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LATINO PARENTS' ACCULTURATIVE STRESS AND THEIR PRESCHOOLERS'

PROSOCIAL DEVELOPMENT:

TESTING THE MEDIATING ROLE OF PARENTING STYLE

A THESIS SUBMITTED TO

THE FACULTY OF THE GRADUATE SCHOOL

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ABSTRACT

Studies increasingly recognize the importance of cultural factors when studying the development of immigrant children from low-income backgrounds. There is reason to believe that parents' acculturative stress may be linked to children's prosocial development, via parenting. The present study included a sample of immigrant Latino parents of 3- to 5-year-old Head Start preschoolers ($N = 28$) to examine how parents' acculturative stress might be associated with children's prosocial behavior at home, as reported by parents, and at school, as reported by teachers. Furthermore, it studied whether this linkage is mediated by warm, supportive, and hostile parenting practices. Results indicated that parents' pressure against acculturation was negatively associated with teacher reports of children's cooperation, prosocial actions, and motivation for prosocial behavior. In addition, the pressure to acculturate was negatively related to teacher reports of children's motivation for prosocial behavior. Neither warm and supportive parenting nor hostile parenting mediated these associations. These findings highlight the importance of considering cultural and contextual factors when studying the prosocial development of Latino children from low-income backgrounds.

CHAPTER ONE

INTRODUCTION

Latino preschoolers make up a substantial number (37%) of children enrolled in Head

Start programs around the U.S. (Head Start, 2017). Preschool-age children are rapidly

developing the social skills necessary for positive social adjustment and overall well-being in

kindergarten and later in life (Eisenberg et al., 2002). In particular, children are developing social

skills such as prosocial behaviors, which are voluntary actions, such as helping and cooperating,

aimed towards benefitting an individual other than oneself (Eisenberg & Fabes, 1998). During

early childhood, the development of prosocial skills predicts positive interpersonal relationships,

fewer antisocial and problem behaviors, better academic achievement, as well as improved

overall psychological adjustment (Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000;

Carlo, White, Streit, Knight, & Zeiders, 2018; Eisenberg et al., 1999; Flouri & Sarmadi, 2016).

Specifically for Latino Head Start preschoolers from immigrant families, factors that have been

shown to influence prosocial development include contextual factors specific to the immigrant

and low-income Latino experience (Knight & Carlo, 2012; Calzada, Sales, and O'Gara, 2019;

Lorenzo-Blanco et al., 2016; Tran, 2014).

In particular, for first-generation immigrant Latino parents, acculturative stress may occur

in response to the process of adopting a new language and culture, while simultaneously

attempting to preserve their native language and culture (Berry, 1997; Torres, Driscoll, & Voell,

2012). Recent studies suggest that parents' acculturative stress is associated with more behavior

problems and mental health issues in their young Latino children and teens, via the use of more

harsh and controlling parenting practices (Calzada et al.,2019; Lorenzo-Blanco et al., 2016).

However, studies examining the development of *positive* behaviors and social skills, rather than

behavior problems, among young children in immigrant families that face cultural and financial

stressors are limited to adolescents (Cabrera, 2013; Davis et al., 2016; Galindo & Fuller,

2010). Thus, while studying prosocial behavior during adolescence is important, prosocial

behavior during early childhood is often referred to as the foundation for positive social

development in adolescence (Eisenberg et al., 1999). Therefore, the overarching goal of the

present study is to investigate whether immigrant preschoolers' prosocial development is linked

with their parents' acculturative stress, and whether this relation is mediated through parenting

practices.

Head Start programs cater to many ethnic minority families, with Latino children making

up more than one third of preschoolers in Head Start programs across the country (Head Start,

2017). In addition, children from immigrant Latino families are at greater risk of growing up in

poverty with parents with a limited formal education, compared to children whose Latino parents

were born in the U.S. (Hernandez, Denton, & Macartney, 2007; Votruba-Drzal, Coley, Collins,

& Miller, 2015). In fact, limited formal education is often an indicator of lower family income,

as well as lower children's socioeconomic status, quality of education, and academic

achievement (Hauser & Warren, 1997; Sirin, 2005). A large body of research exists on how a

lack of economic and social resources is associated with behavioral problems, as well as lower

physical health, academic achievement, and mental well-being among young children (Duncan,

Magnuson, & Votruba-Drzal, 2014; Odgers et al., 2012; Rafferty & Griffin, 2010; Votruba-

Drzal, 2006; White, Roosa, Weaver, & Nair, 2009). By law, at least 90% of families enrolled in

Head Start programs must fall below the federal poverty line (Head Start Act, 2007). Head Start

programs predominantly serve families from low-income backgrounds in the effort to promote

children's school readiness, and provide resources to further cognitive, social, and emotional

development during early childhood (Love et al., 2005).

Additionally, some studies suggest that Latino children of immigrants tend to be more

prosocial compared to European Americans (Knight & Carlo, 2012; de Guzman & Carlo, 2004).

At the same time, other studies characterize young Latino children, specifically from low-income

families, as displaying fewer social skills compared to their White counterparts (Galindo &

Fuller, 2010; West, Denton, & Reaney, 2001). Scholars are calling for more culturally informed

research, as these mixed findings may be reflective of cultural differences in family experiences

and functioning, which are not fully captured in existing research (de Guzman, Brown, Carlo, &

Knight, 2012; Galindo & Fuller, 2010). Given that there is a large population of Head Start

preschoolers from immigrant Latino families, there is a need to better understand the cultural

contexts that may further influence the positive social development of immigrant Latino children

from low-income backgrounds (Cabrera, 2013). To address this, the present study examined the

association between immigrant Latino parents' acculturative stress and their Head Start

preschoolers' prosocial behaviors at home and at school. Furthermore, warm, supportive, and

hostile parenting practices were examined as mediators for the linkage between parents'

acculturative stress and children's prosocial behavior.

Theoretical Framework

Given that the present study examines how parents' experiences might influence their

children's development, this research is primarily guided by Bronfenbrenner's Ecological

System's Theory, the Family Stress Model, and the Integrative Model of Child Development (Bronfenbrenner, 1977; García Coll et al., 1998; Conger, Ge, Elder, Lorenz, & Simmons, 1994). According to Bronfenbrenner, children's development occurs in the context of various environmental systems, and the interactions between those systems (Bronfenbrenner, 2000). The multiple systems that influence children's development vary by proximity to the child. Those closest in proximity might directly influence children's development, whereas those more distant may indirectly influence it (Bronfenbrenner, 2000). The current study focuses on the Microsystem and Exosystem.

The Microsystem refers to the most immediate environment for children. It is the smallest of systems and includes daily environments such as the home or school. Children typically have personal relationships with individuals (e.g., parents and teachers) within their microsystems, and their development is influenced through interactions with those individuals. For example, research indicates that positive adjustment among children is best fostered through warm, supportive, and responsive interactions in their relationships with others (Baumrind, 1971; Kochanska, 1997; Raver et al., 2008; Steinberg, Lamborn, Dornbusch, & Darling, 1992). Additionally, the Exosystem encompasses a system's interactions with other settings that do not include the developing child, which may result in indirect effects on children. For example, if a parent experiences discrimination at work, that may impact how they interact with their child at home (Gassman-Pines, 2015). This study focuses on how parents' acculturative stress can influence their preschoolers' development of prosocial behaviors.

Building on Bronfenbrenner's theory (Bronfenbrenner, 1977), the Family Stress Model (Conger et al., 1994) helps explain how stress can affect family functioning and in turn, children's development. The Family Stress Model posits that environmental stress, particularly

financial stress, experienced by low-income parents is linked to impaired parenting quality, and in turn can negatively impact cognitive, behavioral, and health adjustment among children (Conger et al., 1994). In line with this theory, families in poverty are more likely to use controlling and harsh parenting practices due to external stressors, which may lead to children's negative well-being (Duncan & Brooks-Gunn, 1997; Rafferty & Griffin, 2010). For example, one study with a Head Start sample indicated that the use of negative parenting practices were predicted by mothers' social risk factors such as being younger in age, having less education, and enrollment in government assistance (Rafferty & Griffin, 2010). Furthermore, another study found that financial hardship experienced by Mexican American families was linked with lower warmth and inconsistent discipline by parents with school-age children (White et al., 2009).

In addition, the Integrative Model of Child Development considers cultural variables that may help predict developmental outcomes of ethnic and racial minority children. With this model, García Coll and colleagues explain that factors including societal, family, and child characteristics all influence children's developmental competencies (García Coll et al., 1998). Societal factors for ethnic minority families include social positions such as race and social class, prejudice, discrimination, and promoting and inhibiting environments including schools and neighborhoods (García Coll et al., 1998). Furthermore, these societal factors can influence an ethnic minority family's adaptive culture and overall functioning. Adaptive culture includes one's traditions, history, acculturation, and current contextual demands (Berry, 2007). Acculturation refers to the process of adapting to and navigating between two or more cultures (Berry, 2007). According to this model, the relative ease and difficulty of acculturation plays an important role on a family's adaptive culture, as parents must decide which aspects of their native culture they would like to include and to exclude when parenting their child (Deepak,

2005). Ethnic minority families' functioning may also be influenced by family members, values, and racial socialization (Calderón-Tena, Knight, & Carlo, 2011; Knight & Carlo, 2012; Knight, Carlo, Mahrer, & Davis, 2016). As such, children of color tend to develop values and behaviors that differ from native children (García Coll et al., 1998). This study explores how stressors related to acculturation may influence family functioning and children's adjustment.

To learn more about ethnic minority families from low-income backgrounds, it may be helpful to extend the Family Stress Model (Conger et al., 1994) to include a cultural component (Calzada et al., 2019; White et al., 2009). According to the Integrative Model of Child Development, children's development is also influenced by cultural and contextual factors (García Coll et al., 1998). Among low-income populations, one type of additional stress specific to immigrant families is acculturative stress. Acculturative stress is related to perceived discrimination, the pressure to speak and understand multiple languages, and pressures to know and act on cultural norms for both one's native and American cultures (Gil, Vega, & Dimas, 1994).

This study expands upon the Family Stress Model to include acculturative stress as a contextual factor that shapes family functioning and children's positive adjustment. An extensive literature exists on positive parenting practices and prosocial development among young children (Eisenberg & Valiente, 2002; Hoffman, 2008; Kochanska, 1993), and there is a growing literature on how acculturative stress may negatively influence parenting in immigrant families (Miao, Costigan, & MacDonald, 2018). In a study with first and second generation immigrant mothers of 5- to 6-year-old children, acculturative and general stress were measured as mediators between socioeconomic status and maternal positive parenting (Emmen et al., 2013). Results indicated that the relation between socioeconomic status and sensitive parenting was partly

mediated by both general and acculturative stress, suggesting that cultural factors may play a unique role, separate from financial stress, for families from low-income backgrounds. However, few studies exist on the influence of acculturative stress on such family functioning and associated children's development.

Research on the linkages between parents' experiences of acculturative stress and their children's outcomes is limited to behavior problems and lower mental health among children and adolescents (Calzada et al., 2019; Lorenzo-Blanco et al., 2016; Tran, 2014). Nevertheless, longitudinal studies on prosocial behavior find stability in development from early childhood through adolescence and into adulthood (Eisenberg et al., 1999; Eisenberg et al., 2002). Therefore, studying predictive factors of prosocial development in early childhood is imperative to understanding prosocial behavior later in life. Little is known regarding the role of Latino parental experiences with acculturative stress on preschool children's prosocial behavior. The proposed mediation model suggests a link between parents' acculturative stress and children's prosocial behavior via parenting practices. The present study, in particular, works to broaden the literature on young Latino children's social development by investigating how parents' acculturative stress shapes the development of prosocial behavior among preschoolers.

Preschoolers' Prosocial Development

Prosocial behavior refers to voluntary actions that are meant to benefit another individual (Eisenberg & Fabes, 1998). The development of prosocial skills at an early age is important, as these skills are related to sympathy and perspective taking, and predict later social adjustment such as peer acceptance, positive interpersonal relations, and fewer behavior problems in childhood and adolescence (Eisenberg et al., 1999). Furthermore, prosocial behavior during early

childhood is linked with school readiness and academic achievement during childhood through

early adolescence (Caprara et al., 2000).

Prosocial actions can be exhibited by children through comforting, helping, sharing, and

cooperating with one's peers, teachers, and family members (Dunfield & Kuhlemeier,

2013; Warneken & Tomasello, 2009). Additionally, children's motivations to act in a prosocial

manner can vary depending on the situation (e.g., are the actions self- or other-oriented;

Eisenberg, Fabes, & Spinrad, 2006). Prosocial behaviors can be associated with altruistic,

compliant, emotional, public, and dire motivations (Carlo & Randall, 2002; Eisenberg, Cameron,

Tryon, & Dodez, 1981; Eisenberg & Fabes, 1998; Eisenberg & Valiente., 2002; Hay & Cook,

2007). Altruistic motivation is related to sympathy and concern for the welfare of others and is

induced by an intrinsic want to help another person (Eisenberg & Fabes, 1998). Compliant

prosocial behavior refers to responding to verbal or nonverbal requests by another person to

help (Eisenberg et al., 1981). Children may be emotionally motivated to help another person due

to their emotional response to a situation, and often involves empathetic feelings towards others

(e.g., comforting a crying person). Public motivation occurs when a child wants to gain the

approval of another person or group of people. Finally, dire motivation for prosocial

actions takes place during crisis or emergency situations (Carlo & Randall, 2002).

Prosocial behaviors are often observed among children soon after their first birthday,

when children start to help other individuals in goal-directed tasks and begin to show

rudimentary skills of acting cooperatively (Warneken & Tomasello, 2007). Gradually throughout

their second year of life, children continue to grow in their abilities to express concern and to

collaborate with others while playing games (Tomasello, Carpenter, Behne, & Moll, 2005; Zahn-

Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). Throughout the preschool years, children

increasingly show sharing, helping, cooperative, and comforting behaviors, and start to exhibit prosocial tendencies that are motivated by the want to help others (Eisenberg et al., 2006). Additionally, prosocial skills tend to develop across similar timelines globally. One study found that by the age of three, children from countries including China, Peru, Fiji, Brazil, and the U.S. were all capable of sharing, and improved in this skill by the time they were five years old (Rochat et al., 2009).

