The goals of this study were (a) to examine measurement invariance of a traditional observational measure of parenting across European American and Latina mothers, (b) to compare the factor structures of traditional versus culturally informed observational measures among Latina mothers, (c) to examine traditional versus culturally informed observational assessments of Latinx parenting to determine whether early indicators of parental intrusiveness and parental guidance were associated with internalizing and externalizing behaviors during early childhood among Latinx children, (d) to examine whether maternal warmth moderated associations between traditionally versus culturally informed observational measures of parental intrusiveness and guidance, and Latinx children’s adjustment.

Parenting behaviors were measured using an observational semi-structured parent-child interaction task during home visits when children were on average 14 and 24 months and children’s internalizing and externalizing behaviors were based on mothers reports. Parental intrusiveness and parental guidance were coded using a traditional and a culturally informed coding system. Results indicated partial measurement invariance in parenting behaviors across groups when applying a measure initially developed for European American and middle-class samples to families from Latinx backgrounds. Additionally, findings indicated that during early childhood and within the Latinx cultural context, parental intrusiveness was an indicator of negative parenting, whereas parental guidance was a good indicator of positive parenting. Parental guidance was negatively
associated with internalizing behaviors only for children whose mothers showed high levels of warmth. In contrast, parental guidance was negatively associated with externalizing behaviors for children whose mothers showed average and below average levels of warmth. Finally, parental intrusiveness was positively associated with externalizing behaviors for children whose mothers displayed low levels of warmth during a free play task. These findings provide new knowledge that can guide preventive and intervention efforts and have important theoretical and measurement implications that emphasize the use of culturally informed frameworks to better understand the implications of early caregiving experiences for child development within Latinx families.
A CULTURALLY SENSITIVE CONCEPTUALIZATION OF PARENTAL INTRUSIVENESS AND ITS EFFECTS ON CHILD ADJUSTMENT WITHIN LATINO FAMILIES

by

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Approved by

Committee Chair
To my family Angel, Gloria, and Ignacio for always supporting me in every step I take and encouraging me to follow my dreams. Thank you for always believing in me. To my other family and forever friends for always supporting me even from thousands of miles away. Thank you for inspiring me every day. And to Eric, for always been there.

Thank you for sharing this journey with me and growing together.
This dissertation written by MARTA BENITO GOMEZ has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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CHAPTER I
INTRODUCTION

The extent to which young children develop adjustment problems is heavily influenced by early social interactions with their caregivers. Parenting is a critical environmental factor during childhood and influences children’s ability to physiologically, emotionally, and behaviorally regulate and develop adaptive responses (Calkins & Hill, 2007). This is particularly true for young children who are rapidly developing regulatory capabilities that are thought to set the stage for later social-emotional development and overall adjustment (Vohs & Baumeister, 2016). Research has consistently indicated that young children who experience sensitive parenting are more likely to develop secure attachments, better emotion regulation, and social and emotional adjustment (Leerkes, Blankson, & O’Brien, 2009). In contrast, young children who are exposed to intrusive and harsh parenting are more likely to develop avoidant attachments, low effortful control and self-regulation, and emotional and behavioral problems (Carlson & Harwood, 2003; Gueron-Sela, Bedford, Wagner, & Propper, 2017; Taylor, Eisenberg, Spinrad, & Widaman, 2013). Whereas sensitive parenting is characterized by the use of appropriate responses that support children’s behaviors and needs, intrusive parenting is characterized by the exertion of control and lack of respect for children’s development of autonomy. Even though an extensive literature has examined links between parenting behaviors and children’s adjustment across
developmental periods, the majority of these studies have examined general dimension of parenting, and little attention has been paid to the role of specific caregiving behaviors in shaping the development of adjustment problems during early childhood. Understanding the conditions under which parental intrusiveness influences young children’s development of adjustment problems is of particular relevance due to the short and long-term implications of intrusiveness for children’s well-being.

Latinxs individuals constitute one of the fastest growing ethnic groups in the United States, but few studies have examined the extent to which early caregiving experiences explain individual differences in the development of adjustment problems within this cultural group. It has been suggested that Latinx children are at increased risk for internalizing and externalizing behaviors (Bamaca-Colbert, Umaña-Taylor, & Gayles, 2012; Flores et al., 2002). Understanding to what extent and under what conditions parenting behaviors influence the development of Latinx children’s adjustment problems has important implications for the ability to identify young children at increased risk for internalizing and externalizing behaviors and will allow practitioners to optimize early preventive and intervention efforts. For example, it has been widely accepted that parenting behaviors that are intrusive in nature are detrimental for children’s development. However, studies with samples from different cultural backgrounds have yielded mixed or null results. This is particularly true for studies that have examined this association within Latinx families, suggesting that the effects of parental intrusiveness may not always be harmful depending on factors such as context, culture, and outcomes of interest (Carlson & Harwood, 2003; Ispa et al., 2004).
It is of critical importance to increase understanding regarding the impact of early caregiving experiences on the development of adjustment problems among Latinx children. However, the current literature on parental control and intrusiveness is characterized by several limitations. First, research on early caregiving (and parental intrusiveness in particular) often fail to recognize the role of culture as shaping parenting behaviors and the extent to which the expression, functionality, and impact of parenting may differ across cultural groups. Instead, most studies have used conceptualizations of parenting initially developed based on observations of European American and middle-class families that may or may not apply across cultural groups (Ispa et al., 2004, 2013). These studies may be misestimating cultural differences or drawing false conclusions about parenting processes within ethnic minority parents (Longest et al., 2007). Differences in cultural values and beliefs about childrearing have implications for the form and impact of parenting behaviors on child development. For cultural groups that value interdependence over individual autonomy, parenting behaviors that aim to structure and guide young children’s environments may be associated with more adaptive behaviors, even if perceived as controlling from a Western perspective. As a result, in order to understand the role of parental intrusiveness across cultural groups, it is important to integrate ideas from theoretical approaches that conceive culture as directly influencing parenting behaviors through the role of parental ethnotheories and socialization goals (Garcia-Coll et al., 1996; Harkness & Super, 1992; Keller, 2002). The use of culturally informed research guided by empirical work and theoretical frameworks
is a first step toward further understanding the nature of parental intrusive behaviors and their impact on child adjustment within Latinx families.

Second, although recent conceptualizations of parental control have emphasized the qualitative difference between coercive and directive types of control, researchers have tended to consider any type of control as negative without paying attention to how behaviors are displayed and the function behind such behaviors. Baumrind’s recent work (2011) suggests that how control is asserted modifies its effects on child development. Control that is directive and responsive but not coercive is likely to be associated with positive child adjustment. There is a need to distinguishing parental behaviors that are intrusive in nature from those that aim to provide guidance and structure within the parent-child interaction. Additionally, in line with recent theoretical frameworks that underscore the role of culture as directly shaping parental beliefs and parental ethnotheories, it is important to understand that the extent to which a behavior is defined as intrusive or as providing guidance may differ across cultural groups. For example, whereas European American mothers tend to use suggestions to structure children’s behaviors, Latina mothers are more likely to use directives and engage in physical help (Bornstein, 2012). It has been suggested that the function behind such behaviors may be to correct the child’s behavior and provide guidance and structure, rather than to control and undermine the child’s development of autonomy. Additionally, a number of scholars have suggested that due to differences in parental beliefs and socialization goals, teaching young Latinx children to be respectful, well-behaved, and attentive may require greater use of controlling strategies (e.g., physical manipulation and directives) than are required
to teach children to be autonomous and independent (Carlson & Harwood, 2003). Given that most studies have failed to distinguish between positive and negative forms of control (i.e. intrusiveness versus guidance); research may not be capturing Latinx parenting behaviors in accurate ways which may lead to incorrect findings in relation to child developmental outcomes.

Finally, whereas most studies have examined the role of caregivers at the behavioral level, researchers often fail to examine affective or emotional components involved in the interactions between caregivers and their young children. Given that the literature has reported maternal intrusiveness to be linked with both positive and negative child adjustment and that levels of maternal affect and warmth often differ across cultural groups (Ispa et al., 2004), it is possible that the combination of maternal intrusiveness and warmth may best explain individual differences in internalizing and externalizing behaviors among young children from Latinx backgrounds. Specifically, it has been suggested that within collectivistic cultures, parental intrusiveness is not necessarily accompanied by low levels of warmth (Grusec, Rudy, & Martini, 1997). For example, Latinx parents are more likely to engage in affectionate behaviors (i.e. hugging and kissing) even in the presence of controlling behaviors (Halgunseth & Ispa, 2012). As a result, the emotional context in which intrusive parenting occurs may be a key determinant of its short- and long-term impact (Ispa et al., 2004).

The current study aims to address gaps and limitations in the literature in three ways. First, given that there is a need to conceptualize parental intrusiveness within the socio-cultural context within which Latinx families are embedded, the current study
incorporates recent theoretical frameworks regarding parental control in research on Latinx parenting (Baumrind, 2012; Gronlick, 2002). As suggested earlier, distinguishing between parenting behaviors that are intrusive in nature versus behaviors that aim to provide guidance and structure may be particularly important within this cultural group. Additionally, it is important that research on parental intrusiveness is guided by theoretical frameworks that take into consideration the role of culture and parental ethnotheories (Super & Harkness, 1996; Keller, 2002). The current study uses a conceptualization and measurement of parental intrusiveness that is culturally informed and guided by empirical and theoretical work to examine parenting behaviors within Latinx families. The first goal of this study is to examine measurement invariance of a traditionally coded observational measure of parenting across European American and Latina mothers. The second goal is to compare measurement models (factor structure) of traditional versus culturally informed observational measures of parenting within a sample of Latina mothers.

Given work suggesting that directives and physical manipulation are more likely to be used by Latinx parents to teach socialization goals of familism and respeto, which emphasize the importance of the family system, obedience, and respect for the elders, the proposed study will focus on a newly developed and culturally informed observational measure of Latinx parenting that distinguishes between parental behaviors that are coercive and parental driven versus those that are child oriented and aim to provide structure and guidance within the parent-child interaction. Behaviors that have been traditionally incorporated in coding systems and questionnaires as indicative of parental
intrusiveness, such as directives, physical manipulation, and excessive affectionate contact, may need to be reconsidered based on the extent to which they are coercive and undermining versus supportive of children’s development. Additionally, the presence of indicators of parental promotion of autonomy as indicative of parental intrusiveness may be particularly problematic due to the lack of emphasis on this socialization goal within Latinx families. The third goal of this study is to compare traditional versus culturally informed assessments of intrusive parenting to further understand whether early indicators of parental intrusiveness and parental guidance are associated with later internalizing and externalizing behaviors among Latinx young children.

It has been suggested that within collectivistic cultures, parental intrusiveness is not necessarily accompanied by low levels of warmth, as is the case within individualistic cultures (Grusec et al., 1997). Even though a number of studies have examined the effects of parental intrusiveness on children’s adjustment, they often fail to recognize that parent-child interactions occur within an emotional context. As a result, it is important that studies examine levels of warmth displayed by caregivers while interacting with their children, in addition to how caregivers behave. Similarly, it is important to examine parental intrusiveness without using aggregated intrusiveness scores that include negative affect and additional negative parenting behaviors (McFadden & Tamis-LeMonda, 2013). The current study incorporates measures of maternal positive regard (maternal warmth) for the child during parent-child interactions as indicators of the emotional context within which behavioral indicators of parental intrusiveness occur. Given work suggesting that the impact of parental intrusiveness on child adjustment is moderated by parental
warmth, the fourth goal of this study is to examine how maternal warmth may contextualize the effects of parental intrusiveness on the development of internalizing and externalizing behaviors among Latinx children.
CHAPTER II
THEORETICAL FRAMEWORK

Parenting is a critical environmental factor that supports children’s abilities to regulate physiological, emotional, and behavioral states and generate adaptive responses to environmental stimuli (Calkins & Hill, 2007). One of the ways parents influence their children is through parental beliefs, including values, goals, and attitudes (Bornstein, 2018). These beliefs can serve different functions and shape parental behaviors, which in turn influence the environments and experiences children are exposed to (Bornstein, 2018; Harkness & Super, 1992). However, parent-child interactions do not occur in isolation, but rather are nested within multiple ecological contexts. From birth on, the ecological contexts in which families participate and parents’ cultural backgrounds influence parenting behaviors and shape socialization processes (Garcia Coll et al., 1996; Keller et al., 2004).

Culture is usually conceptualized as consisting of distinctive patterns of norms, beliefs, values, behaviors, and symbolic representations that are shared by a particular group of people and persist over time (Bornstein, 2012, 2018). These patterns serve as guidelines that regulate individuals’ behaviors, such as strategies regarding how to socialize children and achieve successful adult functioning, that are transmitted intergenerationally (Hill, Bush, & Roosa, 2006). Gardiner and Kosmitzky (2005) defined culture as a “cluster of learned and shared beliefs, practices, behaviors, symbols, and
attitudes that are characteristics of a particular group of people” (p. 4), whereas others have defined culture as patterns of shared experiences related to religion, sex, gender, sexual orientation, and social class (Sue & Sue, 2013). Even though these definitions are different, all of them describe culture as a cluster of scripts or patterns that are shared by the group. In contrast, Harwood, Handweker, Schoelmerich, and Leyendecker (2001) located culture within the contextualized individual rather than within the group. Culture is described as a “shifting continuum of shared commonality among individuals” (p. 219). Within this new conceptualization of culture, the authors aim to emphasize issues related to within-group heterogeneity and the need to be sensitive to such diversity.

Culture has been particularly difficult to operationalize and to distinguish from constructs such as race, ethnicity, and social class. Existing work on cultural variations in parenting often confounds cultural or ethnic background with other sociodemographic factors, such as social class (La Placa & Corlyon, 2016). Whereas culture refers to patterns of beliefs, values, and practices shared by the group or within the individual that are transmitted intergenerationally (Gardiner & Kosmitzky, 2005; Harwood et al., 2001), ethnicity is viewed as beliefs, values, and practices linked to a common ancestry (Garcia-Coll et al., 1996). Thus, culture and ethnicity are highly interrelated and individuals from the same ethnic or cultural background are likely to share cultural and parenting practices as a result of their common history. Because ethnicity is socially acquired, these beliefs, values, and practices may change over time as a result of immigration and acculturation processes (Garcia-Coll et al., 1996). In contrast to ethnicity, race constitutes a socially defined strategy to categorize individuals and groups based on shared attributes and
phenotype characteristics, whereas social class is a multifaceted construct that refers to a unit of social stratification in which individuals are classified in terms of financial, human, and social capital (Garcia-Coll et al., 1996; Leyendecker, Harwood, Comparini, & Yalcinkaya, 2005).

Because ethnic minority families are more likely to live under conditions of poverty, it becomes difficult to disentangle culture and ethnicity from contextual factors, such as social class (Le et al., 2008). For example, recent findings suggest differences in parenting behavior (e.g., parental control) distributions across ethnic groups and the extent to which the same parenting behaviors are associated with positive or negative developmental outcomes across groups (Tamis LeMonda, Briggs, McClowry, & Snow, 2009). However, it is not clear whether these differences are due to influences of cultural background or social class. Additionally, most of the extant literature on parenting has used European American, middle-class families as the standard comparative group. As a result, revision of theoretical and conceptual assumptions based on research findings from studies with predominant Western middle-class samples is needed (Garcia Coll & Pachter, 2002). The overarching goal of this study is to examine the role of parental intrusiveness using a culturally sensitive observational measure of parent-child interactions during early childhood to address the following goals: (1) to examine the measurement equivalence of a traditional observational measure of parenting during a semi-structured play task across European American and Latina mothers, (2) to compare the factor structures of traditional versus culturally informed observational measures among Latina mothers, (3) to understand to what extent traditional versus culturally
informed observational assessments of parental intrusiveness and parental guidance differ in terms of their associations with indicators of child adjustment (internalizing and externalizing behaviors), and (4) to examine whether maternal warmth moderates associations between traditional versus culturally informed measures of parental intrusiveness and parental guidance and the adjustment of Latinx children.

**Theoretical Approaches to the Study of Parenting in a Cultural Context**

Cultural, social, and historical factors influence parenting beliefs and behaviors (Garcia Coll et al., 1996). Traditional contextual models applied to family systems and child development such as the ecological framework (Brofenbrenner & Morris, 1998), often consider culture as a part of a macrosystem in which parenting is affected through more proximal factors. Under this assumption, the ecological systems and developmental contextualist theories conceptualize culture as influencing parenting indirectly through proximal and distal factors, rather than directly. In contrast, more recent ecological models have begun to consider culture and ethnicity as a proximal factor and representing a central process within the individual. Additionally, theoretical models have moved away from deficit approaches to include perspectives that address the role of adaptiveness and resilience among diverse populations (Garcia Coll & Pachter, 2002).

**The Integrative Model for the Study of Minority Children**

The integrative model for the study of minority children is considered by many scholars to represent a landmark shift in the way parenting and development of ethnic minority children is conceived (Garcia Coll et al., 1996). The integrative model conceives social class, culture, ethnicity, and race as the “core” rather than the
“periphery” of a theoretical understanding of child development (Garcia Coll et al., 1996). Specifically, the model takes into account how race and ethnicity influence family ecologies and how these ultimately influence the development of competencies among groups who experience marginalization. One of the biggest contributions of this model is that it challenges deficit perspectives of child development among ethnic-racial minority children and families and offers a resilience perspective that underscores the “diversity and strengths” within these groups (Garcia Coll et al., p. 1892; Perez-Brena et al., 2018). For example, the authors introduce the term “adaptive culture,” which refers to “a social system defined by sets of goals, values, and attitudes that differs from the dominant culture” (Garcia Coll et al., 1996, p. 1896). Adaptive culture develops in response to social conditions and is shaped by family cultural backgrounds (e.g. traditions and values). In other words, adaptive culture is constantly evolving and developing in response to contextual demands and as a function of family practices that are guided by unique cultural heritages (e.g. parenting and socialization goals). According to this theory, “adaptive cultural practices” directly influence parenting and child development and could potentially mediate influences of social stratifications on the development of children’s competencies.

The Developmental Niche Theory and Parental Ethnotheories

The developmental niche theory by Super and Harkness, (1986) describes culture as directly influencing parenting through its impact on parental beliefs about normative and non-normative parenting practices, perceptions of children’s developmental needs, and socialization goals. Specifically, the developmental niche is conceptualized in terms
of three components: (1) the physical and social context in which a child lives, (2) childcare and rearing practices based on cultural norms, and (3) the caregiver’s psychology. These three components are viewed as framing the individual’s developmental experience within the broader cultural context (Super & Harkness, 1986). The authors propose that these three components interact with each other as a system but also independently and dynamically with elements from the broader cultural context (Super & Harkness, 1986).

Further elaboration on developmental niche theory resulted in the addition of the concept of parental ethnotheories. Parental ethnotheories refer to culturally based belief systems about parenting and child rearing practices which play a crucial role in shaping parenting behaviors (Harkness & Super, 1992). According to this framework, parents organize children’s experiences and are conceived as active constructors of culture. The authors propose that parental ethnotheories have underlying motivations that function as both goals and interpretations of experiences for parents. As a result, culturally based belief systems shape parenting behaviors and parents’ decisions about children’s socialization goals which in turn are embedded within developmental niches. In sum, this framework underscores that the cultural meanings behind discrete parenting behaviors and the extent to which they have positive or negative effects on child development is, in large part, a function of the ecological niche in which they occur.

Bio-Culture Framework of Parenting

Keller’s bio-culture framework of parenting has also been extremely influential in the study of parenting in context (Keller et al., 2002, 2004, 2009). Guided by LeVine’s
work (1974) focused around the idea that different parenting practices across cultures are due to different developmental goals, Keller proposed that developmental goals can be integrated within sociocultural orientations, such as independence and interdependence. The main difference between these cultural systems is that interdependence prioritizes and maintains the family system, while independence prioritizes success outside the family system (Keller, 2002). According to this framework, independence and interdependence represent cultural systems in which optimal practices and behaviors are defined for specific environments (Keller et al., 2004). As a result, sociocultural orientations are acquired through socialization processes (e.g. socialization goals, parental beliefs, and parenting behaviors) that are likely to differ based on the extent to which cultures emphasize ideas more related to independence or interdependence.

This interpretation of parenting behaviors and ethnotheories goes beyond traditional ideas related to individualistic and collectivistic cultural orientations. Whereas individualism and collectivism have been defined as opposing and mutually exclusive constructs, Keller’s bio-culture framework favors the use of independence and interdependence as an alternative for framing the study of parental ethnotheories. For example, drawing upon her work using observational and ethnographic techniques with middle-class German and Cameroonian Nso mothers, she described two different parenting styles during the first months of life that vary depending on parents’ cultural priorities regarding views of independence versus interdependence (Keller et al., 2004, 2009). The proximal parenting style emphasizes body contact and body stimulation, whereas the distal parenting style is defined in terms of face-to-face engagement and
object stimulation. The proximal parenting style is predominant among cultures in which relatedness, obedience, and hierarchy relations are preferred and is more aligned with interdependence cultural orientations. The distal parenting style emphasizes autonomy, separateness, and individuation and is more characteristic of independent cultural orientations (Keller et al., 2009). In sum, the bio-culture framework of parenting emphasizes connections among socialization goals within a given culture and the role of parental ethnotheories as directly shaping parenting behaviors (Tamis-LeMonda et al., 2007).

Cultural Variability in Parenting: Collectivism versus Individualism

Even though the use of the traditional constructs of individualism and collectivism have been criticized for offering a simplistic view of parenting (Tamis-LeMonda, 2003), they have been widely used as a theoretical framework to guide research questions and understand differences in parenting practices and behaviors across cultural groups (e.g. Grusec et al., 1997; Harwood, Leyendecker, Carlson, Asencio, & Miller, 2002). Individualism refers to cultures in which the development of autonomy and independence are highly valued, whereas collectivism refers to cultures that value group cohesion, loyalty, and protection of the extended family (Hofstede, 2011). These two dimensions have implications for parents’ beliefs regarding socialization goals and children’s behaviors which ultimately influence parenting behaviors. Parents from individualistic cultures (e.g. European American) are more likely to emphasize independence, self-confidence, and the developmental of personal skills. In contrast, parents from collectivistic cultures (e.g. Puerto Rican) are more likely to adopt a sociocentric
perspective in which obedience, proper demeanor, and harmony are highly valued (Harwood, Schoelmerich, Ventura-Cook, Schulze, & Wilson, 1996). As noted by Keller’s bioculture of parenting, mothers from interdependent sociocultural orientations engage in greater body contact and body stimulation with their infants, compared to mothers from independent sociocultural orientations who are more likely to engage in greater face-to-face interactions and object stimulation (Keller et al., 2004).

