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Home-school literacy experiences of Latino preschoolers: Does continuity predict positive child outcomes?

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ABSTRACT

The current study explored the literacy practices used by primary caregivers and Head Start teachers of low-income Latino children, examined the extent to which these practices are continuous, and investigated the role of continuity in home-school literacy practices on Latino preschoolers' emergent literacy development. Results showed that *continuity* in home-school global literacy practices, as well as in the use of high-challenging talk during book sharing interactions, was predictive of children's emergent literacy skills at the end of the Head Start year. By contrast, *discontinuity* in home-school book sharing styles led to higher emergent literacy outcomes. Results are discussed in relation to the importance of the home and preschool environments in supporting low-income Latino children's early literacy development.

As the largest minority group in the United States, Latinos comprise more than 16% of the total U.S. population (García & Jensen, 2009; National Research Council, 2006; U.S. Census Bureau, 2010), and the Latino population is rapidly growing, such that by 2100, 33% of the U.S. population will be from Latino backgrounds (National Research Council, 2006; Ramirez & de la Cruz, 2002). Latinos in the United States, however, do not belong to one homogeneous group; instead, there is much diversity in Latino cultural heritage and practices (Suárez-Orozco, 2001; Suárez-Orozco & Suárez-Orozco, 2009). Nevertheless, there is an array of pan-ethnic issues faced by large percentages of Latino children in the United States (Suárez-Orozco & Suárez-Orozco, 2009). For example, Latino preschoolers are more likely to live in poverty than are preschoolers from other cultural and ethnic groups (Espinosa, Laffey, & Whittaker, 2006), with 61% of Latino children coming from low-income backgrounds (National Center for Children in Poverty, 2008). This, in turn, has a negative impact on the type of schools Latino children attend (Suárez-Orozco & Suárez-Orozco, 2009). Already at school entry, Latino children lag behind their peers on measures of school readiness (Chernoff, Flanagan, McPhee, & Park, 2007; Espinosa et al., 2006; Lee & Burkham, 2002), in particular emergent literacy (Páez, Tabors, & López, 2007), and the gap in academic achievement only grows over time (Planty et al., 2008), with Latinos facing lower high school graduation rates than their non-Latino peers (Rumberger & Anguiano, 2004).

Policy-makers in the United States are, thus, faced with a growing concern about the development of school readiness skills and academic achievement among Latino children (Pew Hispanic Research Center, 2005). The preschool years are a critical period for the development of the early language, print, and literacy skills that are predictive of children's reading readiness and overall school success (Storch & Whitehurst, 2002; Whitehurst & Lonigan, 1998). In fact, research has consistently demonstrated that adult–child interactions in both the home and preschool settings provide the context for emergent literacy development, laying the foundation of literacy-related knowledge prior to children's entry into formal schooling (e.g., Phillips & Lonigan, 2005; Sulzby & Teale, 1991). For example, through their interactions with adults, preschoolers learn to engage in extended discourse independently (Blum-Kulka & Huck-Taglicht, 2001), a skill that is critical for their literacy development upon school entry (Dickinson & Tabors, 2001; Griffin, Hemphill, Camp, & Wolf, 2004; Whitehurst & Lonigan, 1998). Surprisingly, though, only a handful of studies have explored the home and classroom early literacy environments of low-income Latino children. As understanding the home and school emergent literacy experiences of low-income Latino children is critical to our knowledge of the unique experiences of this growing population of children, the current study addressed this gap in the research by exploring how Latino children's experiences at home and at preschool jointly contribute to their development of emergent literacy skills.

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Continuity in home-school practices: conflicting theoretical frameworks

Focusing on the social–interactional function of language, sociocultural theory views literacy as a cultural practice, such that children learn culturally appropriate literacy uses and practices based on their everyday interactions with adults and more knowledgeable others (e.g., Vygotsky, 1978). Given the centrality of the home and school settings during the early childhood years, researchers have suggested that similarities of beliefs and consistency in practices (i.e., continuity) across both settings are critical for positive child outcomes (Bronfenbrenner & Morris, 1998). Accordingly, researchers have suggested that the early literacy difficulties prevalent among children from non-mainstream communities might result from a mismatch between home and school language and literacy practices (Dickinson & McCabe, 2001; Heath, 1983; Perry, Kay, & Brown, 2007). In her seminal ethnographic work, Shirley Brice Heath (1983) posited that because the education system in the United States is grounded in middle-class European–American practices, the home and school language experiences of children from middle-class families are continuous (or similar) in nature. For example, middle-class European–American mothers tend to engage their children in classroom-like question–answer routines. By contrast, for children from non-mainstream communities there often exists a lack of continuity – or discontinuity – between home and school language and literacy practices. Through close study of the everyday lives of working-class children and their families in three Carolina communities, Heath highlighted stark differences between the language and literacy socialization practices fostered in the home and classroom settings. Black children from working-class homes, for example, were not read to regularly and had limited exposure to print. Furthermore, the children were not seen by the adults in their community as conversational partners, nor were they asked questions that elicited basic information such as labels of objects — a practice that is routinely found in school settings.

Heath (1983) suggested that teachers' lack of knowledge about the unique culture-specific practices of these working-class families might lead to misunderstandings about children's skills and, thus, be detrimental for their later success in school. As a result, although parents in the communities Heath studied valued education, many of their children experienced failure upon school entry. Although past research has not extended Heath's work to explore preschool-aged children in Latino communities, it seems plausible that a similar mismatch might exist between the home and school practices of Latino children, especially for those from immigrant families. For example, unlike mainstream European American parents, Latino parents tend to adopt a sole narrator style when engaging in shared book reading interactions with their preschoolers, such that they provide the majority of the information to their children (Caspe, 2009; Melzi & Caspe, 2005; Melzi, Schick, & Kennedy, 2011). This is in stark contrast to the book sharing styles typical of preschool classrooms, where teachers tend to elicit information from the children, thereby co-constructing the stories with their class (Dickinson, 2001; Dickinson & Smith, 1994). Moreover, although Latino parents value education, they emphasize *educación* at home, as they strive to raise good, moral, respectful children, as being well-mannered is seen a key component of school success (Gallimore & Goldenberg, 2001). By contrast to the expectations of teachers in U.S. schools, however, they do not see emergent literacy as an integral early childhood milestone, or as a critical precursor to becoming literate, and do not believe that it is the parents' responsibility to engage children in early literacy practices (Gallimore & Goldenberg, 2001). Thus, a clear difference exists between U.S. Latino children's caregivers' and teachers' beliefs and practices.

A lack of match between home and school practices might mean that children enter school without a clear understanding of classroom expectations (Barbarin, Downer, Odom, & Head, 2010). As a result, teachers' understanding of the language and cultural backgrounds of the children in their classrooms is essential (Espinosa & López, 2007; Heath, 1983; Moll, 1992). By building on home and community literacy practices, teachers can work toward establishing continuity between home-school practices, which, in turn, is a critical precursor to children's academic success (Heath, 1983). In other words, by establishing continuity, children's early school failure might be avoided.

