PARENT-CHILD DYADIC PLAY AND DEVELOPMENT:

CULTURAL PRACTICES AND PARENTAL BELIEFS

by

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Abstract

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In this study, dyadic play in a culturally diverse sample was observed and coded. Thirty mother–child dyads participated, of which 10 were Chinese immigrant families, 10 Hispanic immigrant families and 10 were native born Caucasian Americans. The age of the mothers ranged from 23-39 (*M* = 31, *SD* 3.81) age of the fathers from 25-41 (*M* = 33.34, *SD* 4.40). The age of the children ranged from 18 – 36 months, (*M* = 26.70 months, *SD* 6.05). Of the 30 children, 17 were male and 13 were female. The education level of parents ranged from Junior High School through Graduate School and was well balanced across all groups. Twenty four of the 30 children in the study had siblings. Eight of the children in the study received a therapeutic service and siblings of 7 of them were reported to have received a therapeutic service. Fifteen families reported that they had private health insurance: Medicaid status was used as a proxy for income. A questionnaire of Parental Beliefs about Play and Development was completed as well as an observation of parent-child play. The type of play, child behaviors and level of parental scaffolding were coded to determine the relationship between the parents' responses to the questionnaire and their actual play. Responses to the questionnaire were summarized to form 3 groups -- parents who believed that play and development were interactive, that development was fixed, and that development was based solely upon maturation. Parents who believed that play and development were interactive demonstrated higher levels of scaffolding

behavior of their child in play $F(2,27) = 4.74$ $p<0.01$. There was no effect observed for socioeconomic status or the presence of a disability upon parental beliefs; there were some differences in beliefs about development by ethnicity. The focus of this study was not to reveal cross cultural differences but rather, to ensure that there was enough cross cultural representation to demonstrate that the findings are likely to apply to parents in general, rather than to parents belonging to a specific SES, race or culture.

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1 Introduction

"Now it is clear that children have played since the beginning of time and archaeological diggings show us that every civilization has provided toys for their use…the loving care expended upon these toys in all human groups shows that grown up human beings since the beginning of historical times have understood that the way to make contact with a child and to understand his way of thought is to play with him" (Lowenfeld, 1939).

The miniature dolls in museums attest to the fact that children have played though the ages. Play, however, was not seen as an important and relevant activity for children until the late 1800's (Gitlin-Weiner, Sandfrund & Shaefer, 2000). Spencer (1898) proposed that play behavior was a rather "useless exercise," conducted due to a surplus of energy in the organism; Karl Groos disagreed and argued that play was the very reason for a prolonged period of immaturity. Groos (1899) saw play as an essential developmental mechanism in mammals and described play as an instinct to train for future roles that were required for survival. For Groos, play was a new kind of instinct that formed the basis for intelligence and, in the same way as the related instinct of imitation, replaced more primitive instincts. Groos believed that the mammalian and especially the human repertoire were so complex, that an extra developmental period of youth was required to attain the "higher" final level of achievement.

William Stern (1975/1924) admired Groos' work, and wrote, that play is to life as maneuvers are to war. He stressed that various human skills are required for work, i.e., such skills are essential for survival, but appear much earlier in a less developed form.

Stern viewed the rough and tumble play of boys and the doll play of girls as early manifestations of conflict and caretaking skills, which may be required decades later.

G. Stanley Hall (1896) viewed by many as the father of developmental psychology, described play as a recapitulation of the progress of the human race, "play is not doing things to be useful later, but it is rehearsing social history," as well as an important medium for revealing the inner life of the child. At the turn of the 20th century, play came to be considered a meaningful activity (Gitlin-Weiner, et. al, 2000). For clinicians, play has long been regarded as a window into the troubled psyche of the child. "We see that children repeat in their play everything that has made a great impression on them in actual life" (Freud, 1961). Freud viewed behaviors evident in early childhood as a mechanism to better understand the development of the adult personality and believed that the overt actions of children reflected their unconscious concerns and conflicts (Gitlin-Weiner et. al, 2000).

Play has generally been characterized as an intrinsically motivated pleasure-seeking activity best left between children, free of adult interference. Historically, few researchers have regarded play as a mediated interaction between child and adult. Even fewer would consider the development of play as needing adult facilitation. Yet, the exalted role of play throughout time is evident from Plato's observation, "You can learn more about a person in an hour of play than in a year of conversation" (Gitlin-Weiner et. al, 2000). Play may be the arbiter of what makes us uniquely human. There are no accounts of complex pretend play, role play or sociodramatic play in non human species (Smith, 2005).

How do parents play with their children? Does it matter? Are parents mere caregivers or active facilitators of their child's development? Why do parents play as they do? What are their belief systems about the purpose of play? Do their beliefs affect the way they interact with their children in play? Play can be understood in the context of broader questions. What is the role of play in development? Do parents play differently and does this depend upon the gender of the child, their culture, their education, their society? Some of these questions will be answered; others will remain for future research.

This study seeks to add to the extant knowledge about the different ways parents play with their children and the role of parental beliefs in informing interactive play activities. This study will define play behavior as a socially mediated activity, optimal when performed by children with meaning transmitted through adult guidance. Nelson and Shaw (2002) define development as entering a system of meaning shared by a community. Elkonin (2005) observed that all you have to do is give a child an opportunity to interact with objects without showing him the appropriate strategies, then such manipulations will soon be abandoned. To think that a child is attracted by the materials in his environs, because they represent the ideal link to realizing his unconscious fantasies, is to ignore the real life of the child in his environment. Signs are crucial in that they mediate human thinking and behavior (Vygotsky, 1978). The challenge for a young child is to achieve competency in semiotic systems and to become a competent member of sign-making communities (Braswell, 2006). The competent mediation of symbolic play encompasses both the tool and strategy by which the tool can be transmitted.

