely associated with socioeconomic factors and likelihood of experiencing discrimination (Gee, Walsemann, & Takeuchi, 2010). Research suggests that English competency is positively related to earnings for immigrants (Bleakley & Chin, 2004; Hall & Farkas, 2008). Speaking with an accent is also associated with greater foreigner based discrimination (Bleakley & Chin, 2004). Taken together, low English competency limits one's life chances in a similar way as discrimination making applying and obtaining a job more difficult as well as accessing resources such as medical care and advocating for one's children at school (Jasso, 2011).

In addition to objective measures of income contributing to perceptions of economic stress for Latino immigrant families, experiences of discrimination and limited English proficiency may also lead to how one perceives their current economic situation. Cultural based stressors influence actual and perceived barriers to resources. Likewise, experiences of discrimination contribute to hopelessness regarding one's current and

future life opportunities (Araújo Dawson, 2009; Lapeyrouse, 2009). Therefore, similar to the family stress model theory, it may not be the objective measure of cultural based stressors, per se, but rather the "psychological meaning" of such experiences that exacerbates daily stress (Araújo Dawson, 2009). In fact, previous research suggests acculturative stressors including discrimination, language barriers, and legal status worries are associated with negative beliefs about one's life chances or successes in Mexican-origin adults (Lapeyrouse, 2009). In fact, the cognitive appraisal of discrimination influences perceived barriers and carrier choices of minorities (McWhirter et al., 2007).

Experiencing discrimination may lead to individuals expecting to be discriminated against in the future and denied opportunities that are intertwined with the perception of economic pressure (Schmitt & Branscombe, 2002). For example, the Experiences of Discrimination measure asks participants how often they have "experienced discrimination, been prevented from doing something, or hassled or made feel inferior" in a number of situations "because of their race or ethnicity" (Cummingham et al., 2011; Krieger, 1990; Krieger et al., 2005). The specific situations include the workplace, getting a bank loan, getting hired and getting housing. If a mother feels discriminated while trying to get hired or at work, she likely will feel more current economic pressure and predict to have financial strain in the next 3 months as well. Taken together, cultural based stressors and objective measures of economic hardship may conjointly influence perceptions of upward economic mobility, which are captured in economic pressures measures in the current study.

In a similar vein, one of the subscales assessing economic pressure, the Not Enough Money for Necessities scale, asks participants to indicate if they have the "kind of" necessities they feel they "should have" including home and medical care, which are specific potential contexts of discrimination given on the Experiences of Discrimination scale (R. D. Conger & Elder, 1994). For example, experiencing discrimination while attempting to obtain housing would likely lead to a perception that one was denied the kind of home they deserve. Likewise, having difficulty understanding, speaking and/or writing English likely influences a mother's actual access to resources and perception of access to resources (Gee et al., 2010). In sum, cultural based stressors lead to daily barriers for Latino families including difficulties finding and maintaining steady work, access to medical care, ability to take out a loan and obtain housing. Such daily barriers may represent the psychological meaning of such discrimination and acculturative stress experiences in a parallel process of the relation of economic hardship to economic pressure.

Yet, it is also possible that the measures of economic stress included in this study may be tapping into more general perceived stress for Latina mothers. Although the measures were originally developed to capture the psychological meaning of economic hardship, a mother's perceptions of economic stress are likely closely related to the way in which she sees herself, her world and her future (Beck, 2002). Previous research (Taylor et al., 2012) suggests that for Latina mothers her level of optimism may buffer against detrimental psychological effects of economic pressure. Similarly, a mother's level of hopelessness about her financial situation may be related to her overall feelings

of hopelessness. A combination of economic hardship, English language acculturative stress, and discrimination may be the perfect storm to make an immigrant mother feel hopeless and helpless (Torres et al., 2012; Zhang, Hong, Takeuchi, & Mossakowski, 2012). Perceptions of stress are closely related to one's locus of control (McNaughton, Patterson, Smith, & Grant, 1995). A mother who feels "out of control," hopeless, and helpless is likely to be experiencing a high level of overall stress. Thus, the cumulative effect of poverty, discrimination, and lack of English proficiency may influence perceptions of stress, in turn, influencing depressive symptoms.

It is also possible that the mediation found in this study was a spurious finding as it was not hypothesized, but it does suggest a future avenue for future work that tackles the intersectionality of the experiences of immigrant Latino mothers in the context of societal and structural discrimination. In addition, the relationship between cultural based stressors, economic pressure and paternal depressive symptoms is an important future research question as well. Per traditional gender values, fathers may be more likely to seek employment out of the home and work-place discrimination and/or low levels of English language competency may be even more toxic in terms of Latino immigrant fathers functioning (Krieger et al., 2006).

Economic Hardship, Economic Pressure, and Material Success

Since previous research with Latina mothers found the link between per capita income and economic pressure was weaker for Latina mothers compared to European American families (Parke et al., 2004), I hypothesized that a lesser value of material success may influence Latina mother's perceptions of economic stress. Contrary to

hypotheses, material success did not moderate the association between economic hardship and economic pressure. This hypothesis was exploratory as no previous research has examined the role of cultural values moderating the relationship between objective measures of income and perception of financial stress. Perhaps, the weaker association between economic hardship and pressure for Latino families in previous studies compared to European American families is related to the influence of cultural based stressors also influencing perceptions of economic stress in addition to actual family income. In addition, low income variability may have led to a statistical restriction of range contributing to the weaker association. As highlighted above, the scales measuring current and predicted adjustments to spending may have not been as relevant to the families in our sample who were likely experiencing chronic poverty (Pachter et al., 2006).