A different approach is proposed by Tamis-LeMonda et al. (2007), who suggests that value systems and socialization goals associated with individualism or independent and collectivism or interdependence typologies may coexist. As a result, the developmental goals of autonomy and promotion of relatedness are not mutually exclusive, but rather can occur simultaneously. This may be particularly true for immigrant families that raise their children in the United States, in which endorsement of interdependent values and exposure to independent values are likely to coexist. Specifically, this work suggests that cultural values and socialization goals can co-occur in a conflictive, additive, or functional dependence pattern. Conflictive occurs when value systems and socialization goals associated with collectivism interfere with individualistic values and goals, and/or vice versa. For example, research has shown that immigrant parents from collectivistic societies often raise concerns such that the individualistic orientation in the US can make their children become more selfish and less likely to care for their parents (Tamis-LeMonda et al., 2007). Additive occurs when both collectivistic and individualistic value systems and developmental goals are promoted. In other words, cultural values of respect and obedience can coexist with the developmental
goal of autonomy. In contrast, functional dependence refers to situations in which collectivism and associated values and goals are seen as a pathway to individualism and development of autonomy, and/or vice versa. For example, parents may endorse relatedness and family cohesion as a way to promote self-development and ultimately succeed as an individual. Tamis-LeMonda and colleagues suggest that these forms may change over time in response to different situations, socio-political and economic contexts, and across children’s developmental periods.

A Cultural Framework for Latinx Parenting and Child Functioning

Most of the extant literature on “normative” parenting is based on European American, middle-class samples, and few studies have examined how parenting behaviors are shaped by cultural factors across ethnic groups (Garcia Coll & Pachter, 2002). The majority of studies that have are based on comparisons to the standard group based on Western assumptions of parenting. Understanding parenting behaviors within the large sociocultural context is particularly important to better understand associations between parenting behaviors and child functioning. However, most studies have simply examined whether parenting behaviors differ across ethnic groups, without further examination of the cultural context in which such behaviors are embedded.

Even though Ainsworth’s work (1978) underscored the importance of understanding the cultural context in which parenting behaviors occur, European American parental ethnotheories have resulted in assumptions that parental control is intrusive in nature and has detrimental effects in terms of child adjustment (Carlson & Hardwood, 2003). However, in order to understand the role of parental control across
cultural groups, it is important to integrate ideas from theoretical approaches that conceive culture as directly influencing parenting behaviors through the role of parental ethnotheories and socialization goals (Garcia-Coll et al., 1996; Harkness & Super, 1992; Keller, 2002). As some scholars have suggested, parenting behaviors are culturally constructed through the influence of socialization goals, values, and cultural beliefs and defined by the cultural context within which they are embedded (Carlson & Harwood, 2003; Keller, 2002). For example, for cultural groups that value interdependence over individual autonomy, parenting behaviors that aim to structure and guide young children’s environment may be associated with more adaptive behaviors even if perceived as controlling from a Western perspective. This suggests that parenting behaviors may have different functionalities across cultural groups that align more with their cultural values and socialization goals (Deater-Deckard et al., 2011). Specific to parental control, it has been suggested that it may have different meanings across cultures, due to the influence of different cultural values, underlying parental motivations, and socialization goals (Ispa et al., 2004).

Previous research on parenting in Latinx families has focused on the role of cultural values as key features for understanding Latinx parenting and associated socialization goals. Two cultural values have been identified as central among this cultural group. The cultural value of familismo endorses a strong family orientation and maintenance of family ties, whereas the cultural value of respeto emphasizes obedience and respect for parental authorities and elderly and the importance of showing politeness and proper demeanor (Calzada, Fernandez, & Cortes, 2010; Halgunseth et al., 2006). As
a general construct, *respeto* has been defined as: “knowing the level of courtesy and decorum required in a given situation in relation to other people of a particular age, sex and social status” (Harwood, Miller, & Irizarry, 1995, p. 98) and as a way to maintain harmony within the extended family (Marin & Marin, 1991). Both cultural values have been described as the foundation for successful child development and the primary focus of child rearing practices among Latinx families (Calzada et al., 2010). For example, in a study by Harwood and colleagues, Puerto Rican mothers with infants placed greater value on the socialization goals of *respeto*, including obedience and good behavior, than socialization goals related to personal development, such as self-confidence and independence. Additionally, these mothers were more likely to discourage their children’s autonomous and exploratory behaviors, were higher in parental authority, and engaged in more direct manipulations such as physical restraint compared with European American mothers, regardless of socioeconomic status (Harwood, 1992; Harwood et al., 1999). Calzada et al. (2010) examined behavioral manifestations of *respeto* within a group of Mexican and Dominican mother-infant dyads. The authors found 4 subdomains of *respeto*: (a) obedience, including behaviors such as conformity to authority, following commands, and accepting rules without questions; (b) deference, related to the hierarchical aspect of *respeto*, such as *respeto* towards the grandparents often seen as authority figures; (c) decorum, including behaviors defines to be appropriate during social interactions, and (d) public behavior, related to specific boundaries of appropriate behaviors in public situations.
Studies have found that parents who more strongly endorse cultural values of *respeto* and *familismo* are more likely to use physical control with their children (Carlson & Harwood, 2003) and that such behaviors may underlie caring parental motivations (Halgunseth et al., 2006). The use of controlling behaviors is consistent with socialization goals that emphasize obedience, respect, and family cohesion within more sociocentric cultural groups. It has been suggested that becoming socially competent within Latinx families requires that children comply with parental demands and show respect to parental authority, compared to European American, middle-class families that are more likely to emphasize the development of autonomy and independence (Livas-Dlott et al., 2010). As a result, parental behaviors characterized by directives, physical manipulation, and rules may be viewed by Latinx parents in terms of efforts to raise an adjusted child, rather than interfering with the child’s development of autonomy (Carlson & Hardwood, 2003).

Previous work has underscored the importance of taking into consideration the emotional context within which parental control is displayed across cultural groups. Compared to European American parents, Latinx and African American parents are more likely to use parental control combined with warmth and responsive behaviors (Clincy & Mills-Koonce, 2013; Tamis-LeMonda et al., 2009). As a result, it is not surprising, that within these groups parental intrusiveness and control are not consistently associated with negative child developmental outcomes. Understanding the processes and under what conditions culture influences parenting behaviors and disentangling cultural and ethnic differences from contextual differences may be of particular relevance for the study of
Latinx families. Given that many ethnic minority parents are also immigrants; it is especially important to understand the unique conditions under which they operate. For example, differences in parenting behaviors have been documented in relation to acculturation status, which refers to the extent to which cultural practices have shifted as a result of exposure to a host culture (Hill et al., 2003; Fuller & Garcia Coll, 2010). Specifically, it has been suggested that parents who are more acculturated are more likely to use parenting practices that align with European American values and practices, such as lower levels of parental control (Barajas-Gonzalez et al., 2018; Ispa et al., 2004; Wood & Grau, 2018). The unique conditions and cultures within which families are embedded needs to be understood when studying parenting behaviors across cultural groups (Garcia Coll & Pachter, 2002). The use of culturally informed, theoretically driven frameworks is needed to better understand parenting behaviors and its effects on child functioning in families from different ethnic backgrounds.

The current study is guided by parental ethnotheories and Keller’s bioculture of parenting frameworks. Parental ethnotheories suggests that parental belief systems about child rearing differ across cultures and ultimately influence parental behaviors. Keller’s bioculture framework indicates that developmental goals can be integrated within sociocultural orientations, such as independence and interdependence, and emphasizes connections among socialization goals as well as the role of parental ethnotheories in directly shaping parenting behaviors. The current study incorporates these two frameworks into an understanding of parental intrusiveness among Latinx parents by suggesting that parental belief systems that emphasize socialization goals of familismo
and *respeto*, aligned within an interdependent sociocultural orientation, will influence how parental intrusiveness is expressed, the motivations behind such behaviors, and its effects on children’s adjustment.
CHAPTER III
LITERATURE REVIEW

In the United States (US), Latinxs are the largest minority group and make up over 17.6% of the population (U.S. Census Bureau, 2017). Within this group, a total of 57.5% are married parents of children younger than 18, and the majority of children have been born in the United States (U.S. Census Bureau, 2016). Latinxs constitute one of the fastest growing ethnic groups in the US, and it has been estimated that by 2065 24% of the U.S. population will be Latino/a (Pew Research Center, 2015). Given the considerable projected growth of Latinxs in the US, there is a need for increased understanding regarding the nature of parenting behaviors within Latinx families and their effects on child development, taking into consideration the unique cultural context within which parent-child interactions occur.

Although all parents face stressors, Latinx immigrant parents are more likely to live under conditions of poverty and have lower levels of education compared to other ethnic groups (Ornelas, Perreira, Beeber, & Maxwell, 2009). Due to exposure to a variety of contextual stressors (e.g. poverty, poor quality neighborhood, language barriers, cultural stressors) they are at greater risk for experiencing lifetime prevalence of depression (Breslau, Kendler, Su, Gaxiola-Aguilar, & Kessler, 2005), family and acculturation stress (White, Roosa, Weaver, & Nair, 2009), and unhealthy behaviors or lifestyles (Morales, Lara, Kington, Valdez, & Escarce, 2007), all of which might
ultimately compromise parenting quality. In addition to contextual stressors, differences in cultural values, parental beliefs, and child socialization goals influence how parenting behaviors are expressed, their function, and their impact on children’s development (Super & Harkness, 1996; Garcia-Coll et al., 1996). However, the majority of research on parenting and its effects on children’s adjustment within Latinx families has been conducted based on theoretical and empirical work guided by observations of European American, middle-class families. For example, while it has been widely accepted that parenting behaviors that are intrusive in nature are detrimental for child development, studies with samples from different cultural backgrounds have yielded mixed or null results. Inconsistent conceptualization and measurement of parental intrusiveness across studies, lack of consideration of the cultural and emotional contexts in which parent-child interactions occur, and a tendency to combine items measuring intrusiveness with items measuring hostile and negative behaviors have limited understanding regarding how parental intrusiveness relates to children’s adjustment, particularly within Latinx families.

**Historical Overview of Parental Intrusiveness and Control**

The constructs of parental intrusiveness and control were initially developed based on observations of European American and middle-class families (Barber, 1996; Carlson & Harwood, 2003; Ispa et al., 2004, 2013; Tamis-LeMonda et al., 2009). Within this literature, there is a lack of consistency regarding how parental intrusiveness and control have been conceptualized and measured across research studies. Given recent findings suggesting differences in the distributions of parental intrusiveness and controlling behaviors, and the extent to which such behaviors are associated with positive
or negative developmental outcomes, across cultural groups (Domenech Rodriguez, Dovonick, Crowley, 2009; Carlson & Hardwood, 2003; Grusec & Goodnow, 1994), reexamination of these constructs and how they have been measured is particularly important.

Historically, Baldwin (1948) was one of the first researchers to define control as emphasizing “the existence of restrictions upon behavior which are clearly conveyed to the child” (p. 130). This definition of control refers to the limits and restrictions placed on children’s behaviors as a positive dimension of parenting. In contrast, Becker (1964) defined control as having “restrictions and strict enforcement of demands in the areas of play, modesty behavior, table manners, toilet training, neatness, orderliness, care of household furniture, noise, obedience, aggression to siblings, aggression to peers, and aggression to parents” (p. 174). In contrast to Baldwin’s views, Becker perceived control as a negative dimension, with parental permissiveness being more desirable. Additionally, Becker’s definition of control reflected both the existence of rule setting and strategies for enforcing rules, whereas for Baldwin these represented two different dimensions. The work of Baldwin and Becker illustrates how definitions of parental control have long been problematic.

Some of the most influential work focused on the conceptualization of parental control involves the four typologies developed by Baumrind based on levels of warmth and control (Baumrind, 1966). In her initial work, Baumrind distinguished authoritative and authoritarian types of control, later reframed in terms of a two-dimensional conceptualization based on levels of demandingness and responsiveness (Baumrind,
Demandingness was defined as the “claims parents make on the child to become integrated into the family whole by making maturity demands, supervision, disciplinary efforts and willingness to confront the child who disobeys” (p. 411). Demandingness described in this manner was combined with parental responsiveness to differentiate between parents who were authoritative (high in demandingness and responsiveness) and those whose were authoritarian (low in responsiveness and high in demandingness).

Revisions and elaborations of Baumrind’s work provided distinctions between coercive and confrontive control styles, previously conflated within the authoritative and authoritarian parenting typologies (Baumrind, Larzelere, & Owens, 2010; Baumrind, 2012). Both authoritative and authoritarian parents assert some level of power and control; however, they differ in that authoritative parents assert power that is confrontive (i.e., reasoned, outcome-oriented, regulatory), whereas authoritarian parents assert power that is coercive (i.e., arbitrary, absolute, maintains hierarchical status, involves use of threats). Baumrind suggested that high coercive control, but not confrontive control places children at increased risk for maladjustment (Baumrind, 2012). In fact, she suggested that confrontive power assertion might be beneficial when not confounded with coercive power assertion. Even though Baumrind’s understanding of parental control has evolved over the years, many researchers still use ideas from her initial views of parenting without making further distinctions among parents who assert confrontive versus coercive types of control. Early conceptualizations of parenting styles were developed using middle-class European American families and based on family values and cultural norms that may not apply to families from different cultural backgrounds.
(Domenech Rodriguez et al., 2009). However, few scholars have incorporated consideration of cultural differences in parental use of control in their research studies.

More recent perspectives on parental control have made further distinctions within this construct, such as considering differences between psychological and behavioral control (Barber, 1996). Parental behavioral control refers to parental control over the child’s behavior, whereas parental psychological control refers to manipulation of the child’s thoughts and emotions (Barber, 1996). Even though there is a general consensus that psychological control is associated with negative child developmental outcomes, there is some inconsistency regarding effects of behavioral control on child developmental outcomes. Whereas some studies have indicated that behavioral control is associated with increased risk for maladjustment, others have found negative associations or null effects (Barber, 1996; Grolnick, 2002). Similar to parental psychological control is the construct of parental intrusiveness, which refers to the extent to which parents exert control over children in a way that undermines the development of autonomy (Ainsworth et al., 1978). Generally, parental intrusiveness has been theorized to be detrimental for children’s development because it undermines opportunities for autonomy development and engagement with their environments (Graziano, Keane, & Calkins, 2010). Whether parental intrusiveness is associated with optimal or poor developmental outcomes may depend on the cultural backgrounds of families being considered.
Conceptualization and Measurement of Parental Intrusiveness in Early Childhood

Defining Parental Intrusiveness

Different research studies have used different terminologies, conceptualizations, and measures of parental intrusiveness. Researchers who refer to “control” may be referring to harsh discipline and punishment, or to intrusive and directive behaviors. For example, some researchers have defined physical control in terms of parental physical contact that aims to manipulate, limit, or control the child’s movements in an intrusive manner (Carlson & Harwood, 2003). Others have focused on power assertive practices, distinguishing parents who aim to provide guidance using low power assertive techniques (e.g., direct verbal or nonverbal commands, gestures, redirecting the child’s behaviors) from parents who engage in high power assertive practices characterized by negative control (e.g., manipulation, intrusion, punishment occurring in the presence of negative affect; Donovan, Leavitt, Walsh, 2000; Livas-Dlott et al., 2010). Studies have also differed in the extent to which they have relied on parental self-reports (Baumrind et al., 2010) or observational assessments (Longest et al., 2007) to assess these constructs during early childhood.

Definitions of parental intrusiveness within the context of early parent-child interactions have mostly been guided by the work of Ainsworth et al. (1978) and have conceptualized intrusiveness as an exertion of parental control or interference characterized by the lack of respect for children’s autonomy, wishes, and desires. Ainsworth and colleagues used a cooperation-interference scale to assess intrusiveness. Based on this scale, interference and cooperation are opposite ends of a single continuum.
in which mothers who are high in interference engage in controlling behaviors, whereas mothers on the other end of the continuum are defined as “conspicuously cooperative” and seem to guide rather than to control children’s behavior. This conceptualization can be problematic given that parents who are not intrusive do not necessarily engage in guidance but rather can display fewer intrusive behaviors as a result of high levels of detachment.

In studies that have used Ainsworth’s definition, parental intrusiveness is considered to involve parental behaviors that interfere with children’s efforts (Adam, Gunnar, & Takana, 2004; Ispa et al., 2004) and the use of noncontingent physical behaviors and verbal directives that limit children’s activity (Clincy & Mills-Koonce, 2013). Other researchers have included in their definitions of intrusiveness indicators that include excessive physical or affectionate contact (Adam et al., 2004; Eisenberg, Leavitt, & Walsh, 2015), overstimulation with toys (Eisenberg et al., 2015, Ispa et al., 2004; Stevenson et al., 2013), forcing children to engage in an activity even if they show no interest (Stevenson & Crnic, 2013), or helping even when children may not need assistance (Eisenberg et al., 2015; Tamis-LeMonda et al., 2009; Wood, 2006).

In sum, definitions of intrusiveness and the indicators that describe intrusive parents vary from study to study and the different indicators of intrusiveness may actually have different implications for children’s development. However, it has been suggested that only parenting behaviors that are intrusive, dominating, and coercive should be considered as controlling, whereas parenting behaviors that provide guidance should be considered as structure (Baumrind, 2012; Grolnick, 2002; Scharf & Goldner, 2018). It is
possible that the extent to which a specific behavior represents intrusiveness or guidance may differ across cultural groups and ultimately have different implications for children’s development.

“Naming” the Construct of Intrusiveness

Inconsistency in definitions and operationalization of parental intrusiveness is also reflected in the ways in which researchers have labeled this construct. Related to the lack of consistency in defining and operationalizing parental intrusiveness, some studies have used different labels to refer to the construct of parental intrusiveness. For example, Ispa et al. (2013) sought to label “parental behavior that disregards or interferes with children’s autonomous activity and/or that is overwhelming and not contingent on children’s behaviors” (p. 58). In light of work that has suggested that the effects of parental intrusiveness on children may vary by ethnicity, Ispa and colleagues chose to use the word “directiveness” to describe this behavior in an effort to avoid the negative connotations associated with the word “intrusive.” Ispa and colleagues only changed the “label” of their construct without making changes in the conceptualization or measurement of parental intrusiveness. In other words, the authors used a definition of intrusiveness based on Ainsworth’s work, but labeled the construct as “directiveness” rather than “intrusiveness.” Other researchers have also used the word “directive” to refer to this type of parental control. For example, Guzell and Vernon-Feagans, (2004) indicated that not all directive behaviors should be considered negative but noted that a directive style is not typical in the context of parent-infant play. The authors included the following indicators in their operationalization of parental directive behavior: adult
centered behaviors, lack of attention to children’s interests, attempts to do something for children involving physical manipulation, and persistence in the use of verbal and nonverbal directives. In contrast, Stevenson and Crnic (2013) differentiated directive and intrusive parenting as two different constructs. Directive parenting was defined as verbal and nonverbal instances in which the parent provides control and structure accompanied by information and aims to provide high-quality scaffolding when the child needs assistance. Intrusive parenting was defined as verbal and nonverbal behaviors that restrict children’s activity and interfere with child efforts. Whereas Ispa et al. (2013) used the term “directive” as synonymous with “intrusive,” Stevenson and Crnic (2013) emphasized a key difference between these two: “although intrusive parenting is directive in nature, a key difference between intrusiveness and directiveness is that intrusive behaviors obstruct children’s activities while directive behaviors do not” (p. 502).

Similarly, Longest et al. (2007) differentiated between positive control/directiveness and negative control/Restrictiveness. Directiveness (positive control) was defined as the use of control strategies that are non-coercive in nature, task oriented, and characterized by a child agenda. In contrast, restrictiveness (negative control) was defined in terms of the use of control strategies that are coercive, harsh, and characterized by a parent agenda. The use of similar labels for studying different constructs, or different labels when studying the same construct, can be problematic when interpreting findings across research studies.

An additional limitation of this literature is that multiple studies have combined measures of intrusiveness with hostile and negative dimensions of parenting (e.g. Barnett
& Scaramella, 2017; Wood, 2006). Given work suggesting that parental intrusiveness is not always accompanied by expressions of anger or hostility across cultural groups, such an approach is likely to confuse issues related to the manner in which different types of power assertion may be associated with children’s adjustment. Finally, whereas most studies of parental intrusiveness have been conducted with European American samples, those that included participants from different cultural backgrounds have typically failed to discuss the extent to which cultural factors and their influence on parental ethnotheories impact parenting behaviors. In sum, inconsistent conceptualization and measurement across studies, lack of considerations of the cultural context in which parent-child interactions occur, and the tendency to combine measures of intrusiveness with hostile and negative parenting dimensions all limit understanding regarding the nature of parental intrusiveness and its links to children’s adjustment (McFadden & Tamis-LeMonda, 2013).

