


Culture, parenting, and language: *Respeto* in Latine mother–child interactions

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Abstract

The cultural value of *respeto* (respect) is central to Latine parenting. Yet, how *respeto* manifests in the interactions of Latine parents and their young children remains unexamined. Low-income Mexican immigrant Spanish-speaking mothers and their 2.5-year-old toddlers ($N = 128$) were video-recorded during play ($M_{age} = 30.2$ months, $SD = 0.52$), and two culturally informed items of *respeto* were coded: parent calm authority and child affiliative obedience. *Respeto* related to standard ratings of mother and child interactions (e.g., maternal sensitivity and child engagement) but also captured unique features of parent–child interactions. *Respeto* related to mothers' and toddlers' language production and discourse during the interaction, and explained unique variance in language variables above standard ratings of mother–child interaction. This is the first effort to document a culturally salient aspect of dyadic interaction in Mexican immigrant mothers and young children and to show that *respeto* relates to language use during mother–child interactions.

KEYWORDS

affiliative obedience, culture, language, Latine, parent–child relationship, respect, *respeto*

1 | INTRODUCTION

Parent–child interactions are integrally bound with culture. Children develop within a cultural niche in which the physical and social settings, customs of childcare, and psychology of caregivers influence how children perceive, think, and act (Super & Harkness, 1986). Fundamental to the cultural niche are the values that parents seek to instill in their children and how parents socialize those values through their everyday interactions with children. Thus, parenting is embedded in cultural structures, beliefs, and practices that shape how parents interact with children and the skills that children develop (Halberstadt & Lozada, 2011).

In Latine families, the value of *respeto* (respect) is a cornerstone of parenting. *Respeto* embraces the idea that parents have the authority to expect and demand positive behaviors from their children and that children should obey and defer to their parents (Calzada, Fernandez, & Cortes, 2010; Stein & Polo, 2014). Parenting practices that instill *respeto* in children are considered foundational to *familismo*, a Latine value of strong family connection and closeness that provides children with a clear role within the family system (Calzada et al., 2010; Stein et al., 2014). The high value parents place on *respeto* generalizes across U. S. Latine parents from different ethnicities, who consider *respeto* to be a sign of successful parenting and confirmation that they have raised a child who is *bien educado* or well-mannered (Bridges et al., 2012; Guilamo-Ramos et al., 2007).

Despite the widespread consensus that *respeto* is core to Latine parenting, researchers primarily assess *respeto* through parent self-report. To our knowledge, no study has directly measured *respeto* during parent–child interactions or considered *respeto* from a dyadic perspective that involves both mother and child. Thus, we developed a culturally informed, dyadic measure of *respeto* to characterize play interactions between 2.5-year-old toddlers and their U.S. Mexican immigrant, low-income mothers. We asked whether our observational measure of *respeto*: (a) relates to standard ratings of mother–child interactions, including maternal sensitivity and cognitive stimulation; (b) relates to mothers' and toddlers' language production and discourse during play interactions; and (c) explains unique variance in mother and toddler language exchanges above standard measures of the quality of mother–child interaction.

1.1 | The construct of *respeto*

Latine parenting is best understood from a theoretical framework that situates cultural values at the heart of child-rearing goals and practices (Calzada et al., 2010). By instilling *respeto* in their children, Latine parents solidify social connections among family members and convey core values that include the importance of family and social connection (Calzada et al., 2010). Latine parents communicate the value of *respeto* by calmly asserting their authority and communicating expectations of obedience. In turn, Latina mothers report that children display *respeto* by conforming to authority, following commands and rules without questioning, and displaying appreciation for the hierarchical structure of social relationships. When U.S. Latina mothers described behaviors that indicate respect in preschoolers, they referred to obedience, deference, decorum, and proper behavior (Calzada et al., 2010). Mexican youth likewise report high respect for parental authority—also termed affiliative obedience—relative to U.S. non-Latine, White youth (Díaz-Guerrero, 1994).

When measuring *respeto*, researchers typically ask mothers to rate various child behaviors that reflect *respeto* (e.g., “It is not acceptable for children to talk back to an adult”; “I tell my child to defer to adult wishes”). However, although self-report illuminates beliefs and attitudes around *respeto*, it fails to capture how Latina mothers and children mutually negotiate authority and obedience during everyday interactions. Thus, we built on the dyadic observational rating system of the Joint Engagement Rating Inventory (Adamson, Bakeman, & Suma, 2018) in our development of behavioral measures of *respeto*. We considered two culturally specific behavioral rating items, *caregiver's calm authority* and *child's affiliative obedience*, to be complementary. Our conceptualization of *respeto* during early socialization can be distinguished from existing measures of parenting control and child compliance

in that it contains calmness on the part of mother that is met with affiliative obedience on the part of child. In essence, respeto is not defined solely by high parental authority or high child compliance; it is also characterized by the positive demeanor of partners' actions. Thus, our new observational rating items explicitly indicate not only which behaviors mothers and children express (e.g., the mother's statement of what should be done) but also the demeanor that accompanies those behaviors (e.g., mother expresses her expectations calmly; child smiles to mother while carrying out an action).

We expected U.S. Mexican mothers' calm authority and toddlers' affiliative obedience to be strongly correlated, which would support the idea that Latine mothers can simultaneously demand authority and act without harshness and that children can comply with their mothers' guidance while simultaneously displaying eagerness and positive affect (Díaz-Guerrero, 1994; Stein & Polo, 2014).

1.2 | Respeto's association with mother and child interaction behaviors

Our first aim was to examine how culturally informed observational measures of respeto relate to standard measures of parent and child interactions initially developed with non-Latine samples: maternal sensitivity, cognitive stimulation, positive and negative regard, detachment, and intrusiveness; and children's positive mood, negative mood, and positive engagement. We previously assessed these indicators from the video records used in the current study (Caughy, Mills, Owen, & Dyer, 2017).

We considered the possibility that the benefits of respeto may come at a cost to interaction quality, particularly if parents engage in high levels of control as they attempt to guide the behavior of their children. The pressures surrounding a mother's expectations of proper behavior and the potential resistance of children to those demands may challenge early parent-child relationships in ways that undermine the quality of mother-child interactions. Indeed, Mexican American and Dominican American mothers of young children who reported strongly endorsing child respeto also reported high levels of authoritarian parenting (Calzada, Huang, Anicama, Fernandez, & Brotman, 2012).

However, the documented association between respeto and authoritarian parenting was based on mothers as informants. We therefore considered an alternative possibility—that respeto during dyadic interactions would relate to *positive* behaviors in mothers and children. Although researchers have not directly measured respeto using observational methods, parental "intrusiveness"—pushing an agenda on the child—shows different patterns of association to parent behaviors and child outcomes in different ethnic groups. For example, maternal intrusiveness relates to low dyadic mutuality (i.e., responsive give-and-take interactions and connection) in European American and acculturated Mexican American families but does not relate negatively to mutuality in less acculturated Mexican American families (Ispa et al., 2004). Similarly, when parenting profiles were examined in Mexican American, African American, and European American mothers of 1-year-olds, Mexican American mothers showed profiles of sensitive and directive parenting (i.e., parenting high in intrusiveness coupled with high warmth) but did not show a profile of harshness. In short, Latina mothers directed their children's behaviors without displaying negative affect (Brady-Smith et al., 2013). Furthermore, our prior research indicates that high levels of maternal control relate to maternal sensitivity and warmth in Latina mothers (Caughy et al., 2017). In both studies, parental directiveness was coupled with sensitivity, not harshness. Thus, the construct of authoritarian parenting as traditionally conceptualized may not align with how Latina mothers interact with their young children.

1.3 | Respeto and child and parent language during interactions

The second aim was to test whether a culturally informed measure of respeto would relate to mother and child language production and discourse during interactions, and a third aim was to ask whether identified associations

would remain after controlling for standard quality measures of mother–child interactions. We focused on language within mother–child interactions because language exchanges are vital for establishing social connection with other people, communicating intentions, sharing interests, creating pretend stories in play, regulating others' behaviors, and learning social-cultural norms around language interactions (Kuchirko, Schatz, Fletcher, & Tamis-LeMonda, 2019; Nelson, 1998). In essence, children learn much more than words and grammatical rules during interactions with social partners. They learn the pragmatics and discourse features of language, such as how to listen when someone is speaking, when to respond and when to initiate interactions, and social conventions around establishing and communicating joint interests—aspects of communication that fine-tune children's commitment to reciprocal interactions (Bruner, 1982). The many lessons inherent in early social interactions help explain why children's language skills relate to social competence and emotional regulation and development (e.g., Longobardi, Spataro, Frigerio, & Rescorla, 2016; Rose, Lehl, Ebert, & Weinert, 2018; van Hoorn, Shablack, Lindquist, & Telzer, 2019).

