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# Gender Neutrality in Play of Young Migrant Children

## An Emerging Trend or an Outlier?



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The authors explore gender differences in the play of children of migrant farm workers from Mexico. They review the literature that indicates children exhibit gender differences in their play as early as three years old, but the authors claim their findings do not corroborate the existing research on gender differences in play. The twenty-one migrant girls and twenty boys they studied failed to exhibit gender differences in their play in the classroom, during their free play outdoors, or during their unstructured play at home. The authors also found no gender differences among these children in cognitive tasks, social interactions, and their use of their preferred language. The authors offer several reasons for these results and note that research studies of other cultural groups suggest that gender roles are altered when communities are displaced or undergo migration. The authors speculate on the possible implications of their findings for preschool teaching. **Keywords:** gender differences in play; Mexican immigrants; migrant children; play patterns and gender

### Introduction

Given the significant role of play in child development, early-childhood educators have begun to tackle some important questions. How does play unfold developmentally? Does biological maturity or socialization guide play? Do children actively construct their play experience by structuring their actions and emotions during play? Is play a result of an interaction between the active child, biology, and social messages transmitted to the child? Do boys and girls play differently? Is children's play culturally dependent? Can cultural differences explain variation in children's play? Such questions have occupied researchers, educators, and administrators alike, but few have yielded such strikingly consistent research results as those related to gender differences. Clearly, the research shows, gendered play is ubiquitous among early learners.

Children's play fosters creativity, provides opportunities to practice problem solving, and allows young active learners to explore their environments. During play, children express their individuality while simultaneously acquiring knowledge of the world around them. Play helps children prepare for attending school, mature both socially and emotionally, and learn culturally appropriate adult roles. Early-childhood educators often develop play-based curricula to harness the innate tendency of children to play and to turn play into positive learning experiences (Baines and Slutsky 2009). Offering play-based educational experiences has therefore become a widely recognized method by which early learners develop cognitive, motor, and social-emotional skills (Johnson, Christie, and Wardle 2005).

### **The Early Origins of Gendered Play in Euro-American Society**

The theoretical framework that guides studies on gender differences in children's play comes from diverse areas of study. Theorists from the fields of psychology, biology, mathematics, anthropology, art, psychiatry, pop culture, and linguistics have been vocal on the development of gender differences in children's play preferences (Sutton-Smith 1997). The role of biology in guiding early play behaviors is an emerging area of inquiry, which includes the growing belief that children's gender differentiation does not come solely from social learning but is also a product of biological processes (Auyeung et al. 2009; Ehrhardt and Money 1967; Ehrhardt, Epstein, and Money 1968; Hines et al. 2002). Several studies suggest a relationship between increased levels of testosterone in mothers during gestation and a significantly higher incidence of masculine play behaviors in their female offspring (Auyeung et al. 2009; Ehrhardt and Money 1967; Ehrhardt, Epstein, and Money 1968; Hines et al. 2002).

Both theoretical and empirical evidence substantiates the notion that gender differences exist in the early play of children. Sigmund Freud long ago highlighted the issue but, more recently, discussions on gender differences in children's play draw on Jean Piaget's and Lev S. Vygotsky's conceptualizations of child development and play. Social learning theory suggests that children may learn gender roles at a very young age due to the positive reinforcement with which parents reward their children's gender-appropriate behaviors (Bandura 1977; Bandura and Walters 1963; Block 1973; Mischel 1966). From an early

age, both boys and girls tend to prefer same-sex playmates (Humphreys and Smith 1984; Jacklin and Maccoby 1978; LaFreniere, Strayer, and Gauthier 1984; Maccoby and Jacklin 1987) and sex-stereotypical toys (Alexander and Hines 1994; Servin, Bohlin, and Berlin 1999; Snow, Jacklin, and Maccoby 1983). Boys tend to prefer such masculine toys as construction sets, vehicles, and weapons, whereas girls tend to prefer such feminine toys as dolls (Alexander and Hines 1994; Berenbaum and Hines 1992; Connor and Serbin 1977; Liss 1979, 1981; Smith and Daghli 1977). And boys tend to prefer more aggressive, physical, and active play, like rough-and-tumble and outdoor play (Alexander and Hines 1994; Blurton-Jones and Konner 1973; DiPietro 1981; Eaton and Enns 1986; LaFreniere et al. 2002; Maccoby 1988; Whiting and Edwards 1973), whereas girls tend to prefer less aggressive, more collaborative, more social play that is often highly structured and sedentary, like playing house (Alexander and Hines 1994; Maccoby 1990; Maccoby and Jacklin 1987).

Typically, by age two, children begin to show gender-driven differentiation in play. This difference increases with age. Within one or two years, boys show a tendency toward outdoor active play requiring more space (Fishbein and Imai 1993), display a preference for such building materials as blocks, and develop leader and follower roles. Boys often appear more aggressive, and they engage in competitions (Johnson, et al. 2005). Girls, on the other hand, tend to play in smaller areas indoors (Fishbein and Imai 1993) and engage in nurturing games, again, like playing house. Girls hold more complex conversations than boys and often negotiate their differences rather than working them out through aggressive behaviors (Hönekopp and Thierfelder 2009). Although both girls and boys enjoy artistic play, their themes seem to fall into consistently gendered categories (e.g., girls draw houses and flowers, but boys draw fire engines and dinosaurs).

The content of children's play, their preferences for same-sex playmates, and their differing play styles may affect their social interactions and their relationships to peers, as well as influence their school competencies (Anderson, Hilton, and Wouden-Miller 2003; Clements 1987 1994; Davidson 1990; Fabes et al. 2003; Howe et al. 1993; Jacklin and Lacey 1997; Löfdahl 2006; Natasi and Clements 1993; Petrakos and Howe 1996). Studies have also shown that young children prefer same-sex playmates, but this preference can be overridden if an activity requires doing so (Johnson, Christie, and Wardle 2005). While young girls often prefer playmates on the basis of gender, boys sometimes prefer playmates on the basis of play style (Alexander and Hines 1994; Fishbein and Imai 1993; Hyun and Choi 2004). Preschool-aged boys are more likely to dominate

during play in peer groups (Fabes et al. 2003; Maccoby 1988, 1990; Thorne and Luria 1986), and females tend to avoid such domination.

