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Identifying Culturally Consistent Early Interventions for Latino Caregivers

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Abstract

A convergent parallel mixed-methods design was applied to identify promising culturally consistent early intervention (EI) approaches with Latino caregivers. The researchers collected multiple sources of data, analyzed them separately, and then integrated relevant findings with other sources to identify promising EI approaches. Data included acculturation level, coded caregiver interaction style, and reported caregiver preferred activities. Based on the integration of these data and other sources, several themes and promising interventions were identified for Latino caregivers of young children. The use of imperatives, asking questions to redirect attention, and explicit teaching are discussed as well as ways to expand upon these behaviors through request for clarification, use of expansions, focused stimulation, and dialogic reading. Identifying culturally congruent interventions that fit with caregiver's style and prepares the child for academic settings is also discussed.

Keywords

birth to 3 years of age, cultural and linguistic diversity, Individualized Family Service Plan (IFSP), language learning disorders, exceptionalities, intervention strategies, family/parent issues

Latinos represent a diverse cultural group, and understanding the range of values, beliefs, and behaviors in this population is critical to intervention planning (for a review, see Zea, Quezada, & Belgrave, 1994). At the same time, Latino caregivers may share tendencies or characteristics in some areas and not in others; each individual lies along different points of a cultural continuum for a given cultural group (Anderson & Fenichel, 1989). This is stated succinctly by Thorpe (1997): *All families, in fact, vary greatly in the degree in which their beliefs and practices are representative of a particular culture, language group, religious group, or country of origin*. This variability may be related to differing attitudes toward and involvement with one's own culture and the culture of the larger society, often referred to as acculturation (Kayser & Guiberson, 2008; Locke, 1998). Acculturation may have an impact on an individual's beliefs and behaviors, including in the areas of family dynamics, education, and health (Rodriguez & Olswang, 2003; Sam, Jasinskaj-Lahti, & Ryder, 2006; Zuniga, 2004).

It is known that caregiver *interaction style* and behaviors are influenced by cultural background. Two styles have been described: an *interdependent style* and an *independent style* (Greenfield, Keller, Fuligni, & Maynard, 2003). The interdependent style emphasizes relationships and belonging to the family and group, whereas the independent style emphasizes independence and individual success. In the context of early development, a caregiver's developmental goals for a child are influenced by his or her interaction style (Vigil & Hwa-Froelich, 2004). In this respect, as a child approaches developmental tasks, caregiver interactional styles influence teaching and learning behaviors and determine the child's developmental pathway (Greenfield et al., 2003). While there is variability within cultural groups, Latino caregivers have been described as frequently having an interdependent interaction style (Kayser & Guiberson, 2008). A number of Latino caregiver behaviors and practices have been described that are characteristic of interdependent interaction styles. For example, it is common to see caregivers direct a child's attention, respond only to the child's explicit (complete) communication, and to teach children to complete new skills correctly (García Coll, 1990; Greenfield et al., 2006; Kayser & Guiberson, 2008; Vigil & Hwa-Froelich, 2004).

In short, interaction styles influence how caregivers engage with children and what behaviors are shaped and reinforced. Caregiver interaction style has a major influence

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on daily routines and practices in natural environments and, ultimately, the caregiver's developmental goals and priorities for children. In the context of the current study, this information is important because early intervention (EI) approaches have been primarily based upon European American interaction styles, with little attention given to other cultural groups. Researchers have identified problems with the *cross-cultural validity* and *cultural relevance* of EI language programs that are based upon European American frameworks (Wing et al., 2007). For example, these interventions may have cultural inconsistencies and prescribe parenting and teaching activities that are unnatural and unfamiliar to individuals from culturally diverse backgrounds. These interventions will be foreign and are unlikely to be implemented by caregivers who differ from European Americans; furthermore, these interventions may be inappropriate for the cultural context. An important guiding principle is that EI services should be *culturally responsive* and should align with the family's culture, preferences, and priorities (American Speech-Language-Hearing Association, 2008). Culturally responsive interventions are especially important when working with families with children younger than the age of 3 with identified disabilities. Individualized Family Service Plan (IFSP) services are meant to improve the development of infants and toddlers with disabilities, minimize the likelihood of developmental delay, and expand the ability of families to meet the needs of their child (Office of the Law Revision Counsel: United States Code, 2017). The IFSP should be a family-centered plan that takes into account family concerns, resources, and priorities, all of which are influenced by the family's cultural background. The family is a primary agent in the creation and implementation of the IFSP, so it should be culturally relevant to the family based upon the family's priorities and preferences and also be grounded in research-based interventions. IFSP services should take into account variables such as caregiver interaction style and developmental priorities; for services and intervention strategies to be effective, they should be culturally appropriate for the caregiver and child.