We expected language use during interactions of 2.5-year-old Mexican-heritage children and their mothers to vary considerably and that variations in their language use would relate to measures of *respeto*. However, we were uncertain about the direction of associations between *respeto* and mother and child language production and discourse. We thus considered three possibilities.

Perhaps interactions characterized by high *respeto* would relate *positively* to mothers' and children's language use during interactions. That is, *respeto* would encourage verbal conversations, with mothers using a variety of diverse language to guide children's behaviors, and children reciprocally using language to communicate with their mothers. Indeed, if interactions high on *respeto* are accompanied by maternal sensitivity and cognitive stimulation, they should support children's language during interactions. Moreover, children who show high obedience may regulate their behaviors well, and self-regulation in toddlers relates to language development (Peredo, Owen, Rojas, & Caughy, 2015; Vallotton & Ayoub, 2011).

Alternatively, interactions high on *respeto* may result in *asymmetry* in the language production and discourse of mothers and children during interactions, that is, high mother language input but low child expressive language. This may occur because of a relative imbalance between mothers' and children's contributions to the flow of interactions. As mothers guide children toward appropriate behaviors and children abide, children may remain quiet out of deference to their mothers' authority. Indeed, Latine preschoolers have been shown to adopt the role of “audience” while sharing wordless books with their mothers (Melzi & Caspe, 2005). They attentively listened to their mothers but infrequently contributed to the narrative, in line with their implicit understanding of their role in relation to authority.

Finally, interactions high on *respeto* may relate *negatively* to both mother and child language exchanges, particularly if high control or intrusiveness accompanies mothers' expression of authority and demands around obedience. In support of this possibility, high endorsement of *respeto* by Latine parents of preschoolers was associated with behavior problems in children, largely through associations with self-reported authoritarian parenting (Calzada et al., 2012). However, because we hypothesized that *respeto* would relate to positive rather than negative characteristics of mother–child interaction, and because authoritarian parenting manifests in unique ways in Latine dyads, we thought that this hypothesis was unlikely to be supported.

1.4 | *Respeto* in mother–daughter and mother–son dyads

As an exploratory component, we asked whether mother–son versus mother–daughter dyads differed in their ratings of *respeto* and associations between *respeto* and language production and discourse measures during interactions. Qualitative and quantitative studies of Latine parenting with adolescents suggest that Latine parents grant more autonomy to boys than girls, consistent with the Latine cultural values of male liberty (*machismo*) and female submissiveness (*marianismo*) (Dumka, Gonzales, Bonds, & Millsap, 2009; Guilamo-Ramos

et al., 2007). Perhaps then, higher levels of parent calm authority (PCA) may be seen in mothers of daughters relative to mothers of sons, in line with cultural values of machismo and marianismo. This speculation was based on evidence that preschool boys are more active and less compliant than girls, although the extant literature is based on primarily middle-income, White samples (Kochanska, Tjebkes, & Forman, 1998; Leaper, Anderson, & Sanders, 1998). In addition, based on evidence that mothers provide more verbal input to their daughters and in a more supportive manner compared to their sons (Leaper et al., 1998), dyadic behaviors around respeto may provide the structure boys need to use language during social interactions. Girls, in contrast, who are less active and more compliant and who also surpass boys in language skills early in development (Bornstein, Hahn, & Haynes, 2004; Rojas & Iglesias, 2013), may depend less on respeto to establish the conditions necessary for language exchanges. Thus, we may observe diverging associations between measures of respeto and language measures for boys versus girls.

1.5 | Current study

Although respeto is a core value in Latine families, behavioral measures of the construct do not exist, and as a result, whether and how mothers and young children negotiate expectations around respeto remain unexamined. Thus, we developed rating items of mother and child respeto using an iterative process in which eleven researchers met in person and observed multiple videos of Latine mother-child play interactions over a 2-day period. This group of researchers included two Mexican-born individuals, one bilingual U.S.-born Mexican-American, and a fourth individual who was also bilingual. The group generated a rating system for our dyadic measure of respeto assessed by two items: PCA and Child Affiliative Obedience (CAO). Then, over a period of several months, primary raters implemented the rating system across additional videos of Mexican-heritage mother-child dyads, and identified questions and challenges to rating for group discussion. During several teleconference meetings with members of the full team, we refined the rating system to be appropriate to our sample and the play context, generated behavioral examples of PCA and CAO for the rating manual, and achieved strong inter-rater reliabilities.

We observed dyads when children were 2.5 years of age. By this age, most children have acquired the receptive and expressive language skills necessary for reciprocal language exchanges, and are capable of participating in pretend play interactions (Nelson, 1998). Moreover, children have acquired rudimentary regulatory capacities that allow them to display affiliative obedience in interactions with adults. At the same time, we expected children to differ substantially in their expressions of CAO, and expected mothers to differ in their expressions of PCA. We reasoned that mothers and children have accumulated a history of interactions by the time children are 2.5 years, and that their established styles of interaction should be reflected in behaviors of PCA and CAO. Thus, we aimed to address three primary research questions around respeto at this important time in Mexican-heritage children's development.

First, we asked whether respeto concurrently relates to standard measures of mother and child behaviors during interactions. We hypothesized that respeto would relate to positive behaviors in mothers and children, although we also recognized that we might find the opposite pattern of associations.

Second, we asked whether respeto relates to concurrent measures of mothers' and children's language production and discourse during play interactions. We considered alternative hypotheses that respeto would relate positively to mother and child language production during interactions; asymmetrically to high mother language input but low child language; or negatively to mother and child language.

Third, we asked whether respeto explains unique variance in concurrent measures of mothers' and children's language production and discourse above and beyond standard interaction measures. We hypothesized that taking respeto into account would enhance predictions of both mothers' and children's language production and discourse.

2 | METHOD

2.1 | Participants

Participants (mother and target child) were originally recruited for a longitudinal project that included 224 low-income Latine children and their families in the Dallas-Fort Worth metropolitan area (Caughy, Mills, Brinkley, & Owen, 2018). Recruitment eligibility for the larger project was based on income status (<200% of the federal poverty level) and target children being approximately 2.5 years of age at enrolment. In addition, at least one parent of the target child self-identified as either African American or Latine. Families were enrolled between November 2009 and February 2011.

Dyads were selected for this embedded project if the mother identified herself and the child as Latine, the mother was foreign-born and Mexican-origin, and the mother reported that she and her child spoke predominantly Spanish. Mother and child language was determined based on maternal report of her own and her child's language preference at the time of scheduling the first home visit. About three-quarters ($n = 164$, 73.2%) of the Latine mothers in the sample were foreign-born, of which the vast majority ($n = 157$, 95.7%) were from Mexico. Of these 157 families, 149 (94.9%) included both a mother and child who reportedly preferred to communicate in Spanish. Of these, four were excluded because the child was subsequently diagnosed with a significant developmental disorder; three were missing a video-record of the mother-child interaction due to camera failure or experimenter error; two dyads were excluded because 25% or more of their verbal interaction was in English, according to the transcription data; and one because the child's age was misrepresented at the time of enrolment. Finally, because the purpose of the embedded project was to examine long-term outcomes, only cases for which these outcomes were available were rated for the new *respeto* items, eliminating an additional 11 cases. Study protocols were approved by the institutional review boards of University of Georgia, University of Texas at Dallas, and Georgia State University.

Inclusion requirements resulted in 128 mother-child dyads whose video-recorded interactions were rated using the protocol described in detail below. Children ranged in age from 26.2 to 31.2 months ($M = 30.2$, $SD = 0.52$). Characteristics of the 128 participant dyads are shown in Table 1. Almost 70% of the mothers had immigrated to the United States from Mexico as an adult whereas another 22% immigrated as teenagers. The remainder had immigrated before the age of 13. Almost two-thirds of the families were living below 100% of the federal poverty level.

