Title

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Journal

Cultural Diversity & Ethnic Minority Psychology, 21(2)

ISSN

1099-9809

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Publication Date

2015-04-01

DOI

10.1037/a0037927

Peer reviewed

Cultural Diversity and Ethnic Minority Psychology
2015, Vol. 21, No. 2, 181–190

1099-9809/15/$12.00 http://dx.doi.org/10.1037/a0037927

Home Activities of Mexican American Children: Structuring Early Socialization and Cognitive Engagement

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The question of how home activities advance the early social and cognitive development of Latino children receives growing attention from psychologists and social scientists. Some scholars and practitioners, focused on promoting "school readiness," frame the problem as weak parenting, signaled by insufficient rich language or academic skills. Other theorists, rooted in ecocultural theory, argue that early socialization and cognitive engagement are culturally situated within routine home activities. These activity structures vary and change over time as families acculturate, adapting to local social ecologies. Little is known empirically about the activity structures within Latino homes, including how young children participate. We detail the social architecture and cognitive engagement pertaining to 6 prevalent home activities in which 24 Mexican American 4-year-olds were engaged over 14 months. We then report how children participate in these 6 activities, and their potential relevance to the cognitive skills gap seen at school entry. We found that children's activities reproduced heritage language, symbols, and knowledge less often than suggested in prior literature; children's typical level of cognitive engagement varied greatly among tasks; and the distribution of time spent in activities is associated with the mother's school attainment and home language.

Keywords: Latino child development, socialization, cognitive engagement

Young Latinos raised in the United States develop in a paradoxical manner. The cognitive skills of Latino toddlers lag behind their White peers, even after taking into account home language (Fuller et al., 2009; Mulligan & Flanagan, 2006; Reardon & Galindo, 2009). This disparity is explained in part by Latino–White differences in family size, maternal education, and early parenting practices, and by the types of academically oriented cognitive skills measured: sensorimotor, visual preference, attention, memory, exploration and manipulation, and concept formation (e.g., the Bayley Scales of Infant Development; Bayley, 2006). This paradox, that Latino children, on average, display levels of social engagement and interpersonal skills related to social cognition that rival their White peers at entry to kindergarten (Crosnoe, 2007) is surprising, given wide Latino–White differences in mean family income and social-class status, and the force these factors play in shaping children's early development (Ayoub et al., 2009; McLoyd, 1998).

Mean ethnic gaps in Latino children's social engagement, self-control, and externalizing behavior are small, compared with wide disparities in cognitive skills at entry to kindergarten (Galindo & Fuller, 2010). Cultural psychologists have detailed socialization practices that help to explain these strong social–emotional outcomes for Latino children, including the emphasis on strong ties with family (*familismo*), proper comportment (*bien educado*), and the pursuit of respectful and caring relationships (*respeto*, *cariño*; García Coll & Pachter, 2002; Harwood, Leyendecker, Carlson, Ascenio, & Miller, 2002).

Little is known about the social context and the underlying architecture of daily activities inside Latino homes—especially how tacitly sustained activities advance the cognitive skills required of young children in their social context. As a preliminary step in the process of investigating the cognitive gap between Latino and non-Latino children, the current study examined the

This article was published Online First November 3, 2014.

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predominant activities observed within the homes of a diverse set of Mexican American 4-year-olds. We aim to elucidate the extent to which young Latino children are cognitively engaged or challenged in activities, and illustrate within-group variation. We describe the frequency and distribution of prevalent activities for children of first- and second-generation mothers, and how they participate—including the language and cultural materials used, and how they were cognitively engaged. Finally, we examine how these activity structures vary among Latino homes, focusing on demographic characteristics associated with acculturation.

Ecocultural Theory and Children's Everyday Activities

Developmental psychologists often cite how the specific cognitive skills displayed by children of color do not map onto the academic skills valued by White middle-class parents, competencies also valued inside schools. Ecocultural theorists instead embed cognitive skills within the social context, suggesting that children's competencies are shaped by their daily activity settings and the actors (e.g., the child and the parent) involved in the activity, which may be different from the discrete, academic skills that are valued by schools or White middle-class parents. Compared with other developmental theories, ecocultural theory is unique in highlighting how cognitive engagement is interwoven with the child's *social participation* in daily tasks—learning how to behave and adapt to the context, and acquiring expected linguistic competencies and role behaviors (Livas-Dlott et al., 2010; Parke & Buriel, 1998; Rogoff, 2003; Whiting & Whiting, 1975). Yet the validity of ecocultural theory remains in question, given limited evidence examining specific daily activities in which particular groups of children are engaged. By examining daily activities of Mexican American children, the current study aims to elucidate within-group variation and the extent to which socially embedded activities are associated with developing traditional academic and social–cognitive competencies.