Current Study

The purpose of this study is to describe the interaction styles and the reported activity preferences of Latino caregivers, and to use this knowledge to identify promising culturally consistent EI approaches. To achieve this, we apply a *convergent parallel mixed-methods* design to this study. This approach allows researchers to collect multiple sources of data, analyze them separately, and then integrate relevant findings with other sources (Creswell, 2014). Promising findings from caregivers' acculturation level, coded caregiver interactions, and reported caregiver preferred activities will be integrated and interpreted to identify promising culturally consistent EI approaches for Latino caregivers.

The specific research questions were as follows:

Research Question 1: How are acculturation levels associated with predominant interaction styles in a sample of Latino caregivers?
Research Question 2: What are the interaction styles and behaviors of a sample of Latino caregivers?
Research Question 3: What activities do a sample of Latino caregivers report that they prefer?
Research Question 4: Based on promising findings from each question and other relevant resources, what are promising and culturally consistent interventions for Latino caregivers of young children?

Method

Participants

Caregiver characteristics. Spanish-speaking Latino families were recruited from three states in the Mountain-West region to participate in studies evaluating the use of screening measures for use with 2-year-old Spanish-speaking children (Guiberson, 2015, 2016). For the current study, caregiver variables are analyzed; these data have not been reported in the earlier studies. Caregiver participants were included if they participated with their toddler in a naturalistic play interaction and/or if they completed the *Caregiver Preferred Activities Survey*. A total of 140 caregiver participants met these requirements. All families were given the opportunity to participate in both play and survey measures, but some families only completed either the play sample or the survey measures. One hundred two caregivers and their children participated in play samples, and 38 caregivers completed surveys only. Caregivers included 134 mothers, five fathers, and one grandmother. Caregivers reported that they were from Mexico ($n = 109$), Guatemala ($n = 15$), Puerto Rico ($n = 7$), Honduras ($n = 4$), the Dominican Republic ($n = 2$), or of Mexican American background ($n = 2$). On average, caregivers had lived in the United States for 8 years ($SD = 6.77$). Table 1 presents additional demographic information. All caregivers in this study cared for a 2-year-old child (24–35 months of age). Ninety percent ($n = 126$) of the families qualified for government-funded EI programs (Early Head Start or state programs) and these families had incomes below the poverty guidelines. Family income data for children enrolled only in Part C services were not available ($n = 14$).

Child characteristics. A total of 102 2-year-old children (ranging from 2.0 to 2.11 years) participated with their caregivers in play interactions. Of these, 72 children were typically developing (TD). These children had no previous

Table 1. Means, Standard Deviations, Minimum and Maximum Values for Key Demographic Variables for Caregivers.

Variable	*M*	*SD*	Minimum	Maximum
Caregiver age in years	29	5.7	18	60
Caregiver years of education	9.61	3.64	0	18
Caregiver number of years living in the United States	8.35	6.77	1	31
Child's age in months	29.45	3.48	24	35

diagnosis, no report of concern about language development, and had expressive language Spanish Preschool Language Scale (SPLS-4) scores >85. The remaining 30 children were diagnosed with Developmental Language Disorder (DLD) by a bilingual speech-language pathologist, had history of parent concerns about child language development, and had expressive language standard scores <77 (1.5 *SD* below the mean) on the SPLS-4. All of the children received home-based EI services through Early Head Start or through IFSP services. Sixteen of the children received both Early Head Start and IFSP services. The Early Head Start and IFSP programming varied, and specific data on number of visits per month, or number of visits received over time, were not collected, but total visits could have ranged from 1 to 6 visits per month depending on parent schedules and cancellations.