2.2 | Procedures

Mothers and children participated in a semi-structured play interaction collected in home visits and adapted from the "3 Bags" procedure used in the NICHD Study of Early Child Care and Youth Development (SECCYD) (NICHD ECCRN, 1999). Bag 1 included a children's wordless picture book titled *Good Dog, Carl* by Alexandra Day (1996). Bag 2 contained the Early Learning Centre "First Kitchen," a toy stove with skillet, spatula, toaster, oven, and toy salt and pepper shakers. Bag 3 contained a Fisher Price "Discovery Cottage," a playhouse with family figures and a vehicle. The interactions were approximately 15 min long ($M = 14.6$ min; $SD = 0.97$ min).

2.3 | Ratings

We used two schemes to rate play interactions. The *respeto* scheme consisted of two 7-point scale ratings, the mother's calm authority (PCA) and the child's affiliative obedience (CAO; see Figures 1 and 2). The second scheme focused on parent and child behavior using rating items from the NICHD SECCYD (Owen, Vaughn, Barfoot, &

TABLE 1 Sample characteristics

| Variable | N | % |
|-----------------------|----|------|
| Child characteristics | | |
| Boy | 67 | 52.3 |
| First born | 22 | 17.2 |
| Caregiver education | | |
| <8th grade | 36 | 28.1 |
| <12th grade | 35 | 27.3 |
| High school diploma | 36 | 28.1 |
| Post high school | 19 | 14.8 |
| College | 2 | 1.6 |
| Maternal age | | |
| <20 years | 4 | 3.1 |
| 20–29 years | 59 | 46.1 |
| 30–39 years | 55 | 43.0 |
| 40 or more years | 10 | 7.8 |
| Family poverty level | | |
| <50% | 4 | 3.1 |
| 50%–99% | 78 | 60.9 |
| 100%–149% | 36 | 28.1 |
| 150% or more | 10 | 7.8 |
| Family structure | | |
| Nuclear | 87 | 68.0 |
| Nuclear extended | 32 | 25.0 |
| Single parent | 5 | 3.9 |
| Non-nuclear | 4 | 3.1 |

Note: N = 128.

Ware, 1996). These items included six measures for mothers (maternal sensitivity, cognitive stimulation, positive regard, negative regard, detachment, and intrusiveness) and three measures for children (positive mood, negative mood, and engagement).

2.3.1 | Respeto: PCA and CAO

PCA was developed to capture the parental side of respeto, namely the extent to which the mother influenced the direction of the interaction by using an assertive and confident yet gentle approach. The rating scale for this item ranged from 1 (*low*) to 7 (*high*). To obtain a high-end rating, a mother must guide the preponderance of the interaction using calm, clear, and firm direction. The 1-point lower bound indicated no use of gentle, firm direction (see Figure 1).

The measure of CAO captures the degree of amenability the child demonstrated in response to the mother. On the 7-point scale for this item, a high-end rating of a 6 or 7 is characterized by deference to adult authority, positivity, alacrity to follow instructions, low-to-no resistance to guidance and directions, and behaviors that indicated the child was anticipating that the parent would lead the interaction. At the low end, ratings of 1 reflected the child did not follow parent direction (see Figure 2).

| Description and anchors | |
|--|---|
| Parent Calm Authority The purpose of this rating item is to capture the degree to which the parent directs the interaction with confident calm authority. The parent provides clear indications about what she wants and expects the child to focus on and what she wants the child to do, and she guides the child confidently (rather than tentatively) and gently (rather than harshly or punitively). Calm authority reflects a style of parenting that has been referred to as a “hierarchical parent-child relationship” because the parent acts as the primary agent of behavior regulation and decision-making for the child. It also conveys a tone of confidence and kindness that may reflect the cultural value of “respeto” and more broadly, “familismo”. Calm authority is not disruptive or intrusive, nor are the instructions offered as a suggestion. When choosing a rating for this item, only consider the parent’s actions, not the child’s response. | |
| 1 | Low ratings of calm authority can be shown in many ways. A “1” indicates there are no signs the parent is calmly asserting his/her authority to direct the interaction. The parent does not use gentle firm directions and instructions but rather may appear either harshly demanding, extremely tentative, or coldly directive. The parent may deliver directions to the child in a way that indicates a lack of confidence the child will comply, for example, using a tone that pleads with the child to follow her directions or asking if the child wants to follow directions given. Or, the parent may default to the child’s desires and defer to the child rather than providing leadership, use a “play voice” and play with but not guide the child, and give minimal direction about what to do with the contents of the bags or how to transition from one bag to the next. Low ratings are also evident when the parent’s behavior appears aimless in the interaction. |
| 4 | A middle rating is warranted when a parent shows the ability to provide calm authority over the interaction but may attempt to do so only periodically rather than continually. A “4” is also indicated both when the parent provides well-tuned calm and direct instruction but low amount engagement, such as providing clear firm guidance on transitions but little direction during an on-going activity, and when a parent uses a variety of communication strategies to guide play but only sometimes relies on gentle, clear, and firm direction. There is at least one relatively extended exchange during which the parent clearly provides kind but firm directions to the child. |
| 7 | The highest rating should be reserved for parents who consistently guide the interaction using calm, clear, and firm directions. The parent is calm yet authoritative in directing the child’s attention to which activity to begin with and when to change activities. The parent appears very confident she is setting the agenda or has decided when it is appropriate for the child to do so. High levels of calm authority are evident when the parent gently guides the child’s attention by telling the child which toy to use, when play with a specific toy ends and the next begins, and how to act during the transition (e.g., hold the bag and put the toys away). There are also opportunities to assess whether the parent is asserting confident calm authority during an activity. High levels are evident when the parent provides instructions about what they should do together. She may do this both by speaking with a calm voice and non-verbally through her gestures such as pointing and through her posture such as leaning inward from behind the child to indicate the desired site for their shared activity. As she sets the agenda for play, she acts in ways that suggest she expects the child to be amenable to her suggestions and directions, but she is not harsh or punitive. |

FIGURE 1 Rating manual for respeto (parent calm authority)

Raters were instructed to assess not only control and obedience but also the demeanor with which parents presented instructions and children complied with them. Figure 3 presents example vignettes of dyads varying from low to high on child CAO and on mother PCA. As seen, dyads high on both CAO and PCA (upper right cell) were characterized by maternal guidance and child eagerness to follow along throughout the play session. Dyads low on PCA and CAO (lower left cell) did not contain parental guidance or child responding to communication during the interaction. Other dyads showed a mix in which mothers offered guidance but children inconsistently responded, or in which children were consistently eager for instruction on what to do and to follow mother’s guidance, but mothers inconsistently expressed authority. Notably, however, in the current sample no dyads were characterized by children being high or medium on CAO with mothers being low on PCA; reciprocally, only one dyad was characterized by a child low on CAO and a mother high in PCA. The absence/sparsity of dyads in those

| Child Affiliative Obedience | |
|---|--|
| <p>The purpose of this rating item is to capture the degree of the child's responsiveness to and amenability with the parent's directions. As with the rating item for parents' calm authority, this item characterizes how the child's actions reflect what has been referred to as a "hierarchical parent-child relationship" because the parent acts as the primary agent of behavior regulation and decision-making for the child. However, here we focus on the child's attitude and actions, assessing them separately from the clarity and tone of the parent's instructions. This item assesses both the degree to which the child follows the parent's explicit and implicit directions and the child's displays of deference to the parent, of eagerness to follow her direction, of anticipation that she will provide that guidance, and of positive affect as the child follows the parent's requests.</p> | |
| 1 | <p>Low ratings on affiliative obedience will occur when the child repeatedly resists the parent either by ignoring the parent's directions and requests or by defiant refusals. To be rated "1", the child does not follow the parent's directions. The child may ignore the parent's input or actively resist following the parent's lead. The child may even actively contradict the parent by refusing a request. The child sets the pace of the interaction and the nature of the play. The child unilaterally determines when one activity ends and when to move to the next activity or bag during play.</p> |
| 4 | <p>There are numerous ways in which a child can receive a rating of 4. The child may intermittently follow the parent's lead and appear to be trying to please the parent in the process. Or, the child displays some deference to the parent but also attempts at times to tell the parent what to do. There should be at least one relatively extended exchange during which the child clearly defers to the parent without any sign of resistance. A "4" is marked by the child showing the capacity to defer to the parent's direction and to be responsive and amendable once given, but some qualities may not be clearly defined or the child may have difficulty maintaining affiliative obedience for longer stretches of time.</p> |
| 7 | <p>High ratings on affiliative obedience will occur when the child is attentive to the parents' directions and suggestions and complies with them readily and positively. Markers include a willingness to follow the parent's lead and no or at most low resistance to the parent's directions. In addition, the child should appear to enjoy being obedient, displaying positive affect while following parent's lead and checking in with the parent by, for example, glancing at the parent and smiling to acknowledge that he or she is complying with a request. Indications that a child is relatively high on affiliative obedience may also occur when a child seeks to gain the parent's guidance by, for example, asking for help or information. A rating of "7" should be reserved for a child who consistently shows respect and deference to the parent by being amenable to suggestions and guidance. The child follows the parent's lead not only willingly but happily. The child appears comfortable receiving and accepting the parent's guidance.</p> |

FIGURE 2 Rating manual for respeto (child affiliative obedience)

cells aligns with the reciprocal complementary nature of respeto: It is difficult for a child to display calm obedience in the absence of guidance or for a mother to show calm authority with a child who is low on affiliative obedience.