**Adjustment Problems in Early Childhood**

Research focused on adjustment problems in young children has typically recognized clusters of behaviors that are labeled as internalizing behaviors and externalizing behaviors (Bagner, Rodriguez, Blake, Linares, & Carter, 2012). Internalizing behaviors include behaviors such as social withdrawal, shyness, somatic complaints, anxiety, and excessive worries, whereas externalizing behaviors include aggression, hostility, attention problems, and noncompliant behaviors (Achenbach, Ivanova, & Rescorla, 2017). Compared to internalizing behaviors, externalizing behaviors are more stable and persistent over time; however, there is more change and
less continuity for externalizing behaviors assessed at 12 months than in those assessed at preschool age (Van Zeil et al., 2006). Early presentations of both internalizing and externalizing behaviors characterized by persistent trajectories over time increase the likelihood for later psychiatric disorders (Essex et al., 2009). Additionally, comorbid presentations of internalizing and externalizing behaviors have the greatest stability and predict the highest levels of impairment over time (Eisenberg et al., 2001). Prevalence estimates of emotional and behavioral problems in 2 and 3 years olds have ranged from 7% to 24% using parents’ reports (Briggs-Gowan, Carter, Skuban, Horwitz, 2001). Among 11 to 36 months’ children, estimates of high social-emotional and behavioral problems have ranged from 39.8% to 58.6% based on parents’ reports using validated screening measures. Specific to externalizing behaviors, more than three-fourths of externalizing behaviors occurred in slightly more than 10% of a sample of 12 months old (Van Zeijil et al., 2006).

Rates of internalizing and externalizing behaviors appear to vary by ethnic group, with some studies suggesting that Latinx children and youth are at increased risk for internalizing and externalizing behaviors (Bamaca-Colbert et al., 2012; Flores et al., 2002). However, little work has focused on the prevalence and developmental trajectories of adjustment problems during early childhood among Latinx children. Given the high prevalence and stability over time of adjustment problems in early childhood and its associations with later impairment, and the dearth of research focused on trajectories of problem behaviors among Latinx children during early childhood,
understanding to what extent and under what conditions parenting behaviors influence the development of adjustment problems within this group is of particular importance.

It should be noted that defining behavioral and emotional problems across time can be challenging due to the rapid pace of developmental transitions and growth (Carter, Briggs-Gowan, & Davis, 2004) and variations in the developmental appropriateness of different behaviors at different points in development (Bagner et al., 2012). For example, young children may display temper tantrums as a way to assert independence, but among older children these same behaviors are an indicator of behavioral problems. At the same time, internalizing and externalizing behaviors may be the result of exposure to stressful life events, such as the birth of a sibling or start of childcare rather than being indicative of long-term adjustment difficulties (Campbell et al., 2016). As a result, many parents and professionals believe that early presentations of adjustment problems are transitory and will decrease over time (Briggs-Gowan, Carter, Bosson-Heenan, Guyer, & Horwitz, 2006). Additionally, during this developmental period there is great variability in parental knowledge and expectations about emotional and behavioral problems in general. Given rapid developmental changes and variability in parental expectations, reliable identification and measurement of maladjustment during early childhood may be particularly difficult. The use of reliable and valid measures that include general assessments of adjustment problems, such internalizing and externalizing behaviors, during early childhood are particularly important for prevention and intervention efforts (Carter et al., 2004).
Links between Parental Intrusiveness and Young Children’s Adjustment

There is considerable research suggesting that parental intrusiveness is associated with negative child outcomes. Researchers have explained these findings by suggesting that this type of parenting undermines children’s opportunities for autonomy development and behavioral and emotional regulation (e.g. Graziano et al., 2010). As a result, children with intrusive parents are likely to have fewer opportunities to learn from the environment and engage in self-regulatory behaviors. Additionally, if parental intrusive behaviors are perceived as hostile by the child, they may compromise children’s ability to physiological regulate, undermining learning and socialization experiences (Eisenberg et al., 2015).

Parental Intrusiveness and Children’s Adjustment

Studies that have used predominant European American samples have suggested that parental intrusiveness has negative implications for child development, including emotional and behavioral problems, low effortful control, defensiveness, non-compliant behaviors, avoidant attachments, and other indicators of adjustment problems (Carlson & Harwood, 2003; Gueron-Sela et al., 2017; Guzell & Vernon-Feagans, 2004; Ispa et al., 2004; Tamis-LeMonda et al., 2004; Taylor, Eisenberg, Spinrad, & Widaman, 2013). For example, findings from a large national study using an observational assessment of harsh-intrusive parenting behaviors during a mother-child structured play task indicated that harsh-intrusive parenting behaviors at age 5 was associated with greater internalizing behaviors when children were 6 and 7 years old (Gueron-Sela et al., 2017). Similarly, Tamis-LeMonda et al (2004) found that mothers’ and fathers’ parental intrusiveness at 24
months was negatively associated with children’s language and cognitive development at 36 months. However, not all studies have consistently shown positive associations between parental intrusiveness and child negative outcomes, suggesting that the effects of parental intrusiveness may differ across ethnic groups.

**Parental Intrusiveness and Children’s Adjustment within Latinx Families**

The lack of associations between parental intrusiveness and negative child outcomes is particularly evident in studies that have included Latinx families in their samples, with some researchers concluding that parental intrusiveness among Latina mothers is not always harmful and can be beneficial depending on the context and child adjustment outcome considered (Carlson & Harwood, 2003; Ispa et al., 2004; Wood & Grau, 2018). However, research examining the relationship between parental intrusiveness and controlling behaviors and young children’s adjustment in Latinx families has been scarce and results are mixed. For example, whereas trajectories of increasing intrusiveness have been associated with negative child behaviors towards mothers across ethnic groups, this association is smaller for Mexican American children compared to European American and African American children (Ispa et al., 2013). Additionally, maternal physical control has been associated with secure attachment in Puerto Rican toddlers (Carlson & Harwood, 2003), and mothers who engaged in “abrupt-interfering pick-ups” were more likely to have securely attached infants in a sample of Puerto Rican and Dominican immigrant families (Fracasso, Busch-Rossnagel, & Fisher, 1994).
Among immigrant Latinx parents, it has been suggested that differences in levels of acculturation may contribute to differences in mean levels of parental intrusiveness and its effects on children’s adjustment (Hill, Bush, & Roosa, 2003; Ispa et al., 2004). Even though findings are mixed, some studies have indicated that among less acculturated mothers, parental intrusiveness may have fewer negative or positive implications for children’s development, compared to more acculturated mothers (Barajas-Gonzalez et al., 2018; Ispa et al., 2004; Wood & Grau, 2018). In a recent study by Wood and Grau (2018), associations between maternal control and child dysregulated defiance were examined within the cultural context of Puerto Rican adolescent mothers and their toddlers. Person-centered analyses revealed four different parenting profiles: enculturated/controlling, bicultural/guiding, bicultural/controlling, and acculturated/controlling. Findings indicated that children in the acculturated/controlling subgroup showed greater defiance toward their mothers than children in the enculturated/controlling subgroup. In fact, children in both the enculturated/controlling and bicultural/guiding subgroups showed the lowest levels of defiance, compared to the other two subgroups. These findings suggest that for highly enculturated Puerto Rican mothers who engaged in higher levels of control, lower levels of guidance, and low positive affect, the effects on child defiance were similar to those for bicultural mothers who engaged in higher levels of guidance than control and higher levels of positive affect. In other words, different parenting strategies can lead to similar levels of child adjustment dependent on the context in which parent-child interactions occur. In sum, some studies suggest that parental intrusiveness and control may be less detrimental for
children’s functioning among Latinx immigrant families with strong cultural orientations; however, other studies have found neutral or null results. For example, some studies have found no associations between positive and negative physical control and children’s non-compliance or negative talk towards their mothers, suggesting the need to distinguish parental intrusive behaviors that are affectively positive from those that are more negative (Martinez, 1988).

Some scholars have attributed this discrepancy in findings to differences in the meaning and expression of parental intrusiveness across cultural groups. Among Western families, the development of self-expression is key to becoming a successful member of the family system. Children are seen as having their own voices, desires, and wishes. Thus, socialization strategies include a focus on the support of psychological autonomy from early ages (Keller, 2002). For example, infants are treated as individuals whose wishes, preferences, and intentions need to be responded to and respected by sensitive caregivers (Ainsworth et al., 1978). In contrast, among non-western families, conformity with family values, obedience, respect for the elderly, self-control, good behavior, and maintenance of parental authority are central socialization goals (Keller et al., 2004). In line with a collectivistic orientation, Latina mothers are more likely to use directives and controlling behaviors in their interactions with children (Grau, Azmitia, & Quattlebaum, 2009). Given that the meaning behind discrete parenting behaviors is defined by the culture within which such behaviors are embedded (Harkness & Super, 1996), the use of directive and controlling behaviors within Latinx families may be a strategy to foster culturally relevant socialization goals of familism (by which children
prioritization of the family system is emphasized) and respeto (by which children’s obedience and good manners are stressed; Calzada, Huang, Anicama, Fernandez, & Bortman, 2012).

Additionally, it has been suggested that teaching young children to be respectful, well-behaved, and attentive may require greater use of controlling strategies (e.g., use of physical manipulation and directives), than is required for teaching children to be autonomous and independent (Carlson & Harwood, 2003). Within Latinx families, parenting practices characterized by high levels of control are frequently observed and often considered the best practices for child rearing (Ispa et al., 2004; Tamis-LaMonda et al., 2009). Some researchers have suggested that given that parental control is normative within this cultural group, children may not perceive these behaviors as intrusive but rather as expressions of love and care (Halgunseth et al., 2006), particularly when they are combined with high levels of warmth. The normative hypothesis is an important explanation to consider when trying to understand the influence of controlling behaviors on older children’s adjustment. However, very young children may not be able to interpret intrusive behaviors as caring rather than coercive due to their lack of cognitive skills, suggesting that the normative hypothesis may not be as relevant during this developmental period (Grusec & Goodnow, 1994).

**Maternal Warmth as a Moderator**

Several scholars have proposed that associations between parental intrusiveness and child adjustment within Latinx families, may be different than within other ethnic groups due to Latinx parents’ use of intrusive behaviors in combination with warmth.
Parental warmth refers to expressions of love, affection, support, and positive regard for the child (Maccoby & Martin, 1983). Within the proposed study, maternal warmth is defined as the extent to which parents display positive feelings toward their child during parent-child interactions including expressions of physical affection, speaking in a warm tone of voice, smiling, praising the child, and displaying general enjoyment of the child. It has been suggested that within collectivistic cultures, parental intrusiveness is not necessarily accompanied by low levels of warmth (Grusec et al., 1997). Within European American families, correlations between parental warmth and intrusiveness tend to be negative. In contrast, intrusiveness and parental warmth tend to co-occur within Latino families (Tamis-LeMonda et al., 2008). Additionally, Latinx parents are more likely to engage in affectionate behaviors (i.e. hugging and kissing) even in the presence of controlling behaviors (Halgunseth & Ispa, 2012). This has led to some researchers defining Latinx parenting as “protective” rather than authoritarian (Domenech Rodríguez, Dovonick, & Crowley, 2009). A growing body of research suggests that maternal warmth may moderate the associations between parental control, of which intrusiveness is a component, and children’s adjustment (McLoyd & Smith, 2002) and that the affective context within which intrusive parenting occurs may be a key determinant of its short and long-term impact (Ispa et al., 2004).

Although only a few studies have focused specifically on parental intrusiveness within the context of parental warmth, a number of studies have considered parental warmth as a moderator of associations between controlling behaviors, of which intrusiveness is a component, and indicators of child adjustment. In a sample of African
American and Latina low-income mother-infant dyads, infants who experienced greater maternal responsiveness and lower intrusiveness showed the most positive cognitive outcomes. For infants exposed to low maternal responsiveness, those experiencing high intrusiveness experienced more positive cognitive outcomes than those experiencing low intrusiveness (McFadden & Tamis-Lemonda, 2013). Similar findings were reported in a sample of Mexican American mothers and their adolescents, in which associations between harsh discipline and externalizing behaviors became nonsignificant for mothers who displayed high levels of warmth (German, Gonzales, McClain, Dumka, & Millsap, 2013).

Ispa and colleagues (2004) found that within African American families, maternal intrusiveness, as defined by Ainsworth and colleagues (1978), was associated with toddler’s display of negativity towards their mothers only for mothers who showed low levels of maternal warmth. However, this effect was not observed within European and Mexican American families. In another study of children 4-5 years of age from European American, African American, and Latinx backgrounds, spanking was associated with an increase in behavioral problems over time across all ethnic groups, but only in the context of low maternal emotional support (McLoyd & Smith, 2002). Barajas-Gonzalez et al. (2018) examined whether parental warmth and respeto moderated associations between spanking and verbal punishment, and Latinx children’s adjustment. Findings indicated that greater use of verbal punishment was associated with higher levels of externalizing behaviors and that this association was not moderated by parental warmth or respeto.
In sum, whereas some studies have indicated that maternal warmth moderates associations between parental intrusiveness or other forms of parental control (i.e. spanking) and children’s adjustment, others have not found empirical support for this premise. Additionally, the majority of studies have been conducted with a focus on the effects of spanking and punishment, and only a few have focused on early childhood and families from Latinx ethnic backgrounds. The proposed study addresses these gaps by examining whether maternal warmth moderates associations between parental intrusiveness and parental guidance and young children’s adjustment using a culturally informed understanding of Latinx parenting.

**Parental Intrusiveness and Guidance within Latinx Families:**

**Measurement Implications**

Culturally informed research requires that development of measures should reflect the nature of the underlying construct and be guided by an understanding of the culture within which the measure will be used (Knight, Tein, Prost, & Gonzales, 2002). Traditional observational coding systems used to assess parenting behaviors have been developed based on observations of European American, middle class families (Kerig, 2001). As a result, these coding systems are based on underlying constructs that reflect Western perceptions of parenting. This may make it problematic to applying them to other cultural groups. For example, these coding systems may misestimate cultural differences and reinforce conclusions based on deficit models of ethnic minority parenting. Even though these concerns are widely acknowledged, studies often fail to
adapt coding systems in ways that are congruent with parenting constructs and cultural contexts for a given ethnic group.

Given inconsistent findings in the literature regarding the effects of parental intrusiveness on Latinx children’s adjustment, further examination of how intrusiveness has been conceptualized and measured is particularly important. As mentioned earlier, measures of parental intrusiveness and control have been developed based on conceptualizations of intrusiveness that reflect the perspectives of European American and middle-class families (Barber, 1996; Carlson & Harwood, 2003; Ispa et al., 2004, 2013; Tamis-LeMonda et al., 2009). As a result, intrusiveness is typically defined in terms of parenting behaviors that interfere with children’s development of autonomy (Ainsworth et al., 1978). Even though this may be accurate based on a Western emphasis on individual autonomy and “following the child’s lead” by using less guidance and control (Carlson & Harwood, 2003; p. 56), the development of autonomy and becoming independent may not be primary socialization goals for Latinx parents with young children. In fact, becoming socially competent may be indicated by compliance to parental demands, displaying respect, and participating within the family system. The parenting behaviors that support such socialization goals may be perceived as controlling by outsiders (Carlson & Harwood, 2003; Livas-Dlott et al., 2010). As a result, measures that code parents who do not promote autonomy as intrusive may not provide an accurate representation of Latinx parenting. For example, compared to European American mothers who tend to use suggestions to structure children’s behaviors, Puerto Rican mothers are more likely to use commands, physical manipulation, and verbal directives to
provide structure within their interactions with children (Bornstein, 2012). Direct commands and physical manipulations are often used with the goal of correcting children’s behaviors and teaching socialization goals aligned with the Latinx culture, rather than intended to undermine the development of the child’s autonomy. As a result, a parental behavior defined as intrusive through a Western lens may not necessarily be perceived in similar ways across cultural groups.

A related issue is that traditional theories of parenting that assume parental control is negative have failed to recognize Latinx norms and the existence of different types of control. For example, parental control that is characterized by pressure, intrusion, and lack of respect is likely to lead to negative consequences for children’s development (Grolnick, 2002). However, parenting behaviors that are characterized by rules, limit setting, and guidelines for positive development should be interpreted as guidance and structure rather than as an intrusive type of control. As Grolnick (2002) explained, there is a difference between control meaning “having control” versus control meaning “controlling children.” Yet most studies have failed to include examinations of controlling behaviors that are more positive in nature, guided by child-centered motivations, and that are intended to provide structure. In fact, recent revisions of Baumrind’s work has emphasized the need to differentiating between coercive and confrontive types of control (Baumrind, 2012). Research that fails to do so may not be capturing the nature of parenting behaviors in accurate ways, leading to inaccurate findings related to links between intrusiveness and children’s adjustment. For example, whereas some definitions of intrusiveness include the use of verbal directives and
physical manipulation, if not displayed in a coercive way or driven by parental agendas, these may be considered as intended to provide effective guidance. Behaviors that have been traditionally incorporated into coding systems and questionnaires, such as verbal directives, physical manipulation, and excessive affectionate contact may need to be reconsidered based on the extent to which they are coercive and undermining or supportive of children’s development. Children need provision of structure and guidance in a way that supports their development, and the use of directives and physical manipulation may be one way this occurs within Latinx families.

Even though Latinx parents use more direct verbal commands during parent-child interactions, in most cases demands are not accompanied by anger or negative affect (Livas-Dlott et al., 2010). Given that parental intrusiveness is not necessarily accompanied by anger and negative affect among Latinx parents, measures of intrusiveness that include indicators such as negative regard for the child or maternal negative affect may be problematic. As a result, it has been recommended that researchers not combine indicators of control and emotion within measures of parental control for studies involving Latinx families (Halgunseth et al., 2006). Additionally, most studies tend to combine parental scores of intrusiveness, harness, or anger dimensions using composite and aggregated scores, which limits our understanding of the unique influence of parental intrusiveness on child development (e.g. Adam et al., 2004).

These ideas suggest that the ways in which parental intrusiveness has been conceptualized and measured may have contributed to inconsistent findings in the literature on parental intrusiveness within Latinx families. On the one hand, it is possible
that findings suggesting that parental intrusiveness is less strongly associated with child adjustment problems within Latinx families may be due to the inclusion of both positive and negative aspects of parental control within the same construct. On the other hand, it may be due to the normative nature of parental intrusiveness within this cultural group, in studies involving older children. Another possibility is that because parental intrusiveness has been measured based on Western views of parenting, current measures may result in higher mean levels of intrusive behaviors among Latinx parents than are actually present. The development of culturally informed measures that are guided by both theoretical and empirical evidence and that take the role of culture, parental ethnotheories, and socializations goals into account will move the field beyond a Western bias in measurement and stereotyped representations of ethnic minority families.

Specifically, the use of culturally informed observational coding systems provides a window to move towards a better understanding of the nature of parental intrusiveness and its association with children’s adjustment outcomes within families from Latinx backgrounds.

The current study conceptualizes parental intrusiveness and parental guidance as two different constructs within the cultural context of Latinx immigrant families living in the U.S. Guided by empirical and theoretical work, parental intrusiveness is defined as verbal and nonverbal instances in which the parent provides control in coercive and pressuring ways, behaviors are parent-driven, and demonstrate a general lack of respect for the child. In contrast, parental guidance includes verbal and non-verbal instances that
aim to provide structure and high-quality assistance when the child needs it, as well as behaviors that are child driven and task oriented.

**The Current Study**

Lack of consideration of the cultural and emotional contexts within which parent-child interactions occur, inconsistent conceptualization and measurement of parental intrusiveness across studies, lack of distinction between different types of control, and the tendency to combine measures of intrusiveness with hostile and negative behaviors have all limited understanding regarding how parental intrusiveness relates to children’s adjustment – particularly within Latinx families. The proposed study aims to address these limitations, elucidate differences between traditional and culturally informed models of parenting (parental intrusiveness in particular) and consider the impact of parental intrusiveness and parental guidance on young children from Latinx backgrounds. Specifically, the study sought to answer the following research questions.

**Research Question 1**

Is a traditionally coded observational measure of parental behaviors during a parent-child play task invariant across European American and Latina mothers?

**Hypothesis 1a.** A confirmatory factor analytic (CFA) model will fit the data better for European American than for Latina mothers (configural invariance).

**Hypothesis 1b.** Within a CFA model, parental intrusiveness will load more strongly on the negative parenting latent construct for European American mothers than it will for Latina mothers (metric invariance).
Hypothesis 1c. Latina mothers will have systematically higher parental intrusiveness scores than European American mothers (scalar invariance).

Research Question 2

What is the factor structure of an observational measure of parental behaviors during a parent-child play task that is coded using a culturally informed coding system that distinguishes between parental intrusiveness and parental guidance within a sample of Latina mothers?

Hypothesis 2a. Parental intrusiveness will load on the negative parenting latent construct.

Hypothesis 2b. Parental guidance will load on the positive parenting latent construct.

Research Question 3

Do traditional versus culturally informed coding of observational measures of parental intrusiveness and parental guidance applied to Latina mothers differ in terms of their associations with children’s internalizing and externalizing behaviors?

Hypothesis 3a. For the traditional coding system, parental intrusiveness will be positively associated with children’s internalizing and externalizing behaviors.

Hypothesis 3b. For the culturally informed model, parental intrusiveness will be positively associated with children’s internalizing and externalizing behaviors, whereas parental guidance will be negatively associated with Latinx children’s internalizing and externalizing behaviors.
**Research Question 4**

Does maternal warmth moderate associations between traditionally versus culturally informed observational measures of parental intrusiveness and parental guidance, and Latinx children’s internalizing and externalizing behaviors?