Procedures

This study was conducted across three states in the Mountain-West region of the country in collaboration with federal and state-funded EI programs. Programs assisted in recruiting families by sharing flyers at centers and during program activities (e.g., parent groups, home visits). An informed consent form that had been approved by a university institutional review board was collected from caregivers, and verbal assent was obtained from children. Participants were informed that participation was voluntary and that they could decline participation at any time. Consenting families scheduled a study visit either at their local EI site or in their home. Research professionals, either a program family mentor, special education teacher, or speech-language pathologist conducted the study visits. During the study visits, caregivers engaged children in semistructured play activities with a standard set of toys, including two stuffed dolls (e.g., Elmo & Grover), a plastic set of toddler dishes, baby washcloths, two plastic cube blocks, a shape sorter, and a rattle. Play activities were videotaped and lasted 8 min. Research professionals also collected the *Caregiver Preferred Activities Survey*. Other child measures were also collected for the toddler screening studies (Guiberson, 2015, 2016), but child development measures are not part of the current investigation and thus are not reported here. For families who only competed the *Caregiver Preferred Activities Survey*, surveys were collected during regular EI program visit or activities.

Measures

Proxy Acculturation Scale. The Proxy Acculturation Scale–3 (PAS-3) is a brief acculturation measure that has been shown to have strong psychometric qualities when compared with a longer acculturation scale (Cruz, Marshall, Bowling, & Villaveces, 2008). The PAS-3 is valuable in providing acculturation level in situations where the use of a more comprehensive acculturation scale is infeasible or impractical. The PAS-3 is a three-item scale that includes interview language, language spoken at home, and proportion of life lived in the United States. The PAS-3 includes scoring guidelines (see Cruz et al.). Scored items are summed and a dichotomized acculturation level is obtained (*low acculturation* or *medium/high acculturation*). The PAS-3 procedures were followed to obtain acculturation level for the current study.

Caregiver interaction style coding. Caregiver interaction style coding was based on Vigil and Hwa-Froelich's (2004) framework. Coding conventions were established by creating a protocol that followed the framework and classified observed caregiver interactions as independent or interdependent in style. The appendix presents a condensed version of the protocol, without boxes or other spaces used for tallying behaviors. Consistent with the original framework, caregiver interactions/behaviors were coded within three categories: *attention regulation, pragmatic input*, and *object engagement and play*. These specific categories are of interest because they are observable during caregiver–child interaction and they are influenced by cultural values. Attention regulation describes the manner in which a caregiver encourages a child to attend to an object, person, or event. For example, within this category, an independent behavior includes encouraging the child's attention to the environment, while an interdependent behavior includes encouraging the child's attention to self or others. Pragmatic input describes how a caregiver explores objects/toys and teaches the child. For example, independent behaviors include allowing the child to play

with a toy differently from intended use (i.e., imaginative play), whereas interdependent behaviors include teaching the child to play with the toy explicitly and correctly. Object engagement and play describes the caregivers' communication characteristics when engaging with the child. This includes independent behaviors such as using descriptive speech (i.e., commenting on play) and remarking on the child's interests, and interdependent behaviors such as using attentional directives (e.g., calling the child's name) and producing imperatives (i.e., commands).

Coding conventions were applied to document the types and frequency of caregiver behaviors. For the current study, caregivers' interactions within three categories, namely, *attention regulation, pragmatic input*, and *object engagement and play*, during play samples were coded. The entire 8 min of each video-recording was used to code caregiver interactions. The first step in coding caregivers' interactions was to identify all behaviors that included *attention regulation, pragmatic input*, and *object engagement and play*. The caregiver interaction protocol was used to identify such behaviors. When present, these behaviors were tallied for each occurrence. Time markers and brief descriptions were recorded to review or revisit behaviors. After the entire 8 min were coded, coders then completed a second pass viewing of the entire video from the start, checking their coding, time markers, and brief descriptions. Two additional behaviors were also coded for all caregivers' interactions: *physical closeness*, and *Verbal + Visual scaffolding*. Physical closeness indicated instances when the caregiver made physical contact with the child to show affection and/or direction. Verbal and visual scaffolding was coded if the caregiver gave a verbal command accompanied with a demonstration of the behavior the caregiver desired the child to perform. Possible scores for each behavior range from 0 to the highest number of frequency that behavior occurred in the 8-min play sample.