2` Play in Development

According to the various dictionaries, play has been defined as a way to 'engage in enjoyable activity' 'engage in games or other activities for enjoyment rather than for a serious or practical purpose,' (Oxford). Elkonin (2005) mused that during the last century, a general theory of play within the bounds of the biological and psychological frameworks espoused by those who conceived various theories of play could not be created. Notwithstanding the fact that representatives of all schools of Western psychology have attempted to explain play in a manner that embodies the fundamental concepts of their theory. In 1901 Sully posed the question but did not provide the answers. "I, at least, think that children's play about which so much has been written with such confidence, is only very imperfectly understood. Is it a serious business or rather half-conscious play acting, or both of these in turn?"

From the 1930's to the 1960's play was primarily viewed as a treatment technique (Gitlin-Weiner et. al, 2000). In the 1970's and 1980's, it emerged as a central therapeutic technique. Rather than seeing play only as a window into the inner life of children, theorists began to consider that close observation had the potential to result in more specific information.

Bruner (1972) emphasized the flexible nature of play and its role in facilitating creative problem solving skills in children. Currently, it is believed that play behaviors and patterns reflect a wide variety of a child's inner life, developmental levels of functioning and competence (Fenson, 1984; O'Conner & Ammen, 1997). Efforts to describe and define play behaviors continue to increase. In addition to attempts to refine the definition of play, researchers have begun to consider such process variables as: (a)

type of, and numbers of toys used; (b) context of play; (c) participants involved; (d) sequences of play themes; (e) space used; (f) style(s) with which the play activities were performed and (g) the degree of effort invested in the play (Gitlin-Weiner et. al, 2000).

Increasingly, researchers are turning their attention to the social realm within which the individual interacts with others. The sociocultural historical approach focuses on gathering information regarding cultural factors, family dynamics, and other environmental factors which are believed to influence observed interactions. The sociocultural approach has as its major premise that social interactions represent the primary pathways for development. Accordingly, attention is focused on the acquisition of skills by the child in the context of his or her social interactions with caregivers, adults and peers. A fundamental tenet of the sociocultural approach is that children's development is not isolated from their participation within a social and cultural setting, which serves to contributes to and mold their behaviors. Rather than occurring independently, circumscribed by the individual, psychological processes are believed to emerge from the "collective, practical involvement of humans with each other and the world around them" (Stetsenko, 2005). This study will apply the lens of social interaction to the play between the adult and child, against the backdrop of parental beliefs and culture. A primary hypothesis of the current study is that what parents believe *does* affect *how* they interact with their child.

Although play has long since been a topic of research and discussion, O'Connell & Bretherton (1984) state that there is no consensus as to either its functions or the behaviors encompassed by the use of the term. "The importance of play in children's lives is supported by its pervasiveness in childhood, the opportunities it provides for

learning and the developmental changes it reveals" (Lifter, 2000). Through play, children make manifest their knowledge and thoughts. Lifter (2000) includes a variety of descriptions of play in his definition, including the mouthing of objects, tapping objects to make sound, container play, doll play, rolling cars and trucks, engaging in rough-and-tumble play in the playground and assigning and taking roles while playing 'house'.

According to Rubin, Fein & Vanderberg (1983) play is "intrinsically motivated; characterized by attention to means; guided by 'what I can do with objects' generally referred to as pretense; free from externally imposed rules; and requiring active engagement." Through play "children learn societal roles rules and values and they learn to adapt to their environments." Play, as conceived by G.V. Plekhanov, represents an activity that originates in response to the needs of the society in which children live and in which they must become active participants (Elkonin, 2005). From a cognitive/developmental perspective, play reflects a knowledge and experiential base that includes cognitive organization about objects in general, how they relate to other objects and people, and knowledge about the properties of objects and relationships that exist between and among objects and people (Bloom, 1993 cited in Lifter, 2000).

Since play is prevalent in the activities of children, researchers have developed a variety of taxonomies of play. These taxonomies describe children's play as typically progressing from simple manipulation of objects in infancy, to pretend play themes for toddlerhood, to sociodramatic and fantasy play during the preschool years to its culmination of play with rules for the school aged child. Many researchers have used these taxonomies to make inferences about developmental change (Lifter, 2000). "In sum, play activities are pervasive in children's lives, appear to transcend culture and

reveal developmental changes in children's knowledge about objects and events. Moreover, play, language and social competence/interaction are related and mutually supportive in development" (Lifter, 2000).

In 1932, Mildred B. Parten developed a system for classifying participation in play. This organization is still considered one of the best descriptions of how play develops in children (Gander & Gardiner, 1981). The first stage, called *unoccupied play* is one where the child is not actually "playing" but watches anything that happens to catch his or her interest. S/he may play with his or her own body, move around, remain in one location, or follow a teacher. The next level is entitled *onlooker behavior*. This stage is termed "behavior" instead of play because this child is content to watch other children.