**Hypothesis 4.** These analyses are exploratory in nature, and no specific hypotheses are provided.
CHAPTER IV

METHODS

Participants

Buffering Toxic Stress Research Consortium

Participants in the current study were drawn from two of six Early Head Start (EHS) University Partnerships comprising the Buffering Toxic Stress Research Consortium, a multi-method longitudinal study examining the effects of an attachment-based intervention to reduce the impact of toxic stress on children in poverty. The first subsample was drawn from the Buffering Children from Toxic Stress through Attachment-Based Intervention (ABC): An Early Head Start-University Partnership at University of Maryland. This sample included 208 children (54.2% girls) and their mothers. At enrollment, children’s ages ranged from 6 to 20 months ($M = 13, SD = 4$) and mothers’ ages ranged from 18 to 45 years of age ($M = 31, SD = 6.5$). In terms of educational attainment, 55% of mothers had completed high school and 38% were employed full or part-time. Most mothers (88%) were married or living with a partner. Even though the majority of mothers did not report their incomes, those who did reported low family income ($n = 75; M = \$21,519, SD = \$11,353$), consistent with EHS eligibility criteria. The sample was predominately Latinx (87%), with 91% of the Latinx children born outside of the US, primarily in Central America. Given the focus of the current study, only the Latinx subsample ($n = 135$) will be included as participants in the
proposed study. The second subsample was from the Playing and Learning Strategies (PALS) Intervention in Early Head Start Programs: Reducing the Effects of Toxic Stress for Children in Poverty at New York University. This sample consisted of 267 children (53% girls) and their primary caregivers (92.4% mothers). At enrollment, children’s ages ranged from 0 to 3 years of age ($M = 24, SD = 9$) and mothers’ ages ranged from 18 to 45 ($M = 31, SD = 7$). In terms of education levels, 42% of mothers had less than a high-school education, 21% of mothers completed high school, and 53% were employed full or part-time. The majority of families were low-income, with 68% of the families reporting an annual total household income of less than $21,000, consistent with EHS eligibility criteria. The sample was predominately Latinx ($n = 218; 82\%$) and more than half of Latinx children (65\%) spoke Spanish as their primary language. Given the focus of the current study, only the Latinx subsample will be included as participants in the proposed study.

**Family Life Project**

For the purpose of Research Question 1, participants were drawn from the Family Life Project, a longitudinal investigation focused on families living in rural areas under conditions of poverty in central Pennsylvania and three counties in eastern North Carolina. The sample included a total of 1,292 children (49\% girls) and their primary caregivers (99\% mothers). For the proposed study, analyses focused on data collected when the target children were 15 and 24 months of age. Data were mostly collected from biological mothers with the exception of two foster parents and eight grandmothers or other relatives. On average, mothers were 28 years old when the focal child was born but
were on average 21.6 years old when their first child was born. In terms of maternal education attainment, the average years of education was 13 (SD = 2), 16% of mothers had less than a high-school education, 16% completed a 4-year college degree, and the remaining had some intermediate level of education. Over half of all participants (72.6%) were married and 57% were employed. The majority of families were low-income, with 38% of the families at or below the poverty line at the 15-month assessment. About 55% of children were European American, 42% African American, and 3% Latino or Hispanic based on parent report. For the purpose of Research Question 1, only the European American subsample \( n = 666 \) will be included as participants in the proposed study.

**Procedure**

**Buffering Toxic Stress Research Consortium**

Participants were recruited from seven EHS programs that provided some home-based services in the Washington D.C. and New York metropolitan areas. The following criteria were used for eligibility purposes: (1) receiving home-based EHS services for at least three months; (2) English- or Spanish-speaking mother; (3) maternal age of 18 years or older; (4) infant age 6 to 18 months at recruitment; and (5) infant not receiving federal services for special needs. Written informed consent was obtained from the primary caregiver. Children and their primary caregivers participated in pre-intervention (baseline) and post-intervention assessments. After the baseline assessment, mothers were randomly assigned to received EHS plus the ABC intervention or EHS plus “Book-
of the-Week.” The current study will not focus on the intervention component, although intervention status was included as a control in analyses.

Baseline assessments consisted of a series of demographic and psychosocial questionnaires and a 15-minute, observational semi-structured parent-child interaction task. Data were collected by research assistants during home visits that lasted approximately 2 hours. After the intervention was completed, follow-up assessments were conducted that included a demographic and psychosocial interview and a second 15-minute semi-structured parent-child interaction task. Both assessments were conducted in families’ homes in English or Spanish (based on the caregiver preference) by trained, bilingual research assistants. Observational data were recorded via digital video for later coding. When available, standard Spanish versions of procedures and measures were used. If none existed, standard English versions were translated into Spanish. All procedures were approved by university institutional review boards. For the current study, baseline assessments were used except for the outcome measure.

**Family Life Project**

Families were recruited using a stratified random sampling strategy from three counties in central Pennsylvania and three counties in eastern North Carolina at the time of the target child’s birth. Families were recruited from hospitals and through telephone contact information via birth records. The following criteria were used to exclude families from the study: (1) families for whom English was not the primary language spoken in the household, (2) families who were planning on moving to a different state in the next 3 years, and (3) families whose parental rights had been severed by the state.
Approximately, 70% of mothers contacted agreed to be part of the study, and 80% of those mothers provided written informed consent and became part of the final sample (along with their children). At the 15-month and 24-month assessment, the home visit consisted of a series of interviews, questionnaires, child assessments, and observations of a 15-minute parent-child interaction task. Interviewers and respondents entered interview and questionnaire data into laptop computers. Mothers who had eighth grade reading levels or higher completed the questionnaires individually. Mothers with reading levels below eighth grade had questionnaires read aloud to them. The duration of the home visit was 2-3 hours and observational data were recorded via digital video for later coding. All procedures were approved by university institutional review boards.

**Measures**

**Parenting Behaviors - Traditional Coding System**

Mother-child interaction assessments were coded at the University of North Carolina CDS Observes Center using a series of stablished scales (Mills-Koonce & Cox, 2012). The same (“traditional”) coding system was used for each of the subsamples included in this study (Buffering Toxic Stress, Family Life Project). For the Buffering Toxic Stress Research Consortium, mother-child interactions were coded during the home visits to assess levels of maternal sensitivity, detachment, intrusiveness, positive regard, negative regard, stimulation of development, and animation using the Three-Bag semi-structured play task. For the Family Life Project, the same parenting behaviors were coded during home visits but materials were not into the three bags. General instructions were given to mothers in which they were instructed to play with three
numbered cloth bags numbered from one to three. Each bag contained one standard age appropriate toy or book, and mothers were asked to allow the infant to spend some time interacting with the contents of each bag and that she could play or help however she would like. All interactions were 15 minutes in duration and were videotaped for later coding by trained and reliable coders. A group of five coders was trained by a master coder on each scale and reliability was calculated using a criterion intraclass correlation of $> .70$. Twenty percent of mother-child interactions were double-coded for ongoing reliability checks, and coding discrepancies were resolved by re-watching and conferencing cases. Coders rated each aspect of parenting dimension on a 5-point scale, from (1) not at all characteristic to (5) highly characteristic. All coders were blind to participants’ intervention group assignment for the Buffering Toxic Stress sample. For assessments involving Spanish speaking mothers, native Spanish speakers transcribed and translated the parent-child interactions video-recordings. Even though coders were European American and Latinx, coders were not matched with participants in terms of their ethnic backgrounds.

The proposed study primarily focused on two out of the seven parenting dimensions initially coded: parental intrusiveness and positive regard for the child. *Parental intrusiveness* referred to the degree to which the mother showed a lack of respect for the child and failed to promote autonomy development. Instances included verbal and physical interference with the child’s needs, interests, and behaviors through the use of verbal directives and physical manipulations. Specific behavioral indicators of parental intrusiveness included: (a) failing to modulate behavior that the child turns from,
defends against, or expresses negative affect to; (b) offering a continuous stimulation; (c) not allowing the child to influence the pace or focus of play, interaction, or feeding; (d) taking away objects or food while the child still appears interested; (e) not allowing the child to handle toys he/she reaches for; (f) insisting that the child do something even if child is not interested; (g) not allowing the child to make choices; and (h) physically impairing the child’s movement.

*Positive regard for the child* refers to the mother’s verbal and physical expressions of warmth, affection, enthusiasm, and praise directed toward the child. Specific behavioral indicators of positive regard for the child include: (a) speaking in a warm tone of voice; (b) hugging or other expressions of physical affection; (c) smiling and laughing with the child; (d) enthusiasm about the child; (e) praising the child; and (f) general enjoyment of the child. The measure of positive regard for the child is used as a measure of parental warmth in analyses addressing Research Question 4.

**Parenting Behaviors - Culturally Informed Coding System**

Mother-child interaction assessments were recoded using a culturally informed coding system adapted from the scales used by the University of North Carolina CDS Observes Center (Mills-Koonce & Cox, 2012). Parental intrusiveness was recoded and a new parenting dimension, parental guidance, was coded based on parent-child observations during the Three-Bag semi-structured play task. Similar to the observational assessment using the traditional coding system, a master coder coded all the video recordings and trained four undergraduate research assistants on the parental intrusiveness and parental guidance scales for reliability. Twenty percent of mother-child
interactions were double-coded for ongoing reliability checks and coding discrepancies were resolved by re-watching and conferencing cases. All coders were native Spanish speakers and from Latinx or Hispanic backgrounds. Given previous work suggesting that individuals from different ethnic groups perceive parenting behaviors in different ways, it is a good practice to include observers and coders that match participants’ ethnic background and provide extensive training aimed at reducing personal bias (Gonzales, Cauce, & Mason, 1996).

Guided by empirical and theoretical work, the culturally informed coding protocol considered the role of parental ethnotheories and socialization goals as key components of Latinx parenting. Specifically, this coding system attempted to capture quantitative and qualitative differences in the appearance and consequences of intrusive parenting among Latinx parents and proposed a new parenting dimension, parental guidance, as a salient parenting behavior in which Latina mothers engage to provide structure and teach socialization goals during parent-child interactions. Table 1 includes a summary of traditional versus culturally informed observational measures of parental intrusiveness and parental guidance.

**Parental intrusiveness.** Within the culturally informed coding system, parental intrusiveness referred to the degree to which mothers engaged in controlling behaviors that restricted, interfered, and limited the child opportunities to engage with the environment and showed a general lack of respect for the child. Specifically, behaviors indicative of intrusiveness were guided more by the parent’s own agenda rather than the child’s needs and were considered to be coercive and intrusive in nature. A key
difference compared to the traditional coding system presented above is that the use of verbal directives, physical manipulations, and physical affection were not consistently coded as intrusive. While it is expected in this cultural group that parents will provide more directives to support and guide interactions, the use of directives and physical manipulations were considered intrusive if they were coercive, off-task, and characterized by a general lack of respect for the child. As a result, it is important to distinguish between verbal directives and the use of physical manipulation that is intended to control the interaction and to impose a parental agenda versus to guide, structure the interaction, and teach cultural socialization values. Examples of behavioral indicators of parental intrusiveness included: (a) engaging in harsh physical manipulations; (b) limiting the child opportunities to participate in the task; (c) engaging in directive behavior that is persistent, off-task, parental driven, and coercive in nature; (d) restraining the child’s movement; (e) general lack of respect for the child; and (f) engaging in shaming and guilt inducing behaviors. A parent high in intrusiveness will be extremely coercive, consistently engaging in intrusive behaviors throughout the interaction, and characterized by a general lack of respect for the child’s body and needs.

**Parental guidance.** Within the culturally informed coding system, parental guidance refers to the degree to which mothers engage in supportive behaviors aimed to provide structure during the parent-child interaction, while maintaining a child-focused agenda and providing instructional assistance when needed. Young children typically need parental support and guidance to complete tasks that exceed their developmental levels. However, even when tasks are developmentally appropriate, parents will often
engage in supportive behaviors to provide appropriate guidance and structure. Examples of behavioral indicators of parental guidance include: (a) providing physical guidance; (b) engaging in directing and modeling behaviors; (c) using directives and questions that are on task and often accompanied by a verbal elaboration; (d) well-timed and genuine guidance. A parent high in guidance will use strategies intended to guide the child in a supportive and timely way. In contrast, a parent low in guidance may be disengaged, insensitive to the child’s needs and cues, and provide inconsistent and poorly timed guidance. Another way to score low in guidance would be a parent who guides the interaction but who is more focused in completing the task as opposed to teaching and helping the child to succeed.

**Children’s Adjustment Problems**

For the Buffering Toxic Stress project, social-emotional and behavioral problems were measured at approximately 24 or 48 months (depending on research site) using The Brief Infant-Toddler Social Emotional Assessment (BITSEA, Briggs-Gowan & Carter, 2002). This screening tool can be completed in approximately 5 to 7 minutes and scores can be computed by hand or using a computer scoring program (Briggs-Gowan, 2004). The BITSEA consists of 42-items drawn from the longer Infant-Toddler Social Emotional Assessment (ITSEA) measure which is based on both clinical and empirical criteria. Both the BITSEA and the ITSEA are designed to be used by parents and child-care providers to identify children “at risk” or experiencing social-emotional and behavioral problems from 12 to 36 months of age. Ratings were based on mothers’ reports of their children’s behavior over the last month. It consists of two subscales and
yields a problem score based on 31-items and a competence score based on 11-items. Within the BITSEA problem scale, the BITSEA internalizing and externalizing subscales have been empirical validated (Briggs-Gowan et al., 2004) and were used in the current study. The internalizing behaviors subscale included 6 items and sample items include: “seems nervous, tense, or fearful,” and “worries a lot or is very serious.” The externalizing behaviors subscale included 8 items and sample items include: “hits, shoves, bites or kicks other children” and “can pay attention for a long time” (reversed scored). Following Griethuijsen et al. (2015) recommendations for acceptable values when using lower number of items, internal consistency was adequate ($\alpha = .65$ and $.69$, respectively). Each item was rated on a scale of 0 to 2, with 0 being not true/rarely, 1 being somewhat true/sometimes, and 2 being very true/often. Scores on the internalizing and externalizing behaviors subscales were averaged with higher scores indicative of more adjustment problems.

The BITSEA problem scale has demonstrated very good test-retest reliability (intraclass correlation coefficient = .87), inter-rater agreement between parents (intraclass correlation coefficient = .68), and internal consistency ($\alpha = .79$). The BITSEA internalizing and externalizing subscales have acceptable internal consistency ($\alpha = .80$ and .82, respectively). The BITSEA has adequate reliability and validity across age and gender groups (Achenbach et al., 2017; Briggs-Gowan et al., 2004) and Hispanic and Spanish-speaking populations (Hungerford, Garcia, & Bagner, 2015). The problem and competence scales have both demonstrated validity in relation to ratings of child adjustment problems using other measures. Additionally, it offers cutpoints to identify
children who may need further assessment, with scores at or above the 75th percentile for the problem scale, and scores at or below the 10th-15th percentile for the competence scale relative to the birth cohort. These cutpoints are based on child and gender normed samples and have demonstrated good criterion validity in relation to parental reports on the Child Behavior Checklist (CBCL)/1.5-5 (Fisher r to z transformation = 21.2 to 25.6, p < .01), good sensitivity (93.2%) while retaining acceptable specificity (78%; Briggs-Gowan, 2004).

Data Analysis Plan

First, descriptive statistics were calculated for all model variables. Distributions of variables were tested for normality using the Kolmogorov Smirnov test. The Outlier Labeling Rule was used to identify outliers that fall more than three standard deviations from the mean (Hoaglin & Iglewicz, 1987). For identified outliers, the raw dataset was examined for data entry problems and corrected. Outliers that were not due to data entry problems were removed. Next, associations among all model variables and potential control variables were examined using bivariate correlation coefficients.

Research site, intervention/control group, type of intervention, and caregiver’s primary language were included as control variables in all analyses. Preliminary analyses consisting of multiple regressions were conducted to determine if the following additional controls needed to be included in the focal analyses: child gender, child age baseline, child age BITSEA, household income, maternal education, and maternal depression. In these regressions, the predictor variables were traditional and culturally informed parental intrusiveness variables, parental guidance, parental warmth, and the
potential control variables listed above as predictors of children’s adjustment problems. Different regressions were conducted for each child outcome. Potential control variables that were significantly associated with children’s adjustment were retained within the focal analyses. Focal analyses were conducted using Structural Equation Modeling (SEM), using Mplus v8 (Muthén & Muthén, 2018). Full-information maximum likelihood (FIML; Enders & Bandalos, 2001) was used to handle missing data so as to minimize bias in statistical estimation (Byrne, 2010).

**Research Question 1**

Is a traditionally coded observational measure of parental behaviors during a parent-child play task invariant across European American and Latina mothers?

CFA of parenting dimensions were conducted using the Family Life Project and the Buffering from Toxic Stress samples with factors loading on two latent factors: positive and negative parenting (Figure 1). Maternal sensitivity, detachment, positive regard for the child, animation, and stimulation loaded onto the positive parenting latent factor, whereas maternal intrusiveness and negative regard for the child loaded onto the negative parenting latent factor. Respecifications of the hypothesized model were conducted until the best fitting baseline model was found for each group. Global model fit was evaluated using the chi-square goodness of fit index ($\chi^2$), the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root mean square residual (SRMR). Criteria for assessing good model fit included: (a) non-significant $\chi^2$; (b) RMSEA with values below .05 (Browne & Cudeck, 1993); (c) CFI
with values of .90 or greater (Hu & Bentler, 1999); and (d) SRMR with values below .08 (Hu & Bentler, 1999).

A multiple group CFA was estimated in MPlus to assess measurement equivalence (configural, metric, scalar) across ethnic groups. Models were configurally invariant if the same pattern of factors were observed across groups and change in $\chi^2$ was examined to consider if factor models fit the data similarly across groups. To test for metric invariance, multiple group measurement models were conducted to evaluate the invariance of the factor loadings of each item onto the two latent constructs across ethnic groups. A fully constrained model was compared to a model in which factor loadings were freed across groups and change in $\chi^2$ was examined. A significant improvement in the $\chi^2$ value meant that the unconstrained model was a better fit in the data and that parenting behaviors were differently related to the latent constructs across groups. In other words, differences indicated that some items are stronger indicators of the latent constructs for one group compared to the other groups. To test for scalar equivalence, multiple group measurement models were conducted to evaluate intercept (mean) levels of each indicator across ethnic groups. A fully constrained model was compared to a model in which only the item intercepts were constrained. A significant improvement in the $\chi^2$ value meant that the unconstrained model was better fit in the data and that parenting behaviors differ across groups. This suggested that one group was systematically receiving higher scores.
**Research Question 2**

What is the factor structure of an observational measure of parental behaviors during a parent-child play task that is coded using a culturally informed coding system that distinguishes between parental intrusiveness and parental guidance within a sample of Latina mothers?

A CFA of parenting behaviors was conducted using the Latina mothers subsample from the Buffering from Toxic Stress Study testing the fit for two models (Figure 2). The first model examined the factor structure of parenting using the traditionally coded observational measure, whereas the second model examined the factor structure of parenting assessed by the culturally informed coding of the observational measure. For the traditionally coded observational measure, parental sensitivity, detachment positive regard for the child, animation, and stimulation loaded onto the positive parenting latent factor, whereas parental intrusiveness and negative regard for the child loaded onto the negative parenting latent factor. For the culturally informed observational measure, parental sensitivity, detachment, parental guidance, positive regard for the child, animation, and stimulation loaded onto the positive parenting latent factor, whereas maternal intrusiveness and negative regard for the child load onto the negative parenting latent factor. Global model fit was evaluated using $\chi^2$, RMSEA, CFI, and SRMR from each model, and the same criteria for assessing good model fit than in Research Question 1 was used.
Research Question 3

Do traditional versus culturally informed coding of observational measures of parental intrusiveness and parental guidance applied to Latinx families differ in terms of their associations with children’s internalizing and externalizing behaviors?

Mplus was used to estimate two regression models using the Latina mothers subsample from the Buffering from Toxic Stress Study. In both models, research site, intervention/control group, and language spoken at home were included as control variables. Additional controls were included based on results from preliminary analyses. The first model used parental intrusiveness from the traditional coding system as a predictor of children’s internalizing and externalizing behaviors. The second model used parental intrusiveness and parental guidance from the culturally informed coding system as a predictor of children’s internalizing and externalizing behaviors.

Research Question 4

Does maternal warmth moderate associations between traditionally versus culturally informed observational measures of parental intrusiveness and parental guidance, and Latinx children’s internalizing and externalizing behaviors?

Mplus was used to estimate two regression models using the Latina mothers subsample from the Buffering from Toxic Stress Study. In both models, research site, intervention/control group, and language spoken in the home were included as control variables. Additional controls were included based on results from preliminary analyses. Parental intrusiveness, parental guidance, and parental warmth were centered, and centered variables were used to create interaction terms. The first model examined the
parental intrusiveness variable from the traditional coding system as a predictor of children’s adjustment. To test for moderation, the intrusiveness x warmth interaction was included as an additional predictor. The second model examined the parental intrusiveness variable from the culturally informed coding system as a predictor of children’s adjustment. To test for moderation, the intrusiveness x warmth interaction was included as an additional predictor. The third model examined parental guidance as a predictor of children’s adjustment and the guidance x warmth interaction was included as an additional predictor to test for moderation. Each model was conducted to examine internalizing and externalizing behaviors separately.

Significant interactions were probed following recommendations by Roisman and colleagues (Roisman et al., 2012). First, significant interactions were probed at one standard deviation above and below the mean levels of the moderator (maternal warmth) using tests of simple slopes. Second, region of significance analyses were conducted to identify the exact range of values of maternal warmth at which the independent and dependent variables were significantly associated. These analyses allowed for a more precise examination of the moderator and were estimated using the Johnson-Neyman technique (Hayes, 2012).
CHAPTER V

RESULTS

Preliminary Analysis

Preliminary data analyses were conducted to examine outliers, check normality of distributions for all study variables, and determine potential covariates. Outliers were examined for the BITSEA internalizing and externalizing subscales. No outliers were identified, and both variables were normally distributed. Treatment group, type of intervention, and caregiver’s primary language were included as control variables in all analyses. Additional covariates were identified by conducting separate regression analyses (one for internalizing and one for externalizing) that included traditional and culturally informed parental intrusiveness variables, parental guidance, and potential control variables (child sex, child age at baseline, child age at BITSEA, maternal education, and maternal depressive symptoms at baseline) as predictors of children’s BITSEA internalizing and externalizing scores. Analyses indicated that maternal education was marginally associated with internalizing behaviors and maternal depressive symptoms at baseline was significantly associated with externalizing behaviors; these two controls were retained within focal analyses. Additionally, for analyses examining children’s internalizing and externalizing behaviors, children’s BITSEA scores for the internalizing behaviors subscale were included as a control in analyses predicting externalizing behaviors and vice versa. All analyses were conducted
using Mplus v8 (Muthén & Muthén, 2018), and full-information maximum likelihood (FIML; Enders & Bandalos, 2001) was used to handle missing data so as to minimize bias in statistical estimation (Byrne, 2010).