One observer rated about two-thirds of the sessions, and a second observer rated the rest; both were of Mexican heritage and fluent in Spanish. To assess reliability, 25% of their sessions, spaced randomly throughout rating, were also rated by a master observer. Weighted kappas (Cohen, 1968; here exact agreements and disagreements within one scale point were weighted zero while disagreements of two or more scale points were weighted one) for PCA and CAO were .65 and .60 for the first and .72 and .85 for the second observer, which indicates estimated accuracies of 83% and 86% for the first and 87% and 95% for the second observer for PCA and CAO, respectively (Bakeman, 2018).

2.3.2 | Standard measures of mother and child behavior

Mother and child behaviors were rated using the same video records but by a separate team of researchers. Standard behavior ratings were based on 5-point global scales ranging from 1 (*not at all characteristic*) to 5 (*highly characteristic*), adapted from the NICHD SECCYD (Owen et al., 1996, 2010). Mothers were rated for sensitivity,

| Child Affiliative Obedience | High | | |
|-----------------------------|---|---|---|
| | Mid | | |
| | Low | | |
| | <p>Throughout the interaction, the boy pauses and asks his mother for instruction. He eagerly awaits her lead and direction that never come. After each action, he turns to her and smiles as if looking for approval. He smiles to himself when his mother expresses that he is doing a good job. His mother, however, provides no guidance and is mostly disengaged. (high CAO, low PCA) <i>n</i> = 0</p> | <p>After watching her daughter playing by herself with the kitchen, the mother announces it is time to clean-up. The girl immediately stops playing and looks for guidance. Her mother holds out the bag and she readily places the toys inside. Her mother instructs there are more pieces, and the girl locates and places them in the bag. Her mother then instructs her to sit and get ready for the next toy. She sits, legs crossed, hands in lap, eyes on her mother, waiting for the next toy. (high CAO, mid PCA) <i>n</i> = 4</p> | <p>A mother clearly directs what the characters in the house are doing as her daughter acts it out. After every action, she turns to her mother and smiles directly into her face. When her mother provides the next instruction, the girl readily follows. The mother dictates the story, while encouraging her daughter's interpretation. They continue this way throughout the session. (high CAO, high PCA) <i>n</i> = 17</p> |
| | <p>A girl is mostly absorbed in her own play. However, when her mother uses her name, she quickly responds and is attentive for direction. However, her attention begins to drift back to her own task in which she again becomes engrossed. Her mother carries on independently as well. (mid CAO, low PCA) <i>n</i> = 0</p> | <p>A boy actively follows his mother's instruction and guidance for 3 minutes, eagerly awaiting her direction, smiling at her face when he complies, and seeking her guidance for how to act. However, he accidentally gets his hand stuck in the house chimney and becomes fussy for the remainder of the session despite his mother's efforts to redirect him to other activities. (mid CAO, mid PCA) <i>n</i> = 59</p> | <p>A boy is clearly interested in "driving" the boat. When his mother includes the boat in her directions, he is more than willing to comply and is outwardly pleased to follow. However, when his mother tries to change tasks to another piece of the house, the child is resistant and does not follow instruction. (mid CAO, high PCA) <i>n</i> = 12</p> |
| | <p>A mother follows her daughter's direction as the girl tells her mother what to do throughout interaction, "No, this one" [hands mother toy], "Eggs for daddy," "No, I do." (low CAO, low PCA) <i>n</i> = 18</p> | <p>A boy has difficulty settling down to play. His mother has some success in controlling his activity by positioning her body around him so that he cannot run away and directing his attention to pictures in a book. (low CAO, mid PCA) <i>n</i> = 17</p> | <p>A mother calmly and repeatedly directs her daughter's play, "Place the eggs on the stove," "Push the toast down," "Sit here," but the girl continues to play independently with other toys. (low CAO, high PCA) <i>n</i> = 1</p> |
| | Low | Mid | High |
| | Parent Calm Authority | | |

FIGURE 3 Examples of ratings of respeto as measured by the cross-classification of child affiliative obedience and parent calm authority, categorizing ratings of 1–2 as low, 3–5 as medium, and 6–7 as high. The *ns* indicate the number of dyads from the current study falling in each cell

cognitive stimulation, positive and negative regard, detachment, and intrusiveness, and children were rated for positive mood, negative mood, and engagement by Spanish-English bilingual research assistants. Inter-rater reliabilities for global ratings were calculated using intra-class correlations (ICC, Shrout & Fleiss, 1979) based on double rating 29% of the interactions ranged from .79 to .87.

2.4 | Language measures

Mother-child interactions were orthographically transcribed and coded via The Systematic Analysis of Language Transcripts (SALT 18) software (Miller & Iglesias, 2017) by a third team of Spanish-English bilingual research assistants. SALT was further used to automatically derive the language sample analysis measures of expressive language and discourse from the completed transcripts of mother-child interactions. All trained transcribers possessed native to near-native oral and literate proficiency in Spanish and English. The transcription accounted for Spanish-influenced English as recommended for bilingual language sample analysis (Rojas & Iglesias, 2015), including the proportion of code-switching (words produced in the non-target language, English), coded at the word level. Note that code-switching was the only feature that required coding in the completed transcripts. The proportion of words that were code-switched was minimal for the children ($M = 4.5\%$; $SD = 8.5\%$) and mothers ($M = 1.9\%$; $SD = 3.5\%$), as dyads were predominantly Spanish-speaking. To determine inter-rater reliability of word-for-word transcription and coding accuracy, 25% of the transcripts were randomly selected. Word-for-word transcription agreement and coding agreement across transcribers demonstrated a high degree of consistency (98% and 94%, respectively), calculated by dividing the total number of agreements by the sum of the total number of agreements and disagreements for each.

We used SALT to calculate measures of expressive language production and of language discourse for children and mothers. Measures of expressive language production included the number of total words and different words. Number of total words indicates overall verbal productivity (Paul & Norbury, 2012), which is the sum of all complete and intelligible words produced by each speaker. Number of different words indicates lexical diversity (Golberg, Paradis, & Crago, 2008), which is the sum of all uninflected word roots produced by each speaker.

Measures of language discourse included mean turn length (MTL) in utterances, percentage of spontaneous utterances, and percentage of utterances that were responses to questions. Given that SALT automatically generated the discourse measures, no coding was required. MTL in utterances is a conversational measure of turn-taking at the utterance level (Fagan, Iglesias, & Kaufman, 2016), which reflects the mean number of consecutive utterances (complete, incomplete, or unintelligible) produced by each speaker (i.e., speaking turns). Consequently, the “degree” of turn taking of the mother–child dyads was indexed by the MTL in utterances of the mothers and the MTL in utterances of the children. Utterances were categorized as spontaneous, responses to questions, responses to intonation prompts, or imitations. Thus, percentage of spontaneous utterances included the proportion of all utterances that were *not* responses to questions, responses to intonation prompts, or imitations (exact or reduced), and included statements, exclamations, questions, and the speaker's intonation prompts. Percentage of responses to questions included the proportion of utterances that were responses to questions made by the other speaker, which included requests for clarification (responses to utterances that ended with a question), yes/no responses, and other responses (responses to utterances that did not end with a question). Thus, a total of five language and discourse measures were analyzed with SALT for children and for mothers: number of total words, number of different words, MTL in utterances, percentage of spontaneous utterances, and percentage of responses to questions.

Most utterances were categorized as spontaneous or responses to questions (93% for children, 99% for mothers). Mean percentages for utterances categorized as responses to intonation prompts and imitations were 0.21% and 6.34% for children and 0.01% and 1.43% for mothers; occurrences for these two categories seemed too few to analyze separately. However, to maintain interpretability, we chose not to aggregate them with the much more frequent responses-to-questions category. Consequently, percentage of spontaneous utterances and percentage of responses to questions were essentially complimentary (essentially summing to one), and so correlate identically but with an opposite sign to other variables.