In *solitary independent play,* children prefer to play by themselves and are not yet comfortable interacting with other children. They may play apart with chosen toys and within speaking distance, but will demonstrate little interest in making contact with each other. If contact occurs, it may consist only of grabbing other children's toys. The next stage commonly referred to as *parallel play* (also known as adjacent play or social coaction) is one in which children occupy space near others, but seldom share toys or materials. They may talk, but each has their own conversation and there is no attempt to communicate with each other. As an example, one child may talk about going to the circus while another interrupts and suggests going to a fast food restaurant. In *associative play,* children lend, borrow, and take toys from others. However, it's still very much "every child for himself." At this stage, the children are beginning to engage in close personal contact. However, they still consider their own viewpoint as most important. Parten felt that, although at this stage children are not yet ready to participate in teams or

groups, there should be opportunities for group work in order for them to gradually learn how to communicate their needs.

And finally, Parten theorized that the pinnacle of play development is reached with the attainment of *cooperative play*, the highest form of children working and playing together. They share, take turns, and allow some children to serve as leaders for the group. For example, one child may be the policeman, another a nurse, while another is the mother. In cooperative play, Parten stated "That three-year-olds play best with approximately three other children; whereas five-year-olds can play successfully with approximately five children." Young children, who learn to share, take turns, work and play with others, show a higher degree of success later in life. Parten found that as children became older and with more opportunities for peer interaction, the nonsocial types of play (solitary and parallel) declined in favor of the social types (associative and cooperative) (Lorton & Walley, 1979).

The hierarchy of play behaviors ranges from simple manipulation of toys, often beginning with mouthing and banging of objects, through exploration, to meaningful manipulation and purposeful goal directed use. At its pinnacle, stands the ability of the child to engage in pretend play, a window into the rarified world of symbols valued only by those fortunate enough to participate. Pretend or symbolic play is replete with all the magic of childhood. How does it come to occur? Do actions of parents matter? What role do parents occupy in this developmental milestone? Few theatrical dramas can compete with the elaborate plots developed by some young children in play, as they engage in fantasy, embark on adventures and conquer kingdoms.

The role of pretend play in development is one of the most debated areas in research (Smith, 2005). Smilansky (1968, Smilanksy & Shefatya, 1990) suggested that sociodramatic play was vital for language and cognitive development; and found that pretend and sociodramatic play are less frequent and less complex in disadvantaged children. Haight and Miller (1993) define *pretend play* as play in which the uses of articles are transformed or treated non-literally. They further consider an important element to pretend play to be the elaboration by children of actions incorporated into stories. Haight and Miller (1993) view the role of pretend play as central to understanding and addressing issues of early development and culture. "To be human and to live in a meaningful way within a culture requires living in and through a very sophisticated, abstract system that is largely imaginary" (Vandenberg, 1986). Pretend and sociodramatic play is only seen in humans (Smith, 2005). Children become "more deeply rooted" in an existing system of meanings through their social interactions, they alter and reinterpret meaning as well (Haight & Miller, 1993). The dialectic between individual and culture, and our understanding of children and of culture will ultimately be enriched through the study of pretend play.

The Role of Play

Depending upon one's theoretical background, the question of how children acquire skills may be answered with a variety of mechanisms: biological, evolutionary perhaps, or social. Some view play as integral to the development of language. Play not only reflects social competence, it also promotes it (Clawson, 2002). It also serves as a vehicle to encourage cognitive development, including facilitating access to information, the mastery and consolidation of skills and promotes creativity, through the use of skills

and concepts in play. Children gain skills in problem solving, divergent thinking and metacognition during play. In early childhood, play shows a strong positive relationship to language ability, development of communication skills and emergent literacy (Johnson et. al, 1999). Sutton Smith (2005) noted the importance of play in fostering a child's autonomy and self-control. Play can be considered a mechanism for coping with the pressures and demands of various socializing agents (Johnson, Christie & Yawkey, 1999). Children gain immeasurably from "constructing meaning from emotionally challenging experiences" (Haight, Ostler, Black, Sheridan, & Kingery, 2006).

Coolahan and colleagues (2000) demonstrated strong associations between play, and classroom behavior and learning skills. Children with positive interactive play behaviors were actively engaged in learning activities, demonstrated high levels of motivation, persistence and attention on classroom tasks and had positive attitudes toward learning. Children with frequent disruptive behaviors during play had high levels of conduct issues and hyperactivity during classroom activities. These findings suggest that improving play interaction capabilities may enhance school readiness among young children. Children who played more experienced positive play interactions; thus, evidenced less anxiety about transitions, even on the first day of preschool (Barnet, 1984 in Singer, Golinkoff, & Hirsh-Pasek, 2006). Children may enter school with cognitive skills, but if they do not know how to listen, take turns, and get. along with others, this lack of socialization will hinder further learning (Raver, 2002). Through play children learn vocabulary, language skills, concepts, problem solving, perspective taking, representational skills, memory and creativity (Singer et. al, 2006). Play has been found to contribute to early literacy development as well (Owocki, 1999). Creasy et. al. (1998)

proposed that since research has repeatedly found a relationship between play quality and parental support of play behaviors, children's play reflects a competent, caregiving environment.

Garvey (1977) presented pretend play as affording the mechanism for children to engage in a 'complex form of play' wherein children can "take on roles and transform objects as they express their ideas and feelings about the social world." He described themes that children enact as they explore roles of family members, familiar activities and other social related themes, such as playing doctor, bus driver, school etc. As sociodramatic play begins to emerge, the availability of objects begins to influence the roles that children assume (Fein, 1981). Fein relates how household implements facilitate family related roles, whereas an object such as a cape may trigger superhero play. For younger children, according to Fein, the provision of realistic objects is needed initially. In the second half of the second year, children begin to represent their world symbolically as they transform and invent objects and roles (Bergen, 1988). A young toddler may put a cup on a saucer; stir an imaginary drink and may offer it to someone. It is essential for adults to initiate and support such play.