Several factors contribute to prosocial development among children, including children's relationships with peers, siblings, and caregivers, as well as children's temperament and brain development (Hay & Cook, 2007). Research on child development has long examined the vital role of parenting style and the socialization of prosocial skills with young children in the home (Baumrind, 1971; Bronfenbrenner, 1977; Hoffman, 1975; Schaefer & Bayley, 1963). In addition, after entering preschool, young children's social environments expand to include interactions that occur in their school with teachers and peers, in addition to interactions with family members at home (Bronfenbrenner, 1979; Rimm-Kaufmann & Pianta, 2000). However, what is deemed as prosocial may vary between cultures and ethnic backgrounds (de Guzman et al., 2012). Therefore, when studying prosocial development among preschoolers from immigrant Latino families, it is important to consider cultural factors that may influence how parents promote prosocial development with their young children. Indeed, this study focuses on parenting as a predictor of prosocial behaviors exhibited by children both at home and at school.

Cultural Values to Consider

Certain cultural values (e.g., *familismo*) maintained by parents are related to ways in which parents influence children's social adjustment (Calderón-Tena et al., 2011; Carlo, Knight, McGinley, & Hayes, 2011; Eisenberg & Valiente, 2002). When studying social and emotional

development with children from immigrant Latino families, it is important to consider cultural factors (García Coll et al., 1998). More specifically, parents practice in ways they are familiar with from their cultural heritage, and may also adapt new practices from their social and economic environments (Galindo & Fuller, 2010). Young children then acquire social competencies from their interactions with parents, as well as others in the home, in order to adapt and be a participating member in their family environment (Bronfenbrenner, 1977).

When children start preschool and extend their learning and environment from their home, what is seen as prosocial behavior with their families may not be acknowledged or taught in the classroom (Galindo & Fuller, 2010). For example, Latino immigrant families tend to place an importance on prosocial behaviors such as respectful and good behavior with older family members, cooperation with others, and caring about the broader family interest, which is known as *familismo* (Calderón-Tena et al., 2011; Galindo & Fuller, 2010). Parents may value supporting family members, and might ask their children to help with tasks around the house, or to help with younger siblings (East & Weisner, 2009; Fuller & García Coll, 2010). It is possible that these actions then translate into helping and cooperating in various contexts (Knight & Carlo, 2012).

However, studies often find that teachers rate children from immigrant families as less prosocial compared to their parents' ratings (Carlo & de Guzman, 2009; Galindo & Fuller, 2020; Main, Zhou, Liew, & Lee, 2017). This could be because aspects of social competence that are valued in American society, such as assertion and autonomy, could be viewed as disruptive and inappropriate by first-generation immigrant Latino parents with cultural backgrounds that promote more hierarchical social roles (Carlo & de Guzman, 2009; Galindo & Fuller, 2010). Therefore, when studying prosocial behavior among Latino youth, it is important to

conceptualize and capture prosocial behavior in a culturally sensitive manner (Carlo & Randall, 2002).

Parenting and Prosocial Development

Parents influence the development of prosocial behaviors among children and adolescents (Carlo & de Guzman, 2009; Hay & Cook, 2007). Much of the research on prosocial development indicates that warm and supportive parenting is associated with greater prosocial behaviors among children (Baumrind, 1971; Eisenberg & Valiente, 2002; Hay & Cook, 2007; Hoffman, 2008). In a study that measured differences in maternal support with twin children, as defined as having positive communication styles and general interest with children, the twin who received more supportive parenting also tended to exhibit more positive moods and prosocial behaviors compared to the twin who received less supportive parenting (Deater-Deckard et al., 2001). In addition, there is reason to believe that children raised in warm and supportive homes are also exposed to sympathetic responding, which further promotes prosocial behavior (Carlo & de Guzman, 2009; Eisenberg et al., 2006). Some research also suggests a bidirectional relation between parenting and child temperament, such that parental sensitivity promotes prosocial behavior, and prosocial behavior among children helps parents be more sensitive (Kochanska, 1997; Newton, Laible, Carlo, Steel, & McGinley, 2014).

Proactive parenting, where parents are establishing a clear set of rules, is also associated with behavioral improvements among young children (Gardner, Shaw, Dishion, Burton, & Supplee, 2007). Furthermore, caregivers' explanations to children about their own emotions promote preschoolers' emotional understanding and prosocial behavior (Denham & Grout, 1992). A recent study on warmth and inductive discipline (i.e., explaining to children how their actions affect others) by Turkish mothers with their young children found inductive

reasoning and maternal warmth to be related to children's sharing, comforting, cooperating, and helping (Laible et al., 2017). Additionally, positive reinforcement, such as using verbal rewards when a child acts prosocially for example, is linked with greater intrinsically motivated prosocial behavior among children (Henderlong & Lepper, 2002). Research indicates that verbal praise is a better predictor of intrinsically motivated sharing in 3-year-olds compared with material rewards, which may undermine prosocial acts, or no rewards at all (Grusec & Redler, 1980; Ulber, Hamann, & Tomasello, 2016).

Conversely, harsh and permissive parenting practices are associated with more antisocial and aggressive behavior in children (Deković & Janssens, 1992; Hoffman, 2008). Hostility and harshness by parents are also negatively linked with prosocial behavior and sympathy among children (Eisenberg & Fabes, 1998). Furthermore, gender differences may exist related to the impact of negative parenting practices on children's adjustment. A recent study measured children's disruptive behavior (e.g., temper tantrums) and parents' disciplinary practices during problem situations (Parent et al., 2011). Results indicated that harsh parenting was related to disruptive behavior in both boys and girls, but that permissive parenting was linked to disruptive behavior among boys only. These findings suggest that permissive parenting could be more detrimental for boys than for girls, such that boys may require more discipline and proactive parenting (Parent et al., 2011).

Children's prosocial behavior at an early age predicts positive social behaviors during their teenage years and later on in adulthood (Eisenberg et al., 1999). However, research on parenting and prosocial development among Latino families is limited to adolescents and young adults, and typically does not focus on preschoolers (Carlo et al., 2018). Therefore, it is essential to understand how parenting might influence prosocial development during early childhood, as

well as external factors that may influence parenting in Latino homes, such as acculturative stress.

Additionally, positive parenting in low-income families may act as a protective factor for children, as it is related to better cognitive, social, emotional, and overall psychological well-being (Dearing, 2004; Palermo, Ispa, Carlo & Streit, 2018). In fact, in a longitudinal study with low-income Early Head Start Latino families, maternal sensitivity and cognitive stimulation at the age of three was associated with fewer children's antisocial behaviors at the time of kindergarten entry (Palermo et al., 2018). Other studies found similar effects of supportiveness, responsiveness, monitoring, and skill encouragement by parents in low-socioeconomic status immigrant families on children's antisocial behavior (Holtrop, Smith, & Scott, 2015; Odgers et al., 2012). Nevertheless, it is important to consider that overly controlling parenting, which is generally linked with lower adjustment with children, may instead work as a protective factor for children in risky neighborhoods (e.g., neighborhoods with high levels of violence; Dearing, 2004).

Children's prosocial behavior at an early age predicts positive social behaviors during their teenage years and later in adulthood (Eisenberg et al., 1999). However, research on parenting and prosocial development among low-income families does not often consider cultural factors that may influence this association (Carlo et al., 2018; Main et al., 2017). According to the Integrative Model of Child Development (García Coll et al., 1998) and the Family Stress Model (Conger et al., 1994), family functioning and the way in which ethnic-minority parents choose to raise their children may be influenced by their culture and socioeconomic status. Although economic and social stress is experienced by parents of many different social and ethnic backgrounds, immigrant families in low-income neighborhoods may

additionally be affected due to factors related to race and culture, such as acculturative stress

(Leidy, Guerra, & Toro, 2012; Lorenzo-Blanco et al., 2016; Miao et al., 2018; White et al.,

2009). Therefore, this study aims to explore linkages between parenting and children's prosocial

development, as well as how acculturative stress might influence parenting in Latino immigrant

family homes.

Acculturative Stress

According to Bronfenbrenner's theory, the Microsystem is embedded in the Exosystem,

where parents' interactions with the outside world might impact how they interact with their

children at home (Bronfenbrenner, 2000). One factor that may affect caregivers' parenting style

among immigrant families is acculturative stress (Lorenzo-Blanco et al., 2016; Miao et al.,

2018). Acculturation refers to the cultural and psychological adaptations that take place with

individuals when one's native culture comes in contact with another culture (Berry, 2007).

According to Berry's model of acculturation, immigrants and their families will acculturate

depending on how much they identify with and choose to maintain their native culture, as well as

how much they would prefer to adopt and interact with American culture (Berry, 2007).

Although there is no one way to acculturate, the acculturation strategy associated with

better mental health and overall well-being is known as the integration strategy. Integration

refers to maintaining one's native ethnic identity, while also interacting with and adopting

aspects of American culture (Berry, 2007). However, an individual's process of acculturation

also depends on how accepting the host society is (i.e., American society) to their native culture

(Berry, 2007). Rather, one could choose to assimilate fully into American culture by no longer

identifying with their native culture, or may even separate themselves from the broader

American society and only identify with their heritage culture (Berry, 2007). After entering the

U.S., immigrants and their descendants will adjust in some degree to American culture, developing what is known as a bicultural identity (Benet-Martínez & Haritatos, 2005; Berry, 1998). Regardless of how the process of acculturation occurs, Latino immigrants and their families are likely to be exposed to stressors due to differences in culture (Berry, 1998). Stress due to acculturation (i.e., acculturative stress) and its' influence on parenting in immigrant Latino families will be discussed further.

Acculturation can also be a point of stress for many immigrant families. Immigrants are likely to experience stress due to differences in cultures, having to know multiple languages, and being targets of discrimination (Gil et al., 1994). For example, acculturative stress experienced by both first- and second-generation Latino immigrants is associated with depression and suicidal ideation during adolescence (Hovey & King, 1996), as well as higher levels of anxiety and depression in adulthood (Crockett et al., 2007). Cultural differences in expectations between one's home and external environments may lead to a form of acculturative stress known as cultural mismatch. Cultural mismatch refers to incompatibility between one's native and host cultures, and is related to lower mental well-being in adulthood (Stephens, Townsend, Markus, & Phillips, 2012). When discrimination and social pressures to learn a new language and culture surmount an individual's ability to cope, acculturating immigrants may be subject to stress, which could possibly lead to negative adjustment in adolescence and adulthood (Berry, 2006; Crockett et al., 2007; Hovey & King, 1996).

As mentioned, Latino immigrants may face acculturative stress in response to acts of discrimination (Gil et al., 1994; Torres et al., 2012). Minority groups, including immigrants, may experience blatant, subtle, and covert forms of day-to-day discrimination (Swim, Hyers, Cohen, Fitzgerald, & Bylsma, 2003). Discrimination can occur because of one's membership in a

stigmatized group. Social stigma defines a person or group as flawed or generally undesirable, causing them to be socially discredited (Major & O'Brien, 2005). Not only do Latino immigrants face stigma related to their ethnicity, but they are sometimes targets of discrimination due to their immigration status (Alamadilla, Kim, & Lam, 2010). For example, lacking documentation and fear of deportation may also cause more acculturative stress, regardless of their legal status (Arbona et al., 2010; Yoshikawa & Kalil, 2011). In addition, pressures to understand and fluently speak multiple languages are ways in which individuals can experience acculturative stress (Gil et al., 1994). Immigrant families may also experience acculturative stress due to differences in social values related to gender, culture, and sexuality, all of which challenge an individual's ideas on how to live life (Deepak, 2005). The process of accepting or rejecting these new norms may add more stress on an immigrant family while they are adapting to a new culture (Berry, 2006).

Parents' Acculturative Stress and Children's Prosocial Development

How might the experience of acculturative stress among parents impact their children's development of prosocial tendencies? In line with the Family Stress Model, certain external stressors that parents face can influence interactions with their children in the family environment, thereby influencing children's development and overall well-being (Conger, Rueter, & Conger, 2000). Furthermore, acculturative stress that caregivers experience may be linked to children's development (Lorenzo-Blanco et al., 2016; Tran, 2014). However, these studies are limited primarily to behavior problems and negative mental well-being among children and adolescents, and do not focus on positive social adjustment during early childhood.

A recent cross-sectional study with Mexican-origin mothers and their 3- to 6-year old children found that mothers' acculturative stress was associated with internalizing problems

among their young children, via the use of more authoritarian parenting practices (Calzada et al.,

2019). Researchers captured acculturative stress as the pressure to acculturate, and the pressure

against acculturation, and measured parenting in the context of authoritative and authoritarian

parenting. Authoritative parenting refers to highly responsive and appropriately demanding

parenting while authoritarian parenting is associated with harsh and controlling parenting

(Baumrind, 1971). Results of this study indicated that the pressure for and against acculturation

were both linked with the use of more authoritarian parenting practices. Furthermore,

authoritarian parenting was related to more internalizing and externalizing behaviors among

children. Lastly, the pressure to acculturate was directly and indirectly associated with greater

children's internalizing behaviors, via authoritarian parenting (Calzada et al., 2019).

Additionally, a longitudinal study measured how Latino parents' acculturative stress over

time might be linked to family functioning, as well as adolescent substance use and mental health

(Lorenzo-Blanco et al., 2016). Researchers measured acculturative stress in the context of

general acculturative stress, discrimination, and negative context of reception over three years.

Findings indicated a negative effect of early acculturative stress on family functioning (i.e.,

parental involvement, parenting practices, and family cohesion), such that caregivers reported

lower family functioning if they experienced greater acculturative stress. Lower family

functioning was linked negatively with teens' mental health and positively with substance use.

Better family functioning was related to higher self-esteem, fewer symptoms of depression, less

rule breaking behavior, and lower alcohol and cigarette use (Lorenzo-Blanco et al., 2016).

A handful of studies exist on parents' perceived racial discrimination and young

children's socioemotional and psychological wellbeing (Anderson et al., 2015; Bécares, Nazroo,

& Kelly, 2015; Tran, 2014). One study longitudinally measured parent reported experiences of

racial discrimination and preschool aged children's social and emotional behaviors two years

later (i.e., conduct problems, hyperactivity, emotional symptoms, peer problems, and prosocial

behavior; Bécares et al., 2015). Parents' perceived racial discrimination when children were

three years of age indirectly and negatively impacted children's socioemotional development by

the time they were five years old via harsh parenting practices. Other studies show similar

findings of parents' perceived racial discrimination and children's psychosocial wellbeing, such

that parents experiencing racial discrimination is related to greater internalizing and externalizing

symptoms in young children (Anderson et al., 2015; Tran, 2014). These studies linking parents'

acculturative stress and discrimination with children's adjustment find the relation to be

mediated by factors related to parents' caregiving practices and mental health (Carlo & de

Guzman, 2009; Miao et al., 2018; Tran, 2014; White et al., 2009).