3 | RESULTS

Table 2 presents descriptive statistics for the respeto rating items, standard mother and child rating items, and child and parent language interaction measures. Values for the respeto items (PCA and CAO) averaged 4.1 and 3.6, respectively, on a 7-point scale, just above or just below the midpoint. Average values for the positive rating items such as maternal sensitivity and children's positive mood were between 3 and 4 on a 5-point scale, indicating that most ratings fell between somewhat characteristic and moderately characteristic. Average values for maternal negative regard and children's negative mood were between 1 and 2, suggesting that these behaviors were rarely observed. Maternal intrusiveness was a little higher, with an average of 2.6, consistent with the relatively high directiveness reported for Latina mothers (Caughy et al., 2017; Halgunseth, Ispa, & Rudy, 2006). None of the rating items, maternal language or child language variables differed by child gender.

3.1 | Respeto in relation to standard ratings of mother–child interaction

Table 3 presents correlations among all study variables. Given the high correlation between PCA and CAO (.84), each showed similar associations with standard ratings of the mother–child relationship. Both PCA and CAO were

TABLE 2 Descriptive statistics for summary scores, their constituent ratings, and language scores

| Variable | M | 95% CI | Actual range | <i>r</i> | <i>p</i> |
|-----------------------------|-----|--------------|--------------|----------|----------|
| Respecto ratings (1–7) | | | | | |
| Parent calm authority | 4.1 | [3.8, 4.3] | 1–7 | .12 | .16 |
| Child affiliative obedience | 3.6 | [3.4, 3.9] | 1–7 | .12 | .18 |
| Mother ratings (1–5) | | | | | |
| Maternal sensitivity | 3.3 | [3.2, 3.5] | 2–5 | .03 | .76 |
| Cognitive stimulation | 3.5 | [3.4, 3.7] | 2–5 | –.03 | .76 |
| Positive regard | 3.7 | [3.5, 3.8] | 1–5 | .03 | .75 |
| Negative regard | 1.2 | [1.1, 1.3] | 1–4 | .02 | .86 |
| Detachment | 1.3 | [1.2, 1.4] | 1–4 | –.06 | .50 |
| Intrusiveness | 2.6 | [2.5, 2.8] | 1–5 | .04 | .64 |
| Child ratings (1–5) | | | | | |
| Positive mood | 3.4 | [3.3, 3.6] | 2–5 | .01 | .87 |
| Negative mood | 1.6 | [1.5, 1.7] | 1–5 | –.05 | .55 |
| Engagement | 3.9 | [3.7, 4.0] | 2–5 | .16 | .07 |
| Child language scores | | | | | |
| # total words | 135 | [122, 149] | 18–338 | .11 | .22 |
| # different words | 52 | [48, 56] | 9–107 | .14 | .10 |
| MTL in utterances | 1.2 | [1.1, 1.2] | 1.0–1.7 | ~.0 | .96 |
| % spontaneous utterances | 59 | [57, 61] | 26–90 | –.10 | .27 |
| % responses to questions | 35 | [32, 37] | 8.5–66 | .10 | .24 |
| Mother language scores | | | | | |
| # total words | 953 | [898, 1,008] | 225–1,762 | –.10 | .24 |
| # different words | 195 | [187, 203] | 79–336 | –.01 | .93 |
| MTL in utterances | 3.0 | [2.8, 3.2] | 1.3–7.0 | –.16 | .07 |
| % spontaneous utterances | 94 | [93, 95] | 66–100 | –.15 | .09 |
| % responses to questions | 4.7 | [3.8, 5.6] | 0–33 | .14 | .11 |

Note: *N* = 128. Possible ranges of rating items are shown in parentheses. The *r* is a point-biserial correlation of the variable with child gender, thus its *p*-value is identical to the one obtained with a *t* test.

Abbreviation: MTL, mean turn length.

positively correlated with maternal sensitivity and cognitive stimulation, and negatively associated with maternal detachment. Correlations of PCA and CAO with sensitivity and cognitive stimulation were moderate, while correlations with detachment were weak (Cohen, 1988). Maternal intrusiveness was not significantly correlated with PCA, suggesting that mothers displaying high levels of PCA were highly engaged in the interaction but not necessarily in a controlling or intrusive manner. Correlations with maternal positive and negative regard were not significant. In essence, correlational patterns among maternal behaviors indicate that PCA was distinct from standard measures of parenting and did not solely reflect a mother's control over her child. Children who displayed high levels of CAO also displayed high levels of engagement in the interaction and low levels of negativity.

Intercorrelations were next examined by child gender. PCA was positively correlated with mother sensitivity, $r(67) = .51, p < .001$, and negatively correlated with mother detachment, $r(67) = -.43, p < .001$, among mothers of boys but not among mothers of girls, $r(61) = .15, p = .26$ and $r(61) = -.08, p = .52$, respectively. A Fisher *r*-to-*z*

TABLE 3 Intercorrelations of study variables

| Variable | Respeto | | Mother ratings | | | | Child ratings | | | | |
|--------------------------|---------|--------|----------------|--------|--------|--------|---------------|--------|--------|--------|--------|
| | PCA | CAO | Sens | Cog | P reg | N reg | Det | Int | P mood | N mood | Engage |
| Respeto ratings | | | | | | | | | | | |
| PCA | – | | | | | | | | | | |
| CAO | .84** | – | | | | | | | | | |
| Mother ratings | | | | | | | | | | | |
| Sensitivity | .32** | .32** | – | | | | | | | | |
| Cognitive stimulation | .42** | .36** | .56** | – | | | | | | | |
| Positive regard | .11 | .09 | .42** | .51** | – | | | | | | |
| Negative regard | .05 | .09 | –.32** | –.16† | –.11 | – | | | | | |
| Detachment | –.27** | –.23* | –.49** | –.53** | –.35** | .31** | – | | | | |
| Intrusiveness | –.16† | –.15† | –.66** | –.32** | –.26** | .33** | .28** | – | | | |
| Child ratings | | | | | | | | | | | |
| Positive mood | .08 | .12 | .31** | .28** | .45** | –.10 | –.22* | –.19* | – | | |
| Negative mood | –.24** | –.41** | –.28** | –.19* | –.11 | .13 | .16† | .12 | –.32** | – | |
| Engagement | .20* | .25** | .63** | .41** | .45** | –.29** | –.43** | –.54** | .54** | –.31** | – |
| Child language | | | | | | | | | | | |
| # total words | .25** | .17† | .23* | .16† | .00 | –.08 | –.09 | –.08 | .35** | –.16† | .42** |
| # different words | .24** | .16† | .28** | .25** | .07 | –.15† | –.13 | –.11 | .37** | –.23* | .44** |
| MTL in utterances | –.14 | –.16† | –.10 | –.22* | –.16† | –.04 | .19* | .06 | .17† | .00 | .15 |
| % spontaneous utterances | –.24** | –.25** | –.26** | –.33** | –.11 | .09 | .26** | .20* | .04 | .20* | –.01 |
| % responses to questions | .19* | .23** | .25** | .27** | .07 | –.05 | –.21* | –.24** | –.04 | –.20* | .01 |
| Mother language | | | | | | | | | | | |
| # total words | .37** | .32** | .19* | .56** | .25** | .03 | –.37** | .13 | .00 | –.10 | –.04 |

(Continues)