Lillard and Witherington (2004) go so far as to state that "Pretend play is a significant activity, noted for its conceptual links to many of those activities that some consider hallmarks of the human species." One's theoretical belief forms the lens through which all of development is viewed. In order to elaborate various perspectives, I shall proceed to discuss several theories of play, among them the theories of Jean Piaget (1896-1980) and Lev Vygotsky (1896-1934). Although they lived during a similar time

in history, their cultural backgrounds and orientations informed dramatically differing perspectives on the play of early childhood.

Jean Piaget (e.g., 1932, 1936, 1962, 1963) developed an elaborate stage theory based in part, upon extensive observations of his own three children. He described development as a process, wherein initially a new stimulus is introduced onto a child's preexisting corpus of knowledge or 'schema.' This precipitates cognitive dissonance between the new stimuli as it is reviewed against the child's existing schema, a process Piaget described as 'disequilibration.' When the disruption is resolved, the novel stimulus could be determined to conform to the schema, resulting in 'assimilation.' Alternatively, the stimulus might necessitate the 'accommodation' of the schema to incorporate the new stimulus, a process Piaget termed 'equilibration.'

In Piaget's seminal work on play, *Play, Dreams and Imitation* (1962) he elaborated on the types of play he observed and their relationship to his stage theory of cognitive development. Piaget characterized play within the child's first years as three systems – practice play, symbolic play and play with rules. These are the counterparts of sensorimotor, preoperational and concrete operational intelligence. He reported practice play as dominant in the first eighteen months of life. According to Piaget, this involves the manipulation of actions and sequences for the mere pleasure derived by the mastery of motor activities. This play form arises from the sensorimotor schemes acquired by the child, and focuses on how the child uses objects. The child exhibits behaviors which are repetitive in nature, and constitute applying an elementary behavior (or schema) such as grasping, moving, and shaking an object in response to new situations. Piaget determined this type of play to represent 'an end in itself,' from the subjective perspective of the

child. According to Piaget (1962) this action leads to a lack of balance in favor of assimilation since the available energy is used up in the "pleasure at being the cause," i.e., in the continued practice of the schema "for its own sake."

Around one year of age, Piaget believed, the child passes from mere repetitive to purposeful combinations of actions. He theorized that symbolic play appears during the second year of life, contemporaneous with the ability to represent objects symbolically, inherent in the acquisition of spoken language. Whereas sensorimotor activity involves accommodation to items present before the child, representational activity introduces the interplay of assimilation and accommodation. In contrast with the imitation of the sensorimotor period, the imitation of this second period is characterized as representational, i.e., it is capable of being deferred, and is based upon the interiorization of the mental image of the model as a result of the sensorimotor exploration of the child.

According to Piaget, 'pretend play' is initially a solitary activity involving idiosyncratic symbols. Early pretense play involves the following elements: decontextualized behavior, shifts from self to other references, use of substitute objects, and sequential combinations. With the development of symbolic play, the child increasingly is able to go beyond the simple manipulations of physical reality. Piaget theorized that symbolic play is used to achieve fantasy satisfactions, wish fulfillments and resolve conflicts. He believed that symbolic play declined around the age of four.

The third type of play Piaget presented is play with rules. Piaget argued that this more 'social' form of play rarely occurred before 4-7 years and predominately between 7-11 years. At this stage, Piaget believed that the rules served to regulate and integrate the social group. In *Play, Dreams and Imitation in Childhood* (1962) Piaget focused on

games with rules based upon temporary agreement. He posited that the individual's satisfaction of victory over others was made legitimate by the rules of the games.

"If every act of intelligence is an equilibrium between assimilation and accommodation… it may be said conversely that play is essentially assimilation, or the primacy of assimilation over accommodation" (Piaget, 1962). "Play is primarily mere functional or reproductive assimilation." Piaget describes the process: "Primitive play begins by being almost identical with the set of sensory motor behaviors," the set of behaviors that do not require accommodation and which are reproduced purely for functional pleasure.

> "But with the interiorisation of schemas, play becomes more distinct from the adaptive behaviors properly so-called (intelligence) and tends towards assimilation as such. Unlike objective thought, which seeks to adapt itself to the requirements of external reality, imaginative play is a symbolic transposition which subjects things to the child's activity, without rules or limitations. It is therefore almost pure assimilation, i.e., thought polarized by preoccupation with individual satisfaction… Finally, with the socialisation of the child, play acquires rules or gradually adapts symbolic imagination to reality in the form of constructions which are still spontaneous but which imitate reality. In these two forms, the individual symbol yields either to the collective rule, or to the objective or representational symbol or to both." (p.87)

Piaget likens the development of play to that of development of cognitive skills. "Whereas sensorimotor play is merely a continuation of what has been grasped though the development of intelligence, the symbolic play at the beginning of the representational period develops more and more independently throughout the whole of early childhood." The maturity of the child is characterized by a more stable equilibrium in which the mind assimilates and accommodates simultaneously both in "adapted thought" and in "intelligent investigation."

Play, according to Piaget, provides the child with a multitude of opportunities to interact with materials in the environment and to construct his or her knowledge about the world (Singer, et. al, 2006). Each of Piaget's stages of cognitive development is reflected in the world of play. "The evolution of thought is shown to be the gradual achievement of equilibrium between assimilation and accommodation through successive stages, while play and imitation evolve correlatively toward their complementary reintegration." (Piaget, 1962) In sum, Piaget asserts that the development of play progresses from a purely individual process involving idiosyncratic private symbols to social play with its inherent collective symbolism. Play, in Piaget's theory, derives from the child's own mental structures and can be explained only through that structure.