We build from the ecocultural postulate that early learning occurs as children develop skills to become respected members of their family, apprenticing as novice participants in everyday activities, using cultural materials that elicit a variety of normative social and cognitive skills. When young Mexican American children are expected to set the table or greet visitors with respect, they tacitly internalize the cognitive competencies embedded in culturally bounded roles and scripts (Rogoff, 2003). The young child learns how to legitimately participate in daily activities, reaching intersubjective understandings with others about expected behaviors and requisite forms of complex social cognition. We will illustrate how those activities may or may not also elicit traditional cognitive skills often related to school achievement.

Understanding the Structure of Children's Daily Activities

The variable, often tacit, structuring of activities by parents involves unevenly rich oral language or print materials, and reflects varying levels of cognitive complexity for the child (Hess & Holloway, 1984; Holloway & Fuller, 1997; López, 2003). Beyond explicit educational activities, like reading together or visiting the library, the underlying architecture of home activities, the level of cognitive engagement they demand, and their variability within or among culturally bounded populations remains largely unknown.

Cognitive processes of varying complexity related to attention, memory, exploration, and manipulation are likely elicited by everyday home activities, but earlier qualitative work has failed to focus on this topic, outside of early language development. Ecocultural theory suggests that activity structures adapt to surrounding norms and economic exigencies. But we know little about the source of this variability when it comes to Mexican Americans. These empirical issues motivated our efforts to identify and detail the principal activities of 24 4-year-old children being raised by first- and second-generation Mexican American mothers.

Research Questions

To explore early socialization within Mexican American families' activity structures, we asked (a) What are the most prevalent daily home activities among Mexican American children in their prekindergarten year?, (b) How are children cognitively engaged in these dominant activities?, and (c) How does the observed structure of activities vary by child or family attributes?

Method

Participants

The sample included 24 Mexican American mothers and their 4-year-olds residing in Arizona and California. Previous family ethnographies indicate that such a sample is sufficient to allow for in-depth home observations, while being sensitive to variable patterns among families (Weisner et al., 2001). Inferences made from our statistical analyses, however, should be made with caution.

We recruited mothers through children's agencies, and by posting flyers at community organizations, grocery stores, and churches located in Latino communities. We limited our sample to mothers of Mexican descent with at least one parent who was born in Mexico and with a child who was eligible for kindergarten the next school year.

Fourteen mothers lived in California and 10 in Arizona, as shown in Table 1. About two thirds ($n = 17$) of the mothers were first-generation residents of the United States (born in Mexico). They reported higher levels of school attainment compared with larger samples of first- or second-generation parents (e.g., Portes & Rumbaut, 2001). These mothers differed based on their education, social class, and home language. Fourteen had completed high school or more schooling, often in Mexico, and more than half ($n = 15$) of the mothers were not employed outside the household. Fifteen mothers spoke only Spanish, five spoke Spanish and English, and four spoke only English. More than two thirds ($n = 18$) of the children attended preschool.

Home Observations

Nine researchers conducted home visits across Arizona and California, visiting each family at least 12 times over a 14-month period. Visits lasted 2 to 4 hr in the afternoon or evening and always started in the home. Field researchers, matched to the family in home language, conducted participant observations with

Table 1
Characteristics of Participating Mexican-American Families

	Count of family cases (n = 24)	Average values (means or medians)
State of residence		
Arizona (Phoenix–Tempe)	10 (42%)	
California (Bay Area)	14 (58%)	
Mother's generation in the United States		
First generation	17 (71%)	
Second generation	7 (29%)	
Mother's school attainment		
Some high school or less	10 (42%)	
High school diploma or more	14 (58%)	
Maternal employment		
Not employed outside the home	14 (58%)	
Employed part or full time	10 (42%)	
Home language		
Spanish only	14 (58%)	
Spanish and English	6 (25%)	
English only	4 (17%)	
Gender of focal child		
Female	12 (50%)	
Male	12 (50%)	
Focal child attends a preschool center		
Yes	17 (71%)	
No	7 (29%)	
Household income in 2005, estimated by mother		
Mean		$39,650
Standard deviation[a]		$26,230
Median		$25,000[b]

[a] Household income asked in $10,000 ranges during Interview 3. [b] The median family reported household income between $20,001 and $30,000.

each mother–child dyad, observing interactions while engaged in daily activities.