TABLE 3 (Continued)

| Variable | Respeto | | Mother ratings | | | | | Child ratings | | | | |
|--------------------------|----------------|--------|----------------|--------|--------|-----------------|--------|---------------|--------|--------|--------|--|
| | PCA | CAO | Sens | Cog | P reg | N reg | Det | Int | P mood | N mood | Engage | |
| # different words | .30** | .27** | .22* | .56** | .26** | .00 | -.34** | .08 | .02 | -.17† | .03 | |
| MTL in utterances | -.16† | -.18* | -.12 | .05 | .11 | -.03 | .03 | .20* | -.26** | .08 | -.36** | |
| % spontaneous utterances | .01 | -.03 | -.03 | .13 | .12 | .05 | -.09 | .02 | -.16† | .17† | -.31** | |
| % responses to questions | -.04 | .01 | .00 | -.17† | -.16† | -.03 | .10 | .02 | .12 | -.15† | .26** | |
| Variable | Child language | | | | | Mother language | | | | | | |
| | Tot w | Diff w | MTLu | Sp utt | Resp q | Tot w | Diff w | MTLu | Sp utt | Resp q | | |
| Child language | | | | | | | | | | | | |
| # total words | - | | | | | | | | | | | |
| # different words | .90** | - | | | | | | | | | | |
| MTL in utterances | .45** | .33** | - | | | | | | | | | |
| % spontaneous utterances | .13 | .07 | .47** | - | | | | | | | | |
| % responses to questions | -.15† | -.10 | -.44** | -.93** | - | | | | | | | |
| Mother language | | | | | | | | | | | | |
| # total words | .06 | .13 | -.41** | -.36** | .33** | - | | | | | | |
| # different words | .04 | .19* | -.34** | -.29** | .28** | .87** | - | | | | | |
| MTL in utterances | -.66** | -.56** | -.37** | -.12 | .15† | .28** | .28** | - | | | | |
| % spontaneous utterances | -.57** | -.47** | -.31** | -.27** | .26** | .24** | .20* | .59** | - | | | |
| % responses to questions | .55** | .45** | .30** | .28** | -.24** | -.22* | -.19* | -.53** | -.97** | - | | |

Note: N = 128.
 Abbreviations: CAO, child affiliative obedience, MTL, mean turn length; PCA, parent calm authority.
 †p < .10; *p < .05; **p < .01.

transformation indicated these correlations were significantly different, $z = 2.27$ and -2.10 , $p < .05$ for mother sensitivity and detachment, respectively.

3.2 | Respeto in relation to child and mother language during interactions

We tested the three alternative hypotheses: that respeto would (a) show positive associations to mother and child language production and discourse during interactions; (b) relate positively to mother language but negatively to child language; or (c) relate negatively to both mother and child language production and discourse. As shown in Table 3, we found mixed support for the first and second hypotheses at the bivariate level, with PCA and CAO relating positively to mother and child language production but showing mixed associations to discourse features of the interaction.

Specifically, PCA and CAO each related positively to the total number of words and number of different words that mothers produced, primary indices of linguistic input; correlations were weak to moderate in magnitude (.27 to .37) and statistically significant. PCA and CAO also related positively to the total number of words and number of different words that children produced; correlations were weak (.16 to .25) and statistically significant for PCA but marginally significant for CAO ($p = .058$ and $.065$, respectively). This suggests that as PCA and CAO increased, children tended to experience language higher in quantity and diversity during interactions, and that as PCA and to a lesser extent CAO increased, children tended to produce relatively more total and different words.

The associations between measures of respeto and children's and mothers' amount and diversity of language during interactions occurred in the context of an imbalance between mothers' and children's contributions to their discourse. Specifically, as PCA and CAO scores increased, the proportion of children's utterances that were spontaneous tended to decrease, but, reciprocally, the proportion that were responses to mothers' questions tended to increase; at the same time, their mother's mean turn length tended to decrease (albeit $p = .063$ for PCA). This pattern suggests greater balance in conversational turns between mothers and children when PCA and CAO were high compared to when PCA and CAO were low.

Correlations of PCA and CAO with maternal and child language measures were also examined by child gender. PCA and CAO were negatively correlated with child's spontaneous utterances among boys, $r(67) = -.40$, $p < .001$ and $r(67) = -.44$, for PCA and CAO, respectively. However, the corresponding correlations were not significant for girls, $r(61) = -.04$, $p = .74$ and $r(61) = -.04$, $p = .75$ for PCA and CAO, respectively. A Fisher r -to- z transformation indicated these correlations were significantly different, $z = -2.11$ and -2.39 , $p < .05$ for PCA and CAO, respectively.

3.3 | Unique contribution of respeto

3.3.1 | Language production and discourse

Tables 2 and 3 present values for the ten language variables, five for children and five for mothers, for descriptive purposes. However, only four of them warranted further analysis: the number of different words for children and mothers, the percentage of spontaneous utterances for children, and the MTL in utterances for mothers. Variables not analyzed further were children's MTL in utterances, which was low and showed little variability, and percentages of mother's spontaneous utterances and responses to questions, which were at ceiling and floor, respectively, and showed little variability. Furthermore, to avoid redundancy, we excluded children's and mothers' number of total words from further analyses which correlated .90 and .87 with number of different words for children and mothers, respectively. We chose to retain the measure of lexical diversity because number of different words offers a more informative measure of language richness than number of total words. To illustrate, a mother or child could produce the same few words repeatedly. Although this may generate a high total word

count, the number of different words would be low, indicative of limited diversity in language. Likewise, children's percentage of responses to questions was excluded because it represented the inverse of spontaneous utterances ($r = -.93$), a logical necessity of the rating scheme.

To evaluate the unique contributions of PCA and CAO to these four measures—which assessed child and mother language production and discourse—above the contributions of mother and child behaviors, we used hierarchical regression (Cohen & Cohen, 1983). Preliminary analyses, based on summary scores for respeto (mean of 2 items), mother behavior (mean of 6 items), and child behavior (mean of 3 items), suggested that when added to mother behavior, respeto accounted for small but statistically significant or marginal additional variance in all four language scores, and when added to child behavior, accounted for small and statistically significant additional variance in children's percentage of spontaneous utterances and mothers' number of different words.

3.3.2 | Hierarchical regressions

To provide a more nuanced description, the present analyses consider each rating item separately. We regressed each language score first on one-predictor models defined by each of the six mother and three child ratings (step 1). We then added the PCA score to the model (step 2) and likewise for CAO. These analyses yielded the total variance accounted for by each two-variable model (total R^2) and the unique variance accounted for by PCA (or CAO) additionally (ΔR^2). Reversing the order—entering PCA (or CAO) first and then the mother or child ratings—yielded the unique variance accounted for by the mother or child rating. Finally, subtracting the two unique proportions of variance from the total R^2 resulted in the overlap—the proportion of total variance accounted for by the two predictor variables jointly, as in a Venn diagram (see Cohen & Cohen, 1983). Usually this overlap is positive, a condition known as redundancy; occasionally it is negative, a condition known as suppression.

The results of regressions are shown graphically in Figure 4. (The magnitudes and exact p -values for the PCA and CAO ΔR^2 s—the matter of major interest here—are available in a supplemental table). The figure is a stacked bar graph, with each bar divided into three parts. The height indicates the total R^2 for the particular two-variable model. Given redundancy, the bottom portion represents the ΔR^2 for the PCA or CAO rating when added to a model containing the mother or child rating, the top portion represents the ΔR^2 for the mother or child rating when added to a model containing the PCA or CAO rating, and the middle part indicates their overlap—in which case the r^2 for PCA or CAO is the bottom plus the middle portion and the r^2 for the mother rating is the top plus the middle portion (one-predictor models, the simple correlation squared).

Given suppression—indicated by a dot below the label in the figure and which occurred for 14 of the 42 bars—the bottom and middle portion together represent the ΔR^2 for the PCA or CAO rating, and the top and middle portion together represent the ΔR^2 for the mother or child rating—in which case the r^2 for PCA or CAO is just the bottom portion and the r^2 for the mother rating is just the top portion. As shown in Figure 4 usually these negative “overlaps”—if they occurred for PCA they also occurred for CAO—were small: less than 0.5% when predicting mother number of different words from child negative regard; less than 0.5% when predicting child percentage of spontaneous utterances from child negative regard, child positive mood, and child engagement; less than 1.0% when predicting mother number of different words from mother intrusiveness; and less than 1.5% when predicting mother MTL in utterances from mother cognitive simulation and positive regard. This suggests that apparent suppression effects are more statistical aberration (Sharpe & Roberts, 1997) than substantive, and in any event the focus here is on the ΔR^2 s associated with PCA and CAO.