Nevertheless, attributing the early school failure of children from non-mainstream communities, such as low-income Latino children, to the discontinuity of home-school practices might be overly simplistic. In fact, some scholars (e.g., Hemphill & Snow, 1996; Phillips, McNaughton, & MacDonald, 2004) argue that across all groups – mainstream and non-mainstream – there always exists some degree of discontinuity between home-school practices, as a result of variations in the contexts. For example, by contrast to the home, where mothers typically engage in conversation with one child at a time, in school children must learn to interact in a larger group setting. Thus, these researchers ascribe to a co-constructivist view of development, whereby children actively construct knowledge through their interactions with others, both at home and in the larger community (McNaughton, 2001). Moreover, it is possible that some degree of discontinuity is, in actuality, advantageous to young learners, as it allows for exposure to a multiplicity of literacy styles and genres (Hemphill & Snow, 1996). This would suggest then, for example, that, for low-income Latino preschoolers, experiencing an array of language and literacy practices through interactions with caregivers at home and at preschool could place them at an advantage, insofar as their discourse skills, as well as their flexibility in thinking. This might explain why, irrespective of potential discontinuity between home-school language practices, not all Latino children experience school failure (Reese & Goldenberg, 2008). Furthermore, there exists the possibility that a mismatch between home and school practices might be beneficial for children, such that one setting might serve to compensate for a lack of exposure to particular stimuli in the other. In other words, for some children, and perhaps especially for those from low-income backgrounds, experiencing some discontinuity between home and school practices might, in fact, serve as a protective factor (Barbarin et al., 2010). Yet, research on the continuity between home and school practices has failed to explore this possibility fully through quantitative analyses.

Although there remains a dearth of empirical evidence about the role of continuity between home and school practices in predicting children's school success, both perspectives maintain that all children enter school with a wealth of cultural resources intended to help them participate – and succeed – in the classroom environment (McNaughton, 2001). These cultural pathways influence home practices and activities, which serve as essential predictors of children's development. Ultimately, though, both the home and school contexts are integral to children's development.

Home and school practices as predictors of child outcomes: methodological limitations

To date, most research exploring preschoolers' emergent literacy development has focused on the integral role of the home environment or the preschool setting. For example, past work has linked numerous aspects of the home environment, such as the availability of children's books and other forms of print, opportunities to engage in extended conversations, and adult–child book sharing interactions, to young children's development of language and emergent literacy skills (e.g., Bracken & Fischel, 2008; Bus, van IJzendoorn, & Pellegrini, 1995; Caspe, 2009; Haden, Reese, & Fivush, 1996; Lonigan, Shanahan, & Cunningham, 2008; Sénéchal & LeFevre, 2002). Similarly, various aspects of the preschool classroom environment, including pre-literacy instruction and the frequency and form of book reading interactions, have been found to help shape children's literacy development (Connor, Morrison, & Slominski, 2006; Dickinson & Porche, 2011; NICHD, 2005; Wasik, Bond, & Hindman, 2006). Nevertheless, these

findings are somewhat limited in scope, in that they only account for the role of one of the two contexts – home or preschool – critical for supporting children's early development.

Interestingly, though, much of the research that has examined the intersection between home and school literacy practices has, in fact, focused on language and discourse (Barbarin et al., 2010). Nevertheless, to date this body of work has, generally, been qualitative in nature (e.g., Heath, 1983), and, thus, although rich in description, does not allow for predictions to be made regarding the relation between continuity in home-school practices and children's outcomes. The few studies that have looked at how both home and school literacy experiences influence children's development (e.g., Tabors, Snow, & Dickinson, 2001) typically examine the relative contributions of home and school literacy practices as separate influences on children's early literacy skills. As a result, these works have not quantified the intersection between home-school practices, particularly the degree to which home and school practices are continuous, or aligned. Thus, this method does not allow for an in-depth understanding of how home and school experiences might work together to influence child outcomes. Moreover, by simply including both contexts (i.e., home and school) in the same model, past research has been limited to investigating the *amount* of literacy activities in the home and school, and has not successfully accounted for potential differences in the *types* of activities supported in each of the contexts. Taken together, these methodological limitations have restricted our ability to understand how the home and school literacy environments jointly contribute to preschool children's emergent literacy skills.

The current study thus explored the emergent literacy practices used by caregivers and teachers of Latino children enrolled in Head Start classrooms, and examined the extent to which these practices are aligned – or continuous – using an innovative method to quantify continuity. Rather than qualitatively exploring home and school literacy practices or simply subtracting teachers' literacy practices from parents' literacy practices to explore the similarities and differences in the number of home-school literacy experiences, in the present study the intersection between literacy practices in the home and school, or the degree to which home and school literacy experiences are continuous, was quantified using Euclidean Distance. The use of this methodology serves as a critical contribution to the field, as it provides key information not only regarding the extent to which there is continuity in the amount of home-school literacy practices, but also across the various types of literacy practices used by caregivers and teachers. Moreover, the use of Euclidean Distance allows for the quantitative exploration of whether continuity or discontinuity (i.e., a lack of continuity) in home-school practices is most beneficial for positive child outcomes.

Given that narrative skills are integral to emergent literacy development and that past work has demonstrated cultural patterns in the narrative scaffolding styles used by Latino mothers, the study focused on both global and narrative literacy practices. One main research question guided the study: How are the emergent literacy skills of Latino children enrolled in Head Start classrooms influenced by the extent to which home-school literacy practices (global and narrative) are continuous (or aligned)?

Method

Participants

One hundred and twenty-seven Latino preschoolers, enrolled in a bilingual (Spanish–English) Head Start Center, and their primary caregivers and teachers ($N = 12$) participated in the study. Ninety-five percent of the caregivers ($n = 120$) were the children's mothers; of the remaining caregivers, four were grandmothers, two were fathers, and one was a great aunt. Half of the caregivers (54%, $n = 69$) were born in Mexico, 21% ($n = 26$) were born in other Central or South American countries, and 25% ($n = 32$) were born in mainland United States. Caregivers had been living in the United States for an average of 15 years ($SD = 11.13$) at the time of data collection, and ranged in age from 20 to 60 years ($M = 29.94$, $SD = 7.48$). The children ranged in age from 37 months to 59 months ($M = 47.58$, $SD = 6.04$). About half of the children (54%) were girls, and 52% of the children were in their first year of Head Start. The majority of the families (58%) were monolingual Spanish speakers; 22% were bilingual Spanish–English speakers, 16% were monolingual English speakers, and 4% bilingual Spanish–Mixtec speakers.

The Head Start Center in which the children were enrolled was comprised of twelve classrooms, six full-day and six half-day, with the children within each class ranging in age from three to five. As a bilingual center, the Head Start simultaneously supported the children's development of language and literacy skills in Spanish and English, such that teachers were directed to interact with the children and conduct classroom instruction in both languages. Teachers from all twelve classrooms agreed to participate in the study. All teachers were female; 83% ($n = 10$) of the teachers were Latino, and eight of the teachers (67%) were born in the United States. All but one teacher spoke both English and Spanish, albeit to varying degrees, and self-reported as bilingual. The one remaining teacher was English dominant, with minimal control of the Spanish language. (See Table 1 for additional demographic information.)