Parenting as a Mediator

The relation between parents' acculturative stress and preschoolers' prosocial

development may be in part explained by how acculturative stress shapes caregivers' parenting

style. A recent longitudinal study with immigrant families found that parents who reported

higher levels of acculturative stress tended to decrease their use of positive parenting strategies

(i.e., warmth, monitoring, and reasoning) with their teenagers over time (Miao et al., 2018).

Researchers measured language stress, interpersonal stress, and discrimination, and used

structural equation modeling to assess overall acculturative stress. The authors of that study

explained that there may have been an effect of acculturative stress on parents' emotional

resources, thereby lowering their use of positive parenting strategies (Miao et al., 2018).

In addition, there is a small but growing literature on how acculturation and acculturative

stress might impact parenting within Latino families (White et al., 2009; Williams, Ayón,

Marsiglia, Kiehne, & Ayers, 2017). According to recent research of the impact of acculturative

stressors on parenting among Mexican immigrant families with adolescent children, parents who

experienced greater language fluency and societal acculturation pressures reported using fewer

warm and involved parenting, and harsher, more hostile, and more inconsistent caregiving

practices (White et al., 2009; Williams et al., 2017). There is also evidence to support that a

greater orientation towards one's native culture is linked to less acculturative stress, possibly due

to higher levels of social support that come with being strongly tied to the Latino community

(Williams et al., 2017). Furthermore, parents' experiences with discrimination is negatively

related to positive parenting interactions with their children (Bécares et al.,2015; Brody et al.,

2008; Gassman-Pines, 2015). For example, the results of one longitudinal study found that

mothers' perceived discrimination predicted less warmth, involvement, and closeness by mothers

with their children over the span of three years (Brody et al., 2008). A diagram of the reviewed

links between acculturative stress and parenting practices is included in Figure 1. This study

aims to provide knowledge on how Latino immigrant parents' acculturative stress may influence

parenting and children's prosocial development.

　　According to Bronfenbrenner's Ecological Systems Theory (2000), preschoolers' social

development is influenced by both direct and indirect interactions with their environment.

Experiences with others as well as the experiences of others in contexts outside of a child's

immediate environment might influence children's psychosocial well-being (Bronfenbrenner,

2000). In addition, the Family Stress Model (Conger et al., 2000) posits that parents' stressful

experiences can negatively impact children's adjustment and well-being. Furthermore, the

Integrative Model of Child Development suggests that cultural and contextual factors may

influence racial and ethnic minority children's development (García Coll et al., 1998).

Figure 1. Links Between Acculturative Stress and Parenting Found In Existing Studies
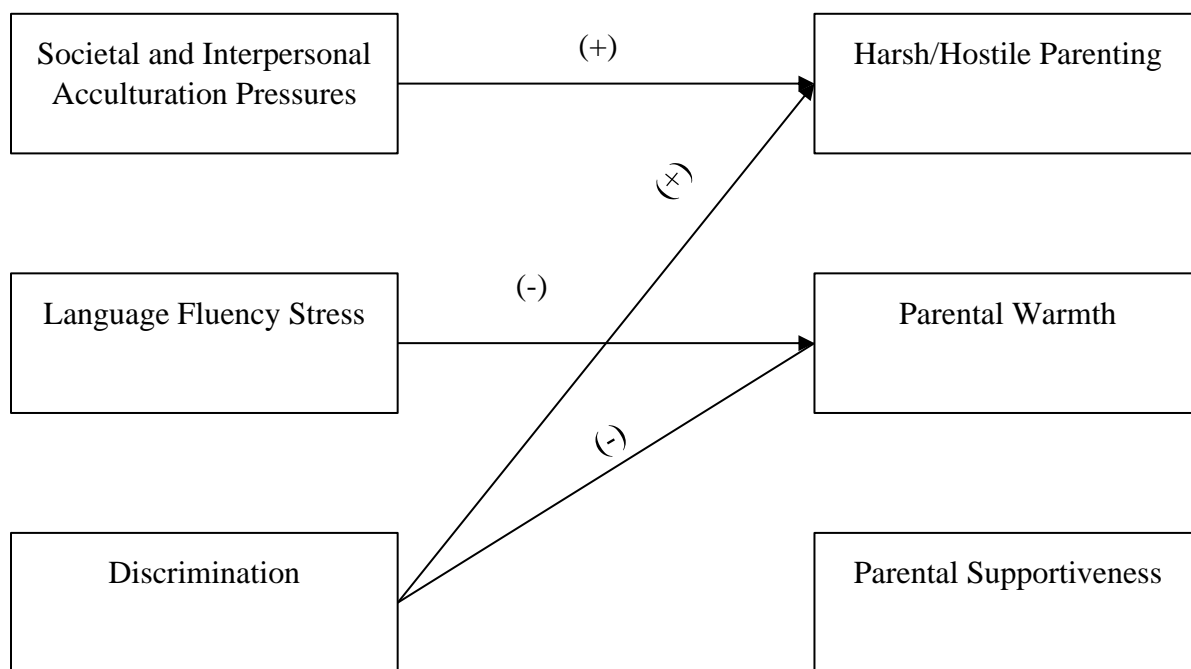
As explored in this literature review, prosocial actions are positively related to warm and supportive parenting, whereas hostile parenting is associated with antisocial behavior among young children (Eisenberg & Valiente, 2002; Hay & Cook, 2007). Furthermore, acculturative stress among Latino parents (i.e., pressure to adhere to social norms, language fluency, and discrimination) is associated with the use of fewer warm and increasingly hostile parenting practices (Brody et al., 2008; Miao et al., 2018; White et al., 2009; Williams et al., 2017). However, it is still unclear how acculturative stress among Latino parents might be linked with supportive parenting, or how it directly influences children's prosocial development. This study aimed to investigate how Latino parents' acculturative stress influences their children's prosocial behaviors. Additionally, this study will examine how this association might be explained through parenting practices such as warmth, supportiveness, and hostility.

Research Questions and Hypotheses

To expand upon the literature reviewed above, this study examined the following

research questions and hypotheses. This study focused on whether acculturative stress

experienced by parents will influence preschoolers' prosocial behaviors exhibited in their home

and at school, via parenting practices in immigrant Latino families from low-income

backgrounds. A diagram of the proposed model is included in Figure 2. The following four

questions will be addressed: (1) how is parents' acculturative stress related to preschoolers'

prosocial behaviors (2) to what degree is parents' acculturative stress associated with their

parenting practices, (3) how are parenting practices related to children's prosocial behavior, and

(4) to what extent are linkages between parents' acculturative stress and children's prosocial

behavior mediated by caregiving style?

Figure 2. Proposed Model of Parents' Acculturative Stress and Children's Prosocial Behavior,
Mediated by Parenting Practices
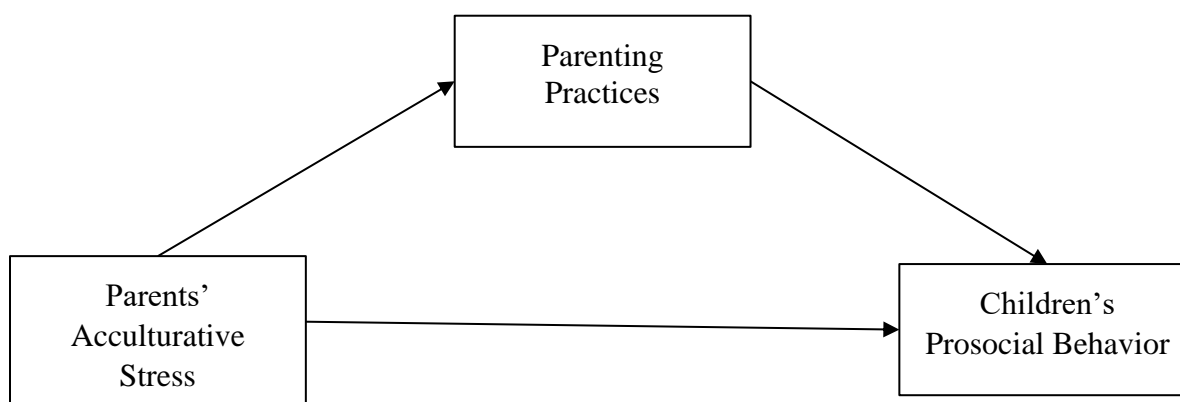
Guided by these four research questions, the following four hypotheses were formulated.

As noted, the existing literature links Latino parents' acculturative stress to young children's

internalizing behaviors, as well as teens' substance use and lower mental well-being (Calzada et

al., 2019; Lorenzo-Blanco et al., 2016). In addition, perceived discrimination, an aspect of

acculturative stress, has been associated with behavior problems and antisocial tendencies, as

well as lower mental health (Bécares et al., 2015; Tran, 2014). Therefore, it was first hypothesized that greater acculturative stress (i.e., pressure for and against acculturation, language fluency stress, and perceived discrimination) experienced by immigrant Latino parents will be linked to fewer prosocial behaviors among preschoolers.

Furthermore, research suggests that acculturative stress is linked with the use of less warm and involved parenting, and more hostile parenting among Latino and other immigrant families (Miao et al., 2018; White et al., 2009; Williams et al., 2017). Also, study results often show that more warm and supportive tendencies, and fewer hostile parenting practices are predictive of more prosocial behaviors during early childhood (Carlo & de Guzman, 2009; Eisenberg et al., 2006; Hay & Cook, 2007). The second and third hypotheses were in line with past research. That is, the second hypothesis posited that there would be a link between parents' acculturative stress and their parenting practices. Additionally, the third hypothesis indicated that positive parenting practices would be associated with more prosocial behaviors among preschoolers.

Finally, research on the association between parents' acculturative stress and children's development indicate that this relation exists via parenting practices. (Bécares et al., 2015; Calzada et al., 2019; Lorenzo-Blanco et al., 2016). Caregiving styles that were found to act as mediators included harshness, involvement, and overall positive parenting. Therefore, the fourth hypothesis postulated that the use of more hostile parenting, and fewer warm and supportive practices, would mediate the negative relation between parents' acculturative stress and preschoolers' prosocial development.

CHAPTER TWO

METHODS

Participants

The current study included 28 self-identified first-generation Latino immigrant parents of 3- to 5-year old Head Start children ($M = 4.09$, $SD = 0.67$). Head Start centers were located in two racially and ethnically diverse neighborhoods in Chicago. Demographic characteristics of participants are listed in Table 1. Over half of the children were boys, and all parents who participated in the present study identified themselves as their child's mother *and* primary caregiver. Approximately half of the mothers stated that their native country was Mexico, and others identified as Ecuadorian, Guatemalan, and Salvadorian. On average, mothers lived in the U.S. for 13.33 years (range = 2-35 years). Additionally, mothers were an average of 33.50 years old (range = 25-47). The mean number of children and adults in each household were 2.50 and 2.11, respectively. Furthermore, over a third of children came from single-parent households, and a third of the mothers were married. One third of mothers received their high school diploma, General Educational Development (G.E.D.) certification, or completed some level of college. Data from this study were drawn from a larger study with 54 Head Start families designed to investigate parents' experiences and their parenting practices, as well as their children's social adjustment, emotional development, and academic achievement.

Table 1. Child and Parent Demographics

Variable	*M* (or %)	*SD*	Frequency
Child Demographics			
Age (years)	4.09	0.67	
Gender			
Female	46.40%		13
Male	53.60%		15
Parent Demographics			
Age (years)	33.50	6.03	
Parent			
Mother	100.00%		28
Father	0.00%		0
Primary Caregiver			
Yes	100.00%		28
No	0.00%		0
Latino Ethnicity			
Mexican	53.60%		15
Guatemalan	14.20%		4
Ecuadorian	28.60%		8
Salvadorian	3.60%		1
Language			
Spanish	53.60%		15
Spanish and English	35.70%		10
Spanish and some English	10.70%		3
Years in United States	13.33	7.86	
Identified as Refugee			
Yes	16.00%		4
No	84.00%		21
Parent Education			
Less than 12th Grade	60.70%		17
High School Diploma or G.E.D.	28.60%		8
Some College or More	10.70%		3
Number of People in Household			
Children	2.50	0.96	
Adults	2.11	0.76	
Marital Status			
Single	39.30%		11
Married	35.70%		10
Living With Partner (Not Married)	14.30%		4
Separated	10.70%		3

Measures

Demographic Questionnaire

Parents were asked to report on their children's birthdate and gender. In addition, parents reported on their age, race, ethnicity, language, immigrant generation status, as well as refugee status. Parents also provided information on their level of education, the number of family members in their household, and their marital status.

Children's Prosocial Behavior

This study used global measures of prosocial behaviors, and asked parents and teachers to report on children's prosocial actions and motivations for prosocial behavior. Parents reported on children's prosocial behavior at home, and teachers reported on children's prosocial behavior at school. Children's prosocial behavior was assessed using measures that reflect different types of prosocial actions (i.e., cooperation, sharing, helping, and comforting) as well as various motivations for prosocial behavior across contexts (i.e., compliant, public, altruistic, dire, and emotional). Preschoolers' prosocial measures included three parent and teacher reports on children.

First, in order to measure children's cooperating, sharing, helping, and comforting behaviors with their peers, parents and teachers were asked to complete prosocial actions and cooperation questionnaires. Specifically, the Prosocial subscale of the Child Behavior Scale (Ladd & Profilet, 1996) is a 7-item questionnaire that includes items on helping, comforting, and sharing. The subscale is set on a 3-point scale from 0 (not true) to 2 (often true). It is worth noting that these items were designed and originally developed for teachers, and were modified for use with parents. Internal reliability for the teacher reported Child Behavior Scale ($\alpha = .88$) was high. However, the internal reliability for the parent reported Child Behavior Scale ($\alpha = .49$)

with the present study sample was inadequate. After removing one item, the modified six-item

Child Behavior Scale had a low internal reliability ($\alpha = .59$) for the present sample. Conversely,

the internal reliability reported by Ladd & Profilet (1996) was high ($\alpha = .92$). In addition, the

Cooperation subscale of the Social Skills Rating System (Gresham & Elliot, 1990) is a 10-item

questionnaire designed to assess how often children exhibited certain cooperative behaviors. This

questionnaire is set on a 3-point scale from 0 (never) to 2 (very often). Internal reliability for the

teacher reported Cooperation subscale ($\alpha = .91$) was high, and the internal reliability for the

parent reported Cooperation subscale ($\alpha = .76$) was adequate.