Absent from the journey of exploration of Piaget's child is an adult holding a map. According to Piaget, all of the development of the child occurs as a result of solitary exploratory sequences with objects in the environment. The intervention of adult guides appears unnecessary or outright undesirable. The involvement of parents in the assessment of their children's play is "a somewhat revolutionary concept" (Linder, 2000). He often left out his wife's contribution when describing the play of his children (Braswell, 2006) and many studies that claim to support the Piagetian view have explicitly asked parents to not get involved. Social processes are recognized but do not hold a central value in Piaget's accounts of how children use pretense signs. In fact Piaget stated that neither pretend play nor drawing depend on the transmission of ready-made external models.

Both Piaget and Vygotsky acknowledge the significance of the development of symbolic play, serving as an indicator of the child's emerging cognitive and linguistic

skills. The primary difference is the role each accords to the influence of adults and context. O'Connell and Bretherton (1984) describe the primary difference between them as the "site of the construction of knowledge." Whereas Piaget views the child as the sole architect of his or her knowledge about the world, Vygotsky shifts the emphasis from the child's own cognitive structures to the role that social context and relationships play in the formation of the child's developing abilities.

Lev Semenovich Vygotsky (1933, 1967, 1978, 1997, 1998) suggested that all learning must be socially mediated, through the use of a highly developed system of psychological tools transmitted through social channels, against the backdrop of a biologically competent organism. He believed that all activity and skills must first appear on the interpersonal or social plane, before such tools could be appropriated and internalized by the child, in order to emerge on the intrapersonal or individual plane. His presentation of "tools of the mind," the use of *mediated* psychological signs and symbols form a cornerstone of his theory, and represent a cultural inheritance bestowed upon children that is uniquely human.

Integral to the sociocultural perspective is the concept that activities occurring over the course of ontogenetic development are related to local social and cultural conditions and will vary accordingly (Duncan & Tarulli, 2003). This approach incorporates more of contextual change, i.e. transitions in the child's relationships within society. Transitions are determined by changes in principal activity, the social situation of development and the types of interaction of that person with the environment (Davydov & Markova, 1983). This examination requires an extensive analysis of the

child's interactions with others commencing in infancy, proceeding through early childhood, and culminating with maturation into adulthood.

D.B. Elkonin (1933/2005) (a graduate student of Lev Vygotsky) describes how on a school holiday, he was at home with his preschool children and tried to feed them porridge, to no avail. One game he suggested that his children play was "kindergarten." He turned into the teacher, they into the students. They began to play at all of the activities of kindergarten, went for a walk, read books and then sat down to eat lunch. Without any protest, as well behaved pupils, the girls sat down and ate the same porridge they had previously refused. The relationship of daughters to their father had changed to the relationship of pupils with their teacher. This served to develop Elkonin's hypothesis that a significant aspect of play is the "role" the preschool child is playing. He noted how as the child plays his role; his actions are transported along with his relation to reality. After Lev Vygotsky's untimely death in 1934, Elkonin became very involved with a research group of his colleagues and students under the leadership of A. N. Leontiev in Kharkov. He quoted J. Sully (1901) as saying "The essence of children's play is the assumption of someone's role." The most interesting aspect of children's play is "the transformation of the most inconsequential and unpromising objects into real living things" (47-51).

Elkonin (2005[1]) discussed how after Vygotsky's early death, the research group (consisting of A. N. Leontiev, L. V. Zaporozhets, and P. Y. Galperin) continued to explore the psychology of play. "Every new achievement in the overall theory caused us to rethink our views of play, to add new facts, and to propose new hypotheses" (Elkonin

[1] This is the English translation from the Russian Text "Ot avtora: biografia issledovanii," in *Psikhologiia igry*, 2d ed. (Moscow: Gumanit. izd. tsent VLADOS, 1999)

2005). Elkonin described the contributions he believed this research group made to the psychology of children's play: (1) the development of the hypotheses of the form of play that is typical among preschoolers, and the theoretical demonstration that role play is social in origin; (2) the conditions under which this form of play arises in ontogeny is not spontaneous, but rather forms under the influence of child rearing; (3) identification of the primary units of play, discovery of the psychological structures of play, and tracing the development of when play activities begin to rise, peak and then fall; (4) the establishment of the fact that the basic content of play is the human being, his work, and the relation of adults to each other; hence play is a form of orientation to the tasks and themes of human activities; (5) the transfer of meaning from one object to another, the play technique, represents an important "precondition" for the child's mastery of social relationships; (6) the identification in play of children's relationships with each other; and (7) the elucidation of the function of play in the development of preschool aged children.

Elkonin cites G. Compayre (1912) who stated "The child takes as his starting point some object and the alchemy of fantasy immediately transforms it and turns it into something else." He continues to describe the magic of symbolic play: the child rides on a stick; an upside down stool becomes a boat…. In short anything that the child's imagination desires to create.

Elkonin asked, "What is the basic content of the roles that children take and perform in their play?" He questioned the primacy of objects or human interaction and describes a study designed to answer this question performed by NV Koroleva (1957). A group of children were taken on a trip and gained many impressions of the railroad, from being at the station, buying tickets, and so on. The teacher believed this would provide

them with sufficient material to play "railroad," yet the game did not get underway. Next she took them to the station and introduced them to the objects involved in life at the railroad, e.g., tickets, luggage, station, ticket window. Although their drawings got more accurate, this increased experience still did not result in the children's play.