We conducted an ethnographic examination of young Mexican American children's daily activities and the associated cognitive demands. During each home visit, the researcher recorded the details of every activity with the focal child, including the language used and the others present. Field notes focused on the child's actions, utterances, and engagement in activities with other family members. We also recorded the mothers' utterances guiding the child's behavior, disciplining the child, encouraging task engagement, or redirecting the child. In addition, we recorded home activities within timed spot observations to document systematically the who, what, when, and where of the child's activities, and to corroborate the incidence rates of activities in the field notes. These "spots" were noted one half hour after the visit started, and every hour thereafter. We collected in-depth data on mothers' demographic attributes and parenting practices via three semistructured interviews.

Coding Field Notes

To prepare data for coding and analysis, field notes and transcribed interviews were first read for emic meanings and coded for themes regarding the child's most frequently observed activities (Miles & Huberman, 1994). We then identified prevalent activities and coded three basic dimensions of each activity: who, what, and where. A set of etic themes informed by prior literature guided our coding. We found concrete examples in the field notes for each activity code, serving as exemplars for the data dictionary. Three additional primary codes were recorded: parenting practices, child outcomes or socialization goals, and context (see Livas-Dlott et al., 2010).

The child activity codes were sorted into the most prevalent types: playing, preparing food or eating, watching TV, contributing to household responsibilities and routines, engaging in learning activities, and engaging in other media. Activities were double coded if they fit into two categories. Each of these six activities were then described in detail and coded with specific subcategories. For example, playing was broken down into gross motor play, playing with manipulatives, academic play, and imaginary play. The four coders achieved strong interrater reliability (mean κ = 91%), using a multirater version of Fleiss and Cohen's (1973) kappa, employing a rotating master coder. Reliability was calculated using interrater reliability between the four raters—that is, consensus between those who rated the same item or interaction. Table 2 includes definitions of each activity code.

Guided by ecocultural theory and research on cognitive engagement, we coded the child's level of cognitive engagement for the six home activities (Meece, Blumenfeld, & Hoyle, 1988; Pintrich & De Groot, 1990; Rogoff, 2003; Saxe, Guberman, & Gearhart, 1987; Tudge, 2008) related to the cognitive competencies evaluated on measures such as the Bayley Scales of Infant Development (Bayley, 1993; e.g., sensorimotor, visual preference, attention, memory, exploration and manipulation, and concept formation). We aimed to elucidate how the type or prevalence of activities may partially explain the cognitive gap. We defined cognitive engagement and determined how actively engaged the child was, as

Table 2
Home Activity Codes and Definitions

Activity codes	Definitions
Playing	Child engages in play activities alone or with others (e.g., child plays soccer).
Preparing food or eating	Child participates in procuring, preparing, or eating food (e.g., child goes to McDonald's for lunch).
Watching TV	Child watches television or engages in other activities in the same room as the TV when it is on, and he/she can see the screen (e.g., child watches *Dora the Explorer*).
Household responsibilities, routines	Child engages in household or family duties, tasks, or chores (e.g., child helps to clean up toys).
Engaging in learning activities	Child engages in self-directed educational activities that he/she initiated or that were initiated by a parent (e.g., child "reads" a book).
Engaging in "other" media	Child uses or responds to media other than television, such as the radio, computer, or electronic toys (e.g., child listens to music on the radio).

shown in Table 3. Specifically, we ascertained the level of (a) regulated attention (e.g., attention), (b) focused effort (e.g., exploration and manipulation of objects to understand their purpose), (c) relating new information to existing knowledge (e.g., ability to maintain attention, learn, and apply new knowledge to solve a problem), and (d) verbal interactions or physical manipulations (e.g., children's ability to describe their explorations with objects). Children's cognitive engagement in activities was coded as modest, moderate, or high. Coders achieved a mean reliability kappa of 86%. These data allowed us to investigate the specific skills required for daily activities that may partially explain the paradox of Latino children: the weaknesses evident in traditional academic skills and the strengths evident in social-emotional skills and social cognitions.

From this general rubric, we specified parameters pertaining to each of the six activities. For example, for play, a modestly cognitively engaged child would be holding a doll without actively maneuvering it, or sitting quietly with music playing in the background. A highly cognitively engaged child would be dressing and talking to a doll, maneuvering it, or engaging in pretend play.

We report mean levels of cognitive engagement across the six prevalent tasks. To illustrate how levels of cognitive engagement in activities varied among children, we conducted counts of each child's activities with their associated levels of cognitive engagement. These counts were placed in a matrix with the axes defined by the child's home language and enrollment in preschool.

Data Analysis

We first focus on the total inventory of home activities from field notes, and then report the systematic spot observations, which guards against between-researcher variation in recording field notes. This procedure also allowed us to tally and correlate counts of each of the six prevalent activities. We detail variation in the cognitive engagement associated with each observed activity and determine how potential differences in type or prevalence of activities may add to our understanding of the cognitive gap.

The exploratory statistical analysis examined subgroup differences using MANOVA to determine whether the type of activities children engaged in—the number of each activity for each child averaged across the 12 occasions—varied by child gender, preschool attendance, home language, or their mothers' generation, education level, or employment. We drew on comparisons related to our interest in how demographic variables associated with acculturation may relate to (shifting) activity structures. Preschool attendance was included because of its potential relevance for intervention to address the cognitive achievement gap. Repeated-measures MANOVA was also run to assess variability across the 12 sets of field notes within each family, to ensure that mean differences between groups were sufficiently different after taking into account variance within the child across the visits. MANOVA informed whether or not the cognitive engagement of activities varied by child or maternal factors.

Results

Prevalent Activity Structures

The children were involved in six types of daily activities, with varying levels of cognitive engagement (see Table 4). Looking across children and households, we found children engaged in play (n = 484 instances observed), meal preparation and eating (n = 301), watching TV (n = 196), household chores and responsibil-

Table 3
Coding Definitions for Child's Level of Cognitive Engagement in Home Activities

Level of cognitive engagement	Definitions
Modestly cognitively engaging	Child is passively involved or not involved in an activity. Child *does not* appear to (a) regulate his/her attention, (b) focus effort on the activity, (c) relate new information to existing knowledge, or (d) engage in any verbal interactions or physical manipulations with others and/or (culturally) relevant materials or technology.
Moderately cognitively engaging	Child is moderately involved in an activity. Child appears to *moderately* (a) regulate his/her attention, (b) focus effort on the activity, (c) relate new information to existing knowledge, and (d) engage in 1–2 verbal interactions or physical manipulations with others and/or (culturally) relevant materials or technology.
Highly cognitively engaging	Child is highly involved in an activity. Child appears to *actively and consistently* (a) regulate his/her attention, (b) focus effort on the activity, (c) relate new information to existing knowledge, and (d) engage in 3 or more verbal interactions or physical manipulations with others and/or (culturally) relevant materials or technology, or take on a novel role.

Table 4
Descriptive Content of Activities

	Total coded activity episodes	Activity episodes with observed content
Playing	484	
Gross motor play		109 (23%)
Playing with manipulatives		97 (20%)
Imaginary play		53 (11%)
Preparing food and eating	301	
Negotiating for food		85 (28%)
Procuring food		46 (15%)
Child eating		43 (14%)
Watching TV	196	
Watching TV/movie		63 (32%)
Watching cartoons		44 (22%)
Interacting with TV/video		29 (15%)
Household responsibilities and routines	98	
Welcoming a guest		48 (49%)
Helping to organize, clean up		17 (17%)
Offering food or drink to guest		16 (16%)
Engaging in learning activities	88	
Drawing or coloring		27 (31%)
Reading		21 (24%)
Writing		19 (22%)

ities (n = 98), explicit learning activities (n = 88), and other media, including video games (n = 61). The spot observations were highly correlated with field notes, suggesting reliable recording of activity incidence levels. The three most common types of each activity are noted with their associated levels of cognitive engagement (see Table 5). Activities embodying the greatest complexity—considered challenging for 4-year-olds—were deemed "highly cognitively engaging."

Playing. This activity was defined as the "child engaging in play activities alone or with others." The three most common types included (a) gross motor play (e.g., playing hide-and-go-seek), (b) playing with manipulatives (e.g., playing with blocks), and (c) imaginary play (e.g., playing "cops & robbers").

Many children engaged in gross motor play; Macey and her sister played outside on a swing and on a teeter-totter. Others jumped or wrestled indoors. Play activities, especially when involving siblings or other children, offered opportunities to practice the social aspects of cognitive skills, as children negotiated what and how to play with whom. For instance, when playing with his younger brother, Aaron grabbed a toy his younger brother had taken. His mother complained about his aggressive behavior and insisted, "Aaron, *deja que el niño juegue con el juguete*" [Aaron, let the child play with the toy]. Other children used items around the house to engage in imaginary play, like Andres, who—after talking about witches—ran to the kitchen to get his mother's broom, and pretended to fly like one.

Play is steeped in developing cognitive skills; children learn to focus their attention, develop conceptual understandings, and build sensorimotor skills through exploration, manipulation, and imagination. In addition, play uses memory and engages children's visual preference skills. Among these children, cognitive engagement in play varied, with more than one third of the instances (37%) deemed highly engaging, and almost two thirds (62%) moderately engaging. This was particularly notable in imaginary play, as shown by Aracely playing with her dolls. As Aracely cleaned up the Barbies, she began imagining that it was time to drink coffee, and prepared "coffee" with her plastic tea set. She used erasers as cookies and sugar, set out spoons and place settings, and drank "coffee."

Preparing food and eating. Children participated in buying, cooking, or eating food, with three prevalent types: (a) negotiating over food (e.g., rejecting food or arguing about food), (b) procuring food (e.g., buying or preparing food), and (c) eating (e.g., a snack or a meal).

Table 5
Percentage of Activities Exhibiting Observable Cognitive Demands

	Total activity episodes with observed cognitive engagement	Modestly engaging	Moderately engaging	Highly engaging
Playing	484	4 (1%)	302 (62%)	178 (37%)
Preparing food and eating	298	111 (37%)	160 (54%)	27 (9%)
Watching television	196	121 (62%)	70 (36%)	5 (2%)
Household responsibilities and routines	98	0 (0%)	46 (47%)	52 (53%)
Engaging in learning activities	88	0 (0%)	53 (60%)	35 (40%)
Engaging in "other" media	61	4 (7%)	46 (75%)	10 (16%)

These activities were common and offered numerous interactions, including many in which mothers expressed concern over nutrition and meal-related etiquette. Some mothers were concerned about their children eating properly or eating enough. For example, Amelia provided her son, Marcos, a "quick snack"—multiple bean tacos—before school, even though his preschool served breakfast, because she wanted to make sure he ate "right," which he might not do if he were playing or in a bad mood. Eating was also a context for imparting proper manners: Marlina was rebuked for trying to take her food to the bedroom, being told in a stern voice, "*Aquí comen. Las camas son para dormir, no para comer*" [Eat here (pointing to the table). Beds are for sleeping, not for eating].

Children were frequently involved in preparing food. For example, while Larisa prepared the dough for frying, her daughter, Marlina, made small, irregularly shaped tortillas for the meal. When the child's main activity involved helping her mother prepare a meal, it was double-coded under "household responsibilities and routines."

Many cognitive skills can be developed and practiced in relation to preparing food and eating, including attention, memory, sensorimotor skills, and exploration and manipulation (e.g., how to make or eat a taco). Although preparing food and eating were common activities, few instances entailed complex discussion or manipulation of the food itself. Over one third (37%) were deemed modestly cognitively engaging, focused on the simple act of eating. Children accompanied their families to fast-food outlets for lunch, ate gummi bears on the couch in front of the TV, and snacked on *polvorones* [cookies] after school.

Watching TV. Children watched TV or engaged in another activity in the same room as the TV, often glancing up at the screen. The three prevalent types of TV activities included (a) watching TV (e.g., watching TV or the TV is on in the background), (b) watching cartoons (e.g., Scooby Doo), and (c) interacting about a program (e.g., asking questions about a program, singing a theme song, or asking to watch a program).

The TV was frequently turned on in the majority of homes that we visited. Sometimes the focal child sat alone and watched, while the mother prepared a meal or cleaned the home. At other times, the TV was the main activity and brought family members together. Often, no one was explicitly watching the TV, or children would gaze at it periodically, while giving their primary attention to another activity. Children watched a variety of shows—often cartoons, and sometimes whatever others were watching, like soap operas. We recorded two instances of children watching *Sesame Street*; it was unusual for children to watch "educational" shows in English or Spanish.

The children often showed great expertise using the remote control and starting or changing video movies. As Marcos picked up the remote and maneuvered to children's learning games, his mother, Amelia, commented, "*Este niño se sabe la televisión al derecho y al revés—hasta mejor que su papá y yo*" [This child knows the TV backward and forward—even better than his dad or me].

When the surrounding neighborhood was seen as unsafe, the weather was bad, or mothers wanted their children independently occupied, the TV offered an easy, engaging alternative. For example, Cassandra settled her son in front of *Dora the Explorer* while she sat on the couch to talk with her guest, periodically reminding Aaron not to sit too close to the TV.

Watching TV and its related activities can provide opportunities to develop and practice a variety of cognitive skills, including memory (e.g., the time and channel of their favorite shows), attention (focusing on watching, and potentially participating), and sensorimotor and exploration and manipulation (e.g., using the remote, DVDs, or cable box). Some TV programs—particularly ones deemed educational—can provide children the chance to engage in explicit early literacy and numeracy activities; this was infrequent. About 62% of the TV-related activities were coded as modestly cognitively engaging. Any time that target children talked about what they were watching, it was considered cognitively engaging because of the attention, effort, and integration required. Educational shows like *Sesame Street* were considered highly cognitively engaging because they typically involved learning the names or sounds of letters or learning the meaning of a word. Yet few instances of talking about the shows, or watching educational TV, were noted; more than 80% of the TV watching appeared to involve passive viewing.

Contributing to household responsibilities and routines. Children engaged in household tasks, family duties, or chores, including the three prevalent types: (a) welcoming a guest (e.g., greeting guests or saying goodbye), (b) helping to organize or clean up (e.g., putting away toys), and (c) offering food or drinks to guests (e.g., the child was prompted to offer the guest a drink).

Greetings and efforts made to anticipate guests' needs were frequently observed, underlining how these children's social cognition skills are nurtured toward proper comportment and respect (*bien educado*). For example, when guests rang the bell, Roberto and his sister ran to the front door. Their mother had them say "*bienvenidos*" [welcome] when they opened the door for their friends. In another home, when Michelle grabbed a ball to start playing, her mother said, "Michelle, *¿no le vas a ofrecer algo de tomar a Cristy*?" [Aren't you going to offer Cristy something to drink?]. Michelle immediately got up from the floor and asked Cristy what she would like to drink. For household responsibilities, children were frequently encouraged to help pick up toys after playing, or to clean up their rooms. These household responsibilities and routines support the development of many cognitive skills, including sensorimotor skills, exploration and manipulation of everyday objects, as well as attention and memory, when following multiple-step instructions to greet and offer guests a drink or snack. More than half (53%) of household responsibilities required complex cognitive engagement, and the remaining 47% were coded as moderately engaging. Exhibiting a highly engaging cognitive activity, Macey raked up leaves and put them in the garbage bin, explaining that she and her sister were helping out because her mom "needed a break" because she worked so hard.

Engaging in learning activities. Children were considered to be "engaging in learning activities" when they participated in educational activities including three prevalent types: (a) drawing or coloring (e.g., in coloring books or creating a drawing), (b) reading (e.g., having a book read to him/her or "reading" the book by him/herself), and (c) writing (e.g., writing letters or "studying" with older siblings).

Learning activities were often very engaging, as when Paulino pointed to the word for the creature in his picture book. In English, he said, "crab," and his mother responded in Spanish, "*cangrejo*." In another home, when Adriana's mother, Ama, suggested that they "read a story together," Adriana retrieved *Goldilocks* in

English. Her mother said that she knew the story and then started telling it in Spanish.

By definition, children who participated in in learning activities were cognitively engaged—explicitly exercising their attention, memory, visual preference, exploration and manipulation, and concept formation. These activities develop traditional school readiness skills: letter recognition, counting, reading together, puzzle completion, and matching colors. Of these learning activities, 60% were moderately engaging and 40% were highly engaging. Embodying a high level of cognitive engagement, Sonia played "school" with her mother: She recited the alphabet as she ordered the letters on her board, then mixed them up and reordered them again.

Engaging other media. Children used or responded to media other than TV, in their native language, such as (a) videogames (e.g., Nintendo or Leap Frog), (b) playing on a computer (e.g., maneuvering through menus to get to a desired game), and (c) and playing with a compact disk (e.g., listening to a song on the stereo).

Paulino often played videogames in English—in contrast to his Spanish home language. During one visit, he played one that required him to find appropriate items for a picnic, with his mother giving him advice in English (e.g., "close the refrigerator"), mimicking the soundtrack, even though she otherwise spoke to Paulino in Spanish. In another home, Alicia was bashful when her mother urged her to show the researcher "what she can do on the computer," indicating that this form of learning was linked to a structured task and performance. Some children enjoyed performing: Hailey sang along to music on her small stereo.

Engaging other media—inherently technical activities—often exercised complex cognitive skills such as exploration and manipulation (e.g., learning how to maneuver a mouse), attention, visual preference, and sensorimotor skills (e.g., playing an electronic game with a joystick. The majority (91%) were either highly or moderately engaging, reflecting children's sophisticated use of computers, the Internet, and electronic games. One child used a remote control to turn on a dancing robot toy, and imitated the robot's moves, dancing, as his parents watched, amused. Another child used his father's digital camera to show photos of recent family activities.

Variability in Activities by Child and Family Attributes

Notable was the range of cognitive engagement across children's activities. There were displays of dynamic imaginary play, exhibiting creativity and complex thought, and hours spent enrapt watching cartoons. Children spent much of their time involved in simple family routines that manifested uneven levels of cognitive engagement. We report, in Table 6, on significant, systematic differences in the incidence rates of the six home activities among families. Counting the activities over each visit and then averaging them over the 14 months, we found mean between-family differences, on average. Additionally, when we considered the repeated measures aspect of the data and accounted for within-family variation, there were still noteworthy between-family differences. Despite the modest sample, our quantitative findings suggest particular between-family differences for further study. Reviewing the proportional incidence of playing, children attending preschool, those in bilingual or English-speaking households, and those with mothers who had more education tended to play more than their peers, suggesting that children in what might be considered more acculturated families spent a larger proportion of their time playing, although the actual percentage differences are not large. This appears to be a trade-off with watching TV: The subgroups that played more tended to watch less TV.

Table 6
Proportional Incidence Levels (Percentage) for Activities by Child and Family Attributes

	Overall MANOVA *F* value	Playing	Watching TV	Engaging in other media	Engaging in learning activities	Preparing food or eating	Household responsibilities or routines
Child's gender	2.86**						
Female		41%	16%	3%†, *ns*	8%	22%	10%
Male		35%	17%	7%	4%	25%	9%
Child attending preschool	2.68*						
Yes		41%†, †	15%†, †	5%	4%†, *ns*	25%	9%
No		31%	22%	4%	9%	20%	6%
Home language	2.61*						
Spanish only		33%†, †	19%	6%	9%	22%	7%
Bilingual or English		45%	13%	3%	4%	26%	9%
Mother's generation in United States	0.68						
First generation		36%	17%	5%	7%	23%	8%
Second generation		44%	16%	3%	4%	25%	7%
Mother's school attainment	0.93						
Some high school or less		34%†, †	21%†, †	4%	7%	24%	7%
High school diploma or more		42%	13%	5%	7%	23%	9%
Mother employed outside the home	3.07**						
Yes (part or full time)		37%	19%	6%†, †	5%	23%	6%†, †
No		40%	13%	2%	9%	25%	11%

Note. Significance level for simple between-group mean differences averaged across visits first reported; significance level for repeated-measures (within-group) MANOVA reported following the comma. Mean differences are not significant unless otherwise indicated. *ns* = not significant.
† $p < .10$. * $p < .05$. ** $p < .01$.

We also found that boys were more likely to engage other media, primarily computers or video games, than were girls (7% vs. 3%), as were children with employed mothers (6% vs. 2%), although the gender trend was no longer significant, using repeated measures MANOVA. Children who did not attend preschool were more likely than those who did attend to engage in learning activities, like doing puzzles (9% vs. 4%), although again this trend dissipated, including within-family variation, using repeated measures MANOVA. The children of working mothers were less likely than their peers whose mothers did not work outside the home to engage in household responsibilities and routines (6% vs. 11%), which included doing chores, helping to clean up, and serving guests.

Discussion

These findings paint a more detailed picture of the daily activities that occupy Mexican American children. Our results support ecocultural theory, in that we cannot rely on static or archetypal classifications of children's environments: Their activities and the contexts that shape them are diverse and dynamic (Holloway & Fuller, 1997; Lowe & Weisner, 2004; Tudge, 2008). The most common activities included playing, eating or preparing food, and watching TV, together occupying substantial shares of children's time at home, although mixed in their corresponding level of cognitive engagement. In addition, activities varied between children by home language, preschool attendance, and maternal education and work status, suggesting the contextual shifts, often linked to acculturation, influenced children's activities. The incidence and content of these home activities expose the dynamic adaptations that many families are making to their surrounding social ecology. Additional research with larger, longitudinal samples would provide important data about how these adaptations occur over time with development.

Our results support ecocultural theory by illustrating how activity settings affect children in three distinct ways: (a) through parent encouragement—the mother made cognitive demands on her children within everyday home activities; (b) through environmental influences—the specific activity and the surrounding environment called for children to use certain abilities or skills; and (c) through individual interests—children actively sought out certain activities. This article builds upon ecocultural theory by identifying specific types of activities children pursue, and their associated levels of cognitive engagement, within the dynamic family sphere, elucidating possible explanations for the cognitive achievement gap.

Parent encouragement played a notable role in structuring home activities, although rarely by turning everyday tasks into cognitively engaging learning opportunities. In fact, few structured, educational activities were observed, as a proportion of all activities. This does not seem to be explained by a lack of material resources, as most homes displayed sufficient numbers of toys, and even print materials. It may be driven by Mexican American parents' tacit beliefs that they are not teachers per se nor agents of their children's early cognitive development (López, 2003; Reese & Gallimore, 2000). This finding is noteworthy in terms of the gap in preliteracy and early math skills seen at school entry between Latino and non-Latino Whites. Extensive research illustrates how non-Latino White, middle-class parents often turn everyday activities into educational experiences for their children in ways that may boost children's early cognitive skills (Lareau, 2003). Our results warrant further examination of how activity settings may be contributing to the preliteracy and early math skills gap seen between Latinos and non-Latino Whites.

Parents *were* structuring home activities to foster valued social cognitions among their children, which is borne out in the strong social skills among Latino children (Bridges et al., 2012; Crosnoe, 2007; Galindo & Fuller, 2010). The social-emotional skills of young children are predictive of early school success (Denham, 2006; La Paro & Pianta, 2000), especially as they promote positive relationships with teachers (Hamre & Pianta, 2005). More research is needed to determine how parents can be encouraged most effectively to broaden home activities that are embedded within the heritage culture in ways that also facilitate their children's academic school readiness skills (Bridges et al., 2014).

With ecocultural theory, we also demonstrate how activities orient children through environmental influences—the demands or "nudges" of the environment. Children's activities were elicited by their home settings that support particular types of pursuits, with their accompanying levels of cognitive engagement. Children were constantly responding to the spheres of influence around them—extended family, neighborhoods, the media, and, in some cases, preschools. Siblings, cousins, and neighborhood friends introduced children to numerous novel activities and experiences—many through the conduit of English, which offered exposure, yet limited language modeling, and may underscore children's relatively weak preliteracy skills.

Some of children's activity environments were more independent of their parents. Neighborhood environments shaped children's activities—whether or not there were parks and libraries close by, and whether or not it was perceived as safe to be outside partaking in these settings. Televisions and computers brought the media into children's homes and exposed them to a wide realm of influences, with profound implications for their activities and cognitive engagement. Many children pursued these activities independently, with little supervision or parental engagement. This is particularly noteworthy, given the amount of time children spent watching TV, particularly when most of it appeared to involve passively watching cartoons and was deemed modestly cognitively engaging.

For some children, preschool was another source of influence, offering cognitively engaging activities that spurred their learning in preliteracy and early math skills. Having teachers who use children's home language—Spanish or English—to expose them to a rich, academic vocabulary can scaffold their learning and boost cognitive skills (Barnett, Yarosz, Jung, & Blanco, 2007; Slavin & Cheung, 2005). Many of these children also brought learning-oriented activities home with them, including books and the interest in reading them.

Finally, children's individual interests had a noteworthy impact—these 4-year-olds were seeking out certain endeavors within the structure of legitimate, often tacitly expected activities. Children were driving some of the home activities—very young arbitrators, as it were, of acculturation to U.S. middle-class culture. Largely through the media, and through older siblings and interactions with peers and adults at preschool, children were introducing their families to new activities, contemporary symbols and values, and language. Many parents commented on their children's

knowledge and skill in using computers, televisions, electronic equipment, and games. Further, this shift was compounded in some families by children's greater familiarity with English. One parent spoke of her dismay in bringing her child to a speech therapist because his language was unintelligible. As it turned out, he was speaking English. This suggests the importance of future research on how even young children become purveyors of acculturation through their activity settings.

In terms of cultural heritage, however, many of the activities children pursued were in fact ubiquitous: Any child from Mexico or the United States could have been playing these games or watching these TV shows. Solely by examining the content of the activities, it would be difficult to guess the child's cultural heritage. Most activities invoked cultural symbols popular in U.S. society, whether delivered in English or Spanish.

Yet children's level of cognitive engagement in daily activities varied across children and by the type of activity involved. Whereas play or learning activities could be challenging in traditional cognitive terms, other activities—like watching TV or eating—were common, but rarely involved high levels of cognitive engagement. In this light, videogames may offer a significantly greater level of cognitive engagement, but were typically performed individually by the child, offering little social interaction with others. Thus, children were not gleaning the social aspect of cognitive skills—typically, a heritage cultural strength—through these daily activities either. And the differences in levels of cognitive engagement among activities are notable because the proportional incidence of participating in particular activities also varied by child and family characteristics. That is, the same children who were playing less and watching more TV were also more likely to be living in Spanish-speaking households, not attending preschool, and being raised by mothers with less formal education. This activity profile suggests the need for further examination of the role of preschool, and how it may influence parents' home practices, particularly given the current push to expand preschool access for Latino children as a way to address the achievement gap.

Findings related to the differential cognitive engagement of particular activities also raise questions for future research, extending observations beyond children's home environments to include preschools and other settings. Our findings invite studies that involve larger, representative samples of young Mexican American children and their families, as well as children and families of differing ethnic backgrounds. Future work might compare the forms of social participation and cognitive requirements embedded in these activity sets with those presented inside formal classrooms. The discontinuities may be wide for many Mexican American children, and inadvertently facilitate the cognitive achievement gap and even undermine their strong social skills. To understand how Mexican American children fare in school, we must have a clear comprehension of the context of their daily activities and the dynamic spheres of influence that shape them.

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