Descriptive statistics and bivariate correlations for the variables of interest related to Research Question 1 are presented in Tables 2 and 3, and variables related to the remaining research questions (using both sites from the Buffering Children from Toxic Stress Study) are presented in Table 4. Given the main focus of this study on the Latinx sample, significant correlations from Table 4 are described here. Higher maternal depressive symptoms were associated with higher BITSEA externalizing scores \( r(210) = .277, p < .001 \). Lower maternal education were associated with higher levels of traditionally coded parental intrusiveness \( r(363) = -.125, p < .05 \), higher levels of culturally informed parental intrusiveness \( r(291) = -.146, p < .05 \), lower levels of parental guidance \( r(291) = .217, p < .001 \), and higher BITSEA internalizing scores \( r(208) = -.190, p < .001 \). Higher levels of maternal warmth were associated with lower levels of culturally informed parental intrusiveness \( r(300) = -.280, p < .001 \) and higher levels of parental guidance \( r(300) = .635, p < .001 \). Higher BITSEA internalizing scores were associated with higher BITSEA externalizing scores \( r(210) = .315, p < .001 \). Finally, higher levels of parental guidance were associated with lower levels of both traditional parental intrusiveness \( r(300) = -.38, p < .001 \) and culturally informed parental intrusiveness \( r(300) = -.525, p < .001 \). Even though the two parental intrusiveness variables were highly intercorrelated, culturally informed parental intrusiveness correlated more strongly with parental guidance.
Primary Analyses

Research Question 1. Measurement Invariance for a Traditionally Coded Observational Measure of Parenting Applied to European American and Latina Mothers

Study 1 examined measurement invariance when the traditionally coded observational measure of parenting was applied at age 15 months using data from the Family Life Project and the UMD Buffering from Toxic Stress site. Study 2 examined measurement invariance when the traditionally coded observational measure of parenting was applied at age 24 months using data from the Family Life Project and the NYU Buffering from Toxic Stress site.

Study 1. Before proceeding with tests of measurement invariance, a confirmatory factor analyses of parenting behaviors were conducted using the Family Life Project at 15 months and the UMD Buffering from Toxic Stress samples (M = 13 months) to establish acceptable well-fitting baseline models for each group of interest (European American and Latina mothers). A two-factor model was estimated in which maternal sensitivity, detachment, positive regard for the child, and stimulation loaded onto the positive parenting latent factor, whereas maternal intrusiveness and negative regard for the child loaded onto the negative parenting latent factor (Table 5).

European American. Initial testing of the hypothesized model for this group (i.e. Family Life Project, age 15 month), revealed that the model did not fit the data well, $\chi^2(8) = 915.41, p < .001, \text{RMSEA} = .32, \text{CFI} = .62, \text{SRMR} = .22$. A review of the modification indices (MIs) revealed several large values, with the largest MI suggesting that sensitivity
negatively loaded on the negative parenting factor in addition to positively loading on the positive parenting factor (cross-loading). Model 2 was specified in which this parameter was allowed to be freely estimated, allowing sensitivity to load on both the positive and negative parenting latent factors. This yielded an improvement in model fit, $\chi^2(7) = 54.69, p < .001$, RMSEA = .10, CFI = .97, SRMR = .06. After another review of MIs, Model 3 was specified allowing the residuals for detachment and sensitivity to co-vary. Re-specification of the model resulted in a baseline model that fit the data for European American families well (Figure 3), $\chi^2(6) = 26.51, p < .001$, RMSEA = .07, CFI = .99, SRMR = .04. This final model incorporated both cross-loading of sensitivity on the positive and negative parenting latent factors and allowing residuals for detachment and sensitivity to co-vary. This final model was used as the most appropriate baseline model for subsequent measurement invariance tests.

**Latina.** Compared to the European American group, results revealed a worse fitting initial model $\chi^2(8) = 146.87, p < .001$, RMSEA = .31, CFI = .77, SRMR = .12. A review of the MIs indicated that sensitivity should be allowed to cross-load on both positive parenting and negative parenting (the same as for the European American model), and that positive regard should be allowed to load on both the positive parenting and the negative parenting factors as well. Both sensitivity and positive regard were negatively loaded on the positive parenting factor. Model 2 was specified allowing cross-loading of sensitivity on both the positive and negative factors, $\chi^2(7) = 27.88, p < .001$, RMSEA = .10, CFI = .97, SRMR = .06. Model 3 was specified allowing cross-loading of positive regard on both the positive and the negative parenting factors, $\chi^2(6) = 10.75, p <$
This final model was considered the most appropriate baseline model for Latinx families (Figure 3). This final model allowed cross-loading of sensitivity on both the positive and the negative parenting factors and cross-loading of positive regard on both the positive and the negative parenting latent factors. This final model was used as the most appropriate baseline model for subsequent measurement invariance tests.

**Measurement invariance.** After establishing the most appropriate measurement models for each group, these models were then used to test invariance of factor loadings and intercepts using multiple group CFA (Table 5). Nested model comparisons are presented in Table 6. First, *configural invariance* was estimated and factor loadings were freely estimated for both groups. Results indicated that the configural model showed very good model fit, $\chi^2(12) = 37.25$, $p < .001$, RMSEA = .07, CFI = .99, SRMR = .04, and that all factor loading were significantly different from zero in both groups, which suggests that configural invariance was supported. The next step consisted of estimating *metric invariance* by constraining all the factor loadings to be equal across groups. Global model fit for this model with all factor loadings constrained to be equal across groups was $\chi^2(20) = 78.27$, $p < .001$, RMSEA = .09, CFI = .98, SRMR = .10. Comparison of the metric invariance model with the configural invariance model indicated that the metric invariance model demonstrated significantly worse fit that the configural invariance model. MIs from this test of parameter equality constraints indicated that the loading of negative regard varied across European American and Latina mothers. Given that full metric invariance was not established, partial metric invariance
was then examined by imposing equality constraints on some, but not all, the factor loadings. Continued testing for partial metric invariance identified two additional factor loadings that varied across groups: the loading of detachment and sensitivity on the positive parenting factor. Global model fit for this final model was $\chi^2(17) = 44.36$, $p < .001$, RMSEA = .06, CFI = .99, SRMR = .06. Nested comparisons between this final model (partial metric invariance with three factor loadings allowed to vary across groups) with the configural model did not yield a statistically significant change in $\chi^2$ values, $\Delta\chi^2(5) = 7.10$, $p = .213$, CFI = .001. In other words, the partial metric invariance model did not demonstrate worse fit than the configural invariance model, suggesting that no other factor loadings varied across the groups.

After establishing partial metric invariance, the next step involved testing for scalar invariance to evaluate the equivalence of intercepts across groups by adding equality constraints for all of the parenting variable intercepts to the previously established partial metric invariance model. Global model fit for the scalar model was $\chi^2(23) = 90.35$, $p < .001$, RMSEA = .09, CFI = .97, SRMR = .07, suggesting that the model did not fit well when intercepts were constrained to be equal across groups. Comparison of the scalar invariance model with the partial metric invariance model indicated that the scalar invariance model demonstrated significantly worse fit than the partial metric invariance model. Given that full scalar invariance was not established, partial scalar invariance was examined by imposing equality constraints on some, but not all, the intercepts. Continued testing for partial scalar invariance and examination of MIs one at a time revealed that three intercepts out of six varied across the two groups:
intrusiveness, sensitivity, and positive regard. Global model fit for a final model allowing these intercepts to vary was $\chi^2(20) = 47.90, p < .001$, RMSEA = .06, CFI = .99, SRMR = .05. Nested comparison of this model (with three intercepts allowed to vary) with the partial metric invariance model did not yield a statistically significant change $\chi^2$ value, $\Delta\chi^2(3) = 3.55, p = .314$, CFI = .001. In other words, the partial scalar invariance model did not demonstrate worse fit than the partial metric invariance model, suggesting that no other intercepts varied across the groups.

A review of estimated values of the freely estimated parameters revealed differences in factor loadings and intercepts for both groups. In terms of factor loadings, the loading of negative regard on the negative parenting factor was .43 for European American mothers and .64 for Latina mothers, the load of detachment on the positive parenting factor was -.86 for European American mothers and -.93 for Latina mothers, and the loading of sensitivity on the positive parenting factor was .56 for European American and .71 for Latina mothers. In terms of intercepts, the intrusiveness intercept when constrained equal for both groups was 2.74, but when allowed to be freely estimated, this intercept was 3.29 for European American mothers and 3.56 for Latina mothers. The sensitivity intercept when constrained to be equal across both groups was 2.91, whereas the freely estimated intercept was 3.58 for European American mothers and 2.10 for Latina mothers. The constrained intercept for positive regard was 3.04, whereas the new freely estimated intercept was 3.32 for European American mothers and 3.18 for Latina mothers.
**Study 2.** Before proceeding with tests of measurement invariance, confirmatory factor analyses of parenting behaviors were conducted using the Family Life Project at 24 months and the NYU Buffering from Toxic Stress samples ($M = 24$ months) to establish an acceptable well-fitting baseline model for each group of interest (European American and Latina mothers). As in Study 1, the initial model was a two factor model in which maternal sensitivity, detachment, positive regard for the child, and stimulation loaded onto the positive parenting latent factor, whereas maternal intrusiveness and negative regard for the child loaded onto the negative parenting latent factor (Table 7).

**European American.** Initial testing of the hypothesized model for this group (i.e. Family Life Project, age 24 months), revealed that the model did not fit the data well, $\chi^2(8) = 274.97$, $p < .001$, RMSEA = .22, CFI = .86, SRMR = .06. A review of the MIs revealed several large values, with the largest MI value being for the cross-loading of sensitivity on the negative parenting factor (negatively loaded). Model 2 was specified so that this parameter freely estimated, allowing sensitivity to load on both the positive and negative parenting latent constructs. This yielded an improvement in model fit, $\chi^2(7) = 83.75$, $p < .001$, RMSEA = .13, CFI = .96, SRMR = .05. A second review of MIs indicated that adding a residual covariance between detachment and sensitivity would improve model fit. Model 3 was specified allowing the residuals for detachment and sensitivity to covary, and Model 4 was specified allowing the residuals for sensitivity and intrusiveness to covary. Re-specification of the model resulted in a baseline model that fit the data well for European American families, $\chi^2(5) = 17.82$, $p < .001$, RMSEA = .06, CFI = .99, SRMR = .02 (Figure 4). This final model incorporated the following
additional parameters: (a) cross-loading of sensitivity on both the positive and negative parenting factors, (b) a residual covariance between detachment and sensitivity, and (c) a residual covariance between sensitivity and intrusiveness. This final model was used as the most appropriate baseline model for subsequent measurement invariance tests.

**Latina.** Compared to the European American group, results revealed a worse-fitting initial model $\chi^2(8) = 125.52$, $p < .001$, RMSEA = .27, CFI = .82, SRMR = .10. A review of the MIs indicated that sensitivity should be allowed to cross-load on both positive parenting and negative parenting (the same as for the European American model). Model 2 was specified allowing cross-loading of sensitivity on both the positive and the negative parenting factors, $\chi^2(7) = 23.59$, $p < .001$, RMSEA = .11, CFI = .97, SRMR = .05. Model 3 was specified allowing the residuals for sensitivity and detachment to covary, $\chi^2(6) = 18.99$, $p < .001$, RMSEA = .11, CFI = .98, SRMR = .04. Model 4 was specified allowing the residuals for intrusiveness and detachment to covary, $\chi^2(5) = 9.66$, $p < .001$, RMSEA = .07, CFI = .99, SRMR = .04. This final model incorporated the following additional parameters: (a) cross-loading of sensitivity on both the positive and negative parenting factors, (b) a residual covariance between detachment and sensitivity, and (c) a residual covariance between intrusiveness and detachment. This final model was used as the most appropriate baseline model for subsequent measurement invariance tests.

**Measurement invariance.** Again, after establishing the most appropriate measurement model for each group, these models were used to test measurement invariance of factor loadings and intercepts using multiple group CFA (Table 7). Nested
model comparisons are presented in Table 8. First, *configural invariance* was estimated, and factor loadings were freely estimated for both groups. Results indicated that the configural model showed very good model fit, $\chi^2(10) = 28.73$, $p < .001$, RMSEA = .07, CFI = .99, SRMR = .03. Additionally, all factor loadings were significantly different from zero in both groups, suggesting that configural invariance was supported. The next step consisted of estimating *metric invariance* by constraining all the factor loadings to be equal across groups. Global model fit for this model was $\chi^2(17) = 50.59$, $p < .001$, RMSEA = .07, CFI = .99, SRMR = .06. Comparison of the metric invariance model with the configural invariance model indicated that the metric invariance model demonstrated significantly worse fit than the configural invariance model. Results from this initial test of parameters being constrained for equality indicated the loading of detachment on the positive parenting factor had the largest MI value, indicating that this loading varied across European American and Latina mothers. Given that full metric invariance was not established, partial metric invariance was examined by imposing equality constraints on some, but not all, the factor loadings. Continued testing for partial metric invariance identified one additional factor loading that varied across groups: the loading of intrusiveness on the negative parenting factor. Global fit for this final model was $\chi^2(15) = 39.24$, $p < .001$, RMSEA = .06, CFI = .99, SRMR = .05. Nested comparisons between this final model (with the two specified factor loadings allowed to vary across groups) with the initial configural model did not yield a statistically significant change $\Delta \chi^2$ value, $\chi^2(5) = 10.51$, $p = .062$, CFI = .002. In other words, the partial metric invariance
model did not demonstrate worse fit that the configural invariance model, suggesting that no other factor loadings vary across the groups.

After establishing partial metric invariance, the next step involved testing for scalar invariance to evaluate the equivalence of parenting variable intercepts across groups by adding equality constraints for all of the parenting variables intercepts to the previously established partial metric invariance model. Global model fit for the scalar model was $\chi^2(21) = 89.83$, $p < .001$, RMSEA = .09, CFI = .97, SRMR = .08, suggesting that the model fit worse when intercepts were constrained to be equal across groups. Comparison of the scalar invariance model with the partial metric invariance model indicated that the scalar invariance model demonstrated significantly worse fit that the partial metric invariance model. Given that full scalar invariance was not established, partial scalar invariance was examined by imposing equality constraints on some, but not all, the intercepts. Continued testing for partial scalar invariance and examination of MIs one at a time indicated four intercepts out of six varied across the two groups: stimulation, intrusiveness, sensitivity, and positive regard. Global model fit for a final model allowing these four intercepts to vary was $\chi^2(17) = 47.95$, $p < .001$, RMSEA = .07, CFI = .99, SRMR = .06. Nested comparison between this final model (with four intercepts allowed to vary) with the partial metric invariance model yielded a statistically significant $\Delta \chi^2$ value, $\Delta \chi^2(2) = 8.71$, $p = .013$; CFI = .001. Even though the chi-square difference test was significant, the difference in CFI was close to 0, suggesting invariance. In other words, the partial scalar invariance model did not demonstrate worse
fit than the partial metric invariance model, suggesting that no other intercepts varied across the groups.

A review of estimated values for the freely estimated parameters revealed differences across factor loadings and intercepts for both groups. In terms of factor loadings, the loading of detachment on the positive parenting factor was -.76 for European American mothers and -.83 for Latina mothers, and the loading of intrusiveness on the negative parenting factor was .78 for European American mothers and .91 for Latina mothers. In terms of intercepts, the stimulation intercept when constrained to be equal across groups was 2.86, but when this intercept was freely estimated it was 2.86 for European American and 3.08 for Latina mothers. The intercept for intrusiveness was 2.71 when constrained to be equal across groups, whereas the freely estimated intercept was 2.75 for European American mothers and 2.87 for Latina mothers. The intercept for sensitivity was 3.15 when constrained to be equal across groups, whereas the freely estimated intercept was 3.02 for European American mothers and 2.81 for Latina mothers. Finally, the intercept for positive regard constrained to be equal across groups was 3.03, whereas the freely estimated intercept was 3.08 for European American mothers and 2.92 for Latina mothers.

**Research Question 2. Factor Structure for Traditionally versus Culturally Informed Coding of Observational Measures of Latinx Parenting**

Model fit for all models as initially hypothesized as well as modified models of traditionally and culturally informed coding of observational measures of Latino parenting are presented in Table 9. Models were specified using modification indices and
by adding parameters one-by-one based on the size of the modification indices provided in Mplus output.

**Latinx traditionally coded measurement model.** Results indicated that the two-factor hypothesized model was a poor fit for the data $\chi^2(8) = 279.67$, $p < .001$, RMSEA = .30, CFI = .78, SRMR = .10. MIs indicted that allowing sensitive parenting to cross-load on the negative parenting factor would result in improvement of model fit. Specification of Model 2 yielded a better model fit, $\chi^2(7) = 40.87$, $p < .001$, RMSEA = .11, CFI = .97, SRMR = .05; however, subsequent MIs suggested positive regard also cross-loaded on the positive and negative parenting factors. Specification of Model 3 resulted in excellent model fit and yielded the most appropriate baseline model, $\chi^2(6) = 16.04$, $p < .001$, RMSEA = .07, CFI = .99, SRMR = .03. Factor loadings for all parenting variables were significantly greater than zero, and the latent factor for positive parenting was negatively associated with the latent factor for negative parenting ($r = -.19$, $p < .05$). A summary of the standardized factor loadings for the traditionally informed final baseline measurement model of Latinx parenting is presented in Figure 5.

**Latinx culturally informed measurement model.** Results indicated that the two-factor hypothesized model was a poor fit for the data but slightly better compared to the traditionally coded measurement model, $\chi^2(13) = 243.11$, $p < .001$, RMSEA = .21, CFI = .83, SRMR = .09. Similar to the traditionally coded measurement model, MIs suggested allowing sensitive parenting to load on both the negative parenting factor and positive parenting factor to improve model fit. Specification of Model 2 yielded a better model fit $\chi^2(12) = 149.79$, $p < .001$, RMSEA = .11, CFI = .97, SRMR = .05; however,
MIs suggested guidance should also be allowed to load on both the negative parenting factor and the positive parenting factor. Specification of Model 3 resulted in improvement of model fit, $\chi^2(11) = 81.69$, $p < .001$, RMSEA = .13, CFI = .95, SRMR = .05. MIs suggested additional model changes and additional parameters were added to subsequent models, one at a time. Specifically, Model 4 allowed sensitivity and negative regard to covary, and Model 5 allowed guidance and stimulation to covary. Even though Model 5 had an acceptable model fit, $\chi^2(10) = 44.89$, $p < .001$, RMSEA = .09, CFI = .97, SRMR = .05, MIs suggested positive regard should be allowed to load on the negative parenting factor as well as the positive parenting factor. Specification of Model 6 resulted in excellent model fit for these data and the most appropriate baseline model, $\chi^2(9) = 26.66$, $p < .001$, RMSEA = .07, CFI = .99, SRMR = .03. Factor loadings for all parenting variables were significantly greater than zero, and the latent factor positive parenting was negatively associated with the latent factor negative parenting ($r = -.19$, $p < .05$). A summary of the final model with standardized factor loadings for the culturally informed measurement model of Latinx parenting is presented in Figure 5.

**Research Question 3 and 4. Parental Intrusiveness, Parental Guidance, and Children’s Adjustment Problems**

Results of multiple regressions predicting children’s adjustment problems from traditional and culturally informed observational assessments of parenting are presented in Tables 10 and 11.

**BITSEA internalizing behaviors subscale.** A closer look at children’s BITSEA scores using the internalizing behaviors subscale for this measure indicated that
children’s internalizing behaviors were not predicted by parental intrusiveness using the traditionally coded measure. The interaction of parental traditionally coded intrusiveness and maternal warmth was not significant (Table 10, line 1 of block 4), $b = .29$, $\beta = .11$, $p = .117$. The main effects model of culturally informed parental intrusiveness predicting children’s internalizing behaviors did not yield significant associations; however, moderation effects indicated that the strength of the association between parental intrusiveness and internalizing behaviors varied based on the level of parental warmth when using the culturally informed measure (Table 10, line 2 of block 4), $b = .27$, $\beta = .13$, $p = .051$. Simple slopes analyses performed at the mean level of parental warmth and one standard deviation above and below the mean of parental warmth did not indicate significant effects of parental intrusiveness on internalizing behaviors. Regions of significance analyses indicated no significant transition points in the distribution of maternal warmth.

Even though the main effects model of parental guidance predicting children’s internalizing behaviors did not yield significant associations, moderation effects indicated that the strength of the association between parental guidance and internalizing behaviors varied based on the level of parental warmth (Table 10, line 3 of block 4), $b = -0.42$, $\beta = - .20$, $p = .002$. Simple slopes analyses performed at the mean level of parental warmth and one standard deviation above and below the mean are depicted in Figure 6. Parental guidance predicted lower internalizing behaviors for children whose mothers displayed greater levels of warmth (1 $SD$ above the mean), $b = -.47$, $p = .042$. Parental guidance was not associated with internalizing behaviors for children whose mother displayed
mean levels of warmth, \( b = -0.18, p = 0.386 \), or lower levels of warmth (1 SD below the mean), \( b = 0.11, p = 0.664 \). Specifically, for children whose mothers displayed higher levels of warmth during parent-child interactions, greater parental guidance was associated with lower levels of internalizing behaviors. A more precise look at the moderation effects using regions of significance testing indicated that greater parental guidance was associated with lower levels of internalizing behaviors for mothers scoring above 0.75 on maternal warmth (mean centered). This value represents the top 26.16 percent of maternal warmth scores within this sample.