For each language score, Figure 4 contains two sets of nine bars (one for each of the mother and child ratings for PCA and CAO), for a total of 72 bars—and hence 72 tests of statistical significance for the unique PCA and CAO ΔR^2 s (this compares with eight tests for our preliminary analyses described earlier). Following Cohen (1990) that researchers are unlikely to solve our “multiple tests problem with the Bonferroni maneuver” (p. 1304), we

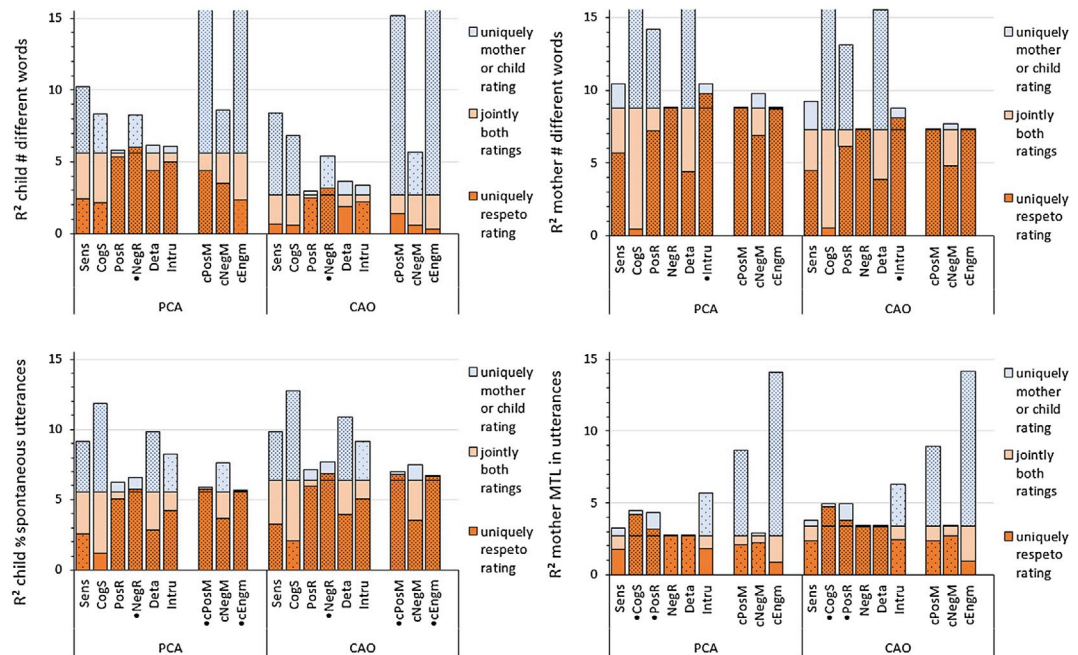


FIGURE 4 The figure shows how expressive language variance is apportioned between respecto ratings (CAO = child affiliative obedience; PCA = parent calm authority), mother ratings (CogS = cognitive stimulation; Deta = detachment; Intru = intrusiveness; NegR = negative regard; PosR = Positive regard; Sens = maternal sensitivity), and child ratings (cEngM = engagement; cNegM = negative mood; cPosM = positive mood). The height of each bar indicates the amount of variance accounted for by a particular two-predictor model (total R^2 , here expressed as a percent). The predictor variables are either PCA or CAO and either a mother or child rating. Each bar is divided into three parts. Given redundancy—the usual case—the bottom part represents the portion of total R^2 uniquely accounted for by the PCA or CAO rating, the top part represents the portion of total R^2 uniquely accounted for by the specific mother or child rating, and the middle part indicates the portion of total R^2 accounted for by the overlap between the two ratings. Thus the bottom and middle portions together represent the total amount of variance accounted for by PCA or CAO. Given suppression—indicated by a dot below the label in the figure—the bottom and middle portions together represent that portion uniquely accounted for by the PCA or CAO rating and the top and middle parts together represent that portion uniquely accounted for by the mother or child rating. Portions significant at the .05 level are dotted and portions marginally significant ($p < .10$) are lightly dotted. To maintain a common scale, some bars are truncated: For child # of different words, R^2 values = 18.1% and 21.6%, and 15.2% and 19.60%, for the two predictor models including cPosM and cEngM for PCA and CAO, respectively; and for mother # of different words, R^2 values = 31.4% and 16.0%, and 31.5% and 15.5%, for the two predictor models including cCogS and Deta for PCA and CAO, respectively. See text for further details

interpret overall patterns of statistical significance and emphasize the magnitude of effects (see also Wilkinson and the Task Force on Statistical Inference, 1999).

3.3.3 | Unique effects of PCA and CAO

Figure 4 addresses our third aim, which was to determine whether respecto explains unique variance in concurrent measures of mothers' and children's language above and beyond standard interaction measures. Generally, the magnitudes of the effects (ΔR^2 s) and their statistical significance were essentially the same for CAO as for PCA, as would be expected given their strong correlation (see Table 3). Effects for child lexical diversity were an exception.

For child number of different words (lexical diversity), R^2 for PCA alone was 5.6% and for CAO alone was 2.7%. The PCA ΔR^2 s were larger than the corresponding CAO ΔR^2 s for all mother and child ratings (average difference was 2.4%). Moreover, whereas all effects for PCA (for both mother and child ratings) were at least small ($>1\%$) and all were marginally or statistically significant, four CAO ΔR^2 s were less than 1% (mother sensitivity and cognitive stimulation, child negative mood and engagement), and only mother negative regard was statistically significant and positive regard and intrusiveness were marginally significant.

For child percentage of spontaneous utterances, R^2 for PCA alone was 5.5% and for CAO alone was 6.4%. All PCA and CAO ΔR^2 s were at least small, and with the exception of mother cognitive stimulation, all were marginally or statistically significant.

For mother number of different words, R^2 for PCA alone was 8.8% and for CAO alone was 7.3%. With the exception of mother cognitive stimulation, all PCA and CAO ΔR^2 s were at least small and all were statistically significant.

For mother MTL in utterances, R^2 for PCA alone was 2.7% and for CAO alone was 3.4%. With the exception of child engagement, all PCA and CAO ΔR^2 s were at least small, and with the exception of mother sensitivity and intrusiveness for PCA and child engagement for PCA and CAO, all were marginally or statistically significant.

In sum, when predicting language scores, respeto effects were pervasive. With a few exceptions, most unique effects were at least small (34 of 42). They were generally larger for child percentage of spontaneous utterances and mother number of different words. Finally, as noted earlier, the PCA and CAO pattern differed only for child number of different words.

4 | DISCUSSION

Our study provides a first step in understanding how respeto manifests in interactions between Latine parents and their young children. Despite the centrality of respeto to Latine parenting, studies to date have focused on parent-reported expectations. Our observational approach identified two measures of respeto—PCA and children's affiliative obedience (CAO)—in the play interactions of Mexican immigrant, low-income mothers and their children. PCA represented the degree to which a mother guided the interaction with her child in an assertive and confident yet gentle manner, and CAO represented the degree to which a child demonstrated positive amenability to mother's guidance. We investigated associations between measures of respeto and standard ratings of mother–child interactions, tested associations to mothers' and children's language production and discourse during interactions, and asked whether respeto accounted for unique variance in language use during interactions after controlling for standard measures of interaction quality.

4.1 | Respeto and positive features of dyadic interactions

Findings confirmed our hypotheses that mothers and children express respeto in the context of high-quality interactions. Measures of respeto related to positive maternal and child behaviors, including maternal sensitivity and cognitive stimulation and child engagement and lack of negativity, which aligns with findings that Latina mothers couple high directedness with high warmth and sensitivity (Cohen, 1988; Halgunseth et al., 2006; Ispa et al., 2004; Livas-Dlott et al., 2010). Still, PCA and CAO were not fully redundant with standard interaction measures.

Respeto's association with positive maternal behaviors contrast with findings from mothers' self-report. Maternal endorsement of respeto-related statements related to child behavior problems in Mexican- and Dominican-origin preschoolers, with the association being mediated by mothers' reported authoritarian parenting style (Calzada et al., 2012). Our findings suggest that respeto may manifest differently in Latina mothers'

interactions with children compared with self-reported views indicative of an authoritarian parenting style. The features of calmness in mothers' behavioral requests and children's affiliative receptiveness to mothers' requests move beyond a singular emphasis on control and obedience to capture aspects of respeto missing from standard parent-report attitudinal measures of parenting style. The recognition that respeto is characterized by positive demeanor in parents and pleasure by children in accepting parents' direction highlights important culture-specific aspects of Latine parenting that might be otherwise overlooked when respeto is defined solely in terms of high authority and high compliance.

As such, the authoritarian/authoritative dichotomy may not map onto the important features of parenting style among these Spanish-speaking, Mexican-origin mothers, underscoring the need to reconceptualize the construct of parenting style in specific cultural contexts. Although Baumrind's conceptualization of parenting style represents a critical contribution to parenting research, laying a foundation of knowledge about how parents support children's developing competence, her original sample included few ethnic minority families and no Latine families (Baumrind, 1970). Indeed, Baumrind herself reported different patterns of parenting style and child competence among the very small number of Black families in her sample (Baumrind, 1972). Our findings indicate a need to re-examine the utility of an authoritative/authoritarian distinction for understanding Latine parenting.