After coding was completed, interdependent and independent behaviors were tallied for each specific behavior observed on protocol, each category (attention regulation, pragmatic input, and object engagement and play), as well as for total behaviors coded by interaction style. The total number of independent or interdependent behaviors observed was used to establish *predominant caregiver interaction style*. For example, if a caregiver had 38 behaviors that were coded as interdependent, and nine that were independent, the caregiver was coded as having a predominantly interdependent interaction style and was placed in the interdependent group. The researchers decided at the onset of the study that a *split interaction style* would be assigned to caregivers who had profiles in which 40% to 60% of behaviors were coded as one style, and the remaining 60% to 40% were coded as the other style. None of the caregivers in the study had split interaction styles.

Both authors and four additional speech-language pathology graduate students were trained in the caregiver interaction style coding. Training included thorough discussion of the protocol and coding conventions, followed by coders completing coding of four training videos. Point-by-point interrater agreement was calculated by reviewing each behavior coded and assigning a plus for agreement and a negative for nonagreement. The time stamps and coding notes were used to identify each coded behavior. Individual coders achieved 90% or higher point-by-point interrater agreement prior to being allowed to code independently, and every fifth tape coded had previously been coded by another coder so that interrater reliability could be calculated. A kappa value in the *very good* range was obtained for caregiver interaction coding ($\kappa = .89$; Altman, 1991)

Table 2. Acculturation and Interaction Style Cross-Tabulation and Chi-Square Results.

Acculturation level	Caregiver predominant interaction style: Independent *N*	Independent %	Interdependent *N*	Interdependent %	*df*	χ^2
Low	17	68	62	81		
Medium/high	8	32	15	19		
Total	25		77		1	1.69

Note. $p = .19$.

Caregiver preferred activities survey. To examine preferred caregiver activities, an 11-item survey was developed and collected from families. The survey was intended to describe caregivers' play interactions (e.g., pretend play), activities caregivers may engage in with their child outside the home (e.g., library visits), and what caregivers may talk about or teach their children (e.g., talking about family plans). Caregivers rated each item as *preferred and frequently occurring activities, preferred occasional activities*, or *not preferred activities*. Seventy-five caregivers completed the survey. Each of the questions, and the percentage of respondents who provided each response, is presented in Table 7.

Results

Acculturation Level

The first research question aimed to describe the acculturation level of the caregivers who completed play samples and to describe how acculturation was associated with predominant interaction style. A total 22% of the 102 caregivers had a medium/high acculturation level, and 78% had low acculturation levels. To further describe acculturation and its association with caregiver interaction style, a cross tabulation table was created and a chi-square test was performed. Inspecting the frequency and percent findings in Table 2, we

Table 3. Behaviors of Attention Regulation, Pragmatic Input, and Object Engagement and Play by Predominant Caregiver Style.

	Independent group ($n = 25$)			Interdependent group ($n = 77$)		
Category	*M*	*SD*	Range	*M*	*SD*	Range
Attention regulation						
Independent style	12.36	4.52	4–24	4.81	3.87	0–17
Interdependent style	2.72	3.92	0–20	4.19	3.71	0–19
Pragmatic input						
Independent style	13.04	5.96	2–23	6.32	4.33	0–24
Interdependent style	2.68	2.29	0–7	8.05	5.55	0–32
Object engagement and play						
Independent style	7.12	6.05	0–29	4.79	4.32	0–24
Interdependent style	14.84	6.53	0–32	29.64	7.92	11–51

found that 81% of those with interdependent styles had a low acculturation level and 19% had medium/high acculturation levels. Furthermore, we found that 68% of those with independent styles had a low acculturation level and 32% had medium/high acculturation levels. The result of the chi-square test, displayed in Table 2, showed that the relationship between acculturation level and caregiver interaction style was not significant ($\chi^2 = 1.69, p = .19$).