Early-childhood development researchers postulate that several factors coalesce to affect gender differentiation within early-childhood learners. For example, they often attribute the aggression exhibited by boys to prenatal exposure to testosterone (Auyeung et al. 2009). On the other hand, researchers often ascribe the content of play, such as girls setting up house, to the stereotypes children observe in their environments (Hines 2004). Thus, an interplay of hormones and social messages seems to impact sex differences in children's play.

### **English Language Learners and Play**

Migrant children in the United States often belong to families who speak Spanish exclusively. It becomes key, then, to use Spanish in their education as a bridge to learning standard English. This can be done by exposing children to play-based activities in English throughout the day. Perhaps modeling is the best way to encourage preschoolers to learn standard English. A teacher in a classroom is well placed to serve as a role model for these children (McCollum and Russo 1993; Reginatto 1993). Play can drive learning among young English language learners (Van Hoorn et al. 2007). Although evidence exists that poor English language skills impede successful high school graduation rates and compromises performance at the workplace and in other settings like hospitals (Health Behavior News Service 2007; Kagan and Garcia 1995), we do not sufficiently understand how to achieve language competency among young migrant children. The federal government has recognized the importance of a bilingual education, and the concept of developing the "whole child" has gained momentum, but no one seems to know how to achieve it across cultural groups at the preschool level. The potential for play to help in teaching language and achieving literacy is underaddressed. We believe this is because the research primarily focuses on native speakers.

Clearly, Hispanic children's literacy and language development is emerging as a key area of research, but the timing and the instructional context need to be considered when exploring learning standard English (Garcia 2000; Romaine 1997). Given that limited competency in standard English has far-reaching and negative consequences for these children, we think it imperative that they start learning English in preschool (Hammer, Miccio, and Wagstaff 2003).

## Cultural Context of Gendered Play

Children's play is universal. In some cultures, play is central to childhood and becomes an important tool to teach young children. In other cultures, play remains peripheral to a child's daily routine and serves as an incentive for socially appropriate behavior or as entertainment and a break from the daily chores. Thus, cultural lenses (culturally specific values, beliefs, knowledge, and attitudes) drive the content of play and the use of language, determine peer groupings in children's play, and create significant diversity. Joe L. Frost and colleagues have presented a comprehensive review of theoretical and empirical information on the topic in *Play and Child Development* (2011). We encourage readers to review its comprehensive analysis of research and the theoretical perspectives related to culture, gender, and the play of young children.

Early socialization by parents, peers, teachers, media, toys, and commercial enterprises all contribute to gender differences in children's early play (Roopnarine 1994). The roles children play in their families govern both the function of play and the amount of time spent engaging in it. For example, in many cultural groups, young girls are involved in household chores, and boys offer assistance in the fields and family businesses. These conditions limit the amount of time spent in free play. Likewise, the toys or tools children use in their play can also be culturally specific.

At an early age, boys from diverse cultural backgrounds tend to exhibit a white-positive bias in playmate preferences (Aboud 1988; Fishbein 1992; Fishbein and Imai 1993; Williams and Morland 1976), whereas girls across cultural groupings tend to prefer playmates from similar cultural backgrounds and tend to avoid engaging in play with white male peers (Fishbein and Imai 1993). Increasing concerns related to child safety not only limit the time spent playing but also the play environments and playmates (Lancy 2002). Children are born into a cultural fabric containing these messages (Ridgeway and Correll 2004).

If, indeed, as the literature suggests, boys and girls play differently, and if, indeed, culture drives many of the factors that inculcate children's gender stereotypes, then studying culturally specific differences would seem paramount to gaining a greater understanding of the development of gender differences (Roopnarine 2003). To what extent can culture impact these differences? Culturally specific values, beliefs, knowledge, and attitudes all shape children's play. Culturally specific observations enable researchers to uncover cultural variations in how children play, with whom they play, and the content of their

play. Thus, it becomes imperative for early-childhood educators to discover culturally specific priorities in play and then design play experiences aligned not only to a child's developmental needs but also to his or her cultural practices and family values (Ridgeway and Correll 2004).

### **Objectives**

This study explored, within different settings, the gender differences in play behaviors exhibited by young children of immigrant seasonal farm workers from Mexico. Our hypotheses were: First, our results would demonstrate statistically significant gender differences in the time spent on various cognitive tasks observed during play in school and at home among preschool-aged migrant children. Second, our results would demonstrate statistically significant gender differences in social groupings during play in school and at home among preschool-aged, migrant children. And, third, our results would demonstrate statistically significant gender differences in language preferences during play in school and at home among preschool-aged, migrant children.

### **Method**

#### *Background*

We conducted this study in Central Florida in four accredited Head Start programs that serve children and families of seasonal migrant farm workers. The centers are operated by the Redlands Christian Migrant Association (RCMA). As one of its central policies, RCMA hires former migrant workers as early-childhood educators. Thus, all of the teachers in the school have significant experience with the lives of migrant farm workers. RCMA provides these teachers with extensive in-service training in child development and early-childhood education. Further, they are supported by education coordinators who provide extensive assistance in planning the daily schedules, arranging the classrooms, and advancing the teachers' personal academic and professional goals.

#### *Sample*

The geographical area where we conducted the research had three early-child care and education centers. All the children were selected for participation. At

	Indoor structured play	Outdoor free play	Play in the home	Total Minutes
Boys	820	461	238	1,519
Girls	687	564	343	1,594
Total	1,507	1,025	581	3,113

*Note.* Male and female children were observed during play in three settings based on observation protocol developed by Sylva, Roy, and Painter (1980)

Figure 1. Total observation time (in minutes)

Sample characteristics	Percentage of sample
Born in Mexico	75%
Speak English well	0%
Speak a language other than Spanish	22%
Live in linguistically isolated families	37%
Live in poverty	30%
Live in basic-budget poverty	76%
Live in overcrowded housing	67%
Mixed citizenship within family	66%

*Note.* Demographic characteristics of participants and their families reveal a high incidence of poverty and overcrowded housing and a low level of English language proficiency.

Figure 2. Demographic profile

an initial parent-teacher conference, the researchers presented the study to parents and family members, where all questions were answered in both English and Spanish. Parents provided written consent, through the aid of classroom teachers, for each child who participated in the study. Researchers observed forty-one children, of which twenty-one were girls and twenty were boys. All the children were between four and five years of age. We divided the children into age-based cohorts. Most of the participants remained present throughout the study. The children who dropped out did so because their family moved away when strawberry-picking season came to a close. The researchers observed the children for a total of 3,113 minutes (see figure 1). The researchers observed the male participants for a total of 1,519 minutes (820 minutes during indoor struc-

tured play, 461 minutes during outdoor free play, and 238 minutes at home). The researchers observed the female participants for a total of 1,594 minutes (687 minutes during indoor structured play, 564 minutes during outdoor free play, and 343 minutes at home). Seventy-five percent of participants had been born in Mexico, 76 percent lived in basic budget poverty, and 37 percent lived in linguistically isolated families (see figure 2 for a demographic profile).

### *Parent Characteristics*

Migrant parents were employed in the harvesting of strawberries in the state of Florida at the time of data collection. After harvesting strawberries, the families moved either within Florida or up to Michigan to pick blueberries and cucumbers. From Michigan most families moved to Tennessee, then to North Carolina, and then back to Florida by September. Some families moved as far north as New York and New Jersey. Thus, in a given year, many of the families made a minimum of three interstate moves. The average family income varied with each family's ability to find harvesting assignments. The average farm worker earned \$1.25 for harvesting one tray (six quarts) of strawberries. In a typical day during the peak harvesting season, which lasted four to six weeks, a farm worker could pick about one hundred trays per day. Toward the end of the strawberry season, some farm workers picked no more than four to six trays per day. For this reason, assessing precise annual incomes for families proved a difficult process during the data collection phase. On average, parents reported an annual family income of \$15,000 to \$17,499.

All the participants were natives of Mexico and spoke Mixteco and some Spanish. Mixteco is spoken mainly in the western half of the state of Oaxaca, although some Mixteco communities extend into the neighboring states of Puebla and Guerrero. While Spanish and Mixteco are mutually unintelligible, we found that most of the families could understand and communicate in Spanish. However, they all reported basic fluency in speaking Spanish and limited fluency in reading and writing it. Parents were poorly educated. Forty-five percent reported no formal education at all. Others had attended some elementary school. Only 2 percent of the children came from families with parents who had graduated from high school in Mexico. None of the parents spoke fluent English.

### *Instrument for Data Collection*

The researchers conducted nonparticipant, time-sampled observations in school during free play. The study used the Target Child Method (Sylva, Roy, and Painter

1980) and an adapted version of the observation schedule developed by the Oxford Child Study group (1980). The Target Child Method objectively documents the overt behavior of children in routine classrooms, keeping running observations of daily activities. In addition to describing the children's behavior on paper, the researchers video taped all observation periods. These recordings allowed the researchers to capture behaviors they could not record in the field. Video recordings also served to validate their written observations. Two researchers coded observational data. Interobserver agreement proved to be 92 percent, and interobserver reliability was 87 percent.

### **Description of Dimensions of Play**

The study reviewed three dimensions of children's play: cognitive tasks, social interactions, and uses of preferred language. The cognitive tasks explored seven variables.

The first required academic and computer-mediated learning of play, which included attempts at reading, writing, or counting. The second, large muscle movement covered exercises such as running, jumping, or swinging. Waiting, the third variable, consisted of behaviors such as watching, standing aimlessly, purposeful movement while searching for something to do, and engaging in verbal and nonverbal social interactions other than play. The fourth variable, music and art, entailed play that demonstrated creative free expression—painting, drawing, listening to sounds, singing, dancing, or playing an instrument. Examination, the next variable, involved the inspection of objects and materials and the use of manual skills needed to manipulate them, which meant engaging the hands, arms, and the senses. The sixth category included play involving both large- and small-scale construction and the use of structured materials and scale version toys. And the final category consisted of several kinds of engagement—passive adult-led group activities, active adult-directed activities, problem solving, informal games, games with rules, nonsocial behavior, playful social interaction, distressing behavior, purposeful movement, and domestic activities and clean-up after these domestic activities had concluded.

In noting the social interactions of the children at play, we examined six variables. The first, solitary play, included a child playing alone or next to another child without any significant involvement from others. The second, pair interactions, involved the play interactions of a target child and another child or adult.

Small group play made up the third variable and included groups of three or four children. Large group play, the fourth category, consisted of groups of five or more children. The fifth variable, the adult overseeing variable, alludes to the intervention of adults in children's play from a distance. (They might shout instructions that were often ignored, for example—parents often shouting such instructions as: "Go slow!" Or "Be careful!" The adults often seemed to get involved to remind their children that they were watching and available if needed.) Our last variable, which we coded adult redirection-interference, covered interruptions of the children's play in ways that significantly altered it. In one instance, the children in the block area were racing cars, although a teacher was suggesting that they participate in a birthday party. An adult intervention like this changed the theme of the children's play and resulted in their assuming new roles in their play.

For the languages the children used, we examined as variables "conversation in English" when the talk during play took place in English, "conversation in Spanish" when it took place in Spanish, and "no conversation" when the play involved no verbal exchanges.

## Results

The objectives of our study were to explore gender differences among preschool-aged (four to five years) migrant children. We studied three dimensions—cognitive tasks, social groupings, and language preferences—during play in both school and home environments. In keeping with the existing research on gender differences in the play of young children, we expected to see a significant gender difference in all three dimensions of play. We hypothesized that the setting in which play occurs would highlight gender differences in play behavior. We computed the means and standard deviations for both sexes for each variable (see figure 3, figure 4, and figure 5). We conducted independent t-tests and multivariate analyses of variance to assess gender differences in children's play across the three dimensions of cognitive tasks, social interaction, and dominant language and the three settings of indoor structured play, outdoor free play, and play at home.