Although the majority of mothers reported a low value of material success, the level of material success did not influence the relationship between economic hardship and pressure. In other words, thinking money was important for happiness or to gain respect from others was not related to the amount of economic pressure felt when experiencing objective economic hardship. Likely for very low-income families, it does not matter whether or not one values money. The pure necessity of money in order to buy basic necessities such as food, shelter, clothing, and medical care leads to worries about money (Karabati & Cemalcilar, 2010). The measures of economic pressure focus on the perception of pressure by examining whether the participant could afford the type of material item they felt their family members "should have." While for a higher

income family this subjective belief in the quality of the material good may be influenced by one's value of material success, a lower income family may be more likely to answer the questions regarding whether they could afford the item at all versus being selective about quality. Chronic poverty may lead to hopelessness and despair about one's ability to obtain basic needs; previous research has suggested the long-term deprivation of meeting one's basic needs due to poverty is related to negative emotions including anger, frustration, shame and humiliation (R. P. Hill & Gaines, 2007). In sum, materialism may be more important at moderate levels of economic hardship. At high levels of hardship, the necessity of paying bills, affording any clothes and housing may lead to the belief that money will make one happy or respected irrelevant. However, little research exists examining the relationship between income and materialism (Burroughs & Rindfleisch, 2002).

In addition, the measure of material success attempts to capture an Anglo-oriented view of money. Previous research has suggested that acculturation is an orthogonal process (Berry, 2006). Therefore, it may be whether or not an immigrant retains a collectivistic view of money common among Latin cultures rather than the lack of American view of money that is protective (Falicov, 2001). It may also be important to examine whether the view that money is instrumental in reinforcing family bonds should also be measured in terms of whether or not individuals behaviorally give gifts to their family and rely on extended family for financial support (Falicov, 2001). A collectivistic view of money may be protective as a larger safety net is available at acute times of financial strain (Falicov, 2001). However, many Latino immigrants would think

it would be disgraceful to not send money home to elderly parents left in their country of origin (Falicov, 2001). Thus, sending money to relatives in one's country of origin may be overly burdensome to a family living on very limited means. Future research should aim to measure both country of origin orientation towards money and Anglo-oriented materialism to explore the relationship between views of money and economic pressure.

Although not the focus of our current analyses, it should be noted that materialism may interact with other cultural values to influence its relationship with perceived stress (Burroughs & Rindfleish, 2002). Burroughs and Rindfleish (2002) suggest a value conflict between materialism and collectivistic values is associated with poorer psychological outcomes. In addition, materialism interacted with both religious values and family values to influence stress in a sample of 373 predominantly White (85%) adults from across the United States. For individuals who reported high religious or family values, increases in materialism values was associated with reduced subjective well-being (i.e., measured three components: positive affect, overall life satisfaction and absence of negative affect). However, for individuals with low religious or family values, increases in materialism were not related to decreases in subjective well-being (Burroughs & Rindfleish, 2002). Future research would benefit from exploring the relationship between material success, religious beliefs and familism values in the Family Stress Model for Latino families. Latinos with high familism values and religious beliefs may be the most at risk for the detrimental effects of materialism.

Economic Hardship, Economic Pressure, and Religious Beliefs

I also hypothesized that religious beliefs would buffer against developing economic stress when experiencing economic hardship. However, religious beliefs did not serve as a moderator in the analyses. Items on the religious belief subscale of the MACVs range in scope from one's belief in God, centrality of spirituality, trust in God, and gratitude towards God (Knight et al., 2009). Perhaps, a specific aspect of religious beliefs or spirituality may be protective in the face of poverty. The rationale for the hypothesis focused on religious beliefs was that one's religious beliefs would serve as a "cultural lens" through which they viewed their situation. Religious beliefs encompassing feelings of solidarity with Jesus, spiritual gratitude, humility and fatalism may be particularly salient in the context of economic hardship (De la Torre, 2002), and these were not tapped into more broadly.

In addition, the religious belief scale fails to capture the degree to which a person feels they are living consistent with their religious values. For example, an immigrant mother may have been an active member of her parish in her country of origin. However, after immigrating to the United States may have had barriers to participation in a religious community. Therefore, she may continue to hold strong spiritual beliefs, but experience dissonance regarding her lack of engagement with a faith community. Previous research suggests church attendance decreases symptoms of depression and suicidal ideation among Mexican immigrants (Hovey, 2000).

In addition, religious beliefs may be closely related to other beliefs such as fatalism. Hunt (2002) found that Latino Catholics were the most likely compared to

other ethnic groups and religions to endorse a "fatalistic" view about poverty (i.e., poverty is caused by forces such as luck, chance, sickness or physical handicaps). Fatalism refers to the idea that fate cannot be changed and that events in life are beyond one's control. Some research suggests, in the face of poverty, fatalism may be associated with a pervasive pessimistic view of one's situation (Hunt, 2002). Additional research on locus of control beliefs and poverty has found that if people that feel that they lack control over their financial situation are more likely to be dissatisfied (Hira, Fitzsimmons, Hafstrom, & Bauer, 1993; Sumarwan & Hira, 1993).

However, religious fatalism may also be viewed as a surrendering one's control to God and trusting in Him (Villafañe, 1993). Villafañe (1993) suggests "through the power of the Holy Spirit disenfranchised Latinos receive charismatic empowerment and spiritual resources to encounter social struggles" (p. 195). Research with migrant farm workers has found Latinos to report satisfaction with their lives in the face of abject poverty. In open-ended interviews with migrant farm workers whose median income was about $7,500 annually, Parra-Cardona, Bulock, Imig, Villarruel, and Gold (2006) found that the migrant workers still reported high amount of life satisfaction even despite many challenges of migrant life. Parra-Cardona et al. (2006) suggested this was due to their "capacity to adapt their belief system in order to make meaning of adversity" (p. 372). Taken together, religious beliefs likely have an intricate and nuanced relationship to perceptions of economic stress. The scale used in this study may have failed to capture the pertinent aspect of religious beliefs that may be protective.