Several months later, after the summer, she took the same children to the station once again. This time they were introduced to the role of each pertinent individual, how the stationmaster meets the train, how the passengers leave the train, how the baggage is loaded, how the engineer cares for the engine, how the conductors clean the cars and care for the passengers. Only after this experience did the children begin to play "railroad." She repeated this research in other settings, the work of a sewing shop, the construction of a new house, the post office. In all cases, the children only began to "play" the game after they had been introduced to the people's activities and their work interactions.

Elkonin clarified that it is the human interaction that informs the content of play, not how people interact with objects. He distinguished between the *topic* and *content* of play. The *topics* are extremely varied and reflect the specific conditions of the child's life. The *content* of play is the child's reproduction of activities and interactions of adults in society, "the social significance of human work." Thus he repudiated "the biological theories of play," those that see the essence of play as the manifestation of the child's primitive instincts and drives. Play is social in content, because it is social in origin, he stated. "It arises out of the conditions of the child's life in society." Play is unique in terms of its motivational characteristics, in that it is the only activity in which the motive does not lie in its result but in the content of the action itself (Duncan & Tarrulli, 2003 citing Leont'v, 1981).

Leont'v describes research in which preschoolers were asked to maintain a rigid standing position without moving. Predictably, young preschoolers began to move after just a few seconds. However, when this task was presented in the context of "standing guard" as part of play role, even four year olds, who were otherwise unable to perform this task, remained in position for considerable lengths of time. These children showed much greater self restraint in the play than in the non-play condition (see also Bugrimenko & Smirnova, 1994). Findings like these have important implications for early childhood education (Duncan & Tarulli, 2003) and further serve to demonstrate how sociodramatic play creates a *zone of proximal development* by drawing a child to a level that exceeds their ability in a nonplay setting.

Whereas Piaget did not see any connection between children's egocentrism and symbolic play, neo-Vygotskians stress the importance of symbolic play. When playing, children have to treat their playmates in accordance with their "play" roles and have to accept the meanings their playmates ascribe to objects. For example, in doctor-patient play, if the doctor uses a stick as a syringe (object substitution); the patient must accept the doctor's position (Karpov, 2005, citing Elkonin, 1978). Thus, in sociodramatic play, the child's view of the world fundamentally changes – s/he must now learn to coordinate their individual point of view with the possible points of view of others – this is truly a dramatic developmental milestone.

Vygotsky concluded that there are two crucial elements of make-believe play that clarify just how it leads children's development (Berk, Mann & Ogan, 2006). He identified two aspects that distinguish make-believe play from all other childhood activities. The first is the creation of imaginary situations that help children to separate

mental representations from the objects for which they stand. He believed that once children are able to sever words, gestures and symbols from their external reality, they are well on their way to overcoming impulse and managing their own behavior. As a result, Berk et. al. (2006) asserted that through play, children strengthen their internal capacity to become socially responsible. Vygotsky maintained that make-believe play helps preschoolers conquer their impulses by allowing children repeated practice to act independently of what they see (Vygotsky, 1978 as cited in Berk et. al, 2006). Vygotsky affirmed that the object substitutions in make-believe play are crucial to help children use thought to guide behavior. Vygotsky maintained that by separating symbols from objects; make-believe play equips children to make choices from alternative courses of action.

The second essential aspect is the application of rules to make-believe play. Children draw upon the rules implicit in their interactions with parents, extended families and communities, and apply these rules to their play scenarios. This fosters the development of children's behavior in line with social expectations. This facilitates the development of external pressures to act in socially responsible ways. Berk et. al. (2006) posit that make-believe play is thus the preeminent contributor to the development of self regulation. Vygotsky firmly believed that pretend play was not "free play," as it is oft described. Rather it is replete with all of the rules of social engagement contained in the complex interactions among adults. When children renounce their momentary attraction in favor of a rule-based behavior, they are developing and enhancing their self control. The paradox described is whereas in ordinary activities children subordinate their desire to do what they want in favor of what they must, e.g., stop playing and go to bed; in pretend play however, they must refrain from their impulses in favor of societal rules

(Berk et. al, 2006). Informal observations of children's pretense suggest that they rarely violate the rules of their social world. They draw upon social conventions, cultural rules and models of cooperation as they engage in the complex negotiations of sociodramatic play (Vygotsky, 1933, as cited by Ortega, 2003).

In conclusion, make-believe play contributes to children's development in several vital ways. By enhancing their application of rule-based conventions to their play, children are at liberty to experiment with and inculcate social values. Through subordinating their immediate desires to the 'rules' of make-believe, children become members of their culture. In so doing, they lay the foundation to regulate their emotions, thought and behavior, in the service of constructive social goals (Berk et. al, 2006). Imaginative play contributes to all areas of development in the young child, including self regulation, inhibition of impulses, and the ability to plan strategies and govern behavior. Rich opportunities for pretend play sensitively nurtured by parents and caregivers, help assure that young children will acquire the self regulatory skills essential to succeed academically and socially (Berk et. al, 2006).

Infancy[2] along the road to development.

In order to understand Vygotsky's theory of play it is necessary to delve into his concepts of development. As with life itself, we begin with Vygotsky's views of infancy. In order to examine the developmental role of play, it is necessary to first define 'development' and 'play.' Vygotsky posits that the journey begins at birth. (Vygotsky, (1998[3]) rejected the perspective of infancy as an 'asocial' period of development, with

[2] The chapter on Infancy was written by Vygotsky in preparation for a book on child developmental psychology.