**BITSEA externalizing behaviors subscale.** Examination of main effects using the BITSEA externalizing behaviors subscale indicated that traditionally coded parental intrusiveness was associated with children’s externalizing behaviors such that more intrusiveness was linked with higher levels of externalizing behaviors (Table 11, line 1 of block 2), \( b = 0.32, \beta = 0.13, p = 0.038 \). Interaction effects were not significant. The main effects model indicated that culturally informed coding of parental intrusiveness was associated with externalizing behaviors (Table 11, line 2 of block 2), \( b = 0.24, \beta = 0.13, p = 0.061 \), such that higher levels of parental intrusiveness were associated with higher levels of externalizing behaviors. The moderation effect in the interaction model revealed a significant interaction of culturally informed intrusive parenting and maternal warmth, \( b = -0.21, \beta = -0.14, p = 0.051 \). Simple slope analyses (Figure 7) indicated that for children who experienced low levels of maternal warmth (-1 SD below the mean), greater parental intrusiveness was associated with higher levels of children’s externalizing behaviors, \( b = 0.42, p = 0.005 \). Intrusiveness was unassociated with externalizing behaviors at mean and
low levels of parental warmth. Regions of significance analyses indicated no significant transition points in the distribution of maternal warmth.

In terms of the main effect of maternal guidance on children’s scores on the BITSEA externalizing behaviors subscale, maternal guidance was negatively associated with externalizing behaviors (Table 12, line 3 of block 2), $b = -0.26$, $\beta = -0.13$, $p = 0.067$. Moderation analyses indicated a significant interaction between parental guidance and maternal warmth (Table 11, line 3 of block 4), $b = 0.35$, $\beta = 0.17$, $p = 0.010$. Simple slopes analyses (Figure 8) indicated that parental guidance was associated with fewer externalizing behaviors for children who experienced low, $b = -0.717$, $p = 0.003$, and mean levels of maternal warmth, $b = -0.440$, $p = 0.019$, but that parental guidance was not associated with externalizing behaviors for children who experienced higher levels of maternal warmth, $b = -0.16$, $p = 0.458$. A more precise look at the moderation effects using regions of significance testing indicated that greater parental guidance was associated with lower levels of externalizing behaviors for mothers scoring below .29 on maternal warmth (mean centered). This value represents the bottom 73.56 percent of maternal warmth scores within this sample.
CHAPTER VI
DISCUSSION

Children’s ability to engage in physiological, emotional, and behavioral regulation and adaptive responses is heavily influenced by their social interactions with caregivers during early childhood (Calkins & Hill, 2007). Given that internalizing and externalizing behaviors are related to multiple aspects of maladaptive functioning across domains throughout middle-childhood and adolescence (Birmaher et al., 1996), identifying early parenting behaviors that may buffer or exacerbate their negative effects during early childhood is important. Even though extensive literature has examined links between parenting behaviors and children’s adjustment across developmental periods, fewer studies have examined the roles of specific parenting behaviors during early childhood that predict internalizing and externalizing behaviors, particularly within Latinx families. Additionally, most available studies have reported mixed findings and failed to use culturally informed and theoretical driven frameworks. This is particularly true for studies that have examined the effects of parental intrusiveness on children’s adjustment across cultural groups. Even less is known about the affective and emotional components involved in interactions between caregivers and their young children. Given the increased risk for Latinx children to develop internalizing and externalizing behaviors (Bamaca-Colbert et al., 2012; Flores et al., 2002), understanding to what extent and under what conditions parenting behaviors influence the development of Latinx children’s
adjustment problems is critical. The current study aimed to address gaps and limitations in the literature in four ways. First, it examined measurement invariance of a traditionally coded observational measure of parenting across European American and Latina mothers. Second, this study compared the factor structure of traditional versus culturally informed observational measures of parenting within a sample of Latina mothers. Third, it examined the extent to which traditional versus culturally informed assessments of parental intrusiveness and parental guidance were associated with later internalizing and externalizing behaviors among Latinx young children. Finally, it examined the extent to which maternal warmth moderated these associations.

**Measurement Invariance of a Traditional Observational Measure of Parenting across European American and Latina Mothers**

The first goal of the study was to examine measurement invariance of a traditional observational measure of parenting across European American and Latina mothers. For Study 1 and consistent with Hypothesis 1a, model fit was slightly better for European American mothers than for Latina mothers using the traditionally coded parenting measure. However, for both groups, the model did not fit the data well. Measurement invariance revealed differences across factor loadings and intercepts across both groups. The lack of metric invariance suggested that parenting variables loaded differently onto the parenting latent factors across European American mothers and Latina mothers. Specifically, there were differences in the factor loadings of negative regard on the negative factor and maternal detachment and sensitivity on the positive factor, with Latina mothers loading more strongly on each factor. However, there were no
differences in loadings for parental intrusiveness. These differences indicated that these parenting behaviors were stronger indicators of the latent constructs for Latina mothers compared to European American mothers. These findings were inconsistent with Hypothesis 1b, given that the factor loading of parental intrusiveness was invariant across groups. In terms of scalar invariance, there were differences in the intercepts of parental intrusiveness, sensitivity, and positive regard across groups. Consistent with Hypothesis 1c, findings indicated that Latina mothers were assigned systematically higher parental intrusiveness scores than European American mothers. Additionally, European American mothers were assigned systematically higher parental sensitivity and positive regard scores than Latina mothers. Specifically, Latina mothers were given systematically higher parental intrusiveness scores, but lower parental sensitivity and positive regard scores, compared to European American mothers. However, it is important to acknowledge that the Latino and European American samples were drawn from different research projects and differences between groups may be due to a range of group-related differences other than ethnicity (e.g., geographical region, socioeconomic status, levels of maternal depression, differences in coders).

For Study 2 and consistent with Hypothesis 1a, model fit was better for European American than for Latina mothers using the traditionally coded parenting measure. Measurement invariance revealed differences across factor loadings and intercepts across both groups. In terms of metric invariance, there were differences in the factor loadings of parental intrusiveness on the negative parenting factor and maternal detachment on the positive parenting factor, with Latina mothers loading more strongly on each parenting
construct. These differences indicated that these parenting behaviors were stronger indicators of the latent parenting constructs for Latina compared to European American mothers. Even though it was hypothesized that metric invariance would not hold, results were inconsistent with Hypothesis 1b, given that the factor loading of parental intrusiveness loaded more strongly on the negative factor for Latina mothers. In terms of scalar invariance, there were differences in the intercepts for parental stimulation, intrusiveness, sensitivity, and positive regard across groups. Consistent with Hypothesis 1c, findings suggested that Latina mothers were assigned systematically higher parental intrusiveness and stimulation scores than European American mothers. In contrast, European American mothers were assigned systematically higher parental sensitivity and positive regard scores. Similar to Study 1, these findings suggest that there some level of systematic differences within the traditional observational measure of parenting such that the measure reflects more positive on European American mothers than Latina mothers. Specifically, Latina mothers were assigned systematically higher parental intrusiveness (an indicator of negative parenting) and stimulation scores, but lower parental sensitivity and positive regard scores (indicators of positive parenting), compared to European American mothers. However, it is important to interpret these findings with caution given that there may factors other than ethnicity that explain differences across groups.

These preliminary findings suggest that the traditionally coded observational measure of parenting was partially invariant across European American and Latina mothers. It is important to test measurement invariance across groups before using measures within research studies, even if researchers do not wish to make cross-cultural
comparisons (Knight et al., 2002). The lack of full metric and scalar invariance suggests that researchers should use caution when applying observational assessments that have been developed based on theories and findings emanating from studies conducted with predominantly European American samples. Additionally, this lack of invariance makes comparisons of both mean levels of parenting behaviors and associations between these behaviors and other variables between ethnic groups problematic, potentially leading to a misunderstanding of ethnic differences and the factors that may be driving these differences.

However, it is important to acknowledge additional explanations for the lack of measurement metric invariance within Study 2, particularly in relation to parental intrusiveness. First, it is possible that invariance across groups may have been due to differences in the observational tasks used in each study. Whereas the Family Life Project used a puzzle and a more structured task, the Buffering from Toxic Stress study used a free play and less-structured task. Children in Study 2 were slightly older, and this may have contributed to differences in parenting behaviors across tasks. Accordingly, it is unclear whether the observed differences are reflective of differences in underlying parenting behaviors or whether they are due to measurement artifacts associated with the nature of the observational tasks. Second, it is possible that the lack of measurement invariance may have been due to coder bias. As suggested by the lack of scalar invariance within Studies 1 and 2, Latina mothers were systematically assigned higher rating scores on parental intrusiveness, indicating they were perceived by coders as more intrusive. These two possibilities (task/age differences, coder bias) may account for the
fact that the factor loading of parental intrusiveness loaded more strongly on the negative parenting construct for Latina mothers for Study 2 and that Latina mothers received higher scores on parental intrusiveness across studies, compared with European American mothers.

**Factor Structure of Traditional versus Culturally Informed Observational Measures of Latinx Parenting**

The second goal of this study was to compare the factor structures of traditional versus culturally informed observational measures among Latina mothers. Consistent with Hypothesis 2a, parental intrusiveness loaded on the negative parenting latent construct for both traditional and culturally informed observational measures of Latinx parenting. However, the contribution of parental intrusiveness to the negative parenting construct was slightly greater for the culturally informed measure compared to the traditional measure. Previous measures of parental intrusiveness have often included both positive and negative indicators of parental control. The contribution of both positive and negative indicators may have resulted in a smaller factor loading for parental intrusiveness on the negative parenting construct because of a lack of precision in measurement. However, for the traditional measure, the factor loading of negative regard on the negative parenting construct was greater compared to the culturally informed measure. Given that the culturally informed measure captures parental intrusiveness within Latinx families as a separate construct from parental guidance, this more “refined” measure may result in a slightly higher contribution of parental intrusiveness to the negative parenting latent construct. These findings suggest that during early childhood,
parental intrusiveness is an indicator of negative parenting even when measured using a culturally informed observational assessment. Some researchers have suggested that parenting practices characterized by high levels of intrusiveness and control might constitute acceptable practices for child-rearing and might be perceived positively within Latinx families (Ispa et al., 2004; Tamis-LaMonda et al., 2009), it is possible that the way parental intrusiveness has often been conceptualized and measured (including both positive and negative aspects of parental control as being part of the same construct) in the literature may have led researchers to make such assumptions in error. However, the use of direct commands and physical manipulation are often used with the goal of correcting children’s behaviors and teaching socialization goals aligned with the Latinx culture and should not be considered as indicative of parental intrusiveness. These findings suggest that at least during early childhood, parental intrusiveness that is characterized by a parental agenda, coercive behaviors, and a general lack of respect for the child’s needs is a good indicator of negative parenting within both European American and Latinx families. Future studies should examine whether this is also true within later developmental periods when children have the cognitive capacity to interpret intrusive parenting behaviors as culturally normative.

Consistent with Hypothesis 2b, parental guidance loaded on the positive parenting latent construct within the culturally informed observational measure of Latinx parenting. However, respecification of the model suggested that parental guidance also contributed to the negative parenting latent construct (in the reverse direction). This finding suggests that parents who engage in parental guidance are also less likely to engage in negative
parenting behaviors (and those who fail to engage in parental guidance are more likely to engage in negative parenting behaviors). Consistent with this premise, findings from this study indicated that parents who engaged in more guidance also demonstrated higher levels of warmth. Nevertheless, parental guidance appears to represent a different construct from parental intrusiveness within Latinx families, and parenting behaviors that provide structure and directiveness, and that do not obstruct the child’s activities, should be considered to represent guidance rather than intrusiveness (Baumrind, 2012; Grolnick, 2002; Scharf & Goldner, 2018; Stevenson & Crnic, 2013). Multiple studies have indicated that Latinx parents are more likely to use direct verbal commands and physical manipulation compared with European American parents (Livas-Dlott et al., 2001). Even though these behaviors are likely to be perceived as controlling through Western lenses, they are often used with the goal of correcting the child’s behaviors or teaching socialization goals aligned with the Latinx culture. For example, Puerto Rican mothers are more likely to use commands, physical manipulation, and directives to provide structure within parent-child interactions, as opposed to European American mothers who tend to use suggestions to structure children’s behaviors (Bornstein, 2012). Results of this study suggest that within Latinx families, parental control behaviors that are more positive in nature, guided by child-centered motivations, and that are intended to provide structure should be measured as a different construct (“guidance”) and not as part of the parental intrusiveness construct.
Associations between Parental Intrusiveness, Parental Guidance, and Children’s Adjustment Problems

The third goal of this study was to examine traditional versus culturally informed observational assessments of Latinx parenting to determine whether early indicators of parental intrusiveness and parental guidance were associated with internalizing and externalizing behaviors during early childhood among Latinx children.

Children’s Internalizing Behaviors

Previous studies have indicated that parental intrusiveness is associated with negative child outcomes and that this type of parenting undermines children’s opportunities for autonomy development and behavioral and emotional regulation (Graziano et al., 2010). Even though not all studies have consistently shown associations between parental intrusiveness and child adjustment problems, it was hypothesized within this study that children with highly intrusive parents would have children with more internalizing behaviors for both the traditional and culturally informed observational measures of intrusiveness. Very few studies have examined the effects of parental intrusiveness on the development of internalizing behaviors during early childhood, and very few have involved children from Latinx backgrounds. Contrary to predictions, results indicated that parental intrusiveness was not associated with Latinx children’s internalizing behaviors, and this was true for both the traditional and culturally informed coding of intrusiveness. These findings are consistent with a line of research suggesting that the effects of parental intrusiveness on child developmental outcomes may differ across ethnic groups. Whereas studies that have involved predominantly
European American samples have suggested that parental intrusiveness has negative implications for child development, results from studies that have included Latinx participants have indicated that parental intrusiveness among Latina mothers is not always harmful and can be beneficial depending on the context and child outcome (Carlson & Harwood, 2003; Ispa et al., 2004; Wood & Grau, 2018). For example, Martinez (1988) reported no associations between behavioral indicators of parental intrusiveness, such as positive and negative physical control, and child non-compliance or negative talk towards mothers.

In contrast, it has been suggested that parents who engage in guidance or directive parenting support children’s positive development. However, within the current study, parental guidance was not associated with children’s internalizing behaviors. This may be because the effects of parental guidance depend on the emotional context within which guiding behaviors are displayed. This possibility will be discussed in a subsequent section.

**Children’s Externalizing Behaviors**

A different pattern of results was observed when children’s externalizing behaviors were examined. Consistent with Hypothesis 3a and 3b, parental intrusiveness was positively associated with children’s externalizing behaviors for both the traditional and culturally informed parental intrusiveness coding of this construct. However, it should be noted that effects were slightly larger for the traditionally coded measure. These findings are consistent with previous studies indicating that parental intrusiveness has negative implications for child development, including behavioral problems, child
negativity, and non-compliance (Ispa et al., 2004; Tamis-LeMonda, Shannon, Cabrera, & Lamb, 2004; Taylor et al., 2013). Together, previous research and the findings from the current study suggest that parental intrusiveness has detrimental effects on children’s development in terms of levels of externalizing behaviors during early childhood within Latinx families. It is possible that children who are very young may not be able to interpret intrusive behaviors as normative rather than coercive (Barajas-Gonzalez et al., 2018, Grusec & Goodnow, 1994), and that such associations might be smaller among older children. Additionally, it is important to acknowledge the role that children’s externalizing behaviors may play in eliciting behaviors from their mothers that are intrusive in nature during dyadic interactions (Lloyd & Masur, 2014). Future studies should use longitudinal methods that allow researchers to capture directionality of the associations between maternal and child behaviors.

As hypothesized, parental guidance was negatively associated with children’s externalizing behaviors. This is consistent with previous studies suggesting that the use of verbal and non-verbal behaviors to provide structure (particularly when accompanied by information), provides for high-quality scaffolding when children need assistance and has positive implications in terms of child development. For example, Donovan et al., (2000) found that toddlers whose mothers engaged in more guidance during a compliance task were more likely to show both compliance and self-assertive behaviors. In contrast, toddlers whose mothers used more negative control strategies demonstrated lower levels of compliance and higher levels of defiance. Similar findings have been reported in studies including Latinx children. Wood and Grau (2018) examined the effects of
different forms of control among adolescent Latina mothers and their toddlers. Findings indicated that toddlers whose mothers were bicultural and engaged in parental guidance showed the lowest levels of defiance. However, low levels of defiance were also observed for toddlers of enculturated and controlling mothers. This finding suggests that within the Latinx culture, a more directive parenting style that guides children’s behaviors may be a better strategy and result in a decreased risk for developing externalizing behaviors. Whereas Latinx parents might be more likely to use directives and physical manipulation during parent-child interactions, such strategies should not be interpreted as intrusive if provided in a sensitive and well-timed manner. In fact, it has been suggested that teaching young children to be respectful, well-behaved, and attentive may require greater use of physical manipulation and directives than teaching children to be autonomous and independent (Carlson & Harwood, 2003). Even though analyses for this study controlled for primary language spoken in the home, it is possible that associations between parental guidance and externalizing behaviors might differ by levels of acculturation and enculturation. Future studies should examine the extent to which cultural processes beyond language might explain this finding.

**Differences for Internalizing and Externalizing Behaviors**

Two possibilities may explain why in the current study parental intrusiveness and parental guidance were significantly associated with children’s externalizing behaviors but not internalizing behaviors. First, it is possible that the lack of significant associations between parenting and internalizing behaviors may have been due to the relatively low mean level of internalizing behaviors within this sample. This lack of
variability of internalizing behaviors may be for two reasons: a) Whereas externalizing behaviors tend to gradually decrease over childhood, internalizing behaviors tend to increase over time (Gilliom & Shaw, 2004); b) Some studies have suggested that early caregiving behaviors (i.e., parental hostility) might be more strongly associated with externalizing behaviors than internalizing behaviors and that the effects of parenting on internalizing behaviors might be stronger as children get older and the prevalence of these behaviors increase (Ge et al., 1996; Pinquart, 2017). Second, these differences could be related to the different representations of internalizing versus externalizing symptomology and the extent to which caregivers have the ability to identify such behaviors during early childhood. For example, internalizing behaviors often include behaviors such as social withdrawal, shyness, somatic complaints, anxiety, and excessive worries. In contrast, externalizing behaviors include aggression, hostility, attention problems, and noncompliance behaviors (Achenbach et al., 2017). Given that internalizing symptomology is often characterized by quiet and internal distress representations, these symptoms may be more challenging to identify at a very young age. Additionally, there is some evidence that suggests that parents, teachers, and other caregivers tend to perceive internalizing behaviors as less problematic than externalizing behaviors. Additionally, children at this age present lower verbal skills and a limited capacity to represent and understand internal feelings states (Tandon, Cardeli, Luby, 2009). As a result, it is possible that parents in this sample may have under reported internalizing symptomatology which may have introduced error into the measurement of internalizing behaviors, leading to the lack of significant findings.
The Role of Maternal Warmth

Scholars have suggested that variations in maternal warmth and affective quality might account for differences in associations between parental intrusiveness and children’s adjustment within Latinx families; however, the findings informing this possibility have been mixed (Carlson & Harwood, 2003; Ispa et al., 2013). The final goal of this study was to examine whether maternal warmth moderated associations between traditionally versus culturally informed observational measures of parental intrusiveness and guidance, and Latinx children’s adjustment. However, given mixed findings and inconsistent conclusions in the literature, no hypotheses were proposed. It is important to note that overall, mothers in this study engaged in more parental guidance and displayed more maternal warmth than parental intrusiveness. This challenges the stereotype that Latinx parents are highly intrusive at the expense of being warm and supports suggestions that Latinx parents with young children engage in both nurturing and directive behaviors (Barajas-Gonzalez et al., 2018; Calzada & Eyeberg, 2002).

Findings indicated that maternal warmth did not moderate the association between the traditional coded parental intrusiveness and children’s internalizing behaviors, suggesting that parental intrusiveness was not associated with greater children’s internalizing behaviors, regardless of maternal warmth. In contrast, when using the culturally informed coded measure, maternal warmth moderated the effects of parental intrusiveness on children’s BITSEA internalizing scores. However, simple slopes and regions of significance analyses did not yield any significant effects or transition points. As a result, findings of this study do not contribute clarifying information with respect to
whether – and how – maternal warmth might moderate associations between parental intrusiveness and children’s internalizing behaviors.

Maternal warmth also moderated the association between parental guidance and internalizing behaviors. Specifically, higher levels of parental guidance were associated with lower levels of internalizing behaviors only among children whose mothers showed high levels of warmth and not among those with low warmth. This finding indicates that it was only when children were exposed to both higher levels of parental guidance and higher levels of parental warmth that they were protected from internalizing behaviors. Maternal guidance in the context of low levels of parental warmth was not protective in terms of internalizing behaviors. Interestingly, a closer examination of this moderating effect indicated that the association between parental guidance and internalizing behaviors was significant (and negative) for children with mothers scoring above .75 on maternal warmth (mean centered), which corresponded to about one-fourth of participants within this sample. This suggests that in the face of low parental guidance, young children may need to be exposed to extremely high levels of maternal warmth to be buffered from later internalizing behaviors.

Maternal warmth did not moderate the association between the traditionally coded parental intrusiveness and children’s externalizing behaviors. In contrast, when using the culturally informed coded measure, maternal warmth moderated the effects of parental intrusiveness on children’s BITSEA externalizing scores. Specifically, the association between culturally informed parental intrusiveness and externalizing behaviors was positive and significant only for children who were exposed to low maternal warmth.
during parent-child interactions. This association became nonsignificant at high and mean levels of warmth, consistent with findings from Germán and colleagues’ (2013) sample of Mexican American adolescents. The authors found that parental harsh discipline was positively associated with externalizing behaviors one year later but only at lower levels of maternal warmth. Similarly, Ispa and colleagues (2004) found that maternal intrusiveness was associated with toddlers’ display of negativity towards their mothers only if mothers showed low maternal warmth. However, this effect was only observed within African American families, not within European American and Mexican American families. This finding from the current study is consistent with prior work suggesting that the effects of Latina mothers’ intrusive parenting may not always be harmful and may be dependent on context (i.e. levels of maternal warmth) and for certain aspects of child functioning (i.e. externalizing behaviors). Parental warmth only moderated associations between the culturally informed measure of parental intrusiveness, suggesting that understanding of the manner in which parental intrusiveness and parental warmth work together to predict indicators of child adjustment within Latinx families requires use of measures that are developed with consideration of this specific cultural context.