Second, in order to capture children's motivations for prosocial behavior, parents and

teachers completed the 10-item Prosocial Tendencies Measure (Carlo & Randall, 2002), which

was adapted for young children. This scale designed for both parents and teachers includes items

on altruistic, compliant, emotional, public, and dire motivations for prosocial behavior. Parents

and teachers rated how likely children acted in a prosocial manner in various contexts with the

reporter and children's peers on a 5-point Likert Scale from 1 (very unlikely) to 5 (very likely).

Internal reliability for the Prosocial Tendencies Measure with the present sample was high when

reported by both teachers ($\alpha = .95$) and parents ($\alpha = .86$).

Parenting Style

In order to measure warm and supportive, and hostile parenting practices, parents

reported on their own parenting practices using a 13-item modified version of the

Multidimensional Assessment of Parenting Scale (MAPS; Parent & Forehand, 2017). First,

warm and supportive parenting practices were captured using a combination of the 3-item

Warmth subscale and 3-item Supportiveness subscale. The Warmth subscale measured displays

of affection by parents with their children (e.g., "My child and I hug and/or kiss each other."). In

addition, the Supportiveness subscale relayed positive communication and interest in children (e.g., "I listen to my child's ideas and opinions."). These subscales were set on a 5-point Likert Scale, from 1 (never) to 5 (always), and parents reported on how often they acted in a warm and supportive manner with their children during the past 2 months. The internal reliability of the warm and supportive parenting scale (α = .61) with the current study sample was sufficient.

Next, hostile parenting practices were captured using the 7-item Hostility subscale, which encompassed harsh and intrusive parenting (e.g., "I lose my temper when my child doesn't do something I ask him/her to do."). This subscale was also set on a 5-point likert scale from 1 (never) to 5 (always). Parents reported on how often they acted in a hostile manner towards their children during the past two months. The internal reliability of the hostile parenting scale (α = .79) with the current study sample was good.

Acculturative Stress

Lastly, to measure parents' acculturative stress, parents were asked to complete the Multidimensional Acculturative Stress Inventory (Rodriguez, Myers, Mira, Flores, & Garcia-Hernandez, 2002) and the Perceived Discrimination questionnaire (Phinney, Madden, & Santos, 1998). The Multidimensional Acculturative Stress Inventory includes four subscales designed to measure interpersonal and societal cultural pressures, as well as language fluency stressors from both American and Latino groups. Specifically, the Pressure to Acculturate subscale is a 7-item survey designed to assess pressures related to adopting mainstream American culture (e.g., "It bothers me when people pressure me to assimilate to the American ways of doing things"; Rodriguez et al., 2002). In addition, the Pressure Against Acculturation subscale is a 4-item survey which captures stress associated with maintaining one's native cultural values and practices (e.g., "I have had conflicts with others because I prefer American customs over Latino

ones"; Rodriguez et al., 2002). Furthermore, the English Competency Pressure subscale is a 7-item survey which measures the pressure to be fluent in English (e.g., "I don't speak English or don't speak it well"; Rodriguez et al., 2002). Lastly, the Spanish Competency Pressure subscale is 7-item survey designed to capture the pressure to be fluent in Spanish ("Since I don't speak Spanish well, people have treated me rudely or unfairly"; Rodriguez et al., 2002). Each subscale is set on a 5-point Likert Scale from 1 (not at all stressful) to 5 (extremely stressful), and parents indicated how stressful an event was if it occurred over the past three months. If the event did not occur, participants were instructed to report 0 (does not reply). Internal reliability for the Pressure to Acculturate ($\alpha = .87$) and the Pressure Against Acculturation ($\alpha = .73$) subscales with the current study sample were good. In addition, the internal reliability for the English Competency Pressures ($\alpha = .93$) and the Spanish Competency Pressures ($\alpha = .85$) subscales with the current study sample were high.

Lastly, perceived discrimination was measured using 7 items developed by Phinney, Madden, and Santos (1998). Parents indicated how often they felt negatively treated due to their ethnic background (e.g., "How often do you feel that others behave in an unfair or negative way toward your ethnic group?"; Phinney et al., 1998). This questionnaire is set on a 5-point Likert Scale from 1 (almost never) to 5 (very often). Although these questions were originally developed to measure perceived discrimination in Armenian, Mexican American, and Vietnamese adolescents, a recent study measuring acculturative stress in Latino parents utilized this measure with high internal reliability (Lorenzo-Blanco et al., 2016; $\alpha = .87$). Internal reliability for the Perceived Discrimination ($\alpha = .86$) scale with the current study sample was high.

Procedure

After gaining approval from the Internal Review Board (IRB), Chicago community

centers with Head Start programs in ethnically diverse neighborhoods were asked to participate

in this study. The research team met with the site coordinators of each community center to

explain the approved study, and asked for consent to approach parents and teachers. After

meeting with and gaining approval from site coordinators of each community center, members of

our research team informed preschool teachers of the upcoming study and answered any

questions teachers had. Furthermore, teachers went through the informed consent process, and

were asked if they would respond to questionnaires on each child participants' prosocial

behavior.

Then, during children's drop-off and pick-up time, parents were asked for their

participation and their children's participation in the current study. Information about language

preferences were provided by the preschools, so that parents who preferred speaking in Spanish

were approached by research assistants who were fluent in Spanish, and parents who preferred

English were approached by research assistants fluent in English. After explaining the study,

researchers asked parents if they would consent to answering questions about their

demographics, acculturative stress, parenting, and their children's prosocial behavior. If parents

chose to participate, researchers asked parents if they would like to complete the interview on

site or over the phone, and would then set a time to complete the interview. Parents were also

given the option to choose whether they would like to be interviewed in Spanish or English.

Analytic Plan

Parents who did not identify as Latino and as a first-generation immigrant were not

included in analyses for the present study. The 28 cases in the analytic sample for the present

study were compared to the 26 cases not included in the analytic sample due to eligibility criteria (Tabachnik & Fidell, 2013). The two groups were not statistically different ($p > .05$) in terms of child age, nor child gender. However, parents in the analytic sample were more likely to speak Spanish only and to be in the U.S. longer compared to parents who were not in the analytic sample. In addition, before conducting the main analyses, participant non-response data patterns for each measure were examined for the sample of 28 participants. In total, across 5 participants, there were nine items with missing values (Teacher Reported Prosocial Tendencies = 5; Spanish Fluency Stress = 2; Perceived Discrimination = 2). Thus, it appeared that data were not systematically missing, given that there were missing values across reporters and constructs.

Except for the parent reported Prosocial Tendencies Measure, all variables were well distributed, and skewness and kurtosis values fell within the accepted range ($z < 3.92$; $p > .001$; Tabachnick & Fidell, 2013). To correct for skewness in the parent reported Prosocial Tendencies Measure, the low outlier was recoded to be equal to the next highest score (Tabachnick & Fidell, 2013). After performing this coding, the parent reported Prosocial Tendencies Measure was no longer skewed.

To address the research questions regarding parents' acculturative stress, parenting practices, and children's prosocial development, multiple regression analyses were conducted using SPSS Version 25. A path analysis was not conducted for this proposed study, as the sample size was not large enough for structural equation modeling (Wolf, Harrington, Clark, & Miller, 2013). As per Baron and Kenney (1986), mediation models can be estimated using three multiple regression analyses to test for the four listed research questions (Holmbeck, 1997). Additionally, the significance of the indirect effect was examined with the PROCESS Macro in SPSS (Hayes,

2013) to conduct post-hoc analyses including the Sobel Test and Bootstrapping method

(Preacher & Hayes, 2004; Sobel, 1982).

First, the significance of the association between parents' acculturative stress and

parenting practices were examined after controlling for the covariates of children's age and

gender. Then, the significance of the relation between acculturative stress among parents and

preschoolers' prosocial behavior was tested in a second regression analysis. This analysis

controlled for children's gender and age, but did not include parenting practices as a covariate.

Finally, a third regression equation was tested measuring caregivers' acculturative stress and

parenting practices as predictors, and children's prosocial behavior as the dependent variable.

Simultaneous entry was used to examine the effect of parenting practices on preschoolers'

prosocial tendencies when controlling for parents' acculturative stress, as well as the effect of

parents' acculturative stress on children's prosocial behavior when controlling for parenting

practices (Baron & Kenney, 1986; Holmbeck, 1997). The difference in regression coefficients

with analyses that did and did not control for parenting when testing for linkages between

parents' acculturative stress and children's prosocial behavior indicated the degree to which

parenting acted as a mediator.

Additional post-hoc testing was conducted to examine the significance of the mediating

variable (Holmbeck, 1997; Preacher & Hayes, 2004). The Sobel test was used to measure the

significance of the indirect effect, which indicated how significantly different the overall effects

were when parenting was controlled compared to when it was not controlled (Baron & Kenny,

1986). However, when using the Sobel test, there is an assumption of normal distribution of the

indirect effect, especially with smaller sample sizes. Therefore, the bootstrapping approach was

also conducted to test for significance of the indirect effect, and to confirm the results found

using the Sobel test (Hayes, 2009). The bootstrapping approach does not make assumptions of

normality, and can be used with smaller samples with confidence (Preacher & Hayes, 2004).

CHAPTER THREE

RESULTS

Descriptive Statistics

Independent samples t-tests were conducted to examine differences at the mean level for each of the prosocial variables based on children's gender (see Table 2). In addition, descriptive statistics of all measures of children's prosocial behaviors, parenting, and parents' acculturative stress are listed in Table 3. Differences in prosocial behavior between girls and boys were not significant for teacher reports of cooperation ($t(25) = 0.33$, $p = .74$), prosocial actions ($t(25) = 0.21$, $p = .82$), and motivations for prosocial behavior ($t(25) = -0.39$, $p = .69$). Similarly, there were no significant differences across children's gender for parent reports of cooperation ($t(26) = -0.46$, $p = .64$), prosocial actions ($t(26) = 0.54$, $p = .59$), and motivations for prosocial behavior ($t(23) = 0.54$, $p = .59$). Girls had higher scores compared to boys on teacher reported cooperation, teacher reported prosocial actions, parent reported prosocial actions, and parent reported motivations for prosocial behavior. However, boys scored higher than girls on teacher reports of motivation for prosocial behavior and parent reports of cooperation. These findings suggest that preschool girls in the present study tended to score higher on prosocial behavior measures compared to boys, but the differences were not significant.

In addition, differences in parenting style depending on children's gender were analyzed. Independent samples t-tests indicated no significant gender differences in warm and supportive parenting ($t(26) = -0.51$, $p = .61$) or hostile parenting practices ($t(26) = 1.52$, $p = .14$). Although

differences were non-significant, mothers tended to be more warm and supportive with their

boys compared to girls, and more hostile with their girls compared to boys.

Table 2. T-Tests for Children's Prosocial Behavior and Parenting Practices

Variable	Girls			Boys	
	M	*SD*		*M*	*SD*
Teacher Reported Prosocial Behavior					
Cooperation	1.51	0.38		1.46	0.51
Prosocial actions	2.41	0.45		2.37	0.54
Prosocial motivations	3.77	0.78		3.92	1.05
Parent Reported Prosocial Behavior					
Cooperation	1.34	0.30		1.40	0.33
Prosocial actions	2.60	0.37		2.53	0.29
Prosocial motivation	4.07	0.28		3.96	0.62
Parenting Practices					
Warm and Supportive	4.64	0.45		4.71	0.29
Hostile	2.42	0.72		2.03	0.61

Note. Independent samples t-tests were conducted, examining mean differences in children's prosocial behavior and parenting practices across girls and boys.

Bivariate Associations

Additionally, preliminary analyses with bivariate correlations of all variables, including

children's age, are presented in Table 3. Initially, bivariate correlations were analyzed with

children's prosocial behavior and parents' acculturative stress. As hypothesized, parents feeling

pressure against acculturation was significantly and negatively associated with teacher reported

children's cooperation ($p = .01$) and prosocial actions ($p = .02$), and marginally related to teacher

reported motivations for prosocial behavior ($p = .05$). Furthermore, parents feeling pressure to

acculturate was marginally and negatively linked with both prosocial actions ($p = .09$) and

motivations for prosocial behavior ($p = .09$). English and Spanish fluency stress, as well as

discrimination were not significantly correlated with prosocial behavior.

Next, bivariate correlations with parents' acculturative stress and parenting practices were examined. Neither warm and supportive or hostile parenting were significantly associated with acculturative stress. In addition, bivariate correlations coefficients were estimated with children's prosocial behavior and parenting practices. Neither warm and supportive parenting practices nor hostile parenting practices were significantly linked with children's cooperation, prosocial actions, and motivations for prosocial behavior. The lack of significant correlational findings may be attributed to the small sample size of the current study.

Furthermore, children's age was not significantly correlated with any prosocial or parenting measures. With the exception of teacher reported motivations for prosocial behavior, children's age was positively associated with children's prosocial behavior. Also, age was negatively linked to parental warmth and supportiveness, and positively associated with parental hostility. Although age was not significantly correlated with children's prosocial behavior or parenting practices, the current findings indicate that older children tended to exhibit more prosocial behaviors. In addition, older children's parents tended to use fewer warm and supportive parenting practices, and more hostile parenting practices.

Lastly, teacher reports of children's prosocial behaviors were positively and significantly correlated with parent reports of children's prosocial behavior. Teacher reported cooperation was positively and significantly correlated with parent reported cooperation ($p = .01$). In addition, teacher reported prosocial actions were positively and significantly correlated with parent reported prosocial actions ($p = .02$). Furthermore, teacher reported motivations for prosocial behavior were positively and significantly correlated with parent reported motivations for prosocial behavior ($p = .02$). This suggests that both parents and teachers reported children's prosocial behaviors similarly.