[3] Although originally written in the 1930's the Collected Works of Vygotsky Volumes 1-6 were not translated until the 1990's.

the infant devoid of even rudimentary abilities to engage others. Revolutionary in his times, Vygotsky presented the infant as a supremely social being.

From birth on the child is incapable of meeting its fundamental and basic needs without interacting with another. “Everything in the behavior of the infant is intertwined and interwoven into the sociable” (Vygotsky, 1998). Vygotsky described, “The infant can not himself satisfy even one vital need…No matter what happens to the infant, he is always in a situation connected with the care giving of adults. Because of this, a completely unique form of social relation develops between the child and the adults around him. ... thus the first contact of the child with reality (even in carrying out the most elementary biological functions) is wholly and completely socially mediated.” He rebukes those who consider the infant to be asocial. “The dependence of the infant on adults creates a completely unique character of the child’s relations to reality (and to himself): these relations are always mediated by others, and are always ***refracted though a prism of relations with another person*** (emphasis added). … in this sense the infant might even be called a maximally social being.” Vygotsky described the dichotomy of the existence of the infant: every function depends upon the maximal level of sociability, yet the infant possesses minimal capability for interaction (p.216).

Vygotsky believed that the total dependence of the infant laid the foundation for the genesis of social behavior since the relation of the child to the adult was “so merged and inseparably intertwined” (p.229). At two to three months, the child rewards his tireless caregiver with the ‘social’ smile. A number of forms of behavior begin to appear which demonstrate the infant’s ability for social interaction. The child can now turn to the person who speaks, listens to the human voice, and is offended if the person turns

away from him. The three month old greets his approaching caregiver with sounds and a smile. Vygotsky places the adult at the center of every situation during infancy. It is for this reason that the social context, the relation of the child to the world depends upon, and is largely derived from, his most direct and concrete relations with an adult.

Play as the "Leading Activity"

In a transcript of the lecture, "The Role of Play in Mental Development of the Child," Vygotsky (1933) provided an analysis of children's play from the perspective of its influence upon the process of mental development. Vygotsky speaks of play specifically as the "leading type of activity" during the preschool age. He presents its significance for the development of "basic neoformations [sic] of this period." He elaborated, "from the point of view of development, play is not the predominant form of activity, but is, in a certain sense, the leading source of development in preschool years." Vygotsky clarifies its role: "defining play on the basis of pleasure can certainly not be regarded as correct," since there are many other activities more pleasurable to the child than play.

Vygotsky believed that in order to understand the transition from one stage of development to the next, one must first identify the motives and incentives for the child to act, to wit: "Without a consideration of the child's needs, inclinations, incentives, and motives to act – as research has demonstrated – there will never be any advance from one stage to the next."

> What is of the greatest interest to the infant has almost ceased to interest the toddler. This maturing of new needs and new motives for action is, of course, the dominant factor, especially as it is impossible to ignore the fact that a child satisfies certain needs and incentives in play; and without understanding the special nature of

> these incentives, we cannot imagine the uniqueness of that type of activity we call play."

Systematic mediation by adults in the course of (their) joint activity results in the child becoming engaged in the new activity (Karpov, 2005). According to scientists who pursued Vygotsky's research agenda after his early death (neo-Vygotskians) although infants are actively engaged in object manipulations, these manipulations are actions within the activity of emotional interactions with their caregivers. Karpov (2005) reviewing works by Elkonin, 1989; Lisina, 1974, 1986; Zaphorozhets & Lisina, 1974, describes the process by which children shift from their activity of emotional interaction to joint activity with adults. In the course of their mediation, caregivers actively encourage the shift of the child's interests and positive emotions from themselves to the desired objects. Thus, the acquisition of object-centered activity commences within the course of interaction with adults to whom the infant has emotional attachment. By mediating the activities, new mental processes are developed.

In the sociocultural historical approach to psychology, the concept of "leading activity" forms the basis of a system of developmental stages (Duncan & Tarulli, 2003). The idea of leading activity was further developed by Leontiev and others after Vygotsky's untimely death. Although Vygotsky was first to describe preschooler's play as a leading activity (Vygotsky, 1966/1976); the concept of leading activity became the cornerstone of the *activity theory* of child development. The transitions of children from one period to the next, was thus explained, as their transition from one leading activity to the next (Karpov, 2005).

Leontiev described the term “leading activity” as the one that plays the major role in a child’s development at a given age period and prepares the child for the transition to the next period (Karpov, 2005). This activity represents “the activity through which the most important psychological and social changes occur during a given developmental period” (Duncan & Tarulli, 2003). The activity that fits this description depends upon the society of which the developing child is a part.

For young children in industrialized societies, Leontiev defined sociodramatic play as the leading activity for the preschool period. Leontiev identified a sequence of three leading activities within modern industrial society: that of play, school and work. Each of these activities encapsulates the relationship of the individual to its environment “during the specific time it is in ascendance.” Each is characterized by a different type of motivation and serves to create a different type of “*zone of proximal development*” (Vygotsky, 1967, 1978). The *zone of proximal development* (ZPD) represents the difference between the child’s independent skills and abilities to that which the child can perform with the assistance of a more capable other. Vygotsky originally introduced the ZPD in the context of arguing against the standardized intelligence measures (e.g., as developed by Alfred Binet in France) as extremely limited because only ‘static’ or ‘fossilized’ abilities were being measured (Berk & Winsler, 1995). Vygotsky suggested that a more appropriate indicator would be that which a child could accomplish with the help of a more competent other, embodying the dynamic, ever changing potential to learn. Vygotsky regarded children as active agents in development, creating internal mental processes in collaboration with more knowledgeable others in the context of meaningful cultural activities.