Maternal warmth also moderated the association between parental guidance and externalizing behaviors. Specifically, parental guidance was negatively associated with children’s externalizing behaviors at low and mean levels of maternal warmth, but not at high levels of warmth. Interestingly, a closer examination of this moderating effect indicated that the association between parental guidance and externalizing behaviors was
significant (and negative) for children with mothers scoring below .29 on warmth (mean centered), which corresponded to the about two-thirds of participants within this sample. This finding supports prior work suggesting that young children with parents who engage in sensitive and appropriate responses that support children’s needs are more likely to develop secure attachments, better emotion regulation, and social and emotional adjustment (Leerkes, Blankson, & O’Brien, 2009). Among Latina mothers, the use of a directive parenting style that supports and guides interactions and aligns with Latinx socialization goals may be beneficial even if mothers display low to mean levels of warmth, whereas mothers who do not engage in these behaviors may fail to support young children’s developmental needs.

**Summary**

Findings from the current study suggest the need to examine measurement invariance across groups when applying measures initially developed within European American and middle-class samples to work with Latinx families. Additionally, findings indicate that during early childhood and within the Latinx culture context, parental intrusiveness is an indicator of negative parenting even when measured using culturally informed coding of an observational measure. In addition, parental guidance seems to be a construct that is distinct from parental intrusiveness and a good indicator of positive parenting. Regarding the effects of parental intrusiveness and parental guidance on children’s adjustment in the context of maternal warmth, several findings emerged. First, parental guidance was negatively associated with internalizing behaviors, but only for children whose mothers exhibited high levels of warmth. Parental guidance was
Negatively associated with externalizing behaviors for children whose mothers showed average and below average levels of warmth. Finally, parental intrusiveness was positively associated with externalizing behaviors, but only for children whose mothers displayed low levels of warmth during an observational parent-child interaction task. Together, these findings provide strong support for the need to study parenting behaviors within an ecological framework that recognizes the cultural context within which Latinx families are embedded and inform a more nuanced understanding of the effects of parental intrusiveness and parental guidance in the context of maternal warmth. Additionally, these findings provide new knowledge that can guide preventive and intervention efforts and have important theoretical and measurement implications that emphasize the use of culturally informed frameworks to better understand the implications of early caregiving experiences for child development within Latinx families.

**Strengths and Limitations**

The current study advances knowledge regarding the study of Latinx parenting and the development of young children’s adjustment problems in several ways. First, it broadens the scope of previous research by providing a theoretical and culturally informed understanding of Latinx parenting and parental intrusiveness in particular. Specifically, it conceptualizes parental intrusiveness taking into consideration the sociocultural context within which Latinx families are embedded and the role that parental ethnotheories and socialization goals play in the expression and function of parenting behaviors. Additionally, it incorporates recent conceptualizations of parental
control that suggest the need for distinguishing between parenting behaviors that are intrusive in nature versus behaviors that aim to provide guidance and structure of the parent-child interaction. This is particularly important in research with Latinx families, given work suggesting that the use of directives and physical manipulation may not be an expression of intrusiveness but rather an effort to provide structure and teach central socialization goals, such as familism and respeto, within this culture. An important contribution of this study is the use of a newly developed and culturally informed observational measure of Latinx parenting that distinguishes between parental behaviors that are coercive and parental driven versus those that are child-oriented and intended to provide structure and guidance within the parent-child interaction. Additionally, this study examines the effects of parental intrusiveness and parental guidance on indicators of child adjustment (internalizing and externalizing behaviors) while considering the emotional context within which parent-child interactions occur to understand how maternal warmth may contextualize the effects of parenting on Latinx children’s adjustment. Finally, this study uses a multi-method longitudinal design, and analyses included multiple covariates and were conducted using best practices in SEM to minimize bias in statistical estimation.

Despite these strengths and contributions, the findings of this study should be considered in light of several limitations. First, in relation to Research Question 1, an important limitation was that different tasks were used during the observational parent-child interaction assessments across the Family Life and the Buffering Children from Toxic Stress projects. Whereas the Family Life Project used a structured task, the
Buffering from Toxic Stress study used a free play task. This may have led to differences due to measurement artifacts associated with the nature of the tasks, rather than parents’ underlying parenting behaviors parents. Future studies should replicate these findings using the same tasks across participants to reduce measurement artifacts.

Second, it was surprising to not be able to detect a statistically significant association between the culturally informed parental intrusiveness variable and children’s BITSEA internalizing scores. This may have been due to the overall low mean levels of internalizing behaviors within this sample. Future studies should further examine these associations in community and clinical samples and use longitudinal designs to address questions of comorbidity and casual effects. Additionally, the use of person-centered and longitudinal designs that examine within and between subject differences within Latinx families might provide a more nuanced understanding of Latinx parenting. It would be important to understand how parental intrusiveness and socialization goals change over time as children develop and solicit more autonomy as well as whether associations between parental intrusiveness and child developmental outcomes differ across developmental periods. Future studies should incorporate longitudinal designs, person-centered approaches, and examined bidirectional influences across developmental periods (Scharf & Goldern, 2018).

Even though this study considered socialization goals such as *respeto* and *familism* in the conceptualization of parental intrusiveness and guidance, it did not include measurement and direct testing of such variables. Previous work suggests that the extent to which cultural beliefs and socialization goals about child-rearing influence
parenting behaviors may depend on acculturation and enculturation levels. However, studies have not yet examined whether associations between socialization goals and parenting behaviors are moderated by acculturation processes. In future studies, it would be important to examine how and under what conditions *respeto* and *familismo* are uniquely associated with parental intrusiveness and guidance and whether there are differences depending on levels of acculturation. Additionally, even though cultural factors, ethnicity, and context are interrelated, much of the work on cultural variations in parenting has confounded ethnicity with contextual factors. Some scholars have suggested that differences in parenting across ethnic groups are due to socioeconomic status disparities, suggesting that socio-demographic factors are more salient than cultural factors in predicting parenting behaviors (Mesman, Van Ijzendoorn, & Bakermans-Kranenburg, 2012). In contrast, others have indicated that culture predicts parenting differences above and beyond socioeconomic status (Harwood et al., 1996; Hoffert, 2003). As a result, it is important to understand how culture, ethnicity, and contextual factors operate both individually and in combination as predictors of variability in parenting behaviors (Le et al., 2008).

Finally, even though the use of the term Latinx is used throughout the study, there is large heterogeneity within this cultural group, and the sample composition for this study was not nationally representative, but rather based on a community sample of Latinx immigrant mothers in an urban environment. Thus, even though this is the first attempt to develop a culturally informed measure of Latinx parenting including separate measures of parental intrusiveness and parental guidance, it is important to acknowledge
that this measure was developed based on observations of parent-child interactions within a single sample and may be sample-specific (i.e., low-income, newly immigrated Latinos). However, it is likely that this measure can be generalized for use with Latinx participants that have similar characteristics, and future studies should be conducted to validate it.

**Implications for Theory, Methods, and Practice**

The current study has several implications for theory and measurement work focused on Latinx parenting. One major implication is related to the conceptualization of parental intrusiveness within Latinx families. This is likely one of the first studies to take into consideration the sociocultural context within which Latinx families are embedded and the role that parental ethnotheories and socialization goals play in the expression and function of Latinx parenting behaviors. Previous measures of parental intrusiveness have been developed based on traditional theories of parenting developed based on studies conducted with European American and middle-class families. Given cultural differences across groups, measures of parenting in which parents who do not promote autonomy are considered to be highly intrusive may not provide a good representation of parenting among Latinx parents. This premise is consistent with findings from this study and suggests the need to develop culturally informed measures that capture the variability of parenting behaviors across groups. Findings from this study indicated that a traditionally coded observational parenting measure may not be able to capture equally well parenting behaviors within different ethnic groups and that differences across samples may have yielded higher mean levels of intrusive behaviors among Latina
mothers than actually were present. Specifically, findings suggested that European American mothers were given systematically lower intrusiveness scores, compared to Latina mothers, favoring one group over the other. In fact, using the culturally informed measure of Latinx parenting, average scores indicated that Latina mothers were more likely to display guidance and warmth during play than intrusiveness. A lack of tests of measurement equivalence limits the ability to interpret findings across studies and raises problems related to both reliability and validity of measures. Future studies should be framed using culturally informed approaches and examine measurement equivalence of observational assessments to determine whether a coding system is valid for use with parents and children from different ethnic backgrounds. Such an approach will allow for a better understanding of family processes, parental socialization strategies, and their effects on child adjustment across cultural groups.

Another implication of this study involves the importance of incorporating recent conceptualizations of parental control that underscore the need to distinguish between parenting behaviors that are intrusive and coercive in nature versus behaviors that aim to provide guidance and structure within parent-child interactions. For European American parents, the use of a directive parenting style may be perceived as intrusive. However, for Latinx parents, the use of direct commands and physical manipulations are often used with the goal of correcting the child’s behaviors and providing guidance, rather than undermining children’s autonomy development. In most cases, these behaviors are not accompanied by anger or negative affect, but rather high warmth and affection. Findings from this study indicated that the culturally informed measure of parental intrusiveness
was a good indicator of the negative parenting construct within European American and Latina mothers, whereas parental guidance was a good indicator of the positive parenting construct for Latinx mothers. These findings highlight the importance of differentiating parenting behaviors that are intrusive in nature versus those that aim to guide and support the child’s needs. Future studies should incorporate recent theoretical frameworks of parental control in research on Latinx parenting and include observations of both parental intrusiveness and guidance. The conceptualization of these constructs should be guided by cultural orientations and associated socialization goals within a given ethnic group. Additionally, given work that has suggested that the use directives and physical manipulation are more likely to be used by Latinx parents to teach socialization goals of familism and respeto, future studies should examine whether such behaviors are coercive and parental driven or whether they are child-oriented and intended to provide guidance.

A final implication is related to understanding the roles of parental intrusiveness and parental guidance with respect to the development of internalizing and externalizing behaviors in young children from Latinx backgrounds. In an effort to understand mixed findings in the literature, maternal warmth was examined as a moderator of associations between traditional and culturally informed parental intrusiveness, parental guidance and children’s internalizing and externalizing behaviors. Traditionally coded parental intrusiveness was associated only with externalizing behaviors and not internalizing behaviors, and maternal warmth did not moderate any of these associations. In contrast, maternal warmth moderated associations between culturally informed parental intrusiveness and children’s internalizing and externalizing behaviors. However, the
positive association between parental intrusiveness and externalizing behaviors was stronger for those children who experienced low levels of maternal warmth. This finding is consistent with recent research suggesting that parental intrusiveness may be detrimental for Latinx children only under the condition of low maternal warmth. In contrast, parental guidance seems to be associated with positive developmental outcomes within this cultural group, even when mothers display low levels of warmth. It would be important for future studies to further explore the mechanisms underlying these associations.

In future work, it would be important to incorporate measures of parental affect and warmth during parent-child interaction observations to consider the emotional context within which parental intrusiveness and guidance are displayed. It is important that future work examines parental intrusiveness that is not aggregated into composite scores that also include harsh parenting behaviors as well as other parenting behaviors (McFadden & Tamis-LeMonda, 2013). Additionally, it is important to not only examine whether and how maternal warmth may alter the effects of parental intrusiveness on child adjustment, but also under what conditions the benefits of maternal warmth might be attenuated by parental intrusiveness (Tamis-LeMonda et al., 2009). Examination of maternal warmth during the same moment that intrusive or controlling behaviors are displayed (Ispa et al., 2013), and consideration of the affect displayed by children when perceiving parenting behaviors might provide a better understanding regarding the effects of parental intrusiveness on child developmental outcomes. Given the heterogeneity within Latinx families based on country of origin, language proficiency, generation
status, income and education levels, and immigration experiences, studies should
examine variation within Latinx subgroups. Finally, the inclusion of both mothers and
fathers in future research might yield additional insights related to whether components
of Latinx parenting differ in relation to young children’s adjustment problems when they
are exhibited by mothers versus fathers.

On a different note, this work can guide prevention and intervention programs that
aim to promote nurturing behaviors and support child development. First, parenting
programs should engage in education that recognizes the roles of culture and ethnicity.
For example, programs should acknowledge the way parental beliefs about child-rearing
and cultural socialization goals influence parents’ behaviors and incorporate those beliefs
in interventions. This will allow an understanding of parenting behaviors within the
cultural and emotional context within which such behaviors are expressed. Using a
culturally informed observational coding measure of Latinx parenting, our findings raised
concerns regarding mothers who exhibited high levels of parental intrusiveness compared
to other mothers within this ethnic groups, especially if intrusiveness occurred in the
context of low parental warmth. Additionally, a directive parenting style seems to be
beneficial for child development, when it is displayed in a sensitive and timely manner,
consistent with Latinx socialization goals. As a result, intervention efforts should aim to
reduce intrusive behaviors and promote the use of parental guidance in the context of
nurturing and warm behaviors.
Conclusion

The current study compared measurement models of parenting across cultural groups and examined the extent to which traditional versus culturally informed assessments of parental intrusiveness and parental guidance were associated with adjustment problems among Latinx young children. Additionally, this study used a conceptualization and measurement of parental intrusiveness that is culturally informed and guided by empirical and theoretical work. Results indicated partial measurement invariance in parenting behaviors across groups when applying a measure initially developed for European American and middle-class samples to families from Latinx backgrounds. Additionally, findings indicated that during early childhood and within the Latinx cultural context, parental intrusiveness was an indicator of negative parenting even when measured using a culturally informed coded observational measure. In contrast, parental guidance seems to be a distinct construct from parental intrusiveness and a good indicator of positive parenting. Parental guidance was negatively associated with internalizing behaviors only for children whose mothers showed high levels of warmth. In contrast, parental guidance was negatively associated with externalizing behaviors but this effect was stronger for children whose mothers showed average and below average levels of warmth. Finally, parental intrusiveness was positively associated with externalizing behaviors but this effect was stronger for children whose mothers displayed low levels of warmth during a free play task. Given the salience of early caregiving behaviors for later child adjustment, the development of culturally informed measures that are guided both by theoretical and empirical evidence and that take the role of culture
into account may be particularly helpful for a better understanding of how parental intrusiveness is linked to child outcomes in Latinx families. The use of culturally informed approaches will move the field beyond generalizations and stereotyped representations of ethnic minority families and toward an understanding of similarities and differences as well as strengths and difficulties across ethnic groups.
REFERENCES


doi.org/10.1080/10888690802387880


doi.org/10.1037/a0018016


Table 1
Traditional Versus Culturally Informed Observational Measures of Parental Intrusiveness and Parental Guidance in Latinx Families

<table>
<thead>
<tr>
<th>Definition</th>
<th>Intrusiveness Traditional</th>
<th>Intrusiveness Cultural</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>The degree to which the mother showed a lack of respect for the child and failed to promote autonomy development</td>
<td>Verbal and nonverbal instances in which the parent provides control in coercive and pressuring ways, behaviors are parent-driven, and the parent demonstrates a general lack of respect for the child</td>
<td>Verbal and non-verbal instances that aim to provide structure and high-quality assistance when the child needs it, as well as behaviors that are child driven and task oriented</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Intrusiveness Traditional</th>
<th>Intrusiveness Cultural</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Offering a continuous stimulation</td>
<td>• Engaging in harsh physical manipulations</td>
<td>• Providing physical guidance</td>
<td></td>
</tr>
<tr>
<td>• Not allowing the child to influence the pace or focus of play, interaction, or feeding</td>
<td>• Limiting the child opportunities to participate in the task</td>
<td>• Engaging in directing and modeling behaviors</td>
<td></td>
</tr>
<tr>
<td>• Taking away objects or food while the child still appears interested</td>
<td>• Engaging in directive behavior that is persistent, off-task, parental driven, and coercive in nature</td>
<td>• Using directives and questions that are on task and often accompanied by verbal elaboration</td>
<td></td>
</tr>
<tr>
<td>• Not allowing the child to handle toys he/she reaches for</td>
<td>• Restraining the child’s movement</td>
<td>• Well-timed and genuine guidance</td>
<td></td>
</tr>
<tr>
<td>• Insisting that the child do something</td>
<td>• General lack of respect for the child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Not allowing the child to make choices</td>
<td>• Engaging in shaming and guilt inducing behaviors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Impairing the child’s movement</td>
<td></td>
<td></td>
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Table 2

Descriptive Statistics and Intercorrelations among Model Variables for the Family Life Project at 15 Months and the Buffering from Toxic Stress Study (UMD Site)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sensitivity</td>
<td>-</td>
<td>-.75**</td>
<td>.56**</td>
<td>.56**</td>
<td>-.34**</td>
<td>-.64**</td>
</tr>
<tr>
<td>2. Detachment</td>
<td>-.70**</td>
<td>-</td>
<td>-.59**</td>
<td>-.61**</td>
<td>.22**</td>
<td>.21**</td>
</tr>
<tr>
<td>3. Stimulation</td>
<td>.67**</td>
<td>-.70**</td>
<td>-</td>
<td>.51**</td>
<td>-.21**</td>
<td>-.26**</td>
</tr>
<tr>
<td>4. Positive Regard</td>
<td>.43**</td>
<td>-.59**</td>
<td>.51**</td>
<td>-</td>
<td>-.22**</td>
<td>-.25**</td>
</tr>
<tr>
<td>5. Negative Regard</td>
<td>-.63**</td>
<td>.18**</td>
<td>-.31**</td>
<td>-.03**</td>
<td>-</td>
<td>.39**</td>
</tr>
<tr>
<td>6. Intrusiveness</td>
<td>-.47**</td>
<td>.17**</td>
<td>-.27</td>
<td>.02</td>
<td>.62**</td>
<td>-</td>
</tr>
<tr>
<td>Mean FLP 15</td>
<td>2.96</td>
<td>2.62</td>
<td>2.79</td>
<td>3.12</td>
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<td>2.68</td>
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<tr>
<td>SD FLP 15</td>
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<td>.92</td>
<td>1.03</td>
<td>.93</td>
<td>.71</td>
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<tr>
<td>Mean BTS</td>
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<td>2.64</td>
<td>2.86</td>
<td>2.86</td>
<td>1.65</td>
<td>3.02</td>
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<tr>
<td>SD BTS</td>
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<td>1.06</td>
<td>.90</td>
<td>.98</td>
<td>.92</td>
<td>.85</td>
</tr>
</tbody>
</table>

*Note. Correlations for FLP are above the diagonal; Correlations for BTS are below the diagonal.*

FLP = Family Life Project; BTS = Buffering from Toxic Stress

*p < 0.01; **p < 0.05
Table 3
Descriptive Statistics and Intercorrelations among Model Variables for The Family Life Project at 24 Months and the Buffering from Toxic Stress Study (NYU Site)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
<tr>
<td>1. Sensitivity</td>
<td>-</td>
<td>-0.73**</td>
<td>0.58**</td>
<td>0.51**</td>
<td>-0.78**</td>
<td>-0.51**</td>
</tr>
<tr>
<td>2. Detachment</td>
<td>-0.70**</td>
<td>-</td>
<td>-0.56**</td>
<td>-0.49**</td>
<td>0.39**</td>
<td>0.40**</td>
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<tr>
<td>3. Stimulation</td>
<td>0.67**</td>
<td>-0.70**</td>
<td>-</td>
<td>0.51**</td>
<td>-0.39**</td>
<td>-0.39**</td>
</tr>
<tr>
<td>4. Positive Regard</td>
<td>0.43**</td>
<td>-0.59**</td>
<td>0.51**</td>
<td>-</td>
<td>-0.31**</td>
<td>-0.22**</td>
</tr>
<tr>
<td>5. Negative Regard</td>
<td>-0.63**</td>
<td>0.18**</td>
<td>-0.31**</td>
<td>-0.03**</td>
<td>-</td>
<td>0.51**</td>
</tr>
<tr>
<td>6. Intrusiveness</td>
<td>-0.47**</td>
<td>0.17**</td>
<td>-0.27</td>
<td>0.02</td>
<td>0.62**</td>
<td>-</td>
</tr>
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<td>Mean FLP 24</td>
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<td>2.71</td>
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<td>0.95</td>
<td>0.99</td>
<td>0.99</td>
<td>0.94</td>
<td>0.93</td>
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<td>2.64</td>
<td>2.84</td>
<td>2.80</td>
<td>1.93</td>
<td>3.04</td>
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<tr>
<td>SD BTS</td>
<td>0.92</td>
<td>1.06</td>
<td>0.91</td>
<td>0.86</td>
<td>0.90</td>
<td>0.98</td>
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</table>

*Note.* Correlations for FLP are above the diagonal; Correlations for BTS are below the diagonal.

FLP = Family Life Project; BTS = Buffering from Toxic Stress

*p < 0.01; **p < 0.05
Table 4

Descriptive Statistics and Intercorrelations among Model Variables for the Buffering Children from Toxic Stress Study

<table>
<thead>
<tr>
<th>Variable</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
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<tr>
<td>1. Treatment Group</td>
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</tr>
<tr>
<td>2. Language Spoken</td>
<td>.27**</td>
<td>-</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Maternal Education</td>
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<td>.08</td>
<td>-</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>4. Maternal Depression</td>
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<td>.01</td>
<td>.03</td>
<td>-</td>
<td></td>
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<td></td>
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<td></td>
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<td>5. Traditionally Coded Intrusiveness</td>
<td>.00</td>
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<td>-.125*</td>
<td>-.02</td>
<td>-</td>
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<td>6. Culturally Coded Intrusiveness</td>
<td>.00</td>
<td>.02</td>
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<td>-.04</td>
<td>.80**</td>
<td>-</td>
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<td>7. Maternal Guidance</td>
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<td>-.01</td>
<td>.22**</td>
<td>.08</td>
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<td>-.53**</td>
<td>-</td>
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<td>8. Maternal Warmth</td>
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<td>.02</td>
<td>.24**</td>
<td>.07</td>
<td>-.31**</td>
<td>-.25**</td>
<td>.64**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. BITSEA Internalizing</td>
<td>-.12</td>
<td>-.12</td>
<td>-.19*</td>
<td>.09</td>
<td>-.02</td>
<td>.04</td>
<td>-.09</td>
<td>-.04</td>
<td>-</td>
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</tr>
<tr>
<td>10. BITSEA Externalizing</td>
<td>-.15*</td>
<td>-.15*</td>
<td>-.06</td>
<td>.28**</td>
<td>.12</td>
<td>.12</td>
<td>-.11</td>
<td>-.04</td>
<td>.32**</td>
<td>-</td>
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<td>Mean:</td>
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<td>.51</td>
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<td>2.46</td>
<td>2.54</td>
<td>2.86</td>
<td>2.14</td>
<td>3.06</td>
</tr>
<tr>
<td>SD:</td>
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<td>.31</td>
<td>.50</td>
<td>8.97</td>
<td>.92</td>
<td>1.17</td>
<td>1.07</td>
<td>1.79</td>
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<td>2.11</td>
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<td>379</td>
<td>373</td>
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<td>300</td>
<td>300</td>
<td>377</td>
<td>208</td>
<td>210</td>
</tr>
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</table>

Note. *p < 0.05; **p < 0.01
Table 5
Model Fit Statistics and Measurement Invariance for European American and Latina Mothers at 15 Months

<table>
<thead>
<tr>
<th>Models</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$p$</th>
<th>RMSEA</th>
<th>CFI</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FLP 15 Factor Structure</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1: Hypothesized</td>
<td>915.41</td>
<td>8</td>
<td>&lt;.01</td>
<td>.319</td>
<td>.620</td>
<td>.224</td>
</tr>
<tr>
<td>Model 2: Sens on Neg</td>
<td>54.69</td>
<td>7</td>
<td>&lt;.01</td>
<td>.104</td>
<td>.974</td>
<td>.055</td>
</tr>
<tr>
<td>Model 3: Detach with Sens</td>
<td>26.51</td>
<td>6</td>
<td>&lt;.01</td>
<td>.073</td>
<td>.989</td>
<td>.043</td>
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<td><strong>UMD Factor Structure</strong></td>
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<td>&lt;.01</td>
<td>.310</td>
<td>.773</td>
<td>.115</td>
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<td>.128</td>
<td>.966</td>
<td>.063</td>
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<td>Model 3: PR on Neg</td>
<td>10.75</td>
<td>6</td>
<td>&lt;.01</td>
<td>.066</td>
<td>.992</td>
<td>.035</td>
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<tr>
<td><strong>Measurement Invariance</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Configural</td>
<td>37.25</td>
<td>12</td>
<td>&lt;.01</td>
<td>.072</td>
<td>.990</td>
<td>.042</td>
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<tr>
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<td>.085</td>
<td>.976</td>
<td>.101</td>
</tr>
<tr>
<td>Partial Metric b</td>
<td>63.27</td>
<td>19</td>
<td>&lt;.01</td>
<td>.076</td>
<td>.982</td>
<td>.093</td>
</tr>
<tr>
<td>Partial Metric c</td>
<td>56.31</td>
<td>18</td>
<td>&lt;.01</td>
<td>.072</td>
<td>.984</td>
<td>.077</td>
</tr>
<tr>
<td>Partial Metric d</td>
<td>44.34</td>
<td>17</td>
<td>&lt;.01</td>
<td>.063</td>
<td>.989</td>
<td>.055</td>
</tr>
<tr>
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<td>.085</td>
<td>.973</td>
<td>.072</td>
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<td>20</td>
<td>&lt;.01</td>
<td>.059</td>
<td>.989</td>
<td>.053</td>
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</table>

Note. CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; Sens = Sensitivity; Neg = Negative; Detach = Detachment; PR = Positive Regard
Table 6

Nested Model Comparisons for European American and Latina Mothers at 15 Months

<table>
<thead>
<tr>
<th>Models</th>
<th>Δ $\chi^2$</th>
<th>df</th>
<th>p</th>
<th>Δ CFI</th>
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<tbody>
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<td>8</td>
<td>.000</td>
<td>.014</td>
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<td>Partial Metric b vs. Configural</td>
<td>26.02</td>
<td>7</td>
<td>.000</td>
<td>.008</td>
</tr>
<tr>
<td>Partial Metric c vs. Configural</td>
<td>19.06</td>
<td>6</td>
<td>.004</td>
<td>.006</td>
</tr>
<tr>
<td>Partial Metric d vs. Configural</td>
<td>7.102</td>
<td>5</td>
<td>.213</td>
<td>.001</td>
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<tr>
<td>Scalar a vs. Partial Metric d</td>
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<td>6</td>
<td>.000</td>
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</tr>
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<td>Scalar b vs. Partial Metric d</td>
<td>35.63</td>
<td>5</td>
<td>.000</td>
<td>.013</td>
</tr>
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<td>Scalar c vs. Partial Metric d</td>
<td>12.10</td>
<td>4</td>
<td>.000</td>
<td>.003</td>
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<td>Scalar d vs. Partial Metric d</td>
<td>3.55</td>
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<td>.314</td>
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Table 7

Model Fit Statistics and Measurement Invariance for European American and Latina Mothers at 24 Months

<table>
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<th>Models</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$p$</th>
<th>RMSEA</th>
<th>CFI</th>
<th>SRMR</th>
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<tr>
<td><strong>FLP 24 Factor Structure</strong></td>
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<td>Model 1: Hypothesized</td>
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<td>.960</td>
<td>.051</td>
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<tr>
<td>Model 3: Detach with Sens</td>
<td>44.02</td>
<td>6</td>
<td>&lt;.01</td>
<td>.100</td>
<td>.980</td>
<td>.043</td>
</tr>
<tr>
<td>Model 4: Sens with Intr</td>
<td>17.82</td>
<td>5</td>
<td>&lt;.01</td>
<td>.064</td>
<td>.993</td>
<td>.019</td>
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<td><strong>NYU Factor Structure</strong></td>
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<td>Model 1: Hypothesized</td>
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<td>&lt;.01</td>
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<td>&lt;.01</td>
<td>.105</td>
<td>.98</td>
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<td>Model 4: Intr with Detach</td>
<td>9.66</td>
<td>5</td>
<td>&gt;.01</td>
<td>.069</td>
<td>.993</td>
<td>.039</td>
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<td><strong>Measurement Invariance</strong></td>
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<tr>
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<td>10</td>
<td>&lt;.01</td>
<td>.067</td>
<td>.993</td>
<td>.026</td>
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<tr>
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<td>.987</td>
<td>.063</td>
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<td>.063</td>
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<td>.976</td>
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<td>.978</td>
<td>.076</td>
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<td>.060</td>
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<td>17</td>
<td>&lt;.01</td>
<td>.066</td>
<td>.988</td>
<td>.055</td>
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</tbody>
</table>

*Note. CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; Sens = Sensitivity; Neg = Negative; Detach = Detachment; PR = Positive Regard*
Table 8

Nested Model Comparisons for European American and Latina Mothers at 24 Months

<table>
<thead>
<tr>
<th>Models</th>
<th>$\Delta \chi^2$</th>
<th>df</th>
<th>$p$</th>
<th>$\Delta$ CFI</th>
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<tbody>
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<td>Metric a vs. Configural</td>
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<td>.006</td>
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<tr>
<td>Partial Metric b vs. Configural</td>
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<td>.035</td>
<td>.003</td>
</tr>
<tr>
<td>Partial Metric c vs. Configural</td>
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<td>5</td>
<td>.062</td>
<td>.002</td>
</tr>
<tr>
<td>Scalar vs. Partial Metric c</td>
<td>50.59</td>
<td>6</td>
<td>.000</td>
<td>.017</td>
</tr>
<tr>
<td>Scalar b vs. Partial Metric c</td>
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<td>5</td>
<td>.000</td>
<td>.015</td>
</tr>
<tr>
<td>Scalar c vs. Partial Metric c</td>
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</tr>
<tr>
<td>Scalar d vs. Partial Metric c</td>
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<tr>
<td>Scalar e vs. Partial Metric c</td>
<td>8.70</td>
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<td>.003</td>
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</tbody>
</table>
Table 9

Model Fit Statistics of the Factorial Structure for the Traditional Observational Measure and Culturally Informed Measure for Latinx Parenting

<table>
<thead>
<tr>
<th>Model</th>
<th>Fit Statistics</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>RMSEA</th>
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Note. CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; Sens = Sensitivity; Neg = Negative; PR = Positive Regard; Guid = Guidance; Stim = Stimulation
Table 10
Regression Analyses Predicting BITSEA Internalizing Scores from Traditionally and Culturally Informed Parenting Measures, and Interaction Terms

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*Note. bolded p values are significant; a, b, and c reflect different models.
*p < .10; **p < .05
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<th>Blocks</th>
<th>Predictor</th>
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<td>.27**</td>
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*Note.* bolded $p$ values are significant. a, b, and c reflect different models.  
*$p < .10$; **$p < .05$
Figure 1

Hypothesized Model of Factorial Structure for the Traditional Coded Observational Measure of Parenting.
Hypothesized Models of Factorial Structure for the Traditional Coded Observational Measure (left) versus Culturally Informed Observational Measure (right) of Latinx Parenting.
Figure 3

Final Models of the Factorial Structure for Study 1 Using Traditional Observational Coding for European American Parents (Model 3) and Latina Mothers (Model 3).
Figure 4

Final Models of the Factorial Structure for Study 2 Using Traditional Observational Coding for European American Parents (Model 4) and Latina Mothers (Model 4).
Figure 5

Final Measurement Models and Summary of Standardized Factor Loadings for the Traditional Observational Coding (Model 3) and Culturally Informed Coding (Model 6) for Latina Mothers.
Figure 6

Interaction between Parental Guidance and Maternal Warmth Predicting Children’s Internalizing Behaviors
* Slope Significantly Different than 0
Figure 7

Interaction between Culturally Informed Parental Intrusiveness and Maternal Warmth Predicting Children’s Externalizing Behaviors
* Slope Significantly Different than 0
Figure 8

Interaction between Parental Guidance and Maternal Warmth
Predicting Children’s Externalizing Behaviors
* Slope Significantly Different than 0
APPENDIX B

CULTURALLY INFORMED CODING PROTOCOL

QUALITATIVE RATINGS

PARENT-CHILD INTERACTION AT 12 – 48 MONTHS OF AGE

For use with:
Early Head Start University Partnership Grants: Buffering Children from Toxic Stress Latino Sample
(Funded by the Administration for Children & Families)

Marta Benito-Gomez, M.S. & W. Roger Mills-Koonce, Ph.D.
September 2018

Adapted from the Family Life Project Parent Coding Manual created by:
Martha J. Cox, Ph.D. and Keith Crnic, Ph.D.
August 2003

ACKNOWLEDGMENTS

These scales are derived from: (1) The scales developed Martha J. Cox, Keith Crnic, and Roger Mills-Koonce for use with the Durham Child Health and Development Study and the Family Life Project; (2) the scales developed by Margaret Tresch Owen and Deborah Vandell for the NICHD Study of Early Child Care; (3) the scales developed by L. Alan Sroufe, Leah Matas, and Deborah M. Rosenberg for the Mother-Child Project (Byron Egeland, P.I.), University of Minnesota; and (4) the scales developed by Mary Ainsworth for the Baltimore Longitudinal Project.

There is a lack of consensus on how parenting practices should be conceptualized and measured within Latino families. The majority of findings in the literature have used
parenting dimensions developed using White, middle-class family values that may or may not apply to Latino families. Of special relevance is the dimension of intrusive parenting. Researchers have found that intrusiveness in Latino mothers is not as strongly associated with problematic child outcomes as it is within other ethnic groups. In collectivistic cultures, authoritarian practices are more common and likely to be employed because they are believed to be best for children and fit within models of good parenting. It is possible that because of this, Latino parents engage in these practices without much negative affect. This stands in contrast to parents in individualistic cultures who have been found to be more likely to demonstrate controlling behaviors accompanied by anger and sadness. Additionally, the extent to which a behavior is consider intrusive or guidance may differ across cultural groups and have different meanings depending on how it is displayed. Even though researchers have suggested that these variations may lead to subtle differences in the appearance and consequences of intrusive parenting, there is not a coding scheme yet developed that has been able to pick up on these differences. Additionally, no previous research has established whether the behaviors that are considered within observationally based measures of intrusive parenting have similar or different meanings across cultures. Given the influence of cultural values, parental beliefs about child rearing, and socialization goals on parenting behaviors, several quantitative, qualitative differences, and patterns were identified and captured in the following coding protocol.

Specific for the study of parenting within Latino families, it is important to consider the role of socialization values such as, respeto, familismo, and obedience, and parental beliefs about child developmental abilities and autonomy granting as a set of culturally bound phenomenon that influences how intrusiveness is expressed and the meaning behind such behaviors. As a general construct, respeto has been defined as: “knowing the level of courtesy and decorum required in a given situation in relation to other people of a particular age, sex and social status” (Harwood, Miller, & Irizarry, 1995, p. 98), accompanied by a strong emphasis in obedience (Gozales-Ramos et al., 1998), and indicates that children need to be considerate to adults and do not interrupt or argue (Delgado-Gaitan, 1994). The value of respeto has often been described as the foundation for successful child development and the primary focus of child rearing practices within Latino families (Calzada, Fernandez, Cortes, 2010). According to this, in the current protocol the observer must be highly attuned to behaviors that may suggest parent-agenda versus child-agenda and understand the cultural context in which such behaviors are expressed. The following two scales consider both contextual information and the role of culture to code parental intrusiveness and parental guidance using a culturally sensitive approach to Latino parenting.
**INTRUSIVENESS**

A parent scoring high on this scale engages in controlling behaviors that restrict and limit the child movements and lack of respect for the child. The parent interferes and limits the child opportunities to engage with the environment. The behavior is guided more by the parent’s own agenda rather than the child’s needs. The content and manner in which the parent is involved should be considered. For example, parents scoring high on intrusiveness engage in controlling behaviors, verbal directives, and physical manipulation not as a way to guide, support, and structure the interaction but rather as a way to impose their own agenda in a coercive manner. Even though verbal directives may be used to keep the child within appropriate limits setting and directing the child’s attention, behaviors are coded intrusive if they are considered to be off task, coercive, and for the parent owns benefits.

There are many ways that a parent may intrude. For example, intrusiveness can occur in a harsh physical manner (grabbing the child’s arms or hands and placing them somewhere else), through the use of verbal directives and commands defined by the parent agenda and off task (parent imposes own agenda regardless of child reactions and needs), or if the parent use physical manipulations to limit the child opportunities to explore and engage in the task (manually restraining child's motor behavior while child is working on the task and doesn’t seem to be struggling). Note that the use of physical affection will only be coded as intrusive if it restrains, controls, or limits the child ability to move in a repetitive and harsh manner. Overall, when a behavior is considered to be coercive and pressuring should be coded as intrusive.

In order to judge intrusiveness, it is important to look at the context of the child’s actions and behaviors. Cues from the child preceding or after the parent’s behavior often indicate how the child has perceived the action, and what may seem as intrusive to the coder may not be to the child. Additionally, it is important to distinguish when verbal directives and physical manipulations are used to control the interaction and to impose a parental agenda versus to guide, structure the interaction, and teach cultural socialization values. While is expected in this cultural group that parents will provide more directives to support and guide the interaction, if such directives are persistent throughout the task while the child is mastering the task, such behaviors should be considered intrusive.

1. **Not at all characteristic.** No sign of intrusiveness is present. The parent may be involved yet continue to respect the child or may alternatively be totally uninvolved with the child and appear withdrawn. In either case, the interaction is guided by the child agenda and the parent may or may not impose directives on the child. If directives are imposed, they are in a sensitive and timely manner (on task), showing respect for the child, and it is clear that the child needs direction. Also, parents may
engage in physical contact and manipulation including physical guidance, as a way of redirecting attention or showing affection.

2 **Minimally characteristic.** There is some indication of intrusiveness, but it is not pervasive. These instances are of low intensity and again may not cause the child to become upset. For example, the parent may redirect the child to a new area in a poorly timed fashion. Alternatively, low level intrusiveness may be “chronic,” however; the child has the opportunity to do some exploration even if the parent is involved as a way to support the child efforts and guide the interaction. The parent may physically manipulate the child even when this one is not struggling, thus in a poor timely and not sensitive manner. Directives may escalate in frequency but should still be considered low intrusive indicators unless they are off task and parental agenda driven.

3 **Somewhat characteristic.** This rating should be given to parents who display frequent, but weak signs of intrusiveness or display a few clear instances of unwelcomed behavior. The parents engage in activities that are characterized by the parent’s agenda, controlling behaviors, and may repeat or escalate these activities, even if the child does not respond negatively to them. The parents are not predominately intrusive; however, intrusive behaviors appear to be more typical than a minimally characteristic (rating of 2) interaction. There may be inconsistent intrusive behavior and the parents may be hard to categorize.

4 **Moderately characteristic.** There are clear incidents of intrusiveness throughout the session and it is clear that the parent’s agenda has precedence over the child’s needs. There may be either several high intensity intrusive interactions or persistent low-level intrusive interactions. For example, the parent may grab the child and physically direct behavior more than once based on the parent owns interests and in a harsh negative manner. Alternatively, the parent may be uninvolved for long periods, but whenever there is interaction, these interactions are consistently intrusive. To give a score of 4 there has to be a general lack of respect for the child and parental behaviors are pressuring and coercive in nature.

5 **Highly characteristic.** The parent is highly intrusive. The parent’s agenda clearly has precedence over the child’s needs, and frequently intervenes inappropriately without considering cues from the child. Highly intrusive parents seem to react to their own interests rather than basing their actions upon their child’s needs and in coercive ways. Both high level and low level indicators are pervasive throughout the session. The parent may demonstrate power assertive techniques to get the child to comply, including shame and guilt; these can be either verbal or physical incidents of intrusiveness. Overall, the interaction is characterized by the parent’s agenda and a clear lack of respect for the child’s body and needs.
GUIDANCE

This scale focuses on both how the parent provides guidance and structure to succeed in the task and how the child responds to such support. It is very likely that toddlers will need parental support and guidance to complete tasks that exceed their developmental level. Yet, even if tasks are adequate to the child developmental abilities, parents will engage in scaffolding and supportive behaviors to guide and structure the session, while maintaining a child agenda and providing instructional assistance when needed.

There are many ways that a parent can engage in structuring behaviors and provide guidance during the session. For example, if the child is having difficulty on the task, the parent may provide physical guidance, or engage in directing and modeling behaviors as a way to teach or offering additional help to the child, rather than to control the situation. Parents may use verbal directives and ask questions about what or where something goes to guide and structure the interaction and help the child succeed in the task. It is important to note that in order to be high in this scale, the parent must show a clear child agenda and understand that there is a direction and goal within the interaction sensitive to the child developmental abilities. Parents’ behaviors must be motivated by the child needs and goals rather than by the parent’s own benefits. Additionally, guidance is provided in a sensitive, genuine, and well-timed manner within the context of the interaction. A parent low in this scale, may be disengaged, insensitive to the child needs and cues, and provide inconsistent and ill-timed guidance. Another way to be low in this scale, would be a parent who guides the interaction but who is more focused in completing the task rather than teaching and helping the child to succeed.

In order to judge this scale, it is important to look at the context of the child’s behaviors. Cues from the child preceding or after the parent’s behavior often indicate how the child has perceived the action and if such scaffolding/guidance was needed. Also, specific for Latino families, it is important to pay attention to parents’ motivations behind such behaviors and understand the cultural context in which such behaviors are expressed. Ratings on this scale should be based on both quality and quantity of parent behavior throughout the whole interaction.

1 Not at all characteristic. There are no signs or attempts of guidance for the child. Thus, the parent is either predominantly controlling and driven by his/her own motivations, or detached, withdrawn, or uninvolved. The parent rarely responds appropriately to the child’s cues and needs. The parent completely fails to provide the child the guidance needed to complete the task.

2 Minimally characteristic. The parent provides some guidance, but it is sporadic and poorly timed to the child’s needs. This rating should be given to parents who display infrequent or weak attempts of guidance. While the parent may be sometimes sensitive to the child’s struggles, the balance is clearly in the direction of lack of
guidance or scaffolding. The parent may give some delayed, low quality, or perfunctory guidance to the child’s needs. If scaffolding or guidance occurs, it is characteristically inappropriate, inconsistent, and ill timed.

3 Somewhat characteristic. This rating should be given to parents who display some clear instances of guidance during the interaction, however the parents’ behaviors may be mechanical in quality and ill paced. These instances may be delayed or perfunctory. The interaction can be characterized by a mix of well-timed and faster paced episodes, or by a parent who fails to provide genuine guidance. There may be inconsistent behaviors and the parents may be hard to categorize.

4 Moderately characteristic. The parent provides good structure, guidance, and confidence in the child’s ability, however, fails to adjust such behaviors depending on the child’s performance in the task and needs at times (e.g. the parent may engage in the same strategy throughout the interaction without making modifications). This rating should be given to parents who predominantly engage in guidance but may fail to show well-timed or appropriate responses throughout the session.

5 Highly characteristic. The parent skillfully and consistently provides guidance throughout the session. If the child is having difficulty, the parent finds strategies to engage and guide the child and perform successfully in the task. This rating should be given to parents who engage in guidance in an exceptionally sensitive and supportive way guided by the child needs. Interactions are characteristically well timed and appropriate.
QUALITATIVE RATINGS: CONDING ANCHORS
PARENT-CHILD INTERACTION AT 12-48 MONTHS OF AGE

INTRUSIVENESS

- To receive a rating of 1, there should be no signs of intrusiveness.
- To receive a rating of 5, the parent should demonstrate intensity in the way they intrude on the child and the interaction is characterized by the parent’s agenda, controlling behaviors, coercive, and a clear lack of respect for the child’s body and needs (i.e. forcefully yanking toys away, grabbing child by the legs). The parent may engage in psychological guilt and shame strategies.

GUIDANCE

- To receive a rating of 1, there should be no signs of guidance.
- To receive a rating of 5, the parent should provide guidance in an exceptionally sensitive and supportive way based on the child needs. Additionally, such interactions should be well timed and appropriate.