Similarly, the positive and calm way that respeto manifested in the current sample of Latina mothers' calls into question the often evaluative connotation of parent intrusiveness, which commonly implies that parents are doing something wrong by imposing their wishes or expectations onto a child's behaviors. Rather, our findings reveal that mothers may calmly guide children in ways that foster connection and cultural values around respeto without being negative in its connotation.

Notably, PCA and CAO showed high correspondence within dyads. Perhaps, mothers' history of calm authority across their children's first years of life paved the way for children to respond with high CAO by 2.5 years. Alternatively, children's temperament may have contributed to the strong associations between mothers' PCA and children's CAO. Children with a low tolerance for frustration and high reactivity during interactions may be low on affiliative obedience, making it more challenging for mothers to maintain their calm authority. Most likely, both mothers and children contribute to how respeto manifests in interactions. Indeed, we conceptualized respeto to be a dyadic construct that captures mutuality between mothers and children. It is thus unsurprising that dyads where mother was high on PCA and child low on CAO (or the reverse) were rare.

4.2 | Associations between respeto and mother and child language use

A second aim was to test whether measures of respeto relate concurrently to language production and discourse features during mother-child interactions. PCA and CAO correlated with mothers' and children's amount and diversity of words. Thus, mothers provided children with high quality language during the play session, while also expressing their authority. Reciprocally, children complied with their mothers' requests in the context of high language production. These findings counter the hypothesis that high respeto decreases children's participation in interactions when children defer to their mothers' authority. Rather, children express respeto in the presence of many words and a high diversity of words, standard measures of language that relate to school readiness and academic achievement (Pace, Alper, Burchinal, Golinkoff, & Hirsh-Pasek, 2019).

In terms of discourse features of language, respeto showed a mixed pattern of associations, relating to shorter speaking turns by mothers and fewer spontaneous but more responsive contributions by children. The shorter speaking turns by mothers who were high on PCA may reflect their sensitivity to the emerging language skills of their young children. Mothers tended to not dominate the interaction by taking considerably more speaking turns than their children but instead maintained balance in conversational turns that facilitated their children's verbal production and responsiveness to mothers' requests. Reciprocally, the tendency of children high in CAO to produce language in response to mothers, but to conversely be low in spontaneous initiation of language interactions,

may reflect children's strong connection and attunement to their mothers while adhering to cultural values around hierarchical interactions. This style of interaction may reflect children's role as "audience" and the idea that children should not speak until they are spoken to (e.g., Melzi & Caspi, 2005), a style well in place by the middle of children's second year.

Our third aim was to discern how respeto might work in concert with aspects of mother behavior such as sensitivity and child behavior as positive mood that have been shown previously to be associated with language production during interactions. The overarching pattern of findings indicate that even though there is often considerable overlap between standard measures of mother and child interaction and our new measures of PCA and CAO, respeto also displays unique associations with mothers' and children's language.

Especially noteworthy is that the unique contribution of both PCA and CAO to language production and discourse occurred relative to almost all of the six parent and three child variables we considered, suggesting that they add information over and above what is captured by documenting general contributions that characterize maternal sensitivity (e.g., negative regard) and child affect (e.g., child positive mood). However, there were a few exceptions to this pattern, the most intriguing being the finding that respeto did not enhance the already strong association of mothers' cognitive stimulation with the diversity of mothers' words ($r^2 = 27.5$ and 27.9 for PCA and CAO). These findings suggest that it may often be heuristic to consider both general and culturally specific aspects of children's and mothers' contributions to language production and discourse during interactions rather than focusing solely on one or the other aspect of early communication.

4.3 | Limitations and future directions

Several limitations and future considerations are warranted. First, findings are based on associations at one point in time. Associations between our observed measures of respeto and child language during interactions at later points in time may differ from those reported here. Our ongoing work will test whether respeto predicts child subsequent language development over time, and additionally, whether respeto relates to social/emotional and literacy achievement in elementary school. Before examining these longitudinal associations, however, we aimed to develop new measures of respeto in this sample of Mexican immigrant dyads.

Second, the sole focus on low-income Mexican immigrant mothers and their children did not allow us to test whether observed behaviors of respect generalize to other Latine groups, from different Spanish-speaking communities across a range of socioeconomic strata. As such, whether respeto manifests in distinctive ways across different Latine groups remains to be examined. Individual differences among Latine parents, including acculturation, education, and years in the United States, may relate to how Latina mothers and children express respeto, whether within Mexican samples or other Latine samples. Moreover, Latine parents are not the only group to stress the importance of respect in interactions with adults. African American families have a tradition of socializing their children to respect others, particularly elders (Hurd, Moore, & Rogers, 1995; Nobles, 1988), as do the Kipsigi of Kenya (Harkness, Edwards, & Super, 1981) and many other cultural communities. How behavioral aspects of respect manifest in child-parent interactions in other cultures where respect is likewise valued remains to be examined. Similarly, our focus on low-income families does not imply that PCA and CAO do not characterize high quality parent-child interactions in middle- and high-income families. In fact, positive features of respeto may generalize across all SES strata, although this remains to be tested.

Third, we are unable to pinpoint whether respeto's associations to mother and child productive language (albeit weak) are due to other cultural variables or family members that we did not study. For example, mother-child dyads who are high on respeto may also be high on familismo. Familismo may offer children rich opportunities to develop their language skills in interactions with fathers and other family members and extended kin. As such, language interaction measures associated with respeto may be a function of greater exposure to other language models. As well, calmness in social interactions—a key feature of respeto as defined here—may support learning

more generally and contribute to dyadic reciprocity in language interactions in early development. Similarly, we remain unsure about why patterns of association differed for boys and girls. Although levels of observed PCA and CAO did not differ by child gender, PCA was associated with greater maternal sensitivity and less detachment for boys but not for girls. Perhaps mothers conveyed their authority and solicited child obedience with greater sensitivity to boys' interests and the goal of instilling respeto in boys who were in the early process of developing machismo. However, precisely why patterns differ for girls and boys, and whether such differences would replicate in future research, remains open to investigation.

Future research should include an examination of other language partners, particularly fathers. Indeed, most studies of early parent-child relationships focus on mothers, with relatively little research on fathers (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000; Tamis-LeMonda, Baumwell, & Cabrera, 2013). Yet, fathers differ from mothers in the degree to which they challenge their children during interactions, both in terms of engaging in more physical, "rough and tumble" play and the language they use (Tamis-LeMonda et al., 2013). Perhaps father-child interactions around respeto manifest in ways that differ from what we observed in mother-child interactions. In short, capturing the multiple cultural factors and people who contribute to Latine children's developing language is a daunting, yet worthwhile research endeavor.

Finally, future research should examine how respeto in early parent-child interactions relates to other domains beyond language exchanges. Calm positive respect for children, coupled with high expectations for obedience, may provide an optimal learning environment for all types of learning. One of the most obvious domains is child self-regulation. By providing highly structured and guided interaction to young children, parents who engage in high PCA may assist their children in developing strong self-regulation skills. This may be particularly the case for children who, for temperamental reasons, have difficulties with inhibitory control. Likewise, if PCA facilitates child language development, it may indirectly contribute to growth in self-regulation because improved child language translates into better self-regulation (Peredo et al., 2015; Vallotton & Ayoub, 2011). Finally, calm, positive, harmonious relationships between parents and children may facilitate children's attachment to caregivers (Sroufe, 2005). If so, positive relationships between parents and children may provide a vital foundation for children's developing language, emotional, and social skills as children practice using language and being socially responsive when they interact with attachment figures.

5 | CONCLUSION

We documented a culturally informed aspect of dyadic interaction among Mexican immigrant mothers and their young children that supports early language use. Developmental niche theory asserts that a child's proximal environment and daily interactions are culturally rooted and that everyday environments "provide material from which the child abstracts the social, affective, and cognitive rules of the culture, much as the rules of grammar are abstracted from the regularities of the speech environment" (Harkness & Super, 2002, p. 272). Here, we show that respeto in Mexican immigrant mothers and their young children can be reliably quantified, relates to positive behaviors in mothers and children, and may uniquely contribute to children's use of language during interactions with mothers. By including culturally relevant aspects of parent-child interactions in theory and research, we move steps closer to understanding the developmental niche of the child.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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