Table 3. Summary of Bivariate Correlations, Means, and Standard Deviations for Parent and Teacher Reported Children's Prosocial Behaviors, Parenting Practices, and Parents' Acculturative Stress

Variable	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*
1. TR-CS	-													
2. TR-CBS	.81**	-												
3. TR-PTM	.72**	.73**	-											
4. PR-CS	.47*	.31	.50**	-										
5. PR-CBS	.63**	.43*	.38*	.54**	-									
6. PR-PTM	.42*	.47*	.46*	.35†	.30	-								
7. WSPP	.24	.24	.16	.04	.27	.26	-							
8. HPP	.14	.20	.07	.05	.09	.00	-.13	-						
9. PTA	-.21	-.33†	-.32†	.10	.00	-.05	-.12	-.07	-					
10. PAA	-.45*	-.42*	-.37†	.09	-.27	-.07	-.19	-.22	.67**	-				
11. ECP	-.02	-.17	-.20	.16	-.06	.05	-.03	.06	.66**	.51**	-			
12. SCP	.22	.28	.25	.04	-.09	.02	-.21	.12	-.04	.15	-.15	-		
13. PD	-.14	-.28	-.13	.03	.17	-.04	-.12	-.03	.47*	.11	.28	-.10	-	
14. Age	.08	.11	-.14	.24	.24	.21	-.17	.24	-.08	.03	-.18	.18	.08	-
M	1.48	2.39	3.85	1.37	2.56	3.95	4.67	2.21	1.46	0.99	2.15	0.47	1.49	4.09
SD	0.44	0.48	0.92	0.31	0.33	0.68	0.36	0.68	0.94	0.70	1.38	0.55	0.58	0.67

Note. Correlations, means, and standard deviations for each variable are presented below the diagonal. Higher scores on all scales indicate that participants associated more with the construct measured. TR-CS = teacher reported Cooperation Subscale of the Social-Skills Rating System; TR-CBS = teacher reported Child Behavior Scale; TR-PTM = teacher reported Prosocial Tendencies Measure; PR-CS = parent reported Cooperation Subscale of the Social-Skills Rating System; PR-CBS = parent reported Child Behavior Scale; PR-PTM = parent reported Prosocial Tendencies Measure; WSPP = Warm and Supportive Parenting Practices; HPP = Hostile Parenting Practices; PTA = Pressure To Acculturate; PAA = Pressure Against Acculturation; ECP = English Competency Pressure; SCP = Spanish Competency Pressure; PD = Perceived Discrimination; Age = children's age.

† $p < .10$

* $p < .05$

** $p < .01$.

Multivariate Associations

Parents' Acculturative Stress and Children's Prosocial Behavior

First, it was hypothesized that parents' acculturative stress would be negatively associated with children's prosocial behavior, when controlling for children's age and gender. Results with standardized regression estimates and confidence intervals for parents' acculturative stress and children's prosocial behavior can be found in Table 4. As expected, greater pressure to acculturate was significantly related to a lower score on teacher reports of children's motivation for prosocial behavior ($p = .04$). In addition, pressure against acculturation was significantly linked with lower teacher reported cooperation ($p = .02$), prosocial actions ($p = .02$), and motivation for prosocial behavior ($p = .01$). In summary, there was a moderate to large link suggesting that parents' pressure against acculturation and the pressure to acculturate predicted teacher reported children's prosocial behavior. In particular, the pressure against acculturation was associated with all three measures of prosocial behavior, as reported by teachers.

In addition, English fluency stress, Spanish fluency stress, and perceived discrimination were not significantly associated with any prosocial outcome variables. Furthermore, there were no significant links between parents' acculturative stress and parent reports of prosocial behavior. These findings suggest that certain aspects of acculturative stress, such as parents feeling pressure against acculturation and the pressure to acculturate, may have linkages that are more salient with children's prosocial behavior compared to language fluency stress and discrimination.

Table 4. Standardized Regression Estimates With 95% Confidence Intervals for Parents' Acculturative Stress and Children's Prosocial Behavior, Controlling for Children's Age and Gender

Acculturative Stress	Teacher Reported			Parent Reported		
	Cooperation	Prosocial Actions	Prosocial Motivation	Cooperation	Prosocial Actions	Prosocial Motivation
	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]
Pressure to acculturate	-0.09 [-0.29, 0.11]	-0.16 [-0.38, 0.05]	-0.39* [-0.78, -0.01]	0.03 [-0.10, 0.18]	0.02 [-0.12, 0.16]	0.01 [-0.22, 0.24]
Pressure against acculturation	-0.31* [-0.57, -0.05]	-0.33* [-0.63, -0.03]	-0.68* [-1.21, -0.15]	0.03 [-0.26, 0.23]	-0.12 [-0.32, 0.07]	-0.01 [-0.33, 0.32]
English fluency stress	-0.01 [-0.14, 0.14]	-0.05 [-0.21, 0.10]	-0.17 [-0.45, 0.11]	0.04 [-0.04, 0.13]	0.02 [-0.07, 0.13]	0.03 [-0.11, 0.19]
Spanish fluency stress	0.20 [-0.14, 0.54]	0.27 [-0.10, 0.65]	0.43 [-0.20, 1.13]	-0.01 [-0.24, 0.23]	-0.07 [-0.32, 0.17]	0.02 [-0.37, 0.41]
Discrimination	-0.09 [-0.43, 0.23]	-0.23 [-0.60, 0.13]	-0.26 [-0.98, 0.45]	0.01 [-0.22, 0.24]	0.07 [-0.12, 0.28]	-0.05 [-0.43, 0.32]

Note. CI = confidence interval.
† $p < .10$
* $p < .05$
** $p < .01$.

Direct Effects Controlling for Parenting

Additionally, analyses were conducted to examine direct effects of parents' acculturative stress on children's prosocial behaviors, while controlling for parenting practices as well as children's age and gender. Results with standardized regression coefficients and confidence intervals for direct effects of parents' acculturative stress and children's prosocial behaviors, when controlling for warm and supportive parenting and hostile parenting, are listed in Tables 5 and 6. When controlling for warm and supportive parenting, there were marginally significant direct negative effects of the pressure to acculturate on teacher reported motivation for prosocial behavior ($p = .06$). In addition, when controlling for hostile parenting practices, there were significant direct negative effects of the pressure to acculturate on teacher reported motivation for prosocial behavior ($p = .04$). These findings suggest moderate negative associations from parents' pressure to acculturate to children's motivation for prosocial behavior, when controlling for parenting practices, and are in line with the first hypothesis.

When controlling for warm and supportive parenting, findings indicated direct negative effects of the pressure against acculturation on teacher reported cooperation ($p = .03$), prosocial actions ($p = .04$), and motivations for prosocial behavior ($p = .02$). Similarly, when controlling for hostile parenting practices, findings indicated direct negative effects of parents' pressure against acculturation on teacher reported cooperation ($p = .02$), prosocial actions ($p = .03$), and motivations for prosocial behavior ($p = .01$). These findings are congruent with the first hypothesis, and suggests there was a moderate to large negative link from parents' pressure against acculturation to all teacher reports of children's prosocial behaviors, when controlling for warm and supportive parenting and hostile parenting.

Table 5. Direct Effects of Parents' Acculturative Stress on Children's Prosocial Behaviors, Controlling for Warm and Supportive Parenting

Acculturative Stress	Teacher Reported			Parent Reported		
	Cooperation	Prosocial Actions	Prosocial Motivation	Cooperation	Prosocial Actions	Prosocial Motivation
	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]
Pressure to acculturate	-0.07 [-0.28, 0.12]	-0.15 [-0.37, 0.06]	-0.37[†] [-0.77, 0.02]	0.04 [-0.09, 0.19]	0.04 [-0.09, 0.18]	0.04 [-0.18, 0.27]
Pressure against acculturation	-0.29* [-0.56, -0.01]	-0.31* [-0.61, -0.00]	-0.66* [-1.21, -0.11]	0.05 [-0.16, 0.23]	-0.08 [-0.28, 0.11]	0.07 [-0.25, 0.40]
English fluency stress	0.01 [-0.13, 0.14]	-0.04 [-0.20, 0.10]	-0.15 [-0.45, 0.11]	-.04 [-0.05, 0.14]	0.03 [-0.05, 0.13]	0.05 [-0.09, 0.19]
Spanish fluency stress	0.24 [-0.09, 0.58]	0.31[†] [-0.05, 0.69]	0.49 [-0.21, 1.20]	0.01 [-0.24, 0.25]	-0.02 [-0.27, 0.21]	0.10 [-0.27, 0.49]
Discrimination	-0.10 [-0.43, 0.22]	-0.23 [-0.60, 0.12]	-0.27 [-0.99, 0.45]	0.01 [-0.22, 0.25]	0.10 [-0.08, 0.28]	-0.01 [-0.37, 0.36]

Note. CI = confidence interval.

[†] *p* < .10

* *p* < .05

** *p* < .01.

Table 6. Direct Effects of Parents' Acculturative Stress on Children's Prosocial Behaviors, Controlling for Hostile Parenting

Acculturative Stress	Teacher Reported			Parent Reported		
	Cooperation	Prosocial Actions	Prosocial Motivation	Cooperation	Prosocial Actions	Prosocial Motivation
	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]
Pressure to acculturate	-0.09 [-0.30, 0.11]	-0.17 [-0.39, 0.04]	-0.40* [-0.79, -0.01]	0.03 [-0.10, 0.18]	0.02 [-0.12, 0.16]	0.01 [-0.22, 0.24]
Pressure against acculturation	-0.31* [-0.81, -0.03]	-0.32* [-0.62, -0.02]	-0.66* [-1.20, -0.12]	0.03 [-0.16, 0.24]	-0.12 [-0.33, 0.77]	-0.02 [-0.36, 0.32]
English fluency stress	-0.01 [-0.15, 0.14]	-0.06 [-0.22, 0.09]	-0.19 [-0.48, 0.09]	0.04 [-0.05, 0.14]	0.03 [-0.07, 0.13]	0.04 [-0.11, 0.21]
Spanish fluency stress	0.19 [-0.16, 0.55]	0.25 [-0.13, 0.64]	0.39 [-0.33, 1.11]	-0.01 [-0.25, 0.24]	-0.07 [-0.32, 0.18]	0.03 [-0.36, 0.44]
Discrimination	-0.09 [-0.42, 0.24]	-0.22 [-0.59, 0.14]	-0.25 [-0.97, 0.47]	0.01 [-0.22, 0.24]	0.08 [-0.12, 0.29]	-0.06 [-0.44, 0.32]

Note. CI = confidence interval.
[†] $p < .10$
* $p < .05$
** $p < .01$.

Lastly there was one marginally significant direct positive effect of Spanish fluency stress on teacher reported prosocial actions ($p = .09$) when controlling for warm and supportive parenting, but not when controlling for hostile parenting. This finding was not in line with the first hypothesis, which suggested that acculturative stress would be negatively associated with children's prosocial behavior. This suggests a positive moderate link between parents' Spanish fluency stress and children's prosocial actions, when controlling for warm and supportive parenting.

When controlling for either warm and supportive or hostile parenting, there were no direct effects of English fluency stress or discrimination on teacher reported children's prosocial behaviors. Furthermore, there were no direct effects of any type of acculturative stress on parent reported children's prosocial behaviors. These findings suggest that, when parenting practices were controlled, English fluency stress and discrimination were not significantly associated with children's prosocial behavior reported by both teachers and parents.

Parents' Acculturative Stress and Parenting Practices

Second, it was hypothesized that parents' acculturative stress would be associated with the use of fewer warm and supportive parenting practices, and more hostile parenting practices. Linear regression analyses were conducted to examine the link from parents' acculturative stress to both warm and supportive parenting, as well as hostile parenting practices, while controlling for children's age and gender. Results with standardized regression estimates and confidence intervals for parents' acculturative stress and parenting practices are listed in Table 7.

Findings indicated that no acculturative stress variables were significantly associated with warm and supportive parenting practices. In addition, the link between acculturative stress and hostile parenting practices was non-significant. These findings are not in line with the second

hypothesis, which suggested that acculturative stress would be negatively associated with the use of warm and supportive parenting practices, and positively associated with hostile parenting practices.

Table 7. Standardized Regression Estimates with 95% Confidence Intervals for Parents' Acculturative Stress and Parenting Practices, Controlling for Children's Age and Gender

Acculturative Stress	Warm and Supportive Parenting		Hostile Parenting	
	β	[95% CI]	β	[95% CI]
Pressure to acculturate	-0.06	[-0.23, 0.09]	0.01	[-0.26, 0.30]
Pressure against acculturation	-0.15	[-0.37, 0.07]	-0.11	[-0.51, 0.28]
English fluency stress	-0.02	[-0.13, 0.08]	0.07	[-0.12, 0.26]
Spanish fluency stress	-0.15	[-0.42, 0.12]	0.18	[-0.29, 0.66]
Discrimination	-0.06	[-0.33, 0.20]	-0.07	[-0.52, 0.37]

Note. CI = confidence interval.

Parenting Practices and Children's Prosocial Behavior

Third, this study hypothesized that warm and supportive parenting would be associated with more children's prosocial behaviors, while hostile parenting would be linked with fewer children's prosocial behaviors. Linear regression analyses examined the link from warm and supportive parenting practices and hostile parenting practices to children's prosocial behavior, while controlling for children's gender and age. Results with standardized regression coefficients and confidence intervals for the association between parenting practices and children's prosocial behaviors can be found in Table 8.

As expected, when only controlling for children's age and gender, warm and supportive parenting was positively and marginally associated with parent reported children's prosocial actions ($p = .07$). In addition, warm and supportive parenting was positively and marginally linked with motivations for prosocial behavior ($p = .09$). These findings suggest a positive

moderate effect of warm and supportive parenting on children's prosocial behaviors at a trend level. These findings suggest that, compared to linkages between hostile parenting practices and children's prosocial behavior, the associations between warm and supportive parenting and children's prosocial behavior may be more salient.