At each age, the child's mental processes are not yet sufficient for the independent performance of this activity. Therefore, it must be mediated in the context of a joint activity with adult and child (Karpov, 2005). Another outcome of successful mediation is the child's acquisition and mastery of a new psychological tool which leads to the development of new mental processes. This creates the rubric for the child to master activities at each period of development, and successfully advance to independence.

Elkonin (1977/2005) discusses and rejects the (then) prevailing view of play as arising out of instinctive tendencies. " It seemed strange to me that the function of the imagination, which is one of the most complex capacities, develops so early, and thought, that perhaps, it was the other way around, that play is the activity in which imagination first shows itself." He simultaneously disagrees with the notion that play, as an instinctive activity, is identical in the young of animals and children. A fundamental difference between the views of Piaget and Vygotsky lies with the determinant of developmental change; whereas Piaget attributes it to a structural change within the individual's psychological characteristics, Vygotsky characterizes it as a change in the child's place within the social structure (Duncan & Tarulli, 2003). It is the qualitative changes in the child's social situation that leads to substantial changes within the child's mind (Davydov & Zinchenko, 1983).

3 The Role of Adults in Play

The sociocultural approach has as its major premise social interaction represents the pathway for development. Heretofore, there has not been much exploration of the role of the adult in play. Some say that the adult has no role in the play of the child, and should not interfere. In the sociocultural perspective, adult participation is viewed as both necessary and desirable. In the sociocultural model it is engagement in cultural practices that drives the development of semiotic production. These practices are situated in a context involving psychological tools, artifacts and people who engage in practices with children. It is within these contexts that children learn to create signs (Braswell, 2006). Although Vygotsky focused on what children may eventually do on their own, many suggest that culturally specified activities are never really solitary (Goodnow, 2001) and at the very least the tools have been provided by others. For scientists who pursued the research embarked upon by Vygotsky and his colleagues (neo-Vygotskians) the role of the adult as guide and nurturer of the young child sets the stage for mediation as the optimal and direct way to lead children to the acquisition of new skills (Karpov, 2005).

In order to examine the role of the adult in play, one must first examine interactions between adult and child. Based upon the concept of leading activity (as discussed above) infants initially manipulate objects within the course of their emotional interactions with caregivers. The infant transitions from the activity of emotional interactions with caregivers to joint object-centered activity. According to Elkonin (1989) caregivers involve infants in joint object-centered actions and mediate these actions in the context of their interactions. As a result of this mediation, by the end of the

first year of life, joint object-centered actions become ends in themselves for children. While infants initially manipulate objects within the course of their emotional interactions with caregivers, ultimately these actions turn into child-caregiver joint object-centered activity.

For neo-Vygotskians, in contrast with the perspective of Piaget, the toy does not represent an end in itself, rather it represents a means to an end, i.e., the presence of 'the toy' is ancillary to the child's communication with his or her caregiver. The center of the child's activity is the adult: use of the item is a means of engaging attention in the context of emotional interaction with its caregiver. One such support is demonstrated by the evidence that children who are severely deprived of adult interactions e.g., in orphanages, or neglectful homes, demonstrate significant delays (Spitz, 1945). In fact, in Spitz' classic study, children who were severely deprived of maternal or caregiver stimulation not only exhibited delayed development, they actually experienced significantly increased rates of mortality!

According to Piaget, infants' object-centered actions derive from innate reflexes. Infants seek new stimulation which is provided by new stimuli that do not fit exactly within the infants' existing schema, or patterns of knowledge. When they encounter such objects, they assimilate them into their existing behavioral pattern or accommodate their behavioral patterns to the new objects (Karpov, 2005). Once these new objects fit within the infants' behavioral patterns, or knowledge base, the infant once again searches for novel objects to provide new stimulation. According to Piaget, this reflects the motivation and process for infants' to engage in object-centered activity.

Elkonin (1989, cited in Karpov, 2005) posits that for an infant a toy simply represents a means to communicate with an adult. He provides an example: An infant is shaking a rattle, smiling at his mother and vocalizing happily. It is obvious that the center of the situation for the infant is the mother and shaking the rattle is simply an action in the context of emotional interaction with his mother. In fact, Fayan (as cited by Leontiev 1959/1964) states that often the infant will cease manipulation of the object when the caregiver leaves the room, only to resume when the caregiver returns.

"Caregivers enrich their emotional interaction with infants in object-centered actions" (Karpov, 2005). Caregivers model object appropriate actions to their infants and encourage them to perform these actions on their own. It is the participation of the caregiver which represents the motivation for the infant to explore and handle the new object in accordance with the demonstration provided for its benefit. Mediation of the joint object-centered action by the adult motivates the infant to participate. Infants pay attention to the actions of the caregiver, and try to repeat these actions and express joy when praised by adults for their successful attempts (Zaporozhets & Lisina 1974, as cited in Karpov, 2005).

By the end of the first year, according to neo-Vygotskians, the infant begins to take initiative to involve caregivers in joint object-centered activity. They try to make the adult perform a role by moving a toy towards them. This leads to the stable initiation of infant caregiver joint activity (Karpov, 2005). For Piaget, the role of the adