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Abstract

This study is an examination of preschool-age English speaking children’s interactive play behaviors with a non-English speaking child (NEC). The play types of a NEC were reported using the Parten’s categories of solitary, parallel, and interactive play. In addition, English-speaking children’s interactive play with a non-English speaking child were reported in this study using categories of affiliative, possession-related, prosocial, and aggressive behavior from Ramsey’s 1987 study.

Key Words: play types, play behaviors, interactive play, children’s interactions, non-English speaking child’s play
Play is a natural activity that provides children with authentic opportunities to construct their knowledge about the world. That play enhances and promotes children’s whole development, including physical, social, emotional, cognitive, and language development, has been documented in-depth (Bredekamp & Copple, 1997; Heuting, Bridges & Woodson, 2002; Hughes, 1995; Morrison, 2001; Saracho & Spodek, 1995). These studies have shown that children’s social play increases when they are enrolled in early childhood programs such as preschools, nursery schools, and child care centers. In the United States (U.S.) about 37% of three-year-olds, 58% of four-year-olds, and 90% of five-year-olds attend early childhood programs in the U.S. (U.S. Census Bureau, 2005). As children attend these programs, their major social agents begin to gradually shift from parents to peers and they create social dynamics as part of their play activities (Fabes et.al., 2003; Shim, Herwig & Shelley, 2002). These social dynamics are formed by children interacting among themselves. For example, as children organize rules or groups in the context of play, they formulate hidden or explicitly stated regulations by which other children can access the play group.

Studies have shown that children typically prefer to play with peers who are similar to themselves with regard to characteristics such as age (Winsler, 1993), gender (Feng et al., 2004; Mastern & Coatworth, 1998), language (DeKroon, Kyte & Johnson, 2002; Fujiki, Brinton & Summers, 2001), and race or ethnicity (Graham & Cohen, 2001; Howes & Wu, 2004). Children as young as two and a half years of age show discomfort with physical differences (Derman-Sparks & the A.B.C. Task Force, 1989).

Taking these behaviors into consideration, it is understandable that many non-English speaking children have social difficulties with English-speaking peers due to
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their lack of English proficiency. Children tend to interact differently with English
learning peers than with English-speaking peers (Brinton & Fujiki, 1999; Fujiki, Brinston
in a non-punitive manner more frequently with peers who are similar to themselves than
with those who are not. Studies have shown that children with language problems can
experience isolation in a classroom setting and children of a linguistic minority frequently
build a loose pupil network and are maladjusted with peers in their classrooms (Coplan,
2001; Feng et al., 2004; McCay & Keyes, 2001). This fact is of considerable importance
as the number of immigrant families in U.S. society rapidly increases.

According to the most recent census data, approximately 34.2 million foreign-
born individuals lived in the U.S. at the beginning of 2004 (U.S. Census Bureau, 2005).
This figure represents an estimated 12% of the American population, up from 10.8% in
1990. Of these individuals, 14 million were children under the age of nine (U.S. Census
Bureau). The number of foreign-born children and children of recent immigrants has
continuously increased. To respond to this changing demographic, it has become
necessary for teachers to provide young children with a more responsive and sensitive
learning environment while promoting appropriate social interactions in children’s play,
especially when cultural and language differences exist among the children.

Though the number of English Learning Learners (ELLs) has been increasing,
very few researchers have focused on how native English-speaking children interact with
ELLs who lack the ability to express their feelings in English (Feng et al., 2004).
Therefore, in this study, we observed a preschool classroom to investigate what types of
play a non-English speaking child engaged in, and how English-speaking children interacted with this non-English speaking child during indoor and outdoor free play time.

**Conceptual Framework**

The major conceptual framework in this study is based on the work of Parten (1932) and Ramsey (1987). Parten’s work has been used by many educators to describe children’s social behaviors during play. His classification of play is a classical model with six types of play behaviors: unoccupied behavior, onlooker behavior, solitary behavior, parallel group activity, associative group play, and organized/cooperative play. Although Parten’s categories are not the most exhaustive ways to classify children’s social play, but they fit most closely within the boundaries of this research study in two ways; we are studying young children aged two to age five, and his categories of child's play form a meaningful framework within which to examine the increasing social maturity of the child. In addition, the children could easily observe playing according to the categories.

Parten’s categories of children’s social play have been frequently used then. The categories are widely accepted by other researchers in their studies (Hartup, 2000; Harrison, 1990; Hughes, 1995; Ladd, 2000; Masten & Coatworth, 1998; Saracho & Spodek, 1995; Shim et al, 2002; Winsler, 1993).

For the purpose of this study, which is to investigate children’s social play behaviors, we adopted three types of play - solitary, parallel, and interactive - based on Parten’s classifications. Solitary play was defined as playing alone with no other children playing within speaking distance. Parallel play was defined as children’s independent play which did involve social interactions between children. In another words, children
play independently, within speaking distance but without making any effort at social interaction. Interactive play involved, “verbal or physical exchanges between two or more children, in which the participants demonstrated awareness of the other(s)’s presence” (Parten, p. 318). Parten’s detractors most often take issue with his categories related to solitary play. In this study, we focused almost exclusively on the categories of interactive play which have not been as criticized.

In this present study, we adopted Ramsey’s conceptual framework to further investigate children’s interactive play. Ramsey (1987) classified children’s interactive play into four categories: possession-related behaviors, affiliative behaviors, prosocial-behaviors, and aggressive behaviors. The operational terms were defined by Ramsey’s as follows:

Possession-related behaviors included any verbal or physical attempts to gain or maintain exclusive access to an object, space, or person; affiliative behaviors involved children’s behaviors initiating (e.g., greeting or inviting to play together) and expanding social interactions (e.g., responding to others’ suggestions or collaborative works); prosocial behavior included “overt expressions of concern for others” such as helping, comforting, and giving toys; [and] aggressive behaviors included verbal and physical attempts to injure or intimidate another person (p. 318-319).

Figure 1 presents a major conceptual framework of this study.
Methodology

Participants

The participants in this study were 15 three- to four-year-old children enrolled at the beginning of the year in a university childcare center. Participants were composed of 11 Caucasians, two African Americans, one Asian American, and one Asian immigrant, a boy aged 4 who had immigrated to the U.S. from China approximately six months before the research study was undertaken. This child was designated as the focal point of this study and labeled the Non-English Speaking Child (NEC). The NEC had no prior experience with the American educational environment before enrollment in university childcare. In addition, the NEC’s family communicated exclusively in Chinese at home. The NEC, and any child who interacted with him, were targeted for observational data in the study.
Data Collection Procedures

The focus of this study was the NEC’s play and children who interacted with him. For the purpose of the study, we videotaped children who interacted with the NEC during periods of indoor and outdoor free play. We set up the video camera in a hidden spot to observe the children’s interactions in a naturalistic environment stayed by the camera to make certain the NEC and whoever interacted with the him were taped at all the times. Since the classroom setting was a university laboratory school, children were accustomed to seeing either university students or faculty/staff members. This helped researchers conduct observations and videotaping of the children’s interactions in a more naturalistic setting. The NEC usually stayed in one or two play centers.

We videotaped the NEC, and any child who interacted with him for 15 days. Each videotaped session lasted approximately 20 to 30 minutes. A total of 326 minutes of videotaped data was ultimately collected. We transcribed 15 video-clips of 30-second intervals using the video-camera time device.

Data Analysis Procedures

Of the 326 minutes of transcribed observational data, 71 minutes of observational content that included the NEC interacting with untargeted subjects, such as faculty or staffs, university students, or adults were excluded. Using a 30-second interval time sampling (30 sec = 1 frequency) a total of 255 minutes (510 frequencies) were analyzed in this study. We independently analyzed the NEC’s play using play type category (e.g., solitary, parallel, or interactive play) and further analyzed his interactive play behaviors using Ramsey’s theoretical frameworks (e.g., possession-related, affiliative, prosocial, or aggressive behavior). After categorizing both the NEC’s play types and categories of
children’s interactive play behaviors with the NEC, we calculated agreement rates. When we could not come to a consensus in relation to either the NEC’s play types or the types of children’s interactive play behavior with the NEC, we resolved the issue through discussion.

*Coding Agreement of Boy’s Play Type*

Agreement rates were calculated by dividing the number of agreements in coding designations with the sum of agreements and disagreements. Our coding agreement rate when determining the types of play in which the NEC engaged (e.g., solitary, parallel, and interactive) was 92% (agreements/sum of disagreements and agreements x 100). To ensure the significance of agreement rates among the three researchers, Pearson correlations were performed in which the agreement rates of a researcher were partialled out. Researcher 1’s and Researcher 2’s ratings remained highly correlated when Researcher 3 were partialled out, $r (13) = .94, p < 0.01$. Researchers 1’s and Researcher 3’s ratings were highly correlated when Researcher 2’s were partialled out, $r (13) = .95, p < 0.01$. Researchers 2’s and 3’s ratings remained highly correlated when Researcher 1 was partialled out, $r (13) = .95, p < 0.01$.

*Coding Agreement of Children’s Interactive Play Behaviors*

Researchers’ coding agreement rates were determined by classifying determining the behaviors of the children when engaging in interactive play with the NEC (e.g., possession-related, affiliative, prosocial, and aggressive behaviors) and showed an 84% agreement (number of agreements determining children’s interactive behaviors/total sum of agreements and disagreements determining children interactive behavior x 100). To ensure the significance of agreements rates among the three researchers, Pearson
correlations were performed in which the agreement rates of each researcher were partialled out. Researcher 1’s and Researcher 2’s agreement rates were highly correlated when Researcher 3 was partialled out, $r (13) = .79, p < 0.01$. The correlation between Researchers 1 and 3 was significant when Researcher 2 was partialled out, $r (13) = .82, p < 0.01$. When Researcher 1 was partialled out, the correlation between Researchers 2 and 3 remained significant, $r (13) = .83, p < 0.01$.

Results

Types of a NEC’s Play

Types of the NEC’s play were analyzed using percentage (number of targeted play type/sum of solitary, parallel, and interactive play × 100). The NEC’s play was composed of 29% ($f = 148$) solitary play, 46% ($f = 230$) parallel play, and 24% ($f = 124$) interactive play.

Figure 2: Frequency of NEC’s Play Type

Type of Children’s Interactive Play Behaviors towards the NEC

Interactive play ($f = 124$) was further analyzed using Ramsey’s (1987) categories of children’s interactive play behaviors (e.g., possession-related, affiliative, prosocial, and
aggressive behaviors). The percentages of children’s interactive play behaviors were calculated using the following formula: targeted interactive play behavior (possession-related, affiliative, prosocial, or aggressive behavior)/sum of interactive play behaviors (sum of affiliative, possession-related, prosocial, and aggressive behavior) x 100.

Children’s interactive play behaviors with the NEC consisted of 62% possession-related ($f = 76$), 16% affiliative ($f = 20$), 3% prosocial ($f = 4$), and 19% aggressive behaviors ($f = 24$). Study results, with some example episodes for each play behavior, are detailed in the following

Figure 3: Frequency of Children’s Interactive Behaviors with a NEC
Possession-Related Behaviors

Sixty-two percent of possession-related behaviors \( (f = 76) \) occurred during interactive play between the NEC and the other children. Possession-related behaviors observed in this study involved asking for toys from the NEC, exchanging toys with or without the NEC’s permission, and taking toys with or without permission from the NEC. Following are some of the examples of the observed possession-relation behaviors occurred during play sessions.

**Episode 1**

(NEC is sitting at sand area scooping sand with a scooper and spoon. Child 1 is standing by him and looking at him).

Child 1: (Sits down by the NEC, give the NEC a container and takes the scooper from his hand. Child 1 scoops sand and put it in the container Child 1 just gave the NEC. Child 1 hands over the scooper to the NEC). I need mine [container] back.

**Episode 2**

The NEC is playing with Lego blocks at manipulative area. There are two other children playing at the area.

Child 2: (building a tower) I need more red [blocks]. (Looks at the NEC and points at the red block). Can I have that one?

(NEC nods and hands over a red block to child 2).

Child 2: (taking the block from the NEC) Thank you.
**Episode 3**

(NEC is playing at housekeeping holding a pan and shaking it up and down pretending to cook).

Child 3: (comes to housekeeping area and stares at the NEC for a few seconds). This is mine (Child 3 is takes the pan from the NEC, holding the pan and shaking it up and down, pretending to cook).

(NEC looks at Child 3 for few seconds and leaves the area).

**Affiliative Behaviors**

Sixteen percent of affiliative-related behaviors ($f = 20$) occurred during interactive play between the NEC and other children. Observed affiliative behaviors in this study included greetings (e.g., “hi,” “hello,” “how are you?”), asking questions (e.g., “What is your favorite animal?” “What is your?” “What are you making?”), suggesting or commanding (e.g., “You can put that away,” “Pick it up.”), expressing one’s feelings (e.g., “Wow, I like it!”), and explaining one’s work (e.g., “Look, what I made,” “Watch mine”). Episodes 4 and 5 are the observed children’s affiliative behaviors with the NEC.

**Episode 4**

(NEC and Child 4 are in block area).

Child 4: (stacking up the unit blocks). Look at this.

(NEC looks at Child 4’s blocks and smiles at him).

Child 4: (looking at the NEC). What are you making? Are you making a house?

(The NEC nods looks at Child 4).

Child 4: I like it. Can I play with you?
(NEC looks at Child 4 and hands over a block to Child 4).

Child 4: Thank you.

*Episode 5*

(NEC is at manipulative table).

Child 5: (passing by the table.) Hi, (using the boy’s name). What are you doing?

(NEC looks at Child 5 and the boy continues matching puzzle pieces).

Child 5: (sits by the boy and points to a puzzle piece). Put this there (pointing at the puzzle frame).

(The boy picks up the puzzle piece that Child 5 pointed and puts in the place Child 5 showed him).

*Prosocial Behaviors*

Three percent of prosocial behaviors ($f = 4$) were observed during interactive play between the NEC and other children. This category involved any verbal and physical expressions of children’s intent to help the NEC (e.g., “Is this what you need?” while handing a puzzle piece to the NEC, or “Do you need a box?”). Episode 6 and 7 illustrate prosocial behaviors.

*Episode 6*

Teacher: (turns the light off and on) Clean-up time!

(NEC is sitting at manipulative area and matching puzzle pieces).

Child 6: (comes to the boy.) It’s clean-up time. (Child 6 hands over a container to the NEC). “A,” clean-up time!

(NEC picks up the puzzle pieces and puts them back in the container).
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Child 6: Nice. (Child 6 also picks up the puzzle pieces and put them back in the container).

*Episode 7*

(NEC and two other children are in the block area parallel with Legos).

Child 7: (watches NEC build with blocks and picks up a block to show the NEC).

Do you need this?

NEC: Yes.

Child 7: (puts the block on the top of the boy’s blocks). Let’s put on the top.

(NEC looks at the blocks and giggles. Child 7 looks at the NEC and giggles).

*Aggressive Behaviors*

This category included any incident in which children showed either physically or verbally aggressive behaviors. Nineteen percent ($f = 24$) of the interactive play behaviors observed in this study were aggressive behaviors. An observed aggressive behavior is illustrated in the *Episode 8*

*Episode 8*

(NEC and Child 8 are playing with unit blocks at block area).

Child 8: (looking at the NEC’s block building and pointing out a block). I need that. I need that.

(NEC looks at Child 8).

(Child 8 picks up one of the NEC’s blocks and breaks down the NEC’s block house).

NEC: (yelling at Child 8.) No!

(Child 8 throws the block at the NEC which he took from him).
(NEC picks up blocks all over the area.)

*Note: In this episode, both possession-related behavior and aggressive behavior were observed.

Discussion

No one can dispute the importance of play as a source of socialization for preschool children. Throughout history, play has been an integral part of early childhood education. According to Saracho and Spodek (1995):

Play activities or their derivatives have always been part of early childhood education programs. Pioneers such as the German educator, Friedrich Froebel (1782-1852), the Swiss educator, Johann Heinrich Pestalozzi (1946-1827), and the Italian educator, Maria Montessori (1870-1952), believed in the importance of play in children’s early years. They and others developed systematic ways to utilize play in both child-rearing and educational programs (p.3).

Contemporary early childhood programs continue the tradition of the founders of the profession. The fact that most programs today build in many opportunities for unstructured, child-initiated play speaks to its importance in the minds of educators. However, children’s play is not always naturally positive. Problems can occur when roadblocks such as language or cultural differences stand in the way of productive play situations. This is an exploratory case study to explore play behaviors between a non-English speaking child, who was a newcomer to the United States and to this particular early childhood program, and his English-speaking peers.

After extended observation, we found that the NEC spent his free play time engaged in solitary play 29% of the time, parallel play 46% of the time, and interactive
play 24% of the time. This is an important finding when the socializing factors of play are taken into account. It was no surprise that the NEC spent close to a third of his time in solitary play. A child who is new to a program and does not speak the language of the other children might naturally gravitate toward solitary play. However, the NEC also spent 46% of his free play time engaged in parallel play. Parallel play has some important social ramifications not found in solitary play. The close proximity to other children that is a feature of parallel play allows the NEC access to his English-speaking peers that he does not have during solitary play. We also found that the NEC spent 24% of his free play time in interactive play with other children, which would help the NEC to learn social contracts such as language or play rules.

Interactive play was examined further in this study because we believed it merited further exploration. We found that the children engaged in affiliative behaviors 16% of the time, but prosocial behaviors made up only 3% of the total interactive play between the NEC and the other children. We further found that aggressive behaviors occurred 19% of the time, while possession-related behaviors made up 62% of all interactive play. The fact that a large majority (81%) of the interactive play behaviors exhibited by the children was possession-related or aggressive behavior is problematic suggesting that the other children more often than not interacted with the NEC with the intention of possessing the NEC’s toys, space, or person. Based only on these results, we are unable to suggest whether these children’s play types toward the NEC are different than their play types toward English-speaking children. This needs further investigation.

However, this finding should lead early childhood educators to closely observe children’s interactive play behaviors, especially when children from different cultural and
linguistic backgrounds are actively engaged with one another. For instance, if a teacher can integrate a NEC’s cultural differences in the classroom in a holistic manner (in this case having the NEC teach the other children Chinese words, having him bring in items from China to show, having him share his own culture, etc.), this will ultimately help children understand and appreciate the NEC’s culture. To implement culturally appropriate practice in early childhood, teachers should look carefully at all of the children in their care, make every attempt to understand their cultural paradigms, and work with the children within their cultural expectations (Hyun, 1998a, 1998b). At the very least, teachers of young children should not view children who exhibit cultural behaviors outside of the mainstream as dysfunctional in any way.

Clearly, a child who has recently entered the country can benefit from prolonged, meaningful interactions with other children. In addition, a child with a culture or language different from the mainstream can be a great resource for the entire program helping the other children become more aware of differences and gain understanding and appreciation for others. Children’s play differs across cultures. As a fundamental concept for developmentally and culturally appropriate practice, we need to understand the dynamics of cultural influence and child development on children’s play, particularly in the contexts of the family’s ethnic culture.

Researchers and teachers with a strong Euro-American perspective tend to make sense of children's play and development based on how or what they can do sociocognitively for themself as an individuals in the social context. From the Asian-American perspective, the focus is on how the child can socioemotionally interact with family members and others as a group member (Hyun, 1980a). Therefore, these culturally
different perspectives create a somewhat different understanding of children's play and their development. Even further, the Asian-American value play and the developmental phenomena in culturally different ways. Early childhood teachers may need to examine their teaching practices and revisit their classroom environments to see how prepared they are in meetings these challenges. Many preschool teachers are eager to implement the multicultural education content in their classrooms. During the month of February the children celebrated Chinese New Year theme and later they celebrated Cinco de Mayo to acknowledge Hispanic culture. However, these efforts are meaningless if the teachers do not realize and understand the true multicultural curriculum implementation. Such teachers are only taking what Bank & Bank (1995) called the “Tourist Approach,” acknowledging culture on the surface but having and no significant effect on their own or their students’ understanding.

The interpretation of children's play and development differs from culture to culture. There is a cultural tendency of many families with Asian backgrounds to perceive children’s play as an end in itself rather than as a means for supporting academic experiences when the child becomes a kindergartner. Asian-American children tend to spend a great deal of their time in academically oriented experiences in their daily schedules (Paley, 1994). These phenomena are highly valued and encouraged by the ethnic culture. Furthermore, other studies reveal that, among Chinese more than among North American children, shy-sensitive behaviors tend to be perceived favorably and correlate positively with peer group acceptance (Chen, Rubin & Sun, 2002).
The findings of this study confirmed findings by Howes & Wu (2004); Poulin et al (1997); Rubin and Borwick (1984); Rubin, et al (1994); who observed the interactions of unfamiliar preschoolers and found that children tended to associate with peers who engaged in similar play behaviors. During the preschool period, children direct more social overtures, engage in more social interaction, and play in more complex ways with “friends” compared to “non-friends.” Because the non-English-speaking child in this study was displayed different play behavior, he was not the choice of friends to play with. There is evidence indicating that children are attracted to peers with whom they share similarities. For example, Fabes, Hanish, and Martin (2003) argued that some of the teaching practices in preschool programs impact the role children play in facilitating their relationships with age mates, social competence, adaptation to school, and future adjustment.

How can we help the young children who speak English as their second or third language be more comfortable interacting with mainstream children? What can we do to help these children become empowered bicultural and bilingual individuals in that context? What would be both a developmentally and a culturally appropriate approach to address this issue and prevent this kind of cultural and linguistic difficulties in children's play and early childhood teachers' practice in the classroom? We agree with Hyun (1998a) that the teacher is the key. There are some unnerving comments from teachers saying that they do not have to worry about multicultural awareness or sensitivity to the cultural diversity because most of their students are homogeneously Whites. What the teacher educators should do in addressing this issue?
Current preschool practices might have an influence on what could now be observed as culturally relevant. We also think that the administrators play important role to making sure these children’s need are address appropriately. Therefore, we suggest that early childhood teachers consider the following when they think of at the culturally relevant aspect of their teaching and classroom planning:

- Their own and their students’ level of preparedness to accept new child(ren) who come from different backgrounds
- Their level of awareness and appreciation of other cultures
- Their examination and awareness of their own culture
- Their level of preparedness to meet the needs of the child and the family - can the teacher invite the parents to class to talk about simple aspects of their culture such as greetings in their native language or present written words in their native language and their English translation to display in class
- Classroom materials and resources that address this issue. Can the teacher have books and other printed materials in the children’s native language in the reading corner?
- The amount of training or professional development the teacher has on culturally relevant developmental practice or multicultural education classes he or she received.

Several research limitations remain in this study. The findings could not answer how children’s interactive play behaviors with this particular child (the NEC) were different than with other children. The children’s demographic backgrounds such as their gender, personal traits, or ethnic background, were not controlled for. For further study,
therefore, it is necessary to control for these variables by observing children’s interactive play behaviors with peers who are from linguistically similar backgrounds in order to make comparisons possible. Other demographic variables must also be controlled for. Finally, we did not examine the more subtle nonverbal communication among the children in this study. Nevertheless, this exploratory case study provides potential insight into the play behaviors of children as they interact with one who speaks a language different from their own.
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