Caregiver Interaction Style and Patterns

The second research question aimed to describe the interaction styles and behaviors (attention regulation, pragmatic input, and object engagement and play) of a sample of Latino caregivers using data from the caregivers who participated in the play samples. As a first step, the caregiver interaction style coding results were reviewed and caregivers were sorted into predominant style, independent, or interdependent. Predominant style was established by identifying which of the two styles caregivers demonstrated more frequently. Twenty-five of the caregivers had a predominantly independent style and 77 had an interdependent style. Next, caregiver styles were inspected to establish frequency of caregiver behaviors observed across the three categories (attention regulation, pragmatic input, and object engagement and play). Table 3 presents caregiver group (independent or interdependent) means, standard deviations, and ranges observed across the three categories. The independent caregiver group had mean attention regulation and pragmatic input behaviors that were independent, but the group's object engagement score was more interdependent. The interdependent caregiver group had mean pragmatic input and object engagement behaviors that were interdependent, while the attention regulation means for this group were approximately split between independent and interdependent. Next, the frequency of each individual caregiver behavior was inspected by predominant caregiver style. Independent behaviors by group are reported in Table 4. *Allows child to explore toys* and the *use of descriptives* were the two most common independent behaviors seen across groups. Other frequent independent behaviors seen in the independent group included *watches child to determine child's next move* and *follows child's lead*. Interdependent behaviors by group are reported in Table 5. *Asks questions to redirect attention* and *produces imperatives* were the two most common independent behaviors seen across groups. Other frequent interdependent behaviors seen in the interdependent group included *uses attentional directives* and *teaches explicitly*. The frequency of two additional behaviors, physical closeness and verbal command combined with visual scaffold, were also coded. Table 6 presents these data; neither behavior was frequent, but both behaviors were observed more often in the interdependent group.

Caregiver Preferred Activities

Next, data from participants who completed the *Caregiver Preferred Activities Survey* were reviewed. The aim of this research question was to establish which activities a group of Latino caregivers reported that they preferred. Table 7 presents the participants' response. Sixty percent of survey respondents reported that the most *preferred frequent activity* was teaching children colors, letters, and numbers. The most *preferred occasional activity* was reading to children. Sixty percent of respondents reported that pretend play was not a preferred activity. When preferred *frequent* and preferred *occasional* responses were combined, the four most common preferred activities included talking to child about what he or she is playing (99%), teaching the child colors, letters, and numbers (96%), asking the child questions to help think about what he or she is doing (91%), and reading to the child (89%). Activities that were frequently rated by respondents as not preferred

Table 4. Frequency of Independent Behaviors by Predominant Caregiver Style.

	Independent group ($n = 25$)			Interdependent group ($n = 77$)		
Behavior	*M*	*SD*	Range	*M*	*SD*	Range
Follows child's lead	3.88	3.83	0–15	1.06	1.51	0–8
Encourages attention to environment	0.16	0.37	0–1	0.12	0.63	0–5
Responds to infant exploration	2.76	2.35	0–8	1.53	1.85	0–9
Watches child to determine child's next move	5.56	3.18	0–13	2.09	2.22	0–9
Focuses on one activity at a time	0.00	0.00	0–0	0.00	0.00	0–0
Holds object	3.36	3.15	0–12	1.53	2.19	0–10
Allows child to explore toys	8.04	6.45	1–23	4.16	3.85	0–23
Allows play with toy different from intended use	1.64	1.82	0–6	0.64	1.06	0–5
Uses descriptives	6.00	6.10	0–29	3.75	3.76	0–24
Describes child's behavior	0.72	1.34	0–6	0.65	1.30	0–9
Remarks on child's interest	0.40	0.65	0–2	0.39	0.95	0–7

Table 5. Frequency of Interdependent Behaviors by Predominant Caregiver Style.