Figure 3 represents gender-specific means and standard deviations for each variable within the cognitive task dimension (see figure 3). Figure 6 illustrates the mean percentage of time boys and girls spent engaged in each cognitive task

	Male		Female	
	M	SD	M	SD
<b>Cognitive task, indoor structured play</b>				
Academic and computer mediated learning	15.62	26.84	10.80	23.42
Large muscle movement	1.25	4.49	0.26	1.15
Waiting	17.06	20.00	10.75	12.54
Music and art	13.47	28.28	17.87	30.93
Pretend play	15.07	23.06	21.78	31.28
Examination	5.94	13.29	3.63	12.57
Other	31.60	29.80	34.91	29.09
<b>Cognitive task, outdoor free play</b>				
Academic and computer mediated learning	5.51	21.33	0.00	0.00
Large muscle movement	29.83	31.58	33.76	30.83
Waiting	33.29	33.29	19.13	19.13
Music and art	0.19	0.19	2.31	2.31
Pretend play	1.83	1.83	10.96	10.96
Examination	8.21	8.21	14.56	14.56
Other	21.14	21.14	19.27	19.27
<b>Cognitive task, play in the home</b>				
Academic and computer mediated learning	0.83	0.83	8.33	8.33
Large muscle movement	12.62	12.62	20.56	20.56
Waiting	20.95	20.95	23.33	23.33
Music and art	0.00	0.00	13.89	13.89
Pretend play	38.21	38.21	12.78	12.78
Examination	8.47	8.47	2.78	2.78
Other	18.91	18.91	18.33	18.33

*Note.* Mean percentage of time spent engaged in cognitive tasks by gender-specific group in three settings. There were no significant gender differences found among cognitive task variables in the indoor structured play, outdoor free play, or play in the home settings.

Figure 3. Gender differences in cognitive tasks

during indoor structured play, and it shows no significant gender difference in cognitive tasks in indoor structured play (see figure 6). Similarly, figure 7 illustrates the mean percentage of time spent by boys and girls in each cognitive task during outdoor free play, and the analysis shows no significant gender difference

	<u>Male</u>		<u>Female</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<hr/>				
Social interaction, indoor structured play				
Solitary play	25.95	23.31	26.09	28.86
Pair play	25.01	25.12	33.95	32.45
Small group play	10.31	12.12	10.76	19.91
Large group play	2.58	7.54	7.15	15.15
Adult overseeing play	33.34	37.56	16.86	28.76
Adult interrupting play	2.82	6.24	5.20	13.51
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Social interaction, outdoor free play				
Solitary play	42.11	31.55	39.38	34.04
Pair play	19.31	19.14	23.97	26.35
Small group play	13.71	18.36	13.87	18.00
Large group play	2.15	5.10	2.13	6.10
Adult overseeing play	21.04	19.98	18.71	27.23
Adult interrupting play	1.68	4.97	1.95	5.68
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Social interaction, play in the home				
Solitary play	60.83	32.10	48.97	40.00
Pair play	27.73	29.55	40.62	39.43
Small group play	1.25	2.09	0.00	0.00
Large group play	0.00	0.00	4.59	10.46
Adult overseeing play	10.19	18.61	5.82	18.28
Adult interrupting play	0.00	0.00	0.00	0.00
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<i>Note.</i> Mean percentage of time spent engaged in social interactions by gender-specific group in three settings. There were no significant gender differences found among social interaction variables in the indoor structured play, outdoor free play, or play in the home settings.				

Figure 4. Gender differences in social interactions

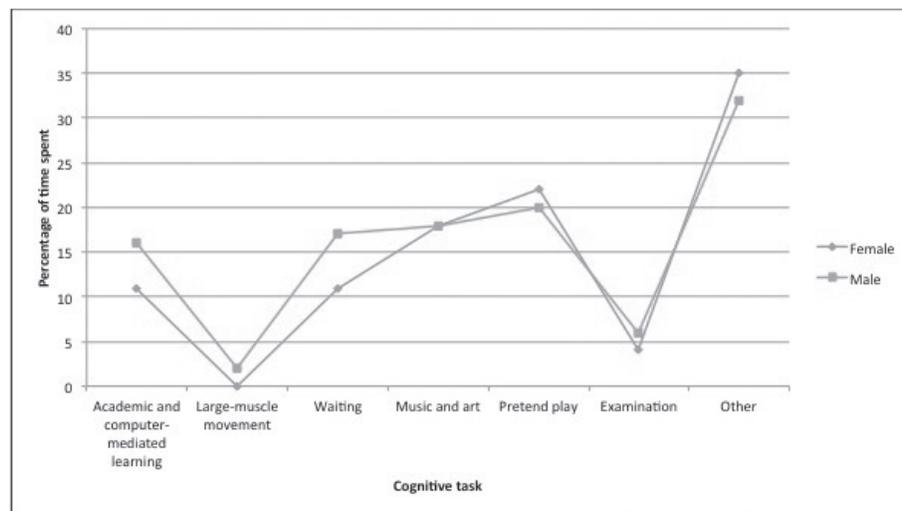
in cognitive tasks in outdoor free play (see figure 7). Finally, figure 8 illustrates the mean percentage of time boys and girls spent engaged in each cognitive task during play at home, and the analysis shows no significant gender difference in cognitive tasks in play at home (see figure 8). Our hypothesis that there is statistically significant gender differences in the time spent on various cognitive tasks was not substantiated in the analysis of our study's results.

Figure 4 represents gender-specific means and standard deviations for each

Language used, indoor structured play	Male		Female	
	M	SD	M	SD
No conversation	55.20	20.90	46.21	28.82
English	20.43	23.28	25.60	34.36
Spanish	24.37	22.71	28.19	29.83
Language used, outdoor free play				
No conversation	63.09	23.01	55.26	28.36
English	12.29	12.88	17.75	27.84
Spanish	23.08	23.51	27.00	26.54
Language used, play in the home				
No conversation	71.79	26.36	65.71	30.12
English	6.35	9.12	3.64	7.10
Spanish	21.87	29.28	30.65	33.2

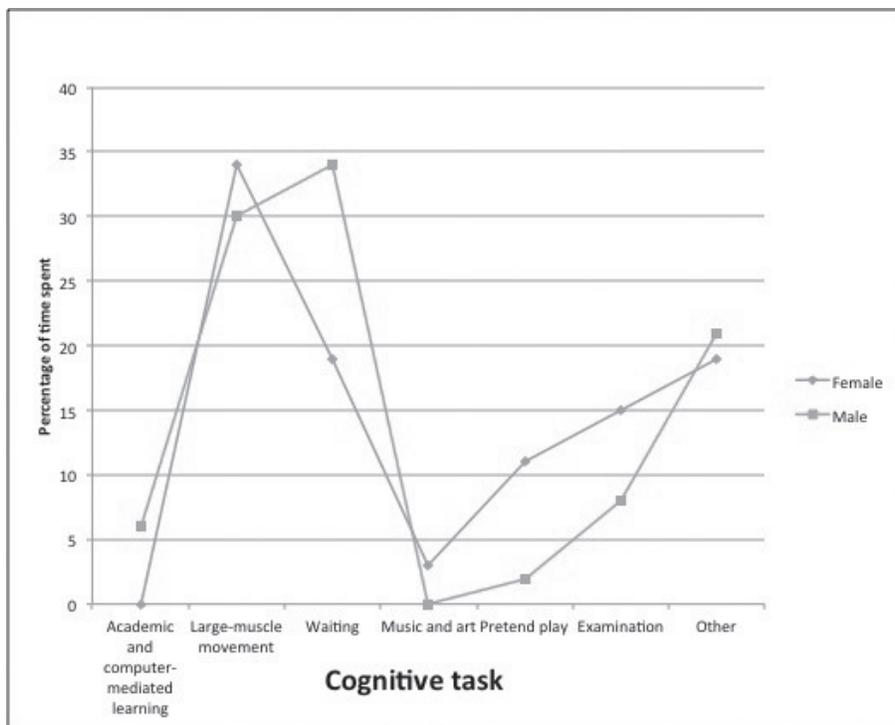
Note. Mean percentage of time spent in use of language by gender-specific group in three settings. There were no significant gender differences found among dominant language variables in the indoor structured play, outdoor free play, or play in the home settings.

Figure 5. Gender differences in preferred language



Note. No significant gender differences were found in cognitive tasks during indoor structured play.

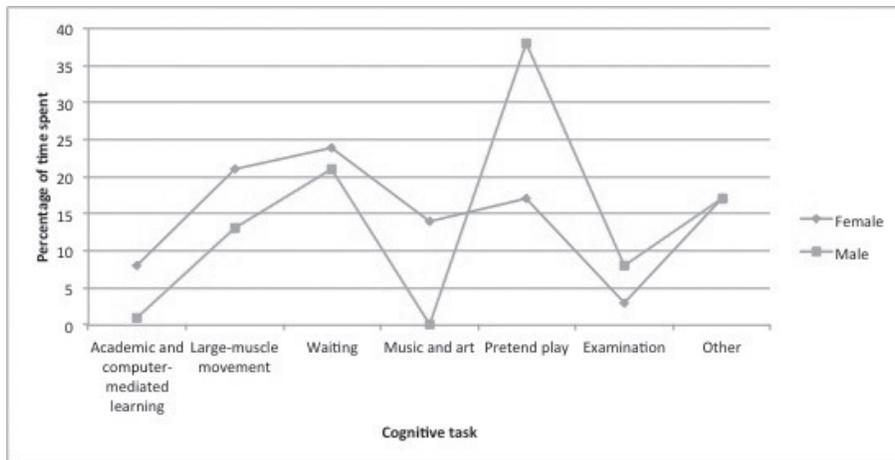
Figure 6. Mean percentage of time spent engaged in cognitive-task activity indoors by gender-specific group



Note. No significant gender differences were found in cognitive tasks during outdoor free play. Though not statistically significant, the 10% gap between girls and boys in the use of “pretend” during free play is intriguing and should be analyzed further through qualitative research.

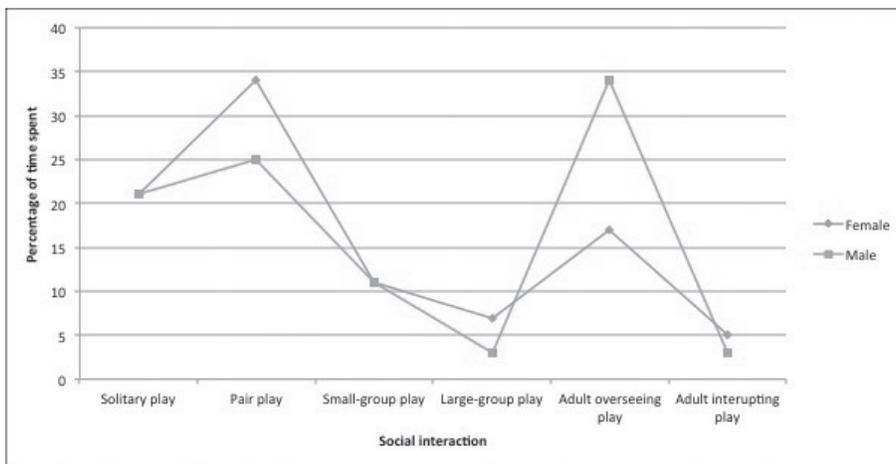
Figure 7. Mean percentage of time spent engaged in cognitive-task activity outdoors by gender-specific group

variable within the social interaction dimension (see figure 4). Figure 9 illustrates the mean percentage of time boys and girls spent engaged in each type of social interaction during indoor structured play, and the analysis shows no significant gender difference in social interaction in indoor structured play (see figure 9). Similarly, Figure 10 illustrates the mean percentage of time boys and girls spent engaged in each type of social interaction during outdoor free play, and the analysis shows no significant gender difference in social interaction in outdoor free play (see figure 10). Finally, figure 11 illustrates the mean percentage of time boys and girls spent engaged in each type of social interaction during play at home and shows no significant gender difference in social interaction in



Note. No significant gender differences were found in cognitive tasks during play in the home.

Figure 8. Mean percentage of time spent engaged in cognitive-task activity in the home by gender-specific group



Note. No significant gender differences were found in social interactions during indoor structured play.

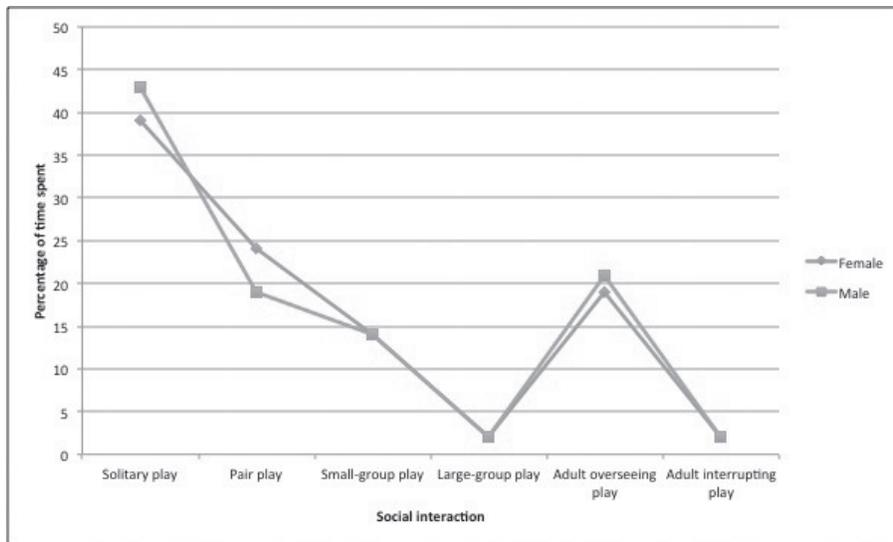
Figure 9. Mean percentage of time spent engaged in social interactions indoors by gender-specific group

the play at home (see figure 11). Thus, the hypothesis that there is statistically significant gender differences in the time spent on social interactions indoors and outdoors was not substantiated.

Figure 5 represents gender-specific means and standard deviations for each variable within the dominant language dimension (see figure 5). Figure 12 illustrates the mean percentage of time boys and girls spent in the use of language during indoor structured play. The analysis shows no significant gender difference in the dominant language used in the indoor structured play (see figure 12). Figure 13 illustrates the mean percentage of time boys and girls spent in the use of language during outdoor free play and shows no significant gender difference in the dominant language used in outdoor free play (see figure 13). Figure 14 illustrates the mean percentage of time boys and girls spent in the use of language during play at home and shows no significant gender difference in the dominant language used in play at home (see figure 14). Thus, the hypothesis that there are statistically significant gender differences in the language used by children from migrant homes in various contexts was not substantiated.

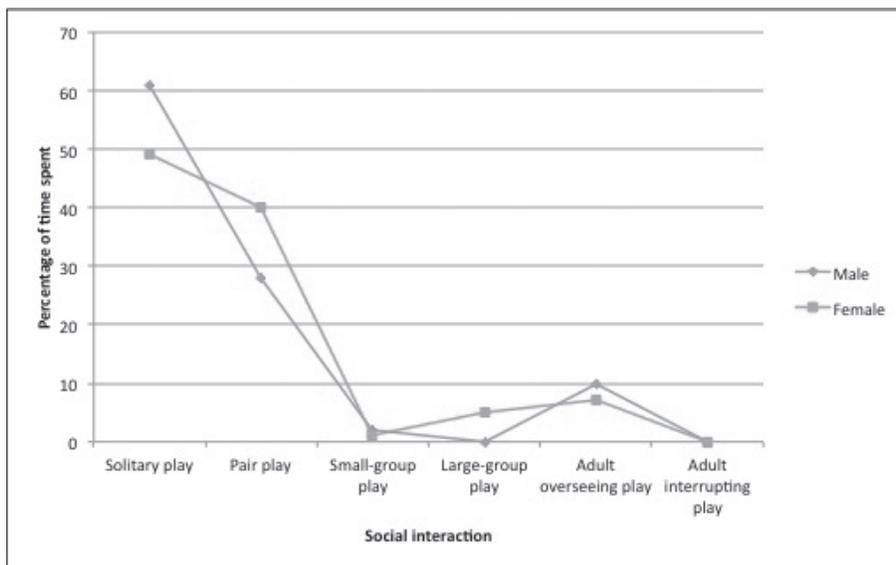
Multivariate analyses of variance (MANOVA) yielded no statistically significant gender differences among the three dimensions within each of the three settings (see figure 15). No significant gender differences were found among the cognitive task ( $N = 39$ , Hotelling's  $T$ ,  $F(7, 31) = 0.75$ ,  $p = .64$ ), social interaction ( $N = 39$ , Hotelling's  $T$ ,  $F(6, 32) = 1.18$ ,  $p = .34$ ), and dominant language ( $N = 39$ , Hotelling's  $T$ ,  $F(3, 35) = 0.60$ ,  $p = .62$ ) variables in indoor structured play. In addition, no significant gender differences were found among the cognitive task ( $N = 32$ , Hotelling's  $T$ ,  $F(7, 24) = 1.26$ ,  $p = .31$ ), social interaction ( $N = 33$ , Hotelling's  $T$ ,  $F(6, 26) = 0.20$ ,  $p = .97$ ), and dominant language ( $N = 33$ , Hotelling's  $T$ ,  $F(3, 29) = 0.48$ ,  $p = .70$ ) variables in outdoor free play. And, finally, no significant gender differences were found among the cognitive task ( $N = 15$ , Hotelling's  $T$ ,  $F(7, 7) = 0.83$ ,  $p = .60$ ), social interaction ( $N = 17$ , Hotelling's  $T$ ,  $F(5, 11) = 1.12$ ,  $p = .41$ ), and dominant language ( $N = 17$ , Hotelling's  $T$ ,  $F(3, 13) = 0.14$ ,  $p = .94$ ) variables in play at home. Thus, a MANOVA of the results of the study reiterate the finding that none of the hypotheses about the existence of gender difference was substantiated.

The results of the study revealed that the children exhibited no statistically significant gender differences in their play activities in any of the three settings. The data suggests that the play of preschool aged (four to five years) migrant boys and girls is noteworthy, in that no statistically significant gender differences in play were observed among this unique sample.



Note. No significant gender differences were found in social interactions during outdoor free play.

Figure 10. Mean percentage of time spent engaged in social interactions outdoors by gender-specific group



Note. No significant gender differences were found in social interactions during play in the home.

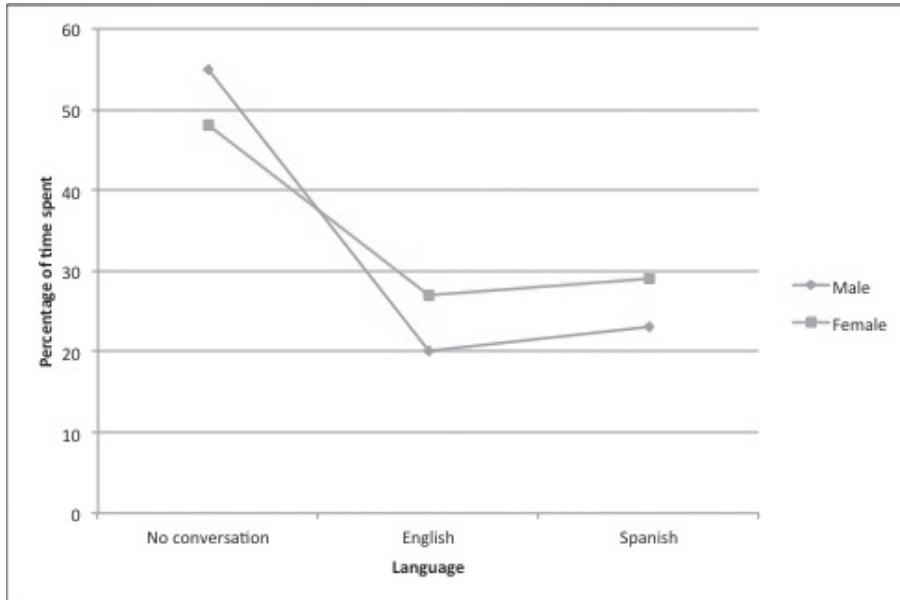
Figure 11. Mean percentage of time spent engaged in social interactions in the home by gender-specific group

## Discussion

Statistical analysis of the data from this study did not substantiate the hypotheses that there are gender differences in the frequency of different behaviors exhibited by four-year-old children who come from seasonal farm-worker families residing in Florida. The data analyzed was gathered in both the school and home environments and during indoor and outdoor play. The areas explored were cognitive activities, social relations, and language usage. A statistically significant result was not found in any of the sample of behaviors examined that related to gender differences. It could be that the methodology used for the study masked gender differences in play behaviors. The more tantalizing hypothesis is that this sample of preschool children is different from other Mexican American groups and American mainstream communities.

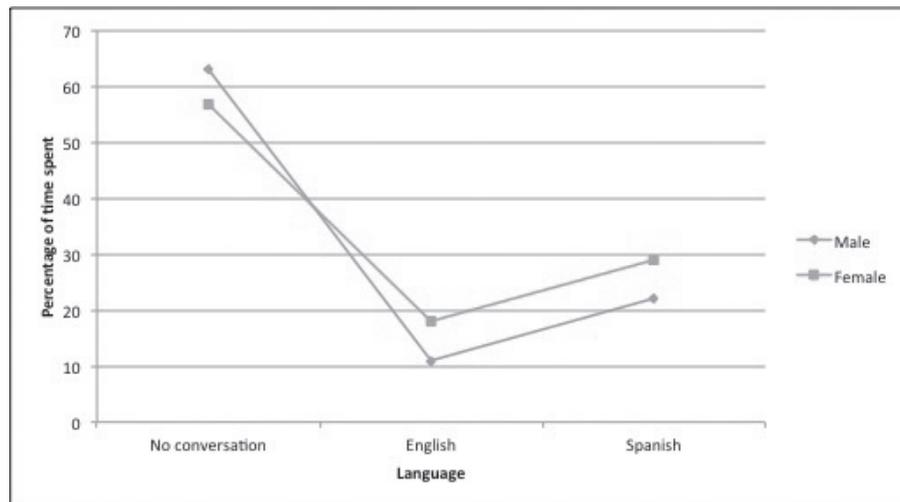
Prior research about the cultural history of the Chicano community had established large gender differences in play, work, and family life (Andrews and Shahrokni 2014). There is some evidence that the gender differences within immigrant communities is greater than that of mainstream or dominant groups simply because of the new environment in which the families find themselves (Taş, Reimão and Orlando 2014). McCabe and her colleagues (2013) had demonstrated that children's play in Mexico was deeply divided by gender. Girls were allowed less independence. They enjoyed fewer opportunities to engage in cognitively challenging tasks. And they felt a greater level of threat when they engaged in unsupervised play. In Mexican culture, the ideas surrounding masculine behavior dictate that boys engage in active assertive play and that girls practice their role as mothers and homemakers (Maternowska, Withers, and Brindis 2014). One recent study revealed that even when jobs required similar skills, second-generation Mexican American teens divided along gender lines in choosing occupations (Hernández-León and Lakhani 2013).

Although the results of this study may not provide evidence of gender differences using the frequency of behaviors exhibited, a more detailed exploration of the life circumstances of other extremely marginalized groups may provide a clue about what makes them different from other Mexican communities in Mexico or from groups that have migrated to the United States. There have been a number of studies that point to a minimal gender role differentiation among African American families living in poverty (Grange, Brubaker, and Corneille 2011; Leavell et al. 2012). Hill (2006) writes about the influence of the history of slavery on gender roles among the African American community in the United



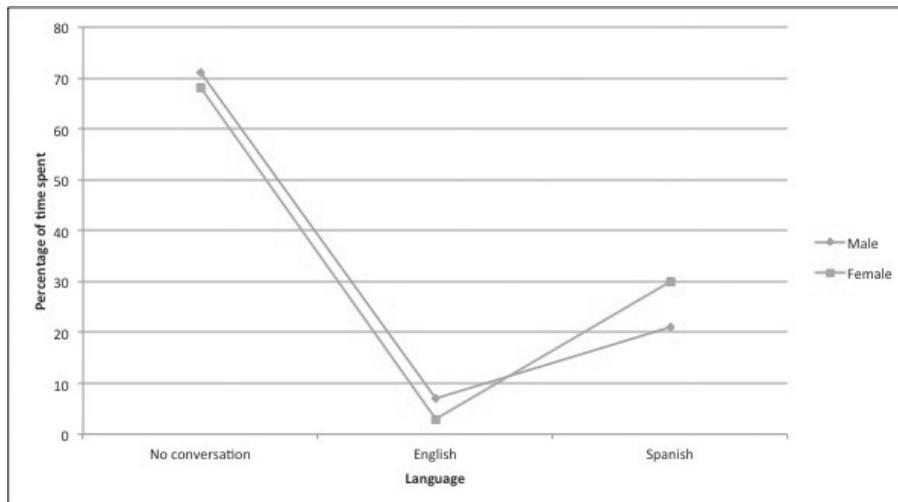
Note. No significant gender differences were found in dominant language used during indoor structured play.

Figure 12. Mean percentage of time spent in use of language indoors by gender-specific group



Note. No significant gender differences were found in dominant language used during outdoor free play.

Figure 13. Mean percentage of time spent in use of language outdoors by gender-specific group



*Note.* No significant gender differences were found in dominant language used during play in the home. The lack of use of English at home warrants further qualitative research in the future.

Figure 14. Mean percentage of time spent in use of language in the home by gender-specific group

States. The splintering of the African American family and the increase in the number of African American families headed by women on their own led the community to rethink gender roles inside and outside the home.

In one study among displaced Nigerian children, no gender differences existed in the manifestation of aggression among the children (Ogwo 2013). In Sudan, women have used displacement as a period to transform and reconfigure gender roles in their communities (Grabska 2013). Similarly, Iranian immigrant men in Sweden undertook a reexamination of their masculine roles (Kosravi 2009). A more recent study revealed that Mexican children whose mothers had migrated to the United States exhibited higher academic motivation (Dreby and Stuz 2012). The authors of these various studies mentioned that violence and social dislocation upset traditional notions of gender roles.

Families of migrant workers from Mexico often became similarly displaced and divided. In many cases, women with children migrate by themselves to send money home (Contreras and Griffith 2012; Cos-Montiel 2008). Other studies seem to suggest that along with immigration and the resulting change in gen-

Settings	Cognitive task	Language	Social interaction
Indoor	$F(7, 31) = 0.75, p = .64$	$F(3, 35) = 0.60, p = .62$	$F(6, 32) = 1.18, p = .34$
Outdoor	$F(7, 24) = 1.26, p = .31$	$F(3, 29) = 0.48, p = .70$	$F(6, 26) = 0.20, p = .97$
At home	$F(7, 7) = 0.83, p = .60$	$F(3, 13) = 0.14, p = .94$	$F(5, 11) = 1.12, p = .41$

*Note.* Multivariate analyses of variance yielded no statistically significant gender differences among the three dimensions (cognitive task, dominant language, and social interaction) within each of the three settings (indoor structured play, outdoor free play, and play in the home).

Figure 15. Main effect of gender

dered power relationships comes increasing tension between the old and new values (Grzywacz et al.2009). Being an undocumented immigrant in this country brings its own loss of self-esteem and sense of masculinity for men. In one study, the author reported that masculinity was affirmed among the minute-men of Texas by the act of hunting down undocumented immigrants in the border regions (Castro 2007). It stands to reason that gender roles and sex-related responsibilities fall into doubt among those who cross borders unlawfully and are forced into a life of legal invisibility.

In migrant communities, children's observations within their micro-environments—environments in which both parents have similar educational backgrounds, work in difficult jobs consisting of similar manual labor activities, leave for and return from work at the same time, and share similar household duties with little time for gender-specific leisure activities—also undermine gender differentiation (Sana and Massey 2007). In many cases, children take over the roles that parents traditionally perform inside and outside the home further undermining traditional gender roles.

The teacher-training programs at RCMA may add to the reexamination of gender roles that the family unit might be going through. Part of the RCMA training places value on gender equity and encourages teachers to implement gender-neutral activities. Intensive in-service workshops offered to teachers at RCMA may have highlighted the value of gender equity in classroom interactions and created sensitivity in the teachers. Thus, it is possible that preschool-aged migrant children do not express gender-stereotyped play behaviors.

Areas of interest that may warrant further qualitative research include the interesting, though not statistically significant, differences that seemed to crop up within our data from time to time. For example, the extra attention teach-

ers afforded boys during play is intriguing, as well as the fact that girls seem to exhibit more early English language skills than boys at school, but this capacity apparently disappears at home, where neither parent is English language proficient.

### Limitations and Future Research Prospects

This article presents data obtained from nonparticipant time-sampled observations for a total of 3,113 minutes in three early-childhood centers for migrant children. A larger sample using probability sampling methods would provide more robust insights with respect to gender differences in children's play. This study did not capture clear conversations during play. Sensitive audio recorders strategically placed in the environment may rectify this issue and lead to a deeper analysis of the complex language used by children. The investigators acknowledge the challenge of documenting complex language during nonparticipant observation in unstructured play environments. Further, parent and teacher interviews may add important insights into gender-based socialization. A longitudinal study that scopes the ecological environments of play behavior would be useful. It would not only indicate clearly when overt expression of gender differences emerge in migrant children but also shed light on where and how migrant children imbibe messages related to acceptable gender roles.

This study gives rise to additional areas of inquiry related to play behaviors of migrant children. At what age does gender differentiation emerge in this group of young learners? How will this lack of gendered play activities impact the students as they enter mainstream classrooms with other students who have previously adopted gender-differentiated play behaviors? What implications might these findings have for professional development programs for early-childhood educators? Finally, the findings of this study may be useful when designing professional development experiences for early-childhood educators and parents.

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