Table 8. Standardized Regression Estimates with 95% Confidence Intervals for Parenting Practices and Parent and Teacher Reported Children's Prosocial Behavior, Controlling for Children's Age and Gender

Children's Prosocial Behavior	Warm and Supportive Parenting		Hostile Parenting	
	β	[95% CI]	β	[95% CI]
Teacher Reported				
Cooperation	0.32	[-0.22, 0.87]	0.07	[-0.23, 0.37]
Prosocial actions	0.34	[-0.26, 0.96]	0.13	[-0.20, 0.47]
Prosocial motivations	0.46	[-0.68, 1.61]	0.25	[-0.36, 0.86]
Parent Reported				
Cooperation	0.07	[-0.28, 0.43]	0.01	[-0.20, 0.21]
Prosocial actions	0.31†	[-0.03, 0.65]	-0.13	[-0.22, 0.20]
Prosocial motivation	0.50†	[-0.09, 1.10]	-0.08	[-0.42, 0.25]

Note. CI = confidence interval.

Direct Effects Controlling for Acculturative Stress

Direct linkages between parenting practices and children's prosocial behaviors were also analyzed when controlling for parents' acculturative stress in addition to children's gender and age. Results with standardized regression coefficients and confidence intervals for direct links between parenting practices and children's prosocial behavior, while controlling for parents' acculturative stress, can be found in Tables 9 and 10. As expected, when controlling for discrimination, more warm and supportive parenting was positively and significantly associated with greater parent reported prosocial actions ($p = .01$). This finding suggests that, when

controlling for parents' experiences with discrimination, warm and supportive parenting had a strong and positive association with parent reported prosocial behavior.

When controlling for the pressure to acculturate, warm and supportive parenting was marginally and positively associated with parent reported prosocial actions ($p = .06$) and motivation for prosocial behavior ($p = .09$). Additionally, when controlling for pressure against acculturation, warm and supportive parenting was marginally and positively related to parent reported prosocial tendencies ($p = .09$). In line with the third hypothesis, current findings indicate that warm and supportive parenting had a modest to moderate link with parent reported children's prosocial behaviors, when parents' pressure for and against acculturation were controlled.

When controlling for English fluency stress, warm and supportive parenting was marginally and positively linked with parent reported prosocial actions ($p = .08$) and parent reported motivations for prosocial behavior ($p = .09$). Similarly, when controlling for Spanish fluency stress, warm and supportive parenting was marginally and positively associated with parent reported prosocial actions ($p = .08$) and parent reported motivations for prosocial behavior ($p = .08$). As expected, these findings suggest that warm and supportive parenting had a positive moderate link with children's prosocial behavior, when controlling for language fluency stress.

Furthermore, when controlling for parents' acculturative stress, warm and supportive parenting was not associated with teacher reported children's prosocial behavior. Additionally, hostile parenting was not significantly related to any prosocial variable. In summary, when controlling for each type of parents' acculturative stress, the positive associations between warm and supportive parenting practices and children's prosocial behaviors were maintained. Regardless of the type of acculturative stress parents experienced, warm and supportive

caregiving predicted their children's prosocial behavior. These findings further support the third

hypothesis, which indicated that warm and supportive parenting practices would be positively

associated with children's prosocial behavior.

Table 9. Direct Effects of Warm and Supportive Parenting Practices on Children's Prosocial Behavior, Controlling for Parents' Acculturative Stress, Children's Gender, and Children's Age

Controlled Variable	Teacher Reported			Parent Reported		
	Cooperation	Prosocial Actions	Prosocial Motivation	Cooperation	Prosocial Actions	Prosocial Motivation
	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]
Pressure to acculturate	0.29 [-0.26, 0.86]	0.29 [-0.31, 0.90]	0.33 [-0.75, 1.43]	0.09 [-0.27, 0.46]	0.33[†] [-0.02, 0.68]	0.52[†] [-0.09, 1.15]
Pressure against acculturation	0.21 [-0.31, 0.73]	0.22 [-0.36, 0.81]	0.21 [-0.85, 1.27]	0.09 [-0.28, 0.47]	0.27 [-0.08, 0.63]	0.54[†] [-0.09, 1.18]
English fluency stress	0.44 [-0.18, 1.08]	0.48 [-0.21, -1.18]	0.59 [-0.69, 1.88]	0.01 [-0.39, 0.39]	0.34[†] [-0.04, 0.74]	0.52[†] [-0.08, 1.13]
Spanish fluency stress	0.38 [-0.15, 0.93]	0.43 [-0.16, 1.03]	0.59 [-0.54, 1.73]	0.07 [-0.30, 0.44]	0.30[†] [-0.05, 0.66]	0.54[†] [-0.08, 1.17]
Discrimination	0.36 [-0.17, 0.90]	0.38 [-0.21, 0.98]	0.48 [-0.70, 1.68]	0.08 [-0.29, 0.46]	0.38* [0.08, 0.67]	0.49 [-0.15, 1.13]

Note. CI = confidence interval.

[†] $p < .10$

* $p < .05$

** $p < .01$.

Table 10. Direct Effects of Hostile Parenting Practices on Children's Prosocial Behavior, Controlling for Parents' Acculturative Stress, Children's Gender, and Children's Age

Controlled Variable	Teacher Reported			Parent Reported		
	Cooperation	Prosocial Actions	Prosocial Motivation	Cooperation	Prosocial Actions	Prosocial Motivation
	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]	β [95% CI]
Pressure to acculturate	0.07 [-0.23, 0.38]	0.14 [-0.17, 0.47]	0.28 [-0.29, 0.85]	0.01 [-0.20, 0.21]	-0.01 [-0.23, 0.20]	-0.08 [-0.43, 0.25]
Pressure against acculturation	0.04 [-0.23, 0.32]	0.10 [-0.20, 0.41]	0.18 [-0.36, 0.74]	0.01 [-0.20, 0.22]	-0.02 [-0.24, 0.18]	-0.08 [-0.43, 0.25]
English fluency stress	0.06 [-0.26, 0.39]	0.14 [-0.20, 0.50]	0.31 [-0.32, 0.95]	0.01 [-0.20, 0.22]	-0.01 [-0.24, 0.21]	-0.10 [-0.45, 0.24]
Spanish fluency stress	0.03 [-0.27, 0.34]	0.09 [-0.24, 0.43]	0.18 [-0.43, 0.81]	0.01 [-0.20, 0.22]	-0.01 [-0.22, 0.21]	-0.09 [-0.44, 0.25]
Discrimination	0.14 [-0.16, 0.44]	0.19 [-0.14, 0.52]	0.28 [-0.37, 0.94]	0.02 [-0.20, 0.25]	0.06 [-0.13, 0.26]	-0.12 [-0.48, 0.24]

Note. CI = confidence interval.

Testing Parenting Practices as a Mediator

Lastly, it was hypothesized that parenting practices would significantly mediate the link between parents' acculturative stress and children's prosocial behavior, when controlling for children's gender and age. Indirect effects of parents' acculturative stress and children's prosocial behaviors were tested with warm and supportive parenting as a mediating variable. Results with standardized regression coefficients and confidence intervals for indirect links between parents' acculturative stress and children's prosocial behavior, mediated by warm and supportive parenting, are listed in Tables 11 and 12. Unexpectedly, post-hoc analyses did not indicate significant indirect effects of any type of parents' acculturative stress on teacher and parent reports of children's prosocial behavior. These findings indicate that warm and supportive parenting did not significantly mediate the link between parents' experiences with acculturative stress and children's prosocial behaviors.

In addition, indirect effects of parents' acculturative stress and children's prosocial behaviors were examined with hostile parenting as a mediating variable. Results with standardized regression coefficients and confidence intervals for indirect links between parents' acculturative stress and children's prosocial behavior, mediated by hostile parenting practices, are listed in Tables 13 and 14. Incongruent with the fourth hypothesis, results indicated no significant indirect effects of parents' acculturative stress and teacher and parent reported children's prosocial behavior. Similar to warm and supportive parenting, hostile parenting was not a significant mediating variable for linkages between parents' acculturative stress and children's prosocial behaviors. Overall, these analyses of indirect effects indicate that parenting did not significantly mediate the link between parents' experiences with acculturative stress and

children's cooperation, prosocial actions, and prosocial tendencies among immigrant Latino families from low-income backgrounds.

In total, the present study conducted multivariate analyses on 232 models associated with parents' acculturative stress, parenting practices, and children's prosocial behavior, all controlling for children's gender and age. Of the 232 models, 23 (9.91%) of the associations were either statistically significant ($p < .05$) or marginally significant ($p < .10$). More specifically, 12 (5.17%) of the linkages were statistically significant ($p < .05$). Therefore, it is worth noting that it is possible that the significant associations found in the present study occurred by chance.

Table 11. Indirect Effects of Parents' Acculturative Stress on Teacher Reported Children's Prosocial Behaviors, Mediated by Warm and Supportive Parenting, and Controlling for Children's Gender and Age

Acculturative Stress	Cooperation			Prosocial Actions			Prosocial Motivation		
	β	z	95% CI	β	z	95% CI	β	z	95% CI
Pressure to acculturate	-0.01	-0.41	[-0.14, -0.02]	-0.01	-0.39	[-0.12, 0.02]	-0.01	-0.28	[-0.19, 0.04]
Pressure against acculturation	-0.02	-0.51	[-0.13, 0.02]	-0.02	-0.49	[-0.16, 0.03]	-0.02	-0.27	[-0.24, 0.06]
English fluency stress	-0.01	-0.31	[-0.05, 0.03]	-0.31	-0.31	[-0.05, 0.04]	-0.26	-0.26	[-0.08, 0.07]
Spanish fluency stress	-0.04	-0.60	[-0.31, 0.05]	-0.04	-0.60	[-0.34, 0.06]	-0.06	-0.51	[-0.57, 0.12]
Discrimination	0.01	0.09	[-0.13, 0.16]	0.01	0.09	[-0.16, 0.16]	0.01	0.07	[-0.24, 0.24]

Note. CI = confidence interval.

Table 12. Indirect Effects of Parents' Acculturative Stress on Parent Reported Children's Prosocial Behaviors, Mediated by Warm and Supportive Parenting, and Controlling for Children's Gender and Age

Acculturative Stress	Cooperation			Prosocial Actions			Prosocial Motivation		
	β	z	95% CI	β	z	95% CI	β	z	95% CI
Pressure to acculturate	-0.01	-0.31	[-0.09, 0.02]	-0.02	-0.71	[-0.11, 0.02]	-0.04	-0.77	[-0.26, 0.04]
Pressure against acculturation	-0.01	-0.40	[-0.10, 0.04]	-0.04	-0.92	[-0.13, 0.01]	-0.08	-0.99	[-0.31, 0.03]
English fluency stress	0.00	-0.01	[-0.01, 0.02]	-0.01	-0.39	[-0.04, 0.02]	-0.01	-0.37	[-0.06, 0.05]
Spanish fluency stress	-0.01	-0.29	[-0.15, 0.09]	-0.04	-0.84	[-0.26, 0.04]	-0.08	-0.92	[-0.48, 0.04]
Discrimination	-0.01	-0.19	[-0.08, 0.06]	-0.02	-0.48	[-0.13, 0.10]	-0.04	-0.62	[-0.34, 0.14]

Note. CI = confidence interval.

Table 13. Indirect Effects of Parents' Acculturative Stress on Teacher Reported Children's Prosocial Behaviors, Mediated by Hostile Parenting, and Controlling for Children's Gender and Age

Acculturative Stress	Cooperation			Prosocial Actions			Prosocial Motivation		
	β	z	95% CI	β	z	95% CI	β	z	95% CI
Pressure to acculturate	0.01	0.11	[-0.04, 0.04]	0.01	0.03	[-0.05, 0.06]	0.01	0.17	[-0.08, 0.10]
Pressure against acculturation	-0.01	-0.11	[-0.07, 0.05]	-0.01	-0.23	[-0.12, 0.04]	-0.01	-0.23	[-0.19, 0.06]
English fluency stress	0.01	0.24	[-0.03, 0.04]	0.01	0.44	[-0.02, 0.07]	0.02	0.49	[-0.04, 0.11]
Spanish fluency stress	0.01	0.17	[-0.09, 0.13]	0.02	0.35	[-0.09, 0.18]	0.04	0.38	[-0.13, 0.28]
Discrimination	-0.01	-0.10	[-0.10, 0.12]	-0.01	-0.11	[-0.13, 0.17]	-0.01	-0.10	[-0.23, 0.27]

Note. CI = confidence interval.

Table 14. Indirect Effects of Parents' Acculturative Stress on Parent Reported Children's Prosocial Behaviors, Mediated by Hostile Parenting, and Controlling for Children's Gender and Age

Acculturative Stress	Cooperation			Prosocial Actions			Motivation for prosocial Behavior		
	β	z	95% CI	β	z	95% CI	β	z	95% CI
Pressure to acculturate	0.01	0.01	[-0.02, 0.02]	-0.01	-0.01	[-0.02, 0.03]	-0.01	-0.09	[-0.06, 0.05]
Pressure against acculturation	-0.01	-0.05	[-0.05, 0.05]	0.01	0.13	[-0.03, 0.08]	0.01	0.26	[-0.08, 0.13]
English fluency stress	0.01	0.04	[-0.02, 0.02]	-0.01	-0.08	[-0.02, 0.02]	-0.01	-0.35	[-0.06, 0.03]
Spanish fluency stress	0.01	0.04	[-0.06, 0.07]	-0.01	-0.01	[-0.10. 0.07]	-0.01	-0.31	[-0.21, 0.05]
Discrimination	-0.01	-0.06	[-0.06, 0.04]	-0.01	-0.18	[-0.06, 0.05]	0.01	0.18	[-0.14, 0.13]

Note. CI = confidence interval.

CHAPTER FOUR

DISCUSSION

In summary, results from the current study find that parents feeling pressure against acculturation was associated with lower teacher reported preschoolers' cooperation, prosocial actions, and motivations for prosocial behavior. Additionally, parents feeling pressure to acculturate was related to fewer teacher reported motivations for prosocial behavior. Although acculturative stress was not linked with either warm and supportive or hostile parenting practices, warm and supportive parenting was significantly and positively associated with parent reported children's prosocial actions and motivations for prosocial behavior. Findings from mediation analyses indicated that neither the use of warm and supportive or hostile parenting practices significantly mediated the link between parents' acculturative stress and children's prosocial behaviors.

These findings support previous research, which suggests immigrant Latino parents' acculturative stress is linked with more behavioral and mental health issues among their children and teens (Calzada et al., 2019; Lorenzo-Blanco et al., 2016; Tran, 2014). In addition, this research expands the existing literature by examining the prosocial development of young Latino children from immigrant families attending Head Start programs (Conger et al., 2000; Votruba-Drzal, 2006; White et al., 2009). Furthermore, the present study is the first to examine how first-generation immigrant Latino parents' feelings of stress related to maintaining their

cultural values and practices may particularly be associated with their children's prosocial development.

<p style="text-align:center;">**Parents' Acculturative Stress and Children's Prosocial Behavior**</p>

The first hypothesis expected parents' acculturative stress to be associated with children's prosocial behavior. Multivariate analyses findings suggest that three types of acculturative stress were linked with young Latino children's prosocial behaviors in the classroom, as rated by teachers. These include the pressure to acculturate, pressure against acculturation, and Spanish fluency stress. Interestingly, Latino immigrant parents' pressure against acculturation, or the pressure to maintain their native cultural values, was the only type of acculturative stress that was associated with all three types of prosocial behavior that were measured (i.e., cooperation, prosocial actions, and prosocial motivations). The present study extends previous work by scholars on how acculturative stress experienced by parents may influence children's outcomes. Past studies have explored how acculturative stress may influence children and teens' mental health and behavioral problems, however it has not been examined with children's positive social development (Calzada et al., 2019; Lorenzo-Blanco et al., 2016; Tran, 2014).

Multivariate analyses findings indicated that parents' stress related to adopting American culture was associated with their children having fewer motivations to behave prosocially. Additionally, the pressure against acculturation was negatively related to teacher reports of children's cooperation, prosocial actions, and motivations for prosocial behavior. These findings suggest that, among Latino immigrant families from low-income backgrounds, external cultural stressors experienced by mothers are negatively associated with their children's positive social development in the classroom. This is in line with recent research by Calzada and colleagues (2019), which found Mexican immigrant mothers' pressure to acculturate and pressure against

acculturation to be directly linked with their young children's internalizing problems. The

current study went beyond Calzada and colleagues' research by examining how the pressures for

and against acculturation might be associated with children's positive social development.

Studying prosocial development during preschool is important, as it has been found to predict

better social competency, academic achievement, and overall psychological adjustment during

childhood (Caprara et al., 2000; Eisenberg et al., 1999; Flouri & Sarmadi, 2016), and it also lays

the foundation for prosocial development later in life (Eisenberg et al., 2002).

According to descriptive findings on types of acculturative stress, Latina mothers in this

sample on average experienced more stress related to adopting American practices compared to

stress associated with maintaining their native culture (see Table 2). Research suggests the

pressure to acculturate often occurs with first-generation immigrants, as stress may be likely to

emerge from societal pressures to adopt more American behaviors (Rodriguez et al., 2002).

Although participants in the present study experienced greater pressure to acculturate compared

to the pressure against acculturation, mothers' pressure against acculturation was more strongly

associated with their children's prosocial development than the pressure to acculturate.

One explanation for these findings could be related to differences in coping with

acculturative stress (Crockett, 2007). When stress transcends one's ability to cope or adapt, it

may be psychologically taxing and lead to negative emotions (Berry, 2007; Hovey & King,

1996). However, studies suggest that coping strategies can help alleviate negative affect and

stress in response to acculturative stress and discrimination (Crockett et al., 2007; Finch et al.,

2003; Miller & Major, 2000). For example, in a study on acculturative stress, social support, and

psychological adjustment among Mexican American college students, researchers found that

peer and parental support moderated the link between acculturative stress and anxiety (Crockett

et al., 2007). Particularly, individuals who reported low levels of social support had greater negative effects of acculturative stress on their mental well-being in comparison to individuals with higher levels of social support (Crockett et al., 2007). Furthermore, active coping skills assist individuals in adapting to their immediate environment, and may act as a protective factor for individuals' well-being when exposed to pressures for and against acculturation (Torres, 2010).

Although coping strategies were not measured with these participants, the present study suggests that there may be differences in how specific types of parents' acculturative stress are associated with children's prosocial behavior. Perhaps the Latina mothers in this sample were less equipped to cope with and adapt to pressure against acculturation compared to pressure to acculturate, as pressure against acculturation had more linkages with children's prosocial behavior compared to the pressure to acculturate. In addition, some studies suggest that young adults who come from families with first-generation immigrant Latino parents tend to report more intergenerational conflicts because their parents perceive them as too "Americanized" (Dennis, Basañez, & Farahmand, 2010). The immigrant Latina mothers in the present study may feel pressure against acculturation so that their children may also maintain their native cultural values and practices. The present findings highlight the importance of conceptualizing acculturative stress as multidimensional rather than unidimensional, as specific types of acculturative stress experienced by parents may influence children's development differently. In addition, it calls attention to the need for future research to address first-generation immigrant parents' feelings of pressure to maintain their native cultural values and practices, even if they may experience it less than pressures to acculturate.

Findings from the present study also add to literature on the development of young Latino children, as it explores how cultural stressors specific to Latino families are associated with children's prosocial adjustment. Furthermore, it expands scholars' understanding of the Head Start population in the U.S., as Head Start families are exposed to various contextual factors that may influence preschoolers' overall positive development (Conger et al., 2000; Votruba-Drzal, 2006; White et al., 2009). Additionally, this study adds to the small but growing literature exploring linkages between immigrant Latino parents' acculturative stress and their children's well-being (Calzada et al., 2019; Lorenzo-Blanco et al., 2016; Tran, 2014), by examining young children's prosocial development.

In addition to the pressures for and against acculturation, Spanish fluency stress was directly and positively associated with teacher reports of children's prosocial actions in the classroom. In other words, parents who felt more stressed about retaining their native language tended to have children who exhibited more prosocial actions such as helping, cooperating, comforting, and sharing. This is not in line with what was hypothesized, and is incongruent with past research findings that link together parents' experiences of acculturative stress with children's negative adjustment (Calzada et al., 2019; Lorenzo-Blanco et al., 2016; Tran, 2014). However, it is important to consider the fact that this finding was marginally significant, and that it was only found when controlling for warm and supportive parenting, but not when controlling for hostile parenting. Furthermore, when either type of parenting was no longer controlled for, this finding became non-significant. Therefore, there is a possibility that it was found to be marginally significant by chance. Despite this, it could be that feeling pressure to stay fluent in Spanish was more of an indicator of mothers desiring to maintain an important aspect of their culture, rather than stress that would spillover to their children's social development.

Within this sample, all participants indicated that they either spoke Spanish only, Spanish and a little bit of English, or both Spanish and English (see Table 3). A qualitative study with Latino American families of school-age children in Canada indicated that mothers tended to placed an importance on Spanish maintenance, as they believed it promoted family unity and ethnic identity among their children (Pacini-Ketchabaw, Bernhard, & Freire, 2001). In addition, neuroscientific research indicates that manageable (i.e., low to moderate) levels of stress may activate psychobiological resilience mechanisms (Aschbacher et al., 2013), suggesting that not all forms of stress are harmful. Since all mothers who participated in the current study spoke Spanish, perhaps the stress to maintain their fluency in Spanish suggested a want to preserve their native language in the home, rather than a stress which would negatively influence their psychological state. Although not in the hypothesized direction, the present findings add to the importance of examining the multidimensionality of acculturative stress, particularly when studying linkages between Latino parents' acculturative stress and children's social development.

Parents' Acculturative Stress and Parenting Practices

The second hypothesis expected that greater acculturative stress would be linked with the use of fewer warm and supportive caregiving styles, and more hostile parenting practices. Findings from the current study indicate no relation between any type of acculturative stress and either hostile or warm and supportive parenting practices, and therefore are not congruent with the existing literature on acculturative stress and parenting practices. Existing literature suggests an association between acculturative stress and parenting practices (Calzada et al., 2019; Miao et al., 2018; Williams et al., 2017). One recent study suggests that greater pressure to acculturate and pressure against acculturation among Latino immigrant mothers is associated with the use of

more authoritarian parenting practices with young children, but not authoritative practices (Calzada et al., 2019). Furthermore, in a study by Williams and colleagues (2017) with Latino parents of middle-schoolers, higher cultural stress was associated with less parental involvement and monitoring, as well as more discipline.

Studies suggest that Latina mothers often use warm and responsive parenting practices with their young children (Calzada, Huang, Anicama, Fernandez, & Brotman, 2012). Therefore, it could be that Latina mothers are warm and supportive regardless of their experiences, or lack thereof, with acculturative stress. In line with this, descriptive findings from the present study indicated that mothers reported themselves to have higher levels of warm and supportive parenting (i.e., 4.68 out of 5), and lower levels of hostile parenting (i.e., 2.21 out of 5), on average. Researchers often discuss high levels of warmth among Latina mothers in terms of *familismo*, the Latino family value that places an importance on the well-being of the family (Calderón-Tena et al., 2011; Galindo & Fuller, 2010). Therefore, Latina mothers who are high in *familismo* may also promote positive emotional connections between themselves and their children, leading them to exhibit greater parental warmth (Harwood, Leyendecker, Carlson, Asencio, & Miller, 2002; Ramirez et al., 2004). The presence of null findings here suggests that acculturative stress experienced by Latina immigrant mothers in this study was not significantly related to their warm and supportive, or hostile caregiving practices. Although this does not reflect past findings, the present study expands upon research related to Latino parents' acculturative stress and parenting practices by examining specific types of acculturative stress as predictors of warm and supportive, and hostile parenting practices.

Parenting Practices and Children's Prosocial Behaviors

The third hypothesis suggested that greater parental warmth and supportiveness would be associated with more prosocial behaviors among children, while hostility would be linked with fewer children's prosocial behaviors. A large body of research exists on the influence of warm and supportive parenting on children's development of positive social skills and overall adjustment (Baumrind, 1971; Eisenberg & Valiente, 2002; Hay & Cook, 2007; Hoffman, 2008). In line with this research, warm and supportive parenting was linked with greater children's prosocial actions and motivations for prosocial behavior, but not children's cooperation or prosocial behaviors in the classroom. In other words, children who received more warm and supportive parenting tended to exhibit more prosocial actions (i.e., cooperating, helping, comforting, and sharing) over a wider range of motivations (i.e., altruistic, compliant, emotional, public, and dire) at home.

In addition, these findings were present when types of acculturative stress were and were not controlled. However, warm and supportive parenting was not associated with children's cooperation, and hostile parenting was not associated with children's cooperating, prosocial actions, or prosocial motivations. Although these null findings are not consistent with research on parenting and children's social development, there are some cultural considerations that could help explain them. Perhaps children of Latino immigrant parents are learning to act prosocially through practices that were not captured by the warm, supportive, and hostile parenting measures used in this study.

In addition to warm and supportive parenting, past research suggests that children's prosocial behavior is positively associated with inductive discipline, which refers to parents' explanations to children about their emotions (Denham & Grout, 1992; Krevans & Gibbs, 1996;

Laible et al., 2017). Furthermore, emotion socialization practices, which involve promoting

children's recognition of their own and others' emotions, can also foster children's prosocial

development (Denham & Grout, 1993; Garner, 2006; Hastings, Miller, & Troxel, 2015).

Particularly among Latino families, parents may socialize children to be more prosocial by

promoting values such as *familismo*, which have been found to foster prosocial behaviors such as

helping and cooperating (Calderón-Tena et al., 2011; Galindo & Fuller, 2010; Knight & Carlo,

2012). For example, since the value of *familismo* pertains to placing an importance on the

family's emotional and physical well-being, parents may ask their children to help with

household tasks, or to help take care of younger siblings (Knight et al., 2010). The present study

examined broader types of parenting practices, such as warm and supportive parenting, and

hostile parenting practices. Future research should examine possible links between more specific

types of parenting practices, specifically inductive discipline, and children's prosocial behavior.

Additionally, it should examine how socialization practices within immigrant Latino families

might influence young children's prosocial development.

Gender Differences

Past research suggests that significant gender differences in prosocial behavior often do

not emerge until middle childhood (Fabes & Eisenberg, 1998). However, non-significant gender

differences may emerge during early childhood, with girls tending to be more prosocial

compared to boys (Fabes & Eisenberg, 1998; Newton et al., 2014). As expected, findings from

the present study indicated that preschooler girls scored higher on most of the measures of

prosocial behavior, but the differences were not significant. In line with past research, the current

findings indicate no significant gender differences in prosocial behavior. Furthermore, the

pattern of findings were in the expected direction, as girls were reported to be more prosocial

compared to boys on a majority of parent and teacher reported measures of prosocial behavior.

In addition, existing research with first-generation immigrant Latino parents of young

children has found no significant child gender differences in the use of warm parenting practices,

but does indicate that parents tend to be more demanding and controlling with their girls

compared to boys (Rodríguez, Donovick, & Crowley, 2009). The present study indicated no

significant differences in the use of warm and supportive parenting or hostile parenting practices

across children's gender. Although there was no indication of significant differences in hostile

parenting with boys and girls in the present study, the fact that girls experienced greater parental

hostility compared to boys is in line with existing research on parent demands and control.

Parents' Acculturative Stress, Parenting Practices, and Children's Prosocial Behavior

Lastly, it was hypothesized that children's prosocial behaviors would be associated with

their parents' acculturative stress, mediated by parenting practices. However, despite direct and

robust links between the pressure against acculturation and children's prosocial behavior, the

present study found that parenting was not a significant mediator for the relation between any

type of parents' acculturative stress and children's prosocial behavior. This does not reflect past

research which suggests that fewer positive, and more negative parenting practices mediate the

link between parents' acculturative stress with increased problem behaviors and mental health

issues among children and teens (Calzada et al., 2019; Lorenzo-Blanco et al., 2016; Tran, 2014).

Despite this, the current study expands upon the existing literature on parents' acculturative

stress and children's development, as it examines prosocial behavior among young Latino

children rather than their negative behavioral or mental-health outcomes. Furthermore, a lack of

significant findings suggests that among Latino immigrant families from low-income

backgrounds, young children's prosocial development may be associated with parents' acculturative stress via other forms of parent-child interactions (Lorenzo-Blanco et al., 2016; Zayas, 2015).

Another type of parenting which may be associated with parents' acculturative stress and children's social development among ethnic and racial minority families is involvement (Lorenzo-Blanco et al., 2016; Pastorelli et al., 2016). During early childhood, parental involvement includes activities such as reading, discussing, or going on outings with one's children (Durand, 2011; Epstein, 1996). A longitudinal study by Lorenzo-Blanco and colleagues (2016) found that increases in immigrant Latino parents' acculturative stress over time predicted lower family functioning, which included parental involvement, positive parenting, and family cohesion. In turn, lower family-functioning negatively influenced their teens' mental health, and led to greater substance use among youth (Lorenzo-Blanco et al., 2016). Furthermore, research with families in eight countries, including Colombia and the U.S., suggested that nurturing and involved parenting fosters children's prosocial development (Pastorelli et al., 2016). The present study measured broad parenting styles, such as warm and supportive parenting, as mediating variables for the association between parents' acculturative stress and children's prosocial development. Since neither warm and supportive parenting nor hostile parenting were significant mediators, future research should examine more specific types of parenting, such as parental involvement, when analyzing the relation between parents' acculturative stress and children's prosocial behavior.

Another possible explanation is that acculturative stress could be associated with exposure to anti-immigration policies, which in turn may influence children's well-being (Giano et al., 2019; Zayas, 2015). Specifically, the fear of deportation may be linked with greater

acculturative stress perceived by individuals, as well as lower overall family functioning (Arbona et al., 2010). The deportation of a family member has been associated with anger and aggression, as well as anxiety and depression among children (Capps et al., 2015; Cervantes, Ullrich, & Matthews, 2018). In addition, research suggests that the fear of deportation can be highly stressful for children, and is related to behavior problems and anxiety among children from immigrant Latino families with at least one undocumented parent (Dreby, 2012; Gulbas et al., 2016; Ortega et al., 2009). Although most parents choose not to share this information with their young children, it could still increase the likelihood of maladjustment related to children's mental health and behavior (Zayas & Gulbas, 2017).

The present study suggests that parents' pressure for and against acculturation is associated with lower prosocial behavior among children from immigrant Latino families. If warm and supportive or hostile parenting practices do not mediate this relation, then perhaps it may be explained through other forms of parenting and socialization practices (Knight et al., 2016; Lorenzo-Blanco et al., 2016), as well as family exposure to stress due to anti-immigrant policies (Zayas, 2015). Furthermore, findings in the present study indicated few significant associations between parents acculturative stress, parenting practices, and children's prosocial behavior, while controlling for children's gender and age. Therefore, future studies should incorporate additional caregiving styles, socialization practices, and contextual factors specific to Latino families when examining the relation between parents' acculturative stress and children's social development.

Despite challenges associated with acculturative stress and discrimination, research suggests that Latinos often exhibit resilience in the face of adversity (Morgan Consoli, Delucio, Noriega, & Llamas, 2015). Studies with Latino adults indicate that social support (Crockett et al.,

2007), hope (Morgan et al., 2015), spirituality (Farley, Galves, Dickinson, & Perez, 2005), and

familismo (Streit, Carlo, & Killoren, 2020) all work as protective factors for overall well-being.

Furthermore, some researchers theorize that immigrant children's normative psychological

adjustment occurs as they acculturate, as immigrant children are often tasked with developing

multiple ethnic and social identities to fit in at home and at school (Suárez-Orozco, Motti-

Stefanidi Marks, & Katsiaficas, 2018). The mechanism by which immigrant children develop

prosocial behaviors may be linked with their individual ability to cope with the additional tasks

related to their process of acculturation (Suárez-Orozco et al., 2018). Therefore, resiliency

among Latina mothers and their children may contribute to a lack of significant findings with

English fluency and discrimination with children's prosocial behavior.

So far, studies on parents' acculturative stress and children's outcomes have primarily

focused on behavior problems and mental-health issues among children and teens, while this

study explores young children's social development (Calzada et al., 2019; Lorenzo-Blanco et al.,

2016; Tran, 2014). Over the past decade, there has been greater advocacy for social and

emotional learning in schools, particularly among ethnic-minority children in Head Start

programs (Schmitt, McClelland, Tominey, & Acock, 2015; Zhai, Raver, & Jones, 2015).

Research suggests that incorporating cultural factors into social and emotional learning programs

can benefit ethnic and racial minority children's development (Jagers, Rivas-Drake, & Borowski,

2018). Additionally, scholars have called for greater efforts to promote parent engagement with

preschoolers among families from low-income backgrounds (Bierman, Morris, & Abenavoli,

2017). Existing literature indicates that focusing on improving relationships between parents and

their young children (Gross et al., 2009), home learning activities (Noble et al., 2012), and

relationships between parents and teachers (Mendez, 2010) can facilitate young children's social

development. This research on prosocial behavior with Latino Head Start preschoolers may help educators and policymakers better understand the cultural and contextual factors that may shape the social development of young Latino children from low-income backgrounds. Specifically, immigrant Latina mothers' pressure to maintain their native culture might be negatively associated with their young children's prosocial behavior.

<p style="text-align:center">**Limitations and Future Directions**</p>

There are some limitations to consider when interpreting the findings of this study. First, the sample was smaller than needed to find significant results for a small effect size, and was therefore underpowered. A lack of significant findings in the present study may be related to the small sample size, rather than indicate that there was no association between two variables. Furthermore, Latinos belong to a heterogeneous population with origins from many countries with different cultures and beliefs, and with varying ethnic identities and socialization practices (Ortiz, 1995). Ethnic identity refers to one's identity associated with their native cultural beliefs and values, and ethnic parental socialization is the transmission of these cultural beliefs and values from parents to their children (Knight, Bernal, Garza, Cota, & Ocampa, 1993). Although ethnic identity and socialization was not measured in this study, ethnic identity and socialization is associated with protective factors for the well-being of individuals exposed to acculturative stress (Streit et al., 2020). In addition, mothers were more likely to speak Spanish and to live in the U.S. longer in the current study. Therefore, it would be beneficial for future research to replicate findings with larger samples, and to include families from diverse backgrounds and home environments.

Second, no fathers reported on themselves and their children's prosocial behavior, and all families came from ethnically and racially diverse neighborhoods. Among families from low-

income backgrounds, including Latino families, fathers' engagement and supportiveness have been positively linked with cognitive, social, and language development during early childhood (Cabrera & Bradley, 2012; Ortiz, 2004; Shears & Robinson, 2005; Tamis-LeMonda et al., 2004). However, the possible influences of fathers' parenting practices on children's social development were not examined among families in the present study. Therefore, when interpreting findings, it is important to take caution when generalizing to the general Latino immigrant parent population in the United States. Future research should aim to capture various factors, such as ethnic identity and cultural values specific to one's country of origin, that are unique to certain groups within the Latino population. In addition, it should include familial values and socialization practices that tend to promote prosocial behaviors among young children. By measuring ethnic identity and socialization practices, differences in acculturative stress and prosocial development can be examined across immigrant Latino families with unique backgrounds and various cultures.

Third, data for the current study was collected cross-sectionally. Although many scholars agree that parental stress and the way parents interact with their children predicts their children's well-being and overall adjustment, scholars also suggest that children's behavior can often influence how their parents act (Kochanska, 1997; Newton et al., 2014). Interestingly, one qualitative study with refugee families suggested that children's academic skills and helping behavior tended to alleviate parents' feelings of stress related to acculturation (Bergnehr, 2018). In summary, the present study does not assume causal relations between acculturative stress, parenting, and prosocial behaviors. Future studies should collect data longitudinally to identify how variables may be causally associated with one another. This would allow researchers to

examine causal relations between parents' acculturative stress and their children's prosocial development over time (Lorenzo-Blanco et al., 2016).

Conclusion

In conclusion, this study uniquely focused on the positive social development of young Latino children while considering socio-cultural contexts. Latino families from low-income backgrounds face many cultural stressors in addition to financial stressors, and these can negatively influence their young children's development (Calzada et al., 2019; Lorenzo-Blanco et al., 2016; Tran, 2014). Prosocial development during early childhood is an important aspect of social development and is predictive of overall positive well-being later in life (Eisenberg et al., 1999; Eisenberg et al., 2002).

Among the Head Start families in the current study, findings indicated that Latina mothers' pressure against acculturation in particular was associated with less cooperation, fewer prosocial actions, and less motivation for prosocial behavior among their young children. Although the pressure to acculturate and pressure against acculturation were both directly related to children's prosocial behaviors, there was no evidence to support an indirect effect via warm and supportive, and hostile parenting practices. Longitudinal and culturally sensitive research on the promotion of prosocial behaviors among low-income Latino families is needed to explain the mechanism by which parents' acculturative stress influences children's prosocial development. By examining cultural and contextual factors, we may better understand different ways in which immigrant Latino parents' acculturative stress might influence family functioning and children's social development may be better understood. Furthermore, longitudinal research on acculturative stress and prosocial development would shed light on how parents' acculturative stress may play a role in their children's prosocial development over time. Incorporating more

nuanced cultural and contextual factors into research on young immigrant Latino families would

help advance knowledge on the often understudied but important domain of Latino children's

positive social development.

APPENDIX A

DEMOGRAPHIC QUESTIONS

Demographics

1. What is your age?
2. What is your gender?
3. What is your child's age?
4. What is your child's birthday?
5. What is your child's gender?
6. What is your race?
7. If you are Hispanic/Latino(a) are you:
     1. Mexican
     2. Guatemalan
     3. Ecuadorian
     4. Cuban
     5. Dominican
     6. Puerto Rican
     7. Other: _____
8. Where were you born?
9. If you were not born in the United States, when did you arrive to the U.S.?
10. What languages do you speak?
11. What language do you most often speak to your child?
12. What is your marital status?
13. How many people live in your household (including both adults and children)?
14. Are you the primary caregiver of your child?
15. How many hours per week do you usually work at your job?
16. Please tell us last month's total earnings from a job for pay for the mother in this household.
17. Or, if you prefer, could you tell us the hourly, daily, or weekly earnings for the mother in this household?
18. Please tell us last month's total household earnings from *other members* of the household (NOT including the mother) from all jobs for pay for all other combined members of the household.
19. Or, if you prefer, could you tell us the total hourly, daily, or weekly earnings for the *other members* of the household (NOT including the mother) from all jobs for pay for all other combined members of the household.
20. What is your highest level of education?

APPENDIX B

CHILDREN'S PROSOCIAL BEHAVIOR QUESTIONS

Social Skills Rating System Cooperation Subscale (SSRS; Gresham & Elliot, 1990)

1. Helps you with household tasks without being asked
2. Attempts household tasks before asking for your help
3. Uses free time at home in an acceptable way
4. Volunteers to help family members with tasks
5. Keeps room clean and neat without being reminded
6. Completes household tasks within a reasonable time
7. Puts away toys or other household property
8. Congratulates family members on accomplishments
9. Follows household rules
10. Communicates problems to you

Child Behavior Scale (CBS; Ladd & Profilet, 1996)

1. Helps
2. Recognizes feelings
3. Concerned about distress
4. Kind towards peers
5. Cooperative with peers
6. Concern for moral issues
7. Offers help

Prosocial Tendencies Measure (PTM; Carlo & Randall, 2002)

1. How likely is your child to help when someone asks for help?
2. How likely is your child to help someone when other people are watching?
3. How likely is your child to help someone even when there might be a cost to him/herself?
4. How likely is your child to help someone when there is an emergency situation?
5. How likely is your child to help someone when the situation is emotionally evocative?
6. How likely is your child to help you when you ask for help?
7. How likely is your child to help you when other people are watching?
8. How likely is your child to help you even when there might be a cost to him/herself?
9. How likely is your child to help you when there is an emergency situation?
10. How likely is your child to help you when the situation is emotionally evocative?

APPENDIX C

PARENTING PRACTICES QUESTIONS

Multidimensional Assessment of Parenting Scale (MAPS; Parent & Forehand, 2017)

Warm and Supportive Parenting
1. I express affection by hugging, kissing, and holding my child
2. I have warm and intimate times together with my child
3. I show respect for my child's opinions by encouraging him/her to express them
4. I encourage my child to talk about her/his troubles
5. My child and I hug and/or kiss each other
6. I listen to my child's ideas and opinions

Hostile Parenting
1. I argue with my child
2. I use threats as punishment with little or no justification
3. The punishment I give my child depends on my mood
4. I yell or shout when my child misbehaves
5. I explode in anger toward my child
6. I lose my temper when my child doesn't do something I ask him/her to do
7. When I am upset or under stress, I am picky and on my child's back

APPENDIX D

PARENTS' ACCULTURATIVE STRESS QUESTIONS

Multidimensional Acculturative Stress Inventory (MASI; Rodriguez, Myers, Mira, Flores, & Garcia-Hernandez, 2002)

Pressure to Acculturate
1. It bothers me when people pressure me to assimilate to the American ways of doing things
2. It bothers me when people don't respect my Latino values (e.g., familism)
3. Because of my cultural background, I have a hard time fitting in with Whites
4. I feel uncomfortable when others expect me to know American ways of doing things
5. I don't feel accepted by Whites
6. I feel uncomfortable when I have to choose between Latino and American ways of doing things
7. People look down on me if I practice Latino customs

Pressure Against Acculturation
1. I have had conflicts with others because I prefer American customs over Latino ones
2. People look down upon me if I practice American customs
3. I feel uncomfortable when others expect me to know Latino ways of doing things
4. I feel uncomfortable because my family members do not know Latino ways of doing things

Spanish Competency Pressures
1. I don't speak Spanish or don't speak it well
2. I feel uncomfortable being around people who only speak Spanish
3. I feel pressure to learn Spanish
4. I have a hard time understanding others when they speak Spanish
5. Since I don't speak Spanish well, people have treated me rudely or unfairly
6. It bothers me when people assume that I speak Spanish
7. I have been discriminated against because I have difficulty speaking Spanish

English Competency Pressures
1. I don't speak English or don't speak it well
2. I have been discriminated against because I have difficulty speaking English
3. Since I don't speak English well, people have treated me rudely or unfairly
4. I feel pressure to learn English
5. It bothers me that I speak English with an accent
6. I have a hard time understanding others when they speak English
7. I feel uncomfortable being around people who only Speak English

Measure of Perceived Discrimination (Phinney et al., 1998)

1. Employers treat me unfairly or negatively because of my ethnic background
2. Colleagues treat me unfairly or negatively because of my ethnic background
3. Other adults (outside of the workplace) treat me unfairly or negatively because of my ethnic background
4. I feel that others behave in an unfair or negative way toward my ethnic group
5. Because of my ethnic background, I feel that I am not wanted in American society
6. Because of my ethnic background, I don't feel accepted by other Americans
7. Because of my ethnic background, I feel that other Americans have something against me

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