Procedure

Caregivers who agreed to participate in the study were visited in their homes during the first few months of the school year by a researcher matched by language dominance. Home visits were scheduled at a day and time convenient for the families and lasted for approximately thirty minutes. Caregivers were asked to complete a brief demographic questionnaire in the language of their choice (i.e., Spanish or

Table 1
Demographic information.

Children ($N = 127$)	
Age (in months)	47.58 (6.04)
Sex	54% girls
Years in Head Start	
First year	52%
Second year	48%
Caregivers ($N = 127$)	
Age	29.94 (7.48)
Country of Origin	
Mexico	54%
US	25%
Other	21%
Education	
<Elementary school	10%
<High school	25%
High school (or GED)	39%
More than high school	26%
Employment	
Full time	28%
Part time	23%
Not employed	49%
Primary Language	
Spanish	58%
English	16%
Spanish–English	22%
Spanish–Mixtec	3%
Teachers ($N = 12$)	
Age	48.08 (11.90)
Ethnicity	83% Latino
Country of Origin	
US	67%
Other	33%
Education	
Undergraduate degree	37%
Graduate degree	63%
Years of Teaching experience	12.63 (6.07)

English). Then, home literacy practices were assessed using two approaches. To investigate global home literacy practices, caregivers completed a questionnaire adapted from the parent survey developed by the Head Start *Family and Child Experiences Survey* (FACES; ACF, 1999). Next, as an observational measure of literacy practices, caregivers were asked to share the wordless picture-book *Frog, Where Are You?* (Mayer, 1969) with the target child. A wordless book was selected for a variety of reasons, perhaps most importantly because the wordless nature of the book allowed all caregivers to share the story with their children, regardless of their literacy level or dominant language. In addition, the pictures provided structure for the discussion of the content, whereas at the same time the wordless nature afforded participants with an opportunity to construct the story in their preferred storytelling style (Caspe, 2009). This task has been used successfully in a wide variety of narrative-related research to elicit narratives from individuals of diverse linguistic, cultural, and socio-economic backgrounds (Berman & Slobin, 1994; Caspe, 2009; Caspe & Melzi, 2008; Melzi & Caspe, 2005). Caregivers were encouraged to look through the book first, and then share it in the language(s) of their choice; no time limit was placed on the interaction. All book sharings were audio- and video-recorded; the researcher was not in the room during the interaction.

In addition, lead teachers ($N = 12$) were visited twice during the early months of the school year and information regarding literacy practices was gathered using two approaches. During the first visit, after completing a demographic questionnaire, lead teachers were asked to fill out a classroom literacy survey, responding to questions loosely adapted from the *FACES Head Start Teachers Self-Administered Survey* (ACF, 1999). During the second visit, as an observational measure of teachers' literacy practices, teachers were asked to share a big-book version of the wordless picture-book *A Boy, a Dog and a Frog* (Mayer, 1967) with their class, in the manner in which they would typically share storybooks. A wordless picture-book was selected to provide a semi-structured forum for the sharing of storybooks. (See Jalongo, Dragich, Conrad, & Zhang, 2002, for a review on the use of wordless books in classrooms to support children's emergent literacy.) Moreover, the selection of a wordless book was equally novel to both caregivers and teachers. Finally, because the participating Head Start Center is designated as a bilingual program, use of a wordless book afforded teachers the opportunity to narrate the story in the language (or combination of languages) they use most often when interacting with the children. No time limit was placed on the length of the book sharing interaction, and all book sharings were both audio- and video-recorded.

During the final three months of the school year, the children were visited at school on two occasions, and their emergent literacy skills were assessed in their dominant language. Language dominance was ascertained based on parental, teacher, and child reports, as well as children's scores on two subscales of the *Preschool Language Assessment Scale* (Pre-LAS; Duncan & deAvila, 1998): *Simon Says* to assess receptive skills, and *Say What You Hear* to assess expressive skills. Then, children's print concepts were assessed in their dominant language, after which children were asked to share the wordless picture-book *A Boy, a Dog, a Frog and a Friend* (Mayer & Mayer, 1971) with the investigator. This task has been used successfully by researchers to elicit narratives from children in early-childhood (e.g., Caspe, 2009). The title of the book was read to the children, and they were told that the book is a continuation of the frog story their caregivers and teachers shared with them earlier in the school year. The children were also informed that the book contained pictures, but no words. They were asked to look through the pages in the book, one by one, to familiarize themselves with the story-line before they shared the story with the investigator (see Berman & Slobin, 1994). This method has been used successfully (e.g., Caspe, 2009) to ensure that participants tell the story, rather than simply label the pictures. Then, they were encouraged to narrate in the language(s) of their choice. No time limit was placed on the length of the interaction, and all narratives were audio recorded. One week later, during the second visit, children's receptive and expressive oral language skills were assessed in their dominant language (i.e., Spanish or English) using the *Preschool Language-Scale Fourth Edition* (*PLS*-4; Zimmerman, Steiner, & Pond, 2004).

Measures

Literacy survey

The *Home Literacy Survey* and the *Classroom Literacy Survey* are 18-item self-reports of literacy practices in the home (for the caregiver) and classroom (for the lead teacher) loosely adapted from the parent and teacher surveys developed by the Head Start *Family and Child Experiences Survey* (FACES; ACF, 1999). Items on the survey include questions such as the frequency with which books are read to the target child/class, oral stories are shared, letters or words on labels or signs are pointed out, and there is direct instruction regarding alphabet letters and numbers, with items across the two sets of surveys closely matching one another. For the current study, 15 Likert-type items on each survey were rated on 4-point scale, ranging from *daily* (score of 3) to *never* (score of 0), and a composite score was computed, with higher numbers denoting a greater number of literacy activities. Cronbach's Alpha for the 15-item sub-scale was .87 for the *Home Literacy Survey* and .73 for the *Classroom Literacy Survey*.

Book sharing task

As an observational measure of an important emergent literacy practice, caregivers were asked to share the wordless picture-book *Frog, Where Are You?* (Mayer, 1969) with the target child, and teachers were asked to share the wordless picture-book *A Boy, A Dog, and a Frog* (Mayer, 1967) with their class. All book sharing interactions were audio- and video recorded, and the narratives were transcribed at the utterance level using a standardized format (CHAT; MacWhinney, 2000). Book sharings were coded and analyzed in the original language(s). All discourse was coded for speaker (i.e., caregiver, teacher, child, class), language used (i.e., Spanish only, English only, or a combination of both Spanish and English within the utterance), and narrative speech event (i.e., pre-reading, reading, or post-reading). In addition, all reading utterances were further coded for pragmatic function and cognitive difficulty. Pragmatic function codes (see Melzi et al., 2011) included: (1) *Provision of information,* or any narrative utterance that was in statement form and explicitly told the story; (2) *Request for information,* or any narrative utterance that elicited information that was related to the story; (3) *Conversational*, or any narrative utterance that did not move the story forward, and whose main function was to ensure optimal communication and maintain the flow of the conversation; (4) *Meta-literacy,* or any utterance that was related to the sharing of the book but was not related to the story, such as metalinguistic and metanarrative information; (5) *Other,* or any utterance that did not fit into the aforementioned categories.

Utterances that received a pragmatic function code of provision, request, or meta-literacy were further coded for degree of cognitive difficulty (see Dickinson & Smith, 1994). *Highly cognitively challenging* utterances included analysis of characters or events, predictions about future events, summarizing or synthesizing the plot, making connections between the events in the story and the child's everyday experiences, and teaching or exploring the meaning of words. *Less cognitively challenging* utterances included describing events, requesting or providing facts immediately after mentioning them, labeling the pictures in the book, making comments about the story itself or the act of reading, and teaching the child basic skills, such as ABCs or counting, while sharing the story. Cohen's Kappa was established for pragmatic function ($K = .95$ for home book sharings, and $K = .90$ for classroom book sharings) and cognitive difficulty ($K = .90$ for home book sharings and $K = .85$ for classroom book sharings).

Early Screening Inventory—Revised (ESI-R)

As part of the regular protocol at the participating Head Start center, upon Head Start entry all children were screened by their teachers using the ESI-R (Meisels, Marsden, Wiske, & Henderson, 1997). The ESI-R, which was administered in the children's home language, serves as an indicator of children's skills in key developmental areas, including language, cognition, and motor coordination, and the composite score was used in the current study to provide information regarding children's baseline skills (range = 0–30) at the start of preschool.

Children's language and emergent literacy skills

Children's emergent literacy skills were assessed using a combination of three measures: a set of print-related tasks (Clay, 1979, 1993), the *Preschool Language-Scale Fourth Edition* (*PLS*-4; Zimmerman et al., 2004), and a narrative task. These tasks were selected as research has found that the skills they assess are predictive of children's school readiness and overall academic achievement (Snow, Burns, & Griffin, 1998).

Print concepts. Children's print concepts were assessed through two tasks: letter recognition and concepts about print. The letter recognition task consisted of a chart containing upper- and lowercase alphabet letters, presented in random order, which was placed in front of the child. The investigator pointed to individual letters on the list, and asked the child to name the letter. The investigator always began with the first letter of the child's first name, and then went back to the top of the chart, and continued to point to the letters in the order they appeared. Children were assigned one point for each letter correctly named. Past work has demonstrated that this task is reliable, with a Cronbach's alpha of .95 (Clay, 1993). Concepts about print were assessed using an adaptation of the English (Clay, 1979) and Spanish (Escamilla, Andrade, Basurto, Ruiz, & Clay, 1996) versions of Clay's *Concepts about Print* task (Cronbach's alpha = .78) was used. As part of the task, *Stones* (Clay, 1979), a specially designed text-based picture-book was shared with the target child, with the investigator stopping on each page to ask the child a question about a print concept (e.g., reading from left to right). In all, 13 questions related to print were asked, and children were assigned one point for each question that was answered correctly. Scores on the two tasks were combined to compute a composite print concepts score.

Preschool Language Scale—4. The Preschool Language Scale (4th Edition; Zimmerman et al., 2004) is a nationally standardized assessment of children's language abilities, simultaneously developed in both English and Spanish, thus making it an appropriate measure to assess the expressive and receptive skills of Latino dual-language learners (Espinosa & López, 2007). The scale provides an *auditory* (or receptive) *comprehension subscale score*, and an *expressive communication subscale score,* in addition to a *total language score*. Both the subscales and the total score have a mean of 100 and a standard deviation of 15. The test–retest reliability coefficients range from .82 to .95 for the individual subscales, and .90 to .97 for the total language score, and internal consistency coefficients range from .66 to .96, with most above .81 (Zimmerman, Steiner, & Pond, 2008).

Narrative task. As an observational measure of emergent literacy skills, children were asked to share the wordless picture-book *A Boy, a Dog, a Frog, and a Friend* (Mayer & Mayer, 1971) with the investigator. All narratives were audio- and video-recorded, later transcribed and verified using a standardized system (CHAT; MacWhinney, 2000), and then coded holistically for three sets of extended discourse skills that have been found to predict children's reading readiness and school success (Blum-Kulka, 2008; Griffin et al., 2004; Blum-Kulka & Huck-Taglicht, 2001). As the preschool years mark the period during which children begin to learn to engage in extended discourse independently (Blum-Kulka & Huck-Taglicht, 2001), narratives were first coded for *conversational autonomy*, or the degree to which the child was able to share the story without the assistance of the investigator (see Blum-Kulka, 2008). Conversational autonomy codes included (1) requiring detailed prompting from the investigator in order to tell the story, (2) telling the story with neutral prompting from the investigator, (3) telling the story with minimal prompting, and (4) telling the story independently.

Next, using the *Tracking Narrative Language Progress* coding system devised by Gillam and Gillam (2010), narratives were coded for *story grammar elements* and *literate language*, key discourse features that develop during the preschool years. *Story grammar* included seven elements related to the narrative's macrostructure: character, setting, initiating event, internal response, plan, action/attempt, and consequence. Each element was scored on a scale of 0 to 3. A score of 0 indicated that the element was not included in the narrative. A score of 1 was assigned when the element is included in a non-specific manner or was not related to the key event of the story. A score of 2 was assigned when the element is included in the narrative one time in a specific and integrated (or related) manner, and a 3 was assigned when a particular element was integrated into the narrative in specific and related manner more than once. A composite score for *story grammar* was then calculated by adding the scores in each of the seven areas. *Literate language* included five elements related to the overall microstructure of the narrative: coordinating conjunctions, subordinating conjunctions, mental/linguistic verbs, adverbs, and elaborated noun phrases. Each of these elements was also scored on a scale from 0 to 3. However, the score assigned was based on the number of times unique instances of that element are included in the narrative, with a score of 0 indicating that the element did not appear in the narrative and a score of 3 indicating that there were at least three different ways in which that element was incorporated into the story. A composite score for *literate language* was then calculated based on the sum of the scores in each of the five areas. Inter-rater reliability was established for all the three narrative codes: conversational autonomy (r = .90), story grammar (r = .88), and literate language (r = .87).

Results

As the focus of the paper is the relation between continuity in home-school literacy practices and children's emergent literacy skills, results are presented in two main sections. The first section is descriptive in nature and provides a brief overview of children's skills across the different measures; in addition, descriptive information regarding home and school global and narrative practices is provided. The second section directly addresses the research question, beginning with a description of how continuity scores were calculated, followed by a series of analyses on the relation between home-school continuity scores and child outcomes.

Descriptive analyses

Children's emergent literacy skills

Overall, children's language skills were within the normal range of 85–115 (M = 100, SD = 15), with a mean receptive language standard score of 96.85 (SD = 12.89) and a mean expressive standard language score of 102.81 (SD = 13.02), and children's print concepts ranged from 0 to 62 (out of a possible 67), with a mean score of 26.74 (SD = 19.18). In terms of their book sharings, 52% of the children shared the storybook primarily in Spanish; the remaining 48% of the children shared the book mainly in English. Across both languages, there was wide variability in the children's conversational autonomy skills. Seventeen percent of the children shared the story without prompting from the investigator; 34% told the story with minimal prompting, 33% with neutral prompting, and 16% relied on detailed prompting from the investigator in order to share the story. Children's story grammar scores ranged from 2 to 16, with a mean score of 9.01 (SD = 3.78), and their literate language scores ranged from 0 to 13, with a mean score of 6.75 (SD = 2.62).

Consistent with past findings, there were no sex differences in children's emergent literacy skills. However, as expected, children's print concepts, and expressive language skills, as well as their conversational autonomy, story grammar scores and literate language scores, were all positively correlated with both age and years in Head Start (see Table 2). Moreover, children's print concepts were correlated with household size ($r = -.20, p < .05$), teachers' education ($r = .25$, $p < .01$), and caregivers' language dominance ($r = .26$, $p < .01$), such that children who came from less-crowded homes, had more educated teachers, and those whose caregivers were English-dominant had higher print concepts scores. Finally, expressive and receptive language was correlated with household size ($r = -.21$, $p < .05$ and $r = -.23$, $p < .05$ respectively), such that children from more-crowded homes had less-developed language skills.

Home and school literacy practices

All caregivers reported engaging in a variety of literacy practices on a regular basis ($M = 32.17$, $SD = 5.64$), though the overall scores for global home literacy ranged from 14 to 44 (out of a possible 45). Likewise, teachers varied in their reports of literacy practices (i.e., scores ranged from 25 to 45, out of a possible 45), with a mean of 37.58 ($SD = 6.47$). Book sharing was one of the most frequent practices, with all teachers and over 90% of caregivers reporting sharing books on a semi-weekly, if not daily, basis.

In terms of the book sharing task, there was wide variability in the length of the stories shared between the caregivers and children, with caregivers contributing between 33 and 377 utterances ($M = 127.15$, $SD = 63.39$; see Table 3 for a breakdown by pragmatic function). On average though, caregivers provided most of the information to their children (i.e., approximately 60% of total utterances were provision of information) during the book sharing interaction and asked few questions (i.e., 7% of total utterances were requests for information) of them (see Fig. 1). In fact, all but 7 of the caregivers provided more of the narrative information to their children than they requested from them. Similarly, there was wide variability in the length of the classroom book sharings, with the narrative interactions ranging from 343 to 1107 utterances ($M = 738.58$, $SD = 249.65$). By contrast to the primary caregivers, the teachers, on average, co-constructed the book sharing interaction with their class by both providing (45% of total utterances) and requesting (27% of total utterances) the narrative information. There was, however, variability, with a third of the teachers asking relatively few questions, and a third of the teachers requesting more information than they provided. Finally, on average, only 12% of caregivers' utterances and 9% of teachers' utterances were highly cognitively challenging in nature. In these challenging utterances, caregivers and teachers mainly provided and/or requested analysis of characters and events and made and/or elicited predictions about upcoming events.

Table 3
Pragmatic function of caregiver and teacher discourse.

	Caregivers $N = 127$		Teachers $N = 12$	
	M (*SD*)	Range	*M* (*SD*)	Range
Requests for information	71.68 (30.61)	8–165	134.34 (53.96)	54–223
Provision of information	10.93 (17.11)	0–91	90.43 (54.50)	16–167
Conversational talk	38.00 (27.90)	0–149	92.43 (39.66)	27–149
Meta-literacy	4.95 (7.22)	0–39	3.93 (4.35)	0–15

Continuity in home and school literacy practices and child outcomes

To examine the continuity between the home and school literacy practices, continuity scores were created on each of the key variables (i.e., global literacy scores for the literacy questionnaires, and provision of information, requests for information, conversational talk, meta-literacy, and high challenging talk for the book sharing elements) using Euclidean Distance. The use of this method is innovative in that it provides important information not only regarding the extent to which there is continuity in the total *amount* of literacy experiences in the home and school, but also across the various *types* of literacy practices used by caregivers and teachers (for multi-dimensional continuity scores). Euclidean distance provides the basic distance between two coordinates. For one dimensional continuity scores (i.e., the distance on one element only) the distance was equivalent to the absolute value of the numerical difference between the points representing a child's caregiver and teacher scores on one variable (e.g., the total global literacy score). Thus, the distance equation used was: $\sqrt{(x_c - x_t)^2}$. For multi-dimensional continuity scores (i.e., the distance between the points representing a child's caregiver and teacher on a set of variables, such as a variety of discourse features), the distance formula used was:

$$\sqrt{(x_c - x_t)^2 + (y_c - y_t)^2 + \cdots + (n_c - n_t)^2},$$

with "*n*" representing the number of variables included. Because Euclidean distance measures the distance between the two points, lower distance scores denote greater continuity in home-school practices.

Continuity in global literacy practices

Global literacy continuity scores (e.g., the distance between home and school total global literacy practices scores) ranged from 0 to 30, ($M = 8.42$, $SD = 5.76$), with *lower numbers* connoting *higher degrees*

Table 2
Correlations between key demographic variables and children's outcomes.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Sex	–															
2. Age	−.05	–														
3. Years in Head Start	.05	.71***	–													
4. Caregivers' age	.06	.01	.04	–												
5. Caregivers' education	−.02	.03	.02	.17	–											
6. Home language	.03	−.06	−.15	−.17	.25**	–										
7. Household size	.14	−.06	−.02	−.12	−.12	−.35***	–									
8. Teachers' age	−.08	.06	.05	.11	−.11	−.12	.28**	–								
9. Teachers' education	−.08	−.04	−.05	.08	.08	−.08	.08	.18	–							
10. Teachers' experience	.03	.13	.02	−.12	.12	.10	−.01	.11	.23*	–						
11. Print concepts	.07	.45***	.31**	.09	.14	.26**	−.20*	−.17	−.25*	−.11	–					
12. Receptive language	.02	.10	.17	.14	.05	.03	−.21*	−.10	−.16	−.06	40***	–				
13. Expressive language	.17	.24*	.25**	.16	−.04	.02	−.23*	−.03	−.13	.02	.25**	.58***	–			
14. Conversational autonomy	−.05	.40***	.33***	.03	.02	−.13	.02	.16	−.03	.03	.05	.08	.32**	–		
15. Story grammar	−.10	.43***	.32***	.10	.10	.14	−.18	−.13	−.14	.04	.39***	.26**	.29**	.37***	–	
16. Literate language	.05	.37***	.23**	.03	−.00	.08	−.17	−.09	−.17	.05	.24***	.24*	.33***	.40***	.50***	–

Note. Sex was dummy coded as 1 for boys and 2 for girls, and home language was dummy coded as 1 for Spanish and 2 for English.
* $p < .05$. ** $p < .01$. *** $p < .001$.

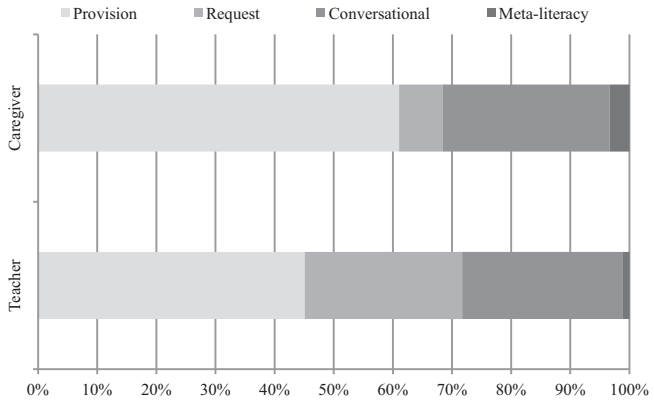

Fig. 1. Pragmatic function of caregiver book sharing discourse in the home and teacher book sharing discourse in the classroom.

of continuity between home and school practices. Correlational analyses suggested that older children ($r = -.30, p = .001$), children who were in their second year of Head Start ($r = -.34, p < .001$), and children with older caregivers ($r = -.22, p < .05$) experienced more continuity in the amount of literacy practices in the home and school settings.

Analyses were then run to explore the relation between continuity in global literacy practices and child outcomes. Continuity in global literacy scores was correlated with children's print concepts ($r = -.29$, $p < .01$), expressive language skills ($r = -.28, p < .01$), story grammar ($r = -.24$, $p = .01$) and literate language ($r = -.19$, $p = .05$). In other words, higher continuity between home and school global literacy scores (i.e., lower distance scores for global literacy) was related to higher scores on each of the aforementioned child outcomes. Follow-up hierarchical regressions showed that continuity between home and school global literacy practices was predictive of children's print concepts ($\beta = -.17$, $p < .05$, $\Delta R^2 = .03$), above and beyond children's baseline scores at Head Start entry, age, caregiver language dominance, household size, and teacher education (see Table 4). In addition, continuity in home-school global literacy predicted children's expressive language skills ($\beta = -.22$, $p < .05$), with continuity explaining 4% of the variance in expressive language skills above and beyond children's baseline skills, age, and household size. Notably, though, continuity in the individual components of global literacy, such as continuity in frequency of book reading, was not related to child outcomes. Rather, it was continuity in the composite of global literacy experiences, such that children who experienced high levels of global literacy at home and in the classroom demonstrated the strongest outcomes.

Using STATA programs, additional regression analyses were run clustering the standard errors to account for the nested nature of the data (i.e., children were nested in one of 12 classrooms). These analyses yielded similar findings to those reported in the aforementioned regression, as well as those that follow throughout the paper. However, because the insufficient power made these findings somewhat unstable, the decision was made to report the more conservative results.

Table 4
Continuity in global literacy practices and children's print concepts & expressive language.

	Print concepts		Expressive language	
Predictor	R^2	β	R^2	β
Step 1	.34***		.12**	
Constant				
ESI-R		.14		.15
Age		.43***		.20
Home language		.22**		
Household size		−.04		−.18
Teacher education		.20*		
Step 2	.37*		.16*	
Constant				
ESI-R		.15		.15
Age		.37***		.14
Home language		.22*		
Household size		−.03		−.17
Teacher education		−.21		
Global literacy		−.17		.22*

Note. Given that age and years in Head Start were highly collinear, the decision was made to control for age, rather than for years in Head Start. As age is a continuous, rather than dichotomous, variable, it allowed for wider variability and was more robust as a control variable; age also is the variable more commonly identified in past literature as playing a key role in children's language and literacy skills.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Continuity in book sharing discourse

Continuity in overall book sharing discourse scores was calculated by looking at the distance between caregivers' and teachers' inclusion of the four main book sharing elements: provision of information, requests for information, conversational utterances and meta-literacy talk. Preliminary correctional analyses suggested that classroom, rather than home, variables were correlated with continuity in overall book sharing styles. Specifically, being enrolled in a full day Head Start class ($r = -.34, p < .001$) and having teachers with more years of education ($r = -.19$, $p < .05$) and less experience ($r = .31$, $p = .001$) were correlated with higher continuity in caregiver–teacher overall book sharing discourse.

The next set of analyses explored the relation between continuity in overall book sharing discourse features and child outcomes. Results showed that continuity in overall book sharing discourse features was correlated with children's print concepts ($r = .20, p < .05$), conversational autonomy ($r = .29$, $p < .01$), and literate language ($r = .30$, $p < .01$). What is most notable, however, is that the direction of these correlations suggested that a lack of continuity – or a *discontinuity* – in home-school overall book sharing styles was related to higher child outcomes. In other words, children's outcomes appeared to be strongest when teachers' stories were high on some discourse features and caregivers' book sharings were high on other discourse features.

Follow-up hierarchical regressions were run controlling for length of caregiver and teacher book sharing interactions (i.e., number of utterances), as a result of the variability in narrative length across contexts (i.e., overall teachers' book sharings were far longer than were caregivers' book sharings). Results of the regression analyses (see Table 5) suggested that, after controlling for children's baseline skills and age, discontinuity of overall book sharing discourse styles was predictive of children's conversational autonomy ($\beta = .27$, $p = .05$, $\Delta R^2 = .04$) and literate language ($\beta = .47, p < .001, \Delta R^2 = .10$).

Table 5
Discontinuity in overall book sharing discourse and emergent literacy outcomes.

	Conversational autonomy		Literate language	
Predictor	R^2	β	R^2	β
Step 1	.20***		.24**	
Constant				
ESI-R		.21*		.33***
Age		.35**		.31***
Step 2		.20	.24	
Constant				
ESI-R		.21		.33***
Age		.34		.31***
Total caregiver talk		−.02		.05
Total teacher talk		.08		.00
Step 3	.24*		.34***	
Constant				
ESI-R		.24**		.38***
Age		.30***		.25**
Total caregiver talk		.06		.18*
Total teacher talk		−.09		−.29**
Overall book sharing		.27*		.47***

* $p < .05$. ** $p < .01$. *** $p < .001$.

Given that discontinuity in overall book sharing styles was related to child outcomes, and that the multi-dimensional aspect of this continuity score made it difficult to tease apart which elements might be most important, continuity scores were then computed for each of the individual elements (i.e., provision, request, conversational, and meta-literacy). Results suggested that discontinuity in provision of information was related to children's conversational autonomy ($r = .24$, $p < .01$), requests for information was related to children's expressive language ($r = .20$, $p < .05$), story grammar ($r = .19$, $p = .05$) and literate language ($r = .24$, $p < .05$ and $r = .23$, $p < .05$), and conversational talk was related to children's literate language ($r = .26$, $p < .01$). Follow-up hierarchical regressions (see Table 6) demonstrated that, controlling for baseline skills and children's age, there was a strong trend toward significance in the relation between discontinuity in home-school provision of information and children's conversational autonomy ($\beta = .20$, $p = .06$, $\Delta R^2 = .03$). Moreover, discontinuity in home-school requests for information was predictive of children's story grammar ($\beta = .20$, $p < .05$, $\Delta R^2 = .03$) and literate language ($\beta = .23$, $p < .05$, $\Delta R^2 = .04$) skills (see Table 7), and discontinuity in conversational talk was predictive of children's literate language ($\beta = .34$, $p < .01$, $\Delta R^2 = .07$), after controlling for children's baseline scores, age, and total caregiver and teacher talk (see Table 8).

Continuity in degree of cognitively challenging talk

Finally, analyses demonstrated that continuity in the degree of cognitively challenging talk was correlated with children's age ($r = .28$, $p < .01$), years in Head Start ($r = .27$, $p < .01$), and class type ($r = -.38$, $p < .001$). In other words, younger children, children in their first year of Head Start, and children in full-day classrooms experienced more continuity in the home-school use of highly challenging talk. Moreover, continuity in the degree of cognitively challenging talk was predictive of children's print concepts ($\beta = -.24$, $p = .01$, $\Delta R^2 = .04$) and literate language skills ($\beta = -.26$, $p < .01$, $\Delta R^2 = .05$), above and beyond not only demographic variables, but also the degree of continuity in home-school overall book sharing styles (see Table 9). Follow-up analyses suggested that children who experienced high challenging language during book sharing interactions in both contexts (i.e., by caregivers at home and teachers at school) demonstrated higher language outcomes at the end of the Head Start year.

Discussion

The goal of the current study was to investigate the role of continuity between home and school literacy practices in the emergent literacy development of Latino dual-language learners enrolled in a bilingual Head Start Center. There has been a long-standing belief that a mismatch between the home and school language and literacy experiences of children from low-income, non-mainstream backgrounds could lead to a cycle of school failure (Heath, 1983). Researchers have, thus, suggested that the school failure experienced by Latino children might be related to Latino family practices. Past work has shown, for example, that low-income Latino mothers read to their children less often than European American mothers (Barrueco, López, & Miles, 2007; Boyce et al., 2004; Brooks-Gunn & Markman, 2005; Raikes et al., 2006; Reese & Gallimore, 2000), and when they do, they typically adopt the role of sole-narrator, providing the information to their children rather than eliciting it from them (Caspe, 2009; Melzi & Caspe, 2004; Melzi et al., 2011). This style is in stark contrast to dialogic reading, a commonly used book sharing practice that encourages adults to actively include children in the sharing of storybooks by asking a variety of open-ended questions (Whitehurst & Lonigan, 1998), and, by extension, it is in contrast to the book sharing practices typically used by teachers in preschool classrooms (Dickinson, 2001; Dickinson & Smith, 1994). Numerous intervention studies have, thus, been designed to "train" low-income Latino mothers to adopt a book sharing style that would be more closely aligned with the manner in which books are shared in classrooms (see Reese, Sparks, & Leyva, 2010). These ideas might stem

Table 6
Discontinuity in provision of information and children's conversational autonomy.

	Conversational autonomy	
Predictor	R^2	β
Step 1	.20***	
Constant		
ESI-R		.21*
Age		.35***
Step 2	.20	
Constant		
ESI-R		.34
Age		.34*
Total caregiver talk		−.02
Total teacher talk		.08
Step 3	.23†	
Constant		
ESI-R		.23*
Age		.32***
Total caregiver talk		.03
Total teacher talk		−.02
Provision of info		.20†

† $p = .06$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 7
Discontinuity in requests for information and children's story grammar & literate language.

	Story grammar		Literate language	
Predictor	R^2	β	R^2	β
Step 1	.28***		.24**	
Constant				
ESI-R		.32***		.33***
Age		.36***		.31***
Step 2	.29		.24	
Constant				
ESI-R		.32***		.33***
Age		.38***		.31***
Total caregiver talk		.09		.05
Total teacher talk		−.06		.00
Step 3	.32*		.28*	
Constant				
ESI-R		.35***		.35***
Age		.36***		.29**
Total caregiver talk		.11		.08
Total teacher talk		−.15		−.10
Requests for info		.20		.23

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8
Discontinuity in conversational talk and children's literate language.

	Literate language	
Predictor	R^2	β
Step 1	.24***	
Constant		
ESI-R		.33***
Age		.31***
Step 2	.24	
Constant		
ESI-R		.33***
Age		.31***
Total caregiver talk		.05
Total teacher talk		.00
Step 3	.31**	
Constant		
ESI-R		.35***
Age		.28**
Total caregiver talk		.15
Total teacher talk		−.17
Conversational talk		.34

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 9
Continuity in cognitively challenging talk and children's print concepts & literate language.

	Print concepts		Literate language	
Predictor	R^2	β	R^2	β
Step 1	.35***		.24***	
Constant				
ESI-R		.14		.33***
Age		.43***		.31***
Home language		.23**		
Household size		−.03		
Teacher education		−.18*		
Step 2	.35		.28*	
Constant				
ESI-R		.14		.35***
Age		.42***		.26**
Home language		.23**		
Household size		−.18*		
Teacher education		.04		
Overall book sharing		.04		.21*
Step 3	.39**		.33**	
Constant				
ESI-R		.12		.32***
Age		.48***		.31***
Home language		.21		
Household size		−.00		
Teacher education		−.15		
Overall book sharing		.14		.31***
Challenging talk		−.24**		−.26**

* $p < .05$. ** $p < .01$. *** $p < .001$.

from research that has highlighted the importance of the home and school working together to support children's learning (Bronfenbrenner & Morris, 1998), as well as from Heath's (1983) seminal ethnographic work three decades ago, which showed how, over time, a mismatch between home and school early language and literacy practices could have a detrimental impact on children's academic achievement. However, to date, Heath's findings have not been tested empirically in low-income Latino populations. Moreover, there is an additional body of research that suggests that continuity in home and school practices might not be necessary, or even advantageous, for the academic achievement of Latino children (e.g., Barbarin et al., 2010; Hemphill & Snow, 1996). Findings of the current study suggest that the role of continuity between home and school literacy practices and child outcomes is complex, such that continuity might be beneficial in some areas, whereas discontinuity might be advantageous in others.

Specifically, continuity in home-school global literacy practices is predictive of children's print concepts and expressive language skills. This finding is not surprising, as it suggests that children who succeed are exposed to more literacy experiences at home and in the classroom. Thus, it is important to encourage Latino families to provide their children with diverse literacy experiences. The results further suggest, however, that the practices do not need to be limited to traditional literacy practices such as book reading, but might also include praying with children, and talking about family, the home country, and holidays, pointing out letters and words on food labels at home, signs on the street, and posters in classrooms; talking about recipes while cooking; and encouraging children to "write" their names or "read" to themselves. Past work has demonstrated the importance of exposure to print, including environmental print, for low-income children's early literacy development (Heath, 1983; Wasik & Hindman, 2010), and in particular their functional literacy and, thus, these practices should be encouraged in low-income Latino families, as well as in preschools serving low-income Latino children.

By contrast to Heath's findngs about the importance of continuity in home-school practices, however, and the belief that being exposed to different discourse styles in the home and at school could have deleterious effects on children's academic achievement, the current findings suggest that discontinuity in home-school book sharing discourse features might be preferable for positive child outcomes. More specifically, discontinuity in overall book sharing discourse resulted in higher print concepts, greater conversational autonomy, and more advanced literate language (after controlling for children's baseline skills and age). This finding lends support to the idea that children who experience discontinuity are exposed to a wider repertoire of styles, thereby supporting their skill development (Hemphill & Snow, 1996).

Follow-up analyses focused on the specific discourse features used by caregivers and teachers while sharing the wordless picture-books. Results highlighted that discontinuity in three dimensions of discourse, namely, provisions of information, requests for information and conversational talk, were related to higher child outcomes six-months later. These findings are especially meaningful, as past research, particularly intervention studies promoting the use of dialogic reading (e.g., Whitehurst & Lonigan, 1998), has posited that encouraging active child participation while sharing storybooks (i.e., eliciting information from children and supporting their contributions, rather than providing information to them) is critical for ensuring positive child outcomes, and a number of interventions have been focused on training low-income Latino mothers to adopt this form of book sharing. Nevertheless, recent work has suggested that this form of book reading might not be effective for low-income families (Mol, Bus, de Jong, & Smeets, 2008; Reese, Leyva, Sparks, & Grolnick, 2010), including Latino Head Start families (Caspe, 2009). The current findings provide additional support for the idea that it might not be necessary for low-income Latino caregivers to adopt the same storytelling style as is commonly practiced in U.S. classrooms. In fact, experiencing discontinuity in the degree to which they are included in the telling of a story might serve as a protective factor, leading to better child outcomes at the end of the Head Start year. In other words, the findings seem to provide support for the assertions of Hemphill and Snow (1996) that discontinuity in home-school practices might place children at an advantage, in that it exposes them to a larger variety of styles. In the case of the current study, children learn that there are various ways to share a book; in some contexts, they are encouraged to actively contribute to the telling of the story, whereas in other settings, they are expected to sit quietly and serve as an attentive audience. Given that the preschool years are a critical period for children's development of language (Roskos, Tabors, & Lenhart, 2009) and storytelling skills (e.g., Peterson & McCabe, 1983), it is notable that exposure to a combination of styles resulted in more independent storytelling (i.e., conversational autonomy), more advanced story structure (i.e., story grammar) and more sophisticated academic language (i.e., literature language).

Finally, continuity in cognitively challenging talk was related to children's print concepts and literate language outcomes. Findings of past research on the effect of including highly cognitively challenging talk during book sharing interactions with preschoolers have been mixed. Some studies have shown the importance of highly challenging talk (e.g., analytical talk) for Head Start children's language development (e.g., Dickinson & Smith, 1994), whereas other studies have suggested that teachers who include highly challenging talk, such as analyses and predictions, might be doing so at the expense of teaching more basic skills, such as letter identification (e.g., Hindman, Connor, Jewkes, & Morrison, 2008). Clearly both sets of skills are important for child outcomes, so finding the right balance is integral. In the current study, both caregivers and teachers included only a small percentage of cognitively challenging utterances, yet exposure to cognitively challenging talk across the home and preschool contexts was important for child outcomes as seemingly diverse as print concepts and literate language.

In conclusion, for the last three decades, researchers have posited that continuity between home and school language and literacy practices would be most beneficial for child outcomes. Findings of the current study show that whereas continuity in global literacy practices and exposure to challenging talk do lead to positive child outcomes, discontinuity in caregiver–teacher book sharing discourse styles might serve as a protective factor for low-income Latino preschoolers,

resulting in higher emergent literacy skills. Thus, exposure to literacy in both contexts is critical for Latino children's emergent literacy development. However, the particular ways in which literacy skills are transmitted to children might differ, and low-income Latino preschoolers might do best when exposed to culturally preferred styles in the home and more mainstream styles in the classroom.

As a result, future studies should investigate whether encouraging Latino parents to continue sharing books with their preschoolers in the style of their choice (i.e., serving as the sole narrator of an engaging story) might be more effective than promoting a co-constructive, or dialogic, book sharing style. In other words, perhaps rather than train low-income Latino parents to match the style used in U.S. classrooms (and by U.S. parents), a strengths-based approach should be taken to support the culturally-preferred home literacy practices of Latino families. At the same time, however, preschool teachers should continue to use a co-constructive style, eliciting information from the children and supporting their contributions through questions and conversational talk. Experiencing this combination of styles across settings seems to result in the most positive child outcomes for Latino dual-language learners at the end of the Head Start year.

However, further research on the role of continuity in home-school literacy practices and children's emergent literacy development is needed. One key limitation of the current study, for example, is the self-reporting of global literacy practices. In particular, the limited variability in teachers' reports of their global literacy practices might suggest the influence of social desirability on their responses. In other words, teachers might be over-reporting the extent to which they engage in certain practices so that they will come across as "better" teachers. Moreover, although book sharing was measured in a semi-naturalistic manner, the use of wordless – rather than text-based – books might limit the generalizability of the study. Thus, further naturalistic examination of literacy practices would help to bolster the findings. Moreover, a key focus of the study was on the degree of similarity (i.e., continuity) or dissimilarity (i.e., discontinuity) in caregiver and teacher styles, as measured by Euclidean Distance, and how this similarity (or lack thereof) related to children's emergent literacy competencies. The methodology employed marks an important contribution to the field and highlights that greater discontinuity in book sharing discourse styles resulted in more positive child outcomes. However, further research is needed to build on these findings and pinpoint the specific combination of discourse practices at home and preschool that might be most beneficial in supporting low-income Latino preschoolers' developmental trajectories.

In addition, the children in this study are unique in that they are enrolled in a bilingual Head Start Center, which is dedicated to simultaneously supporting children's language and literacy skills in Spanish and English. This setting might have important implications for a study on continuity between home and school literacy practices; because of its bilingual focus, the Head Start Center assures that there is, for all children, some degree of continuity and discontinuity between the home and school insofar as the language used. In other words, regardless of their home language, all children at the Head Start are exposed to communication and instruction in both Spanish and English. As a result, all of the children might have had an easier time adjusting to the inherent similarities and differences between the home and school settings than children immersed in a monolingual (whether Spanish or English) preschool classroom setting. This might, in fact, explain why, on average, the children in the study demonstrated age-appropriate emergent-literacy skills in their print-knowledge, language skills, and narrative skills. Therefore, it would be worthwhile to explore whether the current findings regarding the apparent benefits of discontinuity could be generalized to low-income Latino children enrolled in monolingual preschools. Furthermore, all children came from one of twelve classrooms; future work probing the relation between home-school practices and child outcomes should include children from a wider variety of classrooms to control for the effect of nesting.

Finally, the current findings cannot be extended to Latino families from all countries and backgrounds. Approximately half of the caregivers in the study were Mexican immigrants to the United States, close to a quarter of the caregivers were from other South or Central American countries (e.g., the Dominican Republic, Ecuador), and the remaining caregivers were born in the United States. Imbued in each Latino community is a unique cultural heritage, and, thus, additional research focusing on Latino families from a variety of backgrounds is necessary to ascertain whether the current findings might be applicable to a larger range of Latino families.

The rate of school failure for low-income Latino children is astoundingly high, and, as a result, researchers, policy-makers and practitioners alike have been striving to find ways to support the emergent literacy development of Latino children. What the current study suggests is that it might be overly simplistic to assume that a match between home and school literacy practices is necessary to ensure positive child outcomes. Instead, it might be most beneficial to encourage the families and teachers of Latino children to build on their strengths and do their utmost to support the children's emergent literacy development in their own, unique ways.

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