Economic Stress, Familism, and Depressive Symptoms

I hypothesized that the mother's reports of family support and obligations would buffer against the development depressive symptoms in the face of economic stress. Family support and obligation are specific aspects of familism that I predicted would buffer against depressive symptoms. Family support was believed to be potentially protective as it would allow the mothers to rely on others emotionally and financially when experiencing economic stress. Family cohesion previous showed to not deteriorate even in the face of economic pressure in previous research (Behnke et al., 2008). In addition, obligations were posited to lead to a sense of meaning and purpose for Latina mothers reducing the toxic effects of economic stress. Yet, familism failed to protect mothers against developing depressive symptoms.

The majority of previous research on maternal familism values has examined the mother's value in relation to the adolescent's familism values or outcomes. Limited research exists examining the role of familism in relation to psychological health adult samples (Campos, Ullman, Aguilera, & Schetter, 2014). Recent research suggests it may not be the absolute value of familism rather the match between family members in terms of their endorsement of familism that confers protective effects for family members (Baumann et al., 2010). Given the vast majority of the mothers in the sample were immigrants (98%) while the majority of their children in the study were U.S.-born (88%), a higher value of familism may have contributed to a larger gap between the mothers and their adolescent children (Stein et al., 2014). Research with Latino adolescents and their mothers suggest a larger value gap in terms of U.S. mainstream values and traditional

Latino values between the adolescents and their mothers leads to greater acculturation-based conflict, or conflict due to differences in values or beliefs (Kulish, 2016). Latina women are particularly sensitive to increases in conflict in families (Helms et al., 2014) as they may feel it is their duty to maintain family harmony due to an ingrained marianismo value. Thus, although previous research has suggested familism tends to confer protective effects in terms of psychological outcomes, the role of familism in Latina mothers' lives and family relationships especially in a context in with native born youth is likely complex (Valdivieso-Mora, Peet, Garnier-Villarreal, Salazar-Villanea, & Johnson, 2016). Another analysis on the sample supports this line of reasoning. Acculturation gap conflict was associated with greater maternal depressive symptoms over and above the relationship between discrimination and depressive symptoms (D. Hill, Blanco, Mejia, Cavanaugh, & Stein, 2016).

In addition, there may be a discrepancy between how much a mother values family support and obligations and how much she behaviorally enacts familism (Hernández & Bámaca-Colbert, 2016). Therefore, it may be the enactment of familism support and obligations that may be protective for mothers against depression in the face of economic stress. In addition, for a mother who is likely stressed and overburdened by economic hardships and cultural-based stressors such as acculturative stress and discrimination, the obligation to give money to her family back home may be viewed as taxing leading to deteriorating well-being or mental health (Rivera, Torres, & Carré, 1997). Future research examining the nuances within familism values for Latino families is needed to better understand the role of this value in relation to economic stress.

Limitations and Future Directions

Although one of the ways the current study extends past research is examining a culturally informed adaptation of the family stress model in a sample of Latina mothers in a unique context, an emerging Latino community in a semi-rural area in the U.S. Southeast, the homogenous nature of the sample may have contributed to a lack of variability and statistic restriction of range in the current study.

Given the homogeneity of the sample (e.g., all Latina immigrant mothers in an emerging immigrant community in the Southeast United States), there was little variability in reports of cultural values. The vast majority of mothers in the study reported low American values such as material success and high levels of country of origin values such as religious beliefs. Likewise, the sample had limited variability in income, was more economically impoverished and reported greater levels of chronic economic strain than other studies examining the family stress model with Latino families (Behnke et al., 2008). Therefore, the null results may have to do with a statistical restriction of range. On the whole, future research should strive to include a greater diversity of participants. Perhaps, including second or third generation mothers who may have shown deterioration in their cultural values would lead to support of the hypothesized interactions. Utilizing integrative data analysis that allows researchers to combine samples across groups (e.g., examining newly immigrated Latina mothers in the United States Southeast in junction with mothers from more established immigrant communities in the United States Southwest) may be a solution to the limited variability in terms of cultural values of mothers in an emerging immigrant community (Curran &

Hussong, 2009). Similar to past studies comparing across ethnicities (Behnke et al., 2008; Iruka et al., 2012; Parke et al., 2004), research could examine specific hypotheses comparing the samples related to context of migration, generational status, etc. Thus, such an approach may elucidate the complexity of within ethnic group variability and allow for generalizability across contexts.

Although the current study did not collect data on documentation status, this likely plays an integral role in objective and perceived upward mobility and contributes to emotional and economic distress (Cavazos-Rehg, Zayas, & Spitznagel, 2007). In 2014, there were 331,000 undocumented Latino immigrants living in North Carolina (Batalova, Hooker, & Capps, 2014). Previous research on documentation status suggests undocumented workers are at high risk for job-related exploitation. Frequently, corrupt employers will attempt to take advantage of the worker's legal status paying very low wages, withholding employment benefits and sometimes even wages ("desperation and wariness about their legal status and may pay very low wages, not offer employee benefits and protections and even may withhold wages (Cavazos-Rehg et al., 2007). Immigrants in emerging communities have heightened fear of deportation, which is associated with greater emotional distress, difficulties finding jobs, job exploitation (e.g., pressure to accept low paying jobs, challenges obtaining promotions or pay raises), avoidance of government agencies, and reluctance to seek psychological, social and medical services (Cavazos-Rehg et al., 2007).

In addition, undocumented individuals have less access to institutional resources that require identification. Previous research suggests barriers to access of institutional

resources increases economic hardship and, in turn, increases psychological distress. Furthermore, lack of access to checking or saving accounts and credit prevents undocumented immigrants from having a buffer at acute times of economic strain (Yoshikawa, Godfrey, & Rivera, 2008).

Another major limitation of the current study is that the data was cross-sectional. Future longitudinal studies with Latino families are necessary to properly test mediation. Another limitation was that the study only tested the mother's report in terms of the family stress model compared to the full chain of the model. There is a limited amount of research testing the full model with Latino families (Parke et al., 2004; White et al., 2009).

The modest size of the sample was a weakness of the study. Many barriers and challenges exist with research on low-income, ethnically diverse families. The current study sought to overcome the barriers involved with research with Latino immigrant communities by completing in home data collection, engaging with the local community through the school district, and completing phone call as well as door to door recruitment. Despite the research team's best efforts, the sample size of the study was not large enough to test latent moderated mediated models. Future research should examine a cultural and contextual moderation of the family stress model with a larger sample of families.

In addition, the study had a number of measurement concerns. The Mexican American Cultural Values Scale demonstrated low reliability across values, which has been seen in previous research (Knight et al., 2009). Additionally, there were significant

measurement concerns with the material success and religious beliefs measures, and these subscales have only been used in a limited amount of studies (D'Anna-Hernandez, Aleman, & Flores, 2015; Morgan Consoli, Llamas, & Consoli, 2016). To address this issue, post hoc tests included the higher order constructs (i.e., Latino cultural values, Mainstream American cultural values), but the results remained the same. Improvement in measurement of cultural values is necessary to test future research questions regarding possible mediation of the family stress model, especially testing stronger measures of religiosity and material success values. The low alphas in the sample only allowed to the possibility of capturing a relatively large effect (Henson, 2001). Previous research has suggested that cultural values have a small, but significant and consistent effect on psychosocial outcomes (Valdivieso-Mora et al., 2016). Given our sample size, we likely reduced our chances of detecting any effect of cultural values due to the combination of sample size and measurement error (Kline, 2015).

The data collection for this current study occurred in 2013-2015. Since 2015, the political climate in the United States has changed and led to more instances of overt discrimination against Latinos (Murphy, 2017). In fact, according to the Southern Poverty Law Center (2016), 315 anti-immigrant hate crimes were reported in the month following the election of President Donald Trump. Heightened discrimination, a political movement towards stricter policies on immigration likely has led to more fear and uncertainty in all Latino families, but especially families with undocumented family members (Arbona et al., 2010). Thus, the stress families reported experiencing in

2014/2015 is likely even higher now. In addition, different cultural based stressors may be more salient to immigrant families in the current political climate.

Given the barriers to success and psychological well-being in these immigrant families, future studies on resiliency are necessary. In addition to examining negative outcomes such as maternal depression, positive outcomes such as hopefulness, occupational resiliency, motivation to succeed, and positive parenting should be examined. Also, different factors influencing resiliency should be examined. For example, it may not be the mean levels of cultural values that confer protective effects for families, but rather the values in conjunction with a psychological resiliency (e.g., flexible and positive attribution style) that leads to positive outcomes (Valdivieso-Mora et al., 2016). Research examining resiliency in these immigrant parents facing a high level of economic and cultural based stress is integral in order to promote positive development in their children.

Despite these limitations, the study had a number of strengths. The current study is one of a small number of studies examining the family stress model in Latino families (Behnke et al., 2008; Mistry et al., 2002; Parke et al., 2004; Taylor et al., 2012). This was the first study to explore values of material success and religious beliefs as potential moderators of the family stress model. In addition, the study is the only study to have examined the family stress model in an emerging Latino community in the Southeastern United States.

Clinical Implications

The majority of mothers in our sample reported high depressive symptoms suggesting they are having difficulty coping with stress. The results of this dissertation suggest that both poverty and cultural based stress related to navigating a new environment, language barriers, experiences of discrimination and economic hardship is related to increases in mother's perceptions of economic stress and, in turn, increases in depressive symptoms. Thus, the cultural risk hypothesis was supported for these mothers. However, the cultural resilience hypotheses were not supported as religious beliefs, a low value of material success and familism values failed to buffer against the toxic effects of poverty, discrimination, low English language competency and perceptions of economic stress. Given our results highlight the importance of perceptions of stress for these mothers, this has important implications for prevention and intervention efforts.

First, efforts to reduce the actual barriers these families have to accessing basic resources are imperative. The results suggest the stress Latino immigrants' families experience in emerging Latino communities is tremendous. Unlike established Latino immigrant communities, these destinations do not have the infrastructure or resources to help such families (Raffaelli & Wiley, 2013). Thus, creating programs to help reduce barriers to accessing community resources are needed. Agencies that help immigrants engage with existing resources can help reduce actual and perceived barriers for these families (Perreira, Chapman, & Stein, 2006).

Second, families with unauthorized members face additional barriers. Previous research has found U.S. citizen children of unauthorized parents are eligible for means-tested public policies and programs, but often do not access these resources. In addition to lack of knowledge of current programs, families do not attempt to access programs due to fear of deportation (Yoshikawa, Suárez-Orzco, & Gonzales, 2017). Therefore, legislation to protect families with unauthorized members will increase access to resources for children. Increasing the legal rights and protections of unauthorized family members (e.g., improving working conditions by allowing greater access to work permits) may improve the outcomes of immigrant youth. In addition, programs such as access to identification cards allows undocumented immigrants to gain legal identification cards can assist in tremendous ways such as enabling such individuals to report if they are a victim of a crime (Kline, 2015). Immigration reform that allows for a process by which undocumented immigrants can work towards becoming documented can help such families as well (Arbona et al., 2010).

Second, in addition to connecting Latino families to already existing resources, the creation of new programs to help such families in emerging immigrant communities is necessary. Given the current lack of Spanish speaking teachers, school personnel, and medical providers, additional interpreter services are necessary to help parents in these contexts (Flores, 2005; Good, Masewicz, & Vogel, 2010). Educational opportunities for Latino adults would improve such communities in multiple ways. Not only would it allow an avenue for upward social mobility for such immigrant families to pull themselves out of poverty, it would also help the larger Latino community in the area by

having more Spanish professionals. For example, helping a Latina mother learn English, complete a GED and a teaching certificate to be a teacher's aide would help Latino families at the school have another Spanish speaking professional to improve access to the school environment and give hope to other Latino families of the possibility of upward mobility. Thus, education programs including English language learner classes for adults, GED programs, and access to professional and technical degree programs is necessary.

Third, our results suggest discrimination and cultural stress are toxic to Latina mothers' functioning. Previous research suggests Latino immigrants face greater discrimination in emerging Latino communities vs. established communities (Perreira, Fuligni, & Potochnick, 2010). In addition, as individuals become more acculturated, they tend to report more experiences of discrimination (Finch et al., 2000). Unfortunately, by increasing an individual's English language competency, they may actually have more experiences of discrimination (Finch et al., 2000). Thus, in conjunction with improving educational opportunities for Latinos, efforts to reduce discrimination are important as well. Recently political changes led to an increase in discrimination as well (Murphy, 2017). Diversity trainings for professionals in the community especially legal officers, school personnel, and medical providers may reduce instances of discrimination (Owiti et al., 2014; Rowe & Garland, 2013).

Fourth, interventions focused on alleviating the psychological burden of poverty and cultural based stress for Latino parents is imperative. Our results suggest that perceptions of economic stress are a pathway by which per capita income and cultural

based stress influences mother's depressive symptoms. Although the best way to help such families would be to reduce the financial burdens overall, efforts to make such changes are likely costly and will require time to make such improvements. Cognitive behavioral therapy is effective at reducing symptoms of depression and perceptions of stress (Butler, Chapman, Forman, & Beck, 2006). Thus, cultural tailored psychological interventions may help Latina mothers cope with discrimination, reduce symptoms of depression and hopelessness. Reducing the negative cognitive perceptions of one's situation can instill hope, empower individuals to overcome their challenging situations and create positive changes in their lives.

Conclusions

Taken together, many Latino immigrant families in emerging immigrant communities are struggling with poverty and cultural based stress. In addition to the traditional family stress model findings that per capita income is associated with economic stress, it was found that cultural based stress contributes to perceptions of economic stress as well (Behnke et al., 2008; Mistry et al., 2002; Parke et al., 2004; Taylor et al., 2012). However, the hypotheses regarding cultural values contributing to resilience were not supported. Thus, cultural values failed to protect against the toxic effects of poverty, discrimination, English language acculturative stress and economic stress. Future research should continue to examine resilience factors in Latino families to help inform ways to reduce the stress and improve the psychological functioning of Latino families.

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APPENDIX A

TABLES AND FIGURES

Table 1

Descriptive Statistics

Variable	Range	Mean	*SD*
Family Income ($)	5,000.00 to 87,499.50	23,020.35	12,389.77
People Living Off Income	2 to 8	4.72	1.10
Per Capita Income ($)	714.29 to 29,166.50	5,098.57	3,205.27
Economic Adjustments and Cutbacks	.00 to 9.00	2.43	2.02
Not Enough Money for Necessities	1.14 to 5.00	3.11	.91
Inability to Make Ends Meet	1.00 to 5.00	3.14	.96
Financial Strain	1 to 4	1.69	.56
Overall Economic Pressure	.86 to 5.18	2.59	.91
Familism Support and Obligations	3.20 to 5.00	4.44	.42
Total Familism	3.13 to 5.00	4.36	.62
Latino Cultural Values	2.79 to 5.00	4.40	.41
Mainstream Cultural Values	1.65 to 4.72	3.18	.62
Frequency of Discrimination	.00 to 22.00	3.63	4.53
English Language Competency	1.00 to 6.00	4.70	1.28
Religious Beliefs	2.43 to 5.00	4.61	.50
Material Success	1.00 to 4.80	2.16	.82
Maternal Depressive Symptoms	.00 to 57.00	12.43	11.07
Maternal Age	28.12 to 55.04	38.23	5.64
Youth Age	10.33 to 15.23	12.86	.68
Mother's Years in US	.20 to 36.00	15.67	4.61

Table 2

Correlations

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Economic Hardship	–											
2. Economic Pressure	-.33***	–										
3. Religious Beliefs	-.11	.12	–									
4. Material Success	-.05	.01	.08	–								
5. Maternal Depressive Symptoms	-.19*	.40***	.00	.06	–							
6. Cultural-Based Stress	-.10	.37***	-.10	.01	.29***	–						
7. Maternal Familism Obligations and Support	.01	.07	.56***	.21**	- .03	.05	–					
8. Total Familism	-.10	.10	.62***	.30***	.02	-.00	.90***	–				
9. Latino Cultural Values	-.10	.12	.77***	.27***	.01	-.02	.89***	.98***	–			
10. Mainstream Cultural Values	-.10	-.01	.26***	.78***	.00	-.07	.37***	.51***	.47***	–		
11. Mother's Years in U.S.	.04	.03	.07	.05	-.03	-.07	-.03	-.01	.01	.02	–	
12. Mother's age	.08	.12	.05	.16*	-.03	.07	.09	.04	.06	.00	.24**	–

Note. *p < .01., **p < .01, ***p < .001

Table 3

Model Estimates for Model 1 (Standard Errors in Parentheses; $N = 173$)

Parameter Estimate	Unstandardized	Standardized	p
Per Capita Income → Economic Pressure	-0.24 (.06)	-0.32	.000
Cultural Based Stress → Economic Pressure	0.21 (.05)	0.28	.000
Religious Beliefs → Economic Pressure	0.08 (.05)	0.10	.125
Religious Belief X Per Capita Income → Economic Pressure	0.08 (.05)	0.08	.223
Material Success → Economic Pressure	0.02 (.01)	0.03	.062
Material Success X Per Capita Income → Economic Pressure	0.06(.07)	0.06	.486
Mother's Age → Economic Pressure	0.02(.01)	0.14	.062
Per Capita Income → Depressive Symptoms	-0.07 (.07)	-0.07	.350
Economic Pressure → Depressive Symptoms	0.43 (.12)	0.32	.000
Cultural Based Stress → Depressive Symptoms	0.17 (.09)	0.17	.048
Familism → Depressive Symptoms	-0.05 (.08)	-0.05	.500
Economic Pressure X Familism → Depressive Symptoms	-0.09 (.12)	-0.09	.442
Residual for Economic Pressure	0.44 (.04)	0.78	.000
Residual for Depressive Symptoms	0.81 (.12)	0.81	.000

Note. χ^2 (28) = 34.42; p = .16, CFI = 0.90; RMSEA = 0.04; SRMR = 0.05.

Table 4

Indirect Effects of Cultural Based Stress and Per Capita Income on Depressive Symptoms Through Economic Pressure for Model 1

| Predictor	Estimate	SE	*p*-value	95% Confidence Interval	
				Lower	Upper
Per Capita Income Indirect	-0.10	0.04	.01	-0.19	-0.05
Per Capita Income Direct	-0.07	0.08	.35	-0.20	0.06
Per Capita Income Total	-0.17	0.07	.01	-0.30	-0.10
Cultural Based Stress Indirect	0.09	0.03	.00	0.04	0.15
Cultural Based Stress Direct	0.17	0.09	.05	0.03	0.34
Cultural Based Stress Total	0.26	0.09	.01	0.10	0.41

Note. Based on 1,000 bootstrap samples.
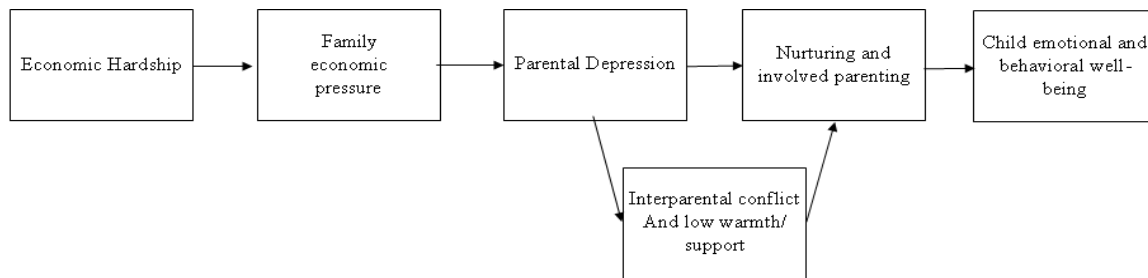
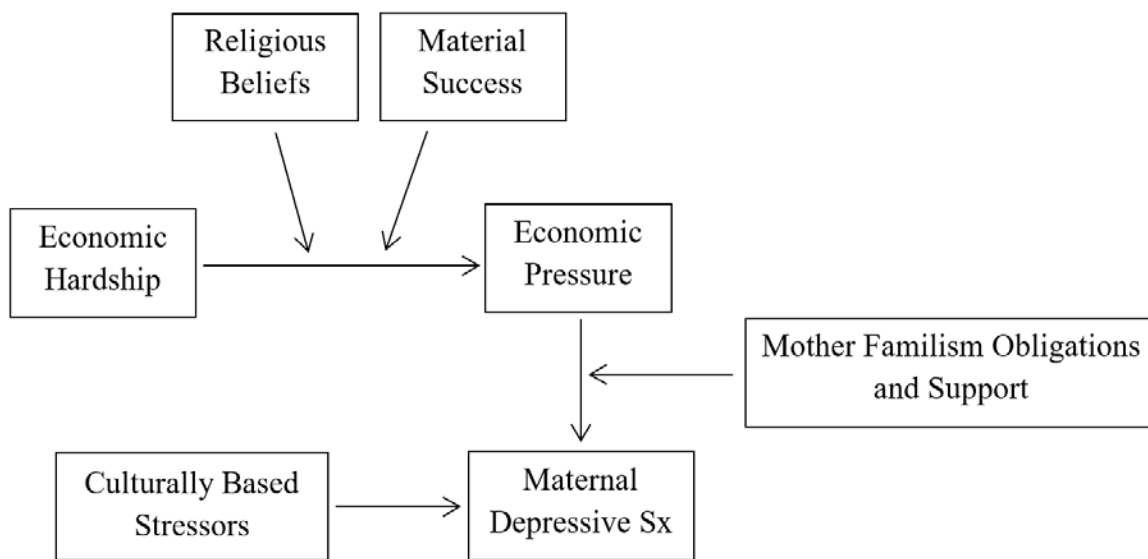Figure 1. The Family Stress Model (Conger & Donnellan, 2007).

Figure 2. Hypotheses 1-4.
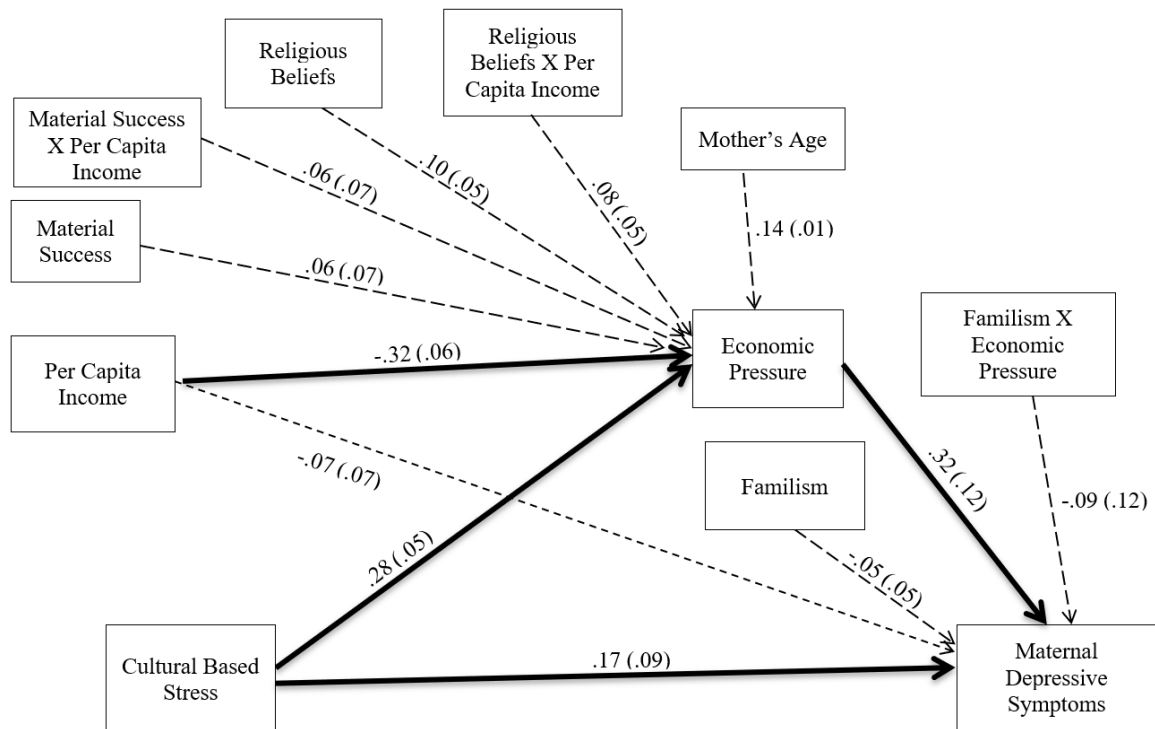
Figure 3. Model 1 Testing Hypotheses 1-4. Significant Paths ($p < .05$) are Represented by Solid Lines and Nonsignificant Paths are Represented by Dashed Lines. Standardized Coefficients (Standard Errors) are Presented.

APPENDIX B

MEASURES

Economic Hardship

How much total income, before taxes, has your family received in the last twelve months? Include your own income, the income of everyone else in your household, and income from welfare benefits, dividends, and all other sources?

1. Less than $5,000
2. $5,000 to $9,999
3. $10,000 to $19,999
4. $20,000 to $29,999
5. $30,000 to $39,999
6. $40,000 to $49,999
7. $50,000 to $74,999
8. $75,000 to $99,999
9. $100,000 and up

How many people altogether live off this income? _____ _____ (01-99)

Economic Pressure

Economic Hardship (Barrera)

		Almost never	Once in a while	Sometimes	A lot of the time	Almost always
1.	In the NEXT 3 MONTHS, how often do you think that you and the family members in your household will experience bad times, such as poor housing or not having enough food?	1	2	3	4	5
2.	In the NEXT 3 MONTHS, how often do you expect that you and the family members in your household will have to do without the basic things that your family needs?	1	2	3	4	5

		A great deal of difficulty	Quite a bit of difficulty	Some difficulty	A little difficulty	No difficulty at all
1.	Think back over the PAST 3 MONTHS, since [MARKER-three months before], and tell me how much difficulty you had with paying your bills. Would you say you had:	1	2	3	4	5

		More than enough money	Some money left	Just enough money left	Somewhat short of money	Very short of money
1.	Think again over the PAST 3 MONTHS. Generally, at the end of each month did you end up with:	1	2	3	4	5

Please think about you and the family members in your household and your financial situation over the PAST 3 MONTHS, since [Marker]. Please tell me how much you agree or disagree with each statement.

		Strongly agree	Agree	Neutral/ mixed	Disagree	Strongly disagree
1.	We had enough money to afford the kind of home we should have.	1	2	3	4	5
2.	We had enough money to afford the kind of clothing we should have.	1	2	3	4	5
3.	We had enough money to afford the kind of furniture or household appliances we should have.	1	2	3	4	5
4.	We had enough money to afford the kind of car we need.	1	2	3	4	5
5.	We had enough money to afford the kind of food we should have.	1	2	3	4	5
6.	We had enough money to afford the kind of medical care we should have.	1	2	3	4	5
7.	We had enough money to afford leisure and recreational activities.	1	2	3	4	5

Just answer yes or no to the next few questions.

		Yes	No
1.	In the past 3 months, we changed food shopping or eating habits a lot to save money.	1	2
2.	In the past 3 months, we shut down the heat or air conditioning to save money even though it made the house uncomfortable.	1	2
3.	In the past 3 months, a family member didn't go to see the doctor or dentist when he or she needed to because we had to save money.	1	2
4.	We fell far behind in paying bills.	1	2
5.	We asked relatives or friends for money or food to help us get by.	1	2
6.	A family member added another job to help make ends meet.	1	2
7.	In the past 3 months, we received government assistance.	1	2
8.	We sold or pawned some possessions because we needed the money, even though we really wanted to keep them.	1	2
9.	We moved to another house or apartment because we didn't have enough money.	1	2

Family Cultural Values:

Familism: Mexican American Cultural Values scales (MACVS)

Open Binder to Form A
These statements are about what people may think or believe. Remember there are no correct or incorrect responses.

How much do you believe that:

		Not at all	A little	Somewhat	Very much	Completely
1.	One's belief in God gives inner strength and meaning to life.	1	2	3	4	5
2.	Parents should teach their children that the family always comes first.	1	2	3	4	5
3.	Children should be taught that it is their duty to care for their parents when their parents get old.	1	2	3	4	5
4.	Children should always do things to make their parents happy.	1	2	3	4	5
5.	No matter what, children should always treat their parents with respect.	1	2	3	4	5
6.	Children should be taught that it is important to have a lot of money.	1	2	3	4	5
7.	People should learn how to take care of themselves and not depend on others.	1	2	3	4	5
8.	God is first; family is second.	1	2	3	4	5
9.	Family provides a sense of security because they will always be there for you.	1	2	3	4	5
10.	Children should respect adult relatives as if they were parents.	1	2	3	4	5
11.	If a relative is having a hard time financially, one should help them out if possible.	1	2	3	4	5
12.	When it comes to important decisions, the family should ask for advice from close relatives.	1	2	3	4	5
13.	Men should earn most of the money for the family so women can stay home and take care of the children and the home.	1	2	3	4	5
14.	One must be ready to compete with others to get ahead.	1	2	3	4	5
15.	Children should never question their parents' decisions.	1	2	3	4	5
16.	Money is the key to happiness.	1	2	3	4	5

		Not at all	A little	Somewhat	Very much	Completely
17.	The most important thing parents can teach their children is to be independent from others.	1	2	3	4	5
18.	Parents should teach their children to pray.	1	2	3	4	5
19.	Families need to watch over and protect teenage girls more than teenage boys.	1	2	3	4	5
20.	It is always important to be united as a family.	1	2	3	4	5
21.	A person should share their home with relatives if they need a place to stay.	1	2	3	4	5
22.	Children should be on their best behavior when visiting the homes of friends or relatives.	1	2	3	4	5
23.	Parents should encourage children to do everything better than others.	1	2	3	4	5
24.	Owning a lot of nice things makes one very happy.	1	2	3	4	5
25.	Children should always honor their parents and never say bad things about them.	1	2	3	4	5
26.	As children get older their parents should allow them to make their own decisions.	1	2	3	4	5
27.	If everything is taken away, one still has their faith in God.	1	2	3	4	5
28.	It is important to have close relationships with aunts/uncles, grandparents and cousins.	1	2	3	4	5
29.	Older kids should take care of and be role models for their younger brothers and sisters.	1	2	3	4	5
30.	Children should be taught to always be good because they represent the family.	1	2	3	4	5
31.	Children should follow their parents' rules, even if they think the rules are unfair.	1	2	3	4	5
32.	It is important for the man to have more power in the family than the woman.	1	2	3	4	5
33.	Personal achievements are the most important things in life.	1	2	3	4	5
34.	The more money one has, the more respect they should get from others.	1	2	3	4	5
35.	When there are problems in life, a person can only count on him/herself.	1	2	3	4	5

		Not at all	A little	Somewhat	Very much	Completely
36.	It is important to thank God every day for all one has.	1	2	3	4	5
37.	Holidays and celebrations are important because the whole family comes together.	1	2	3	4	5
38.	Parents should be willing to make great sacrifices to make sure their children have a better life.	1	2	3	4	5
39.	A person should always think about their family when making important decisions.	1	2	3	4	5
40.	It is important for children to understand that their parents should have the final say when decisions are made in the family.	1	2	3	4	5
41.	Parents should teach their children to compete to win.	1	2	3	4	5
42.	Mothers are the main people responsible for raising children.	1	2	3	4	5
43.	The best way for a person to feel good about himself/herself is to have a lot of money.	1	2	3	4	5
44.	Parents should encourage children to solve their own problems.	1	2	3	4	5
45.	It is important to follow the Word of God.	1	2	3	4	5
46.	It is important for family members to show their love and affection to one another.	1	2	3	4	5
47.	It is important to work hard and do one's best because this work reflects on the family.	1	2	3	4	5
48.	Religion should be an important part of one's life.	1	2	3	4	5
49.	Children should always be polite when speaking to any adult.	1	2	3	4	5
50.	A wife should always support her husband's decisions, even if she does not agree with him.	1	2	3	4	5

Depressive symptoms:

<u>CESD</u>

The following phrases indicate different ways of feeling. Please indicate the frequency with which you have felt these ways in the last week. The possible responses are:
1 = Rarely or Never (Less than once per day)
2 = Sometimes (1-2 days)
3 = Occasionally/Several times (3-4 days)
4 = Almost every day (5-7 days)

	During the last week:	Rarely or Never	Sometimes	Occasionally	Almost every day
1.	I was bothered by things that usually don't bother me.	1	2	3	4
2.	I did not feel like eating; my appetite was poor.	1	2	3	4
3.	I felt that I could not shake off the blues even with the help of my family and friends.	1	2	3	4
4.	I felt that I was just as good as other people.	1	2	3	4
5.	I had trouble keeping my mind on what I was doing.	1	2	3	4
6.	I felt depressed.	1	2	3	4
7.	I felt that everything I did was an effort.	1	2	3	4
8.	I felt hopeful about the future.	1	2	3	4
9.	I thought my life had been a failure.	1	2	3	4
10.	I felt fearful.	1	2	3	4
11.	My sleep was restless.	1	2	3	4
12.	I was happy.	1	2	3	4
13.	I talked less than usual.	1	2	3	4
14.	I felt lonely.	1	2	3	4
15.	People were unfriendly.	1	2	3	4
16.	I enjoyed life.	1	2	3	4
17.	I had crying spells.	1	2	3	4
18.	I felt sad.	1	2	3	4
19.	I felt that people disliked me.	1	2	3	4
20.	I could not get going.	1	2	3	4