	Independent group ($n = 25$)			Interdependent group ($n = 77$)		
Behavior	*M*	*SD*	Range	*M*	*SD*	Range
Directs child's attention	1.08	2.10	0–10	1.91	1.94	0–11
Encourages attention to self or other person	0.36	0.76	0–3	0.51	1.10	0–6
Redirects child's attention to join an established activity	0.64	1.15	0–4	1.18	1.48	0–6
Redirects to establish communicative interchange	0.60	2.06	0–10	0.57	1.13	0–6
Attends to several activities simultaneously	0.04	0.20	0–1	0.03	0.16	0–1
Teaches explicitly	1.28	1.67	0–7	5.34	4.57	0–25
Manipulates child's hands and toy	0.08	0.40	0–2	0.49	0.87	0–3
Teaches child to play with toy correctly	1.32	1.52	0–6	2.22	1.96	0–10
Uses attentional directives	2.28	2.30	0–7	5.40	3.40	0–20
Produces imperatives	4.68	3.20	0–13	11.47	5.32	1–25
Asks questions to redirect attention	7.88	5.06	0–20	12.77	7.17	0–33

Table 6. Frequency of Additional Behaviors by Predominant Caregiver Style.

	Independent group ($n = 25$)			Interdependent group ($n = 77$)		
Behavior	*M*	*SD*	Range	*M*	*SD*	Range
Physical closeness	0.76	1.05	0–3	1.36	1.71	0–8
Verbal command + Visual scaffold	0.36	0.76	0–3	1.58	1.51	0–7

included pretend play (60%), and going to the library to listen to stories (56%).

Limitations

There are a number of limitations to take into account with this study. Detailed information about the number of EI visits, either from Early Head Start or as part of an IFSP/Part C was not collected. While the purpose of the current study was not to evaluate EI programming, frequency of visits and length of enrollment may have influenced caregiver behaviors. Another limitation is that this study employed a proxy acculturation scale. While the PAS-3 has been found to have high levels of concurrent validity with

Table 7. Latino Caregivers Reported Preference and Frequency of Activities ($n = 75$).

Activity	Caregiver response		
	Preferred frequent activity (%)	Preferred occasional activity (%)	Not a preferred activity (%)
Talk to my child about what he or she is playing	47	52	1
Talk about family plans or plans for the future	28	39	33
Ask my child questions to help him or her think about what he or she is doing	47	44	9
Pretend or pretend play with my child	12	28	60
Tell my child stories about our family or our culture	24	35	41
Sing songs, say rhymes, or play rhyming games with my child	35	44	21
Watch videos with my child	47	39	15
Go to the library to listen to stories or select books with my child	17	27	56
Teach my child what signs and words mean	27	52	21
Teach my child colors, letters, and/or numbers	60	36	4
Read to my child	28	61	11

Note. Percentages were rounded up to the nearest whole number when above 0.5.

full scales of acculturation, it should be acknowledged that there may be a risk that an aspect of acculturation was not captured by this tool. An additional limitation is the study was not designed, nor was there an adequate sample, to examine the relationship between interaction style and nationality, age of caregiver, or other variables. Although the study design allowed us to identify possible areas or themes that may inform culturally consistent interventions, additional research is needed to evaluate these potential intervention approaches.

Discussion

The goal of this study was to identify culturally consistent interventions for Latino caregivers using a convergent parallel mixed-methods design. In this section, we will integrate findings from the caregiver interaction style coding, Caregiver Preferred Activities Survey analysis, and relevant literature to identify promising intervention approaches. Table 8 summarizes this information. Caregiver interaction style coding showed that 75% of caregivers in this study had a predominantly interdependent style and 25% had a predominantly independent caregiver style. These results demonstrate that this sample of Latino caregivers was diverse in interaction style but that most caregivers had more interdependent behaviors. When planning interventions for caregivers who have a predominantly interdependent style, it may be beneficial to try to incorporate or build upon existing caregiver behaviors and expand upon these behaviors with *culturally congruent* interventions (Wing et al., 2007). For example, if a caregiver tends to explicitly teach his or her child how to play with a toy, it would be good to include this in the recommendations and to add on another element of complexity in the play sequence, or to add a verbal prompt or script that accompanies this teaching. Some behaviors, such as the use of imperatives and asking questions to redirect attention, were frequently seen regardless of predominant caregiver style. Frequent use of imperatives, such as *mira, ten, haz*, and others were often observed during the interactions. This finding parallels findings from other studies showing that command forms used by Latino/a caregivers are endearing and demonstrations of *cariño* or affection (Livas-Dlott et al., 2010). The use of these imperatives and redirecting attention may fit into teaching a child to play with a toy correctly. For example, teaching a child to imitate, or *do this*, while playing could be a natural upward extension of a play activity. These approaches are very similar to strategies that are sometimes applied through *focused stimulation*, an intervention approach that researchers have recommended when working with Spanish-speaking children (Gutiérrez-Clellen & Simon-Cereijido, 2013; Wing et al., 2007). The principles of modeling, frequent repetition, and explicit teaching may be culturally consistent for caregivers from interdependent backgrounds, and a natural way to expand upon caregiver explicit instruction to children.

These teaching behaviors are very different from the *follow the child's lead* approach that is frequently seen in language intervention approaches that are based on European American, independent interaction styles. The use of explicit teaching, combined with attentional directives may be more natural for Latino caregivers, especially when engaging children in developmentally challenging tasks or play sequences. Our results showed that Latino caregivers with interdependent styles were comfortable using a didactic style in which caregivers give commands, direct children's behaviors, and explicitly teach children how to play or complete tasks. These behaviors were sometimes combined with physical closeness and visual scaffolding.

Table 8. Promising Culturally Consistent Early Language Intervention Strategies for Latino Caregivers.

Strategy	Caregiver interaction style	Caregiver preferred activities	Supporting references
Explicitly teaching children	+		+ (1, 2, 3)
Use of imperatives/directives with children	+		+ (1)
Ask questions to redirect child's attention to shared activity	+		
Elements of focused stimulation (e.g., modeling, use of repetitions, etc.)			+ (1, 3, 4)
Physical closeness	+		
Verbal instruction + Visual scaffold	+		
Preacademic language activities		+	
Talking about what child is playing (i.e., use descriptives)	+	+	
Asking questions to help child think about what he or she is doing		+	
Shared book reading and language strategies		+	+ (3, 5, 6, 7, 8, 9, 10, 11, 12)
clarification requests and expansions		+	+
Use family discourse vignettes, focused stories, and eventually more school-like narratives		+	+ (13)

Note. Numbers correspond to references listed: (1) Vigil and Hwa-Froelich (2004), (2) García, Pérez, and Ortiz (2000), (3) Wing et al. (2007), (4) Simon-Cereijido (2015), (5) Kummerer (2010), (6) Kummerer, Lopez-Reyna, and Hughes (2007), (7) Gillanders and Castro (2011), (8) Boyce et al. (2004), (9) Ijalba (2015), (10) Tsybina and Eriks-Brophy (2010), (11) Durán, Hartzheim, Lund, Simonsmeier, and Kohlmeier (2016), (12) Boyce, Gillam, Innocenti, Cook, and Ortiz (2013), and (13) Bliss, McCabe, and Mahecha (2001). See reference list for full citations.

Results from the *Caregiver Preferred Activities Survey* provided additional information that may be useful in developing culturally consistent activities for use with Latino caregivers of young children. First, preacademic language activities that focus on concepts children will need in preschool and kindergarten were rated by Latino caregivers as preferred activities. These activities included teaching children colors, letters, and numbers. Teaching preacademic language also maps onto the results on caregiver interaction style that indicated that Latino caregivers in this study frequently employed explicit teaching. Preacademic language and concepts can easily be integrated into caregiver explicit teaching routines, where the caregiver practices and teaches these concepts repeatedly. Two other language strategies that appear to be culturally consistent for Latino families include talking to children about what they are playing and asking children questions to help them think about what they are doing. These strategies can be embedded into explicit *escuelita* (*little school*) teaching times or during everyday routines and activities. These language strategies also fit with shared book reading, which was an additional preferred activity reported by families. Other researchers have found that adding language enhancement strategies to shared book reading may be effective for Latino families (Tsybina & Eriks-Brophy, 2010). Given that most families reported book reading as an activity, they prefer it may be a culturally consistent way to expand upon language enhancement strategies in a familiar routine. One group of researchers found that *dialogic reading* was an effective alternative approach to focused stimulation (Tsybina & Eriks-Brophy, 2010). Both approaches promote joint activity as well as promoting interactions that include language modeling, but dialogic reading has the benefit of being contextualized in a storybook. The hallmarks of dialogic reading include training the caregiver to use *evocative techniques* to encourage the child to produce targeted words by talking about the book and either praise or expand upon his or her child's utterances (Tsybina & Eriks-Brophy, 2010). The overall goal of dialogic book reading is for the child to eventually retell the story and for the caregivers to become active listeners. Dialogic reading incorporates elements that are both interdependent and independent in style and, for that reason, dialogic reading may be a promising culturally consistent intervention for Latino caregivers.

When considering culture and its influence on caregiver behaviors, it is important to remember that culture exists on a continuum and each individual will vary in terms of cultural identity, values, beliefs, and behaviors. In addition, every family and every individual caregiver has unique characteristics that may influence his or her teaching behaviors and developmental priorities for a child. In this way, it is important that every recommendation or goal for an IFSP or Individualized Education Program (IEP) be individualized to meet the unique needs and profiles of the caregivers and children involved. *Cultural relativism* and understanding cultural patterns and the value of different beliefs is

essential to understanding families and children from diverse backgrounds, especially when interventions are mostly developed from a majority cultural lens and have not been adequately tested with culturally and linguistically diverse populations (Roseberry-McKibbin, 2018). When planning interventions for Latino caregivers and young children, interventionists should also keep in mind cultural differences and developmental expectations in both home culture and school culture. Effective culturally consistent interventions will promote both academic and social development (Gorman, Fiestas, Peña, & Clark, 2011). In some instances, there may be a mismatch between school expectations and expectations at home. Interventionists should work from the home culture and identify *culturally congruent* practices that will build upon what is familiar and natural to the caregiver and provide stimulation to the child (Wing et al., 2007). Bliss et al. (2001) identified several promising strategies for Latino families, several of which parallel the themes that we saw in the responses from the Caregiver Preferred Activities Survey. First, respecting the family's culture and helping them see that it will also be important for families to learn school culture and expectations is important. Also, using materials (books or other) that reflect the family's culture is important. If a caregiver uses mostly direct correction or explicit instruction, interventionists can build upon this by teaching the caregiver to use other facilitation strategies, such as using clarification requests and expanding upon what the child has said. In the context of narrative development, it may be culturally consistent to begin with family discourse and then shift toward school discourse over time. Family discourse may include vignettes (descriptions of family activities and experiences) and conversation-focused stories (e.g., recalling past events, experiences, and family members). Within family discourse, the emphasis is placed on maintaining a conversation with the child rather than on probing for specific information or a correct answer. Eventually, intervention can target more school-like narratives that focus on descriptions, actions, sequencing, and aspects of story grammar.

In this study, we identified EI recommendations through a convergent parallel design that included multiple sources, a process that was specifically tailored to take into account cultural aspects of working with Latino caregivers of young children. Although more research is needed to test the effectiveness of the interventions we identified, this study makes a unique contribution because it identified promising culturally consistent strategies that are not simple translations of interventions developed for European American families. We integrated findings from multiple sources, including data-based sources and themes from relevant literature to identify promising culturally consistent recommendations for EI approaches for Latino caregivers of young children. When planning EI services for Latino families of your young children, we recommend building upon the caregivers' naturally occurring behaviors and preferences, and selecting culturally congruent activities and providing recommendations that fit into established routines and activities, and begin to extend these activities to skills that will be expected in preschool or kindergarten settings.

Appendix

Caregiver Interaction Style Coding.

Independent behaviors	Interdependent behaviors
Continuum of caregiver style of attention regulation	
Follows child's lead	Directs child's attention
Encourages attention to environment	Encourages attention to self or another person
Responds to infant exploration	Redirects child's attention to join an established activity
Watches child to determine child's next move	Redirects to establish communicative interchange
Focuses on one activity at a time	Attends to several activities simultaneously
Continuum of caregiver style of pragmatic input	
Holds object	Teaches explicitly
Allows child to explore toys	Manipulates child's hands and toy
Allows play with toy different from intended use	Teaches child to play with toy correctly
Continuum of caregiver style of object engagement and play	
Use descriptive words	Attentional directives
Describes child's behavior	Produces imperatives
Remarks on child's interests	Asks questions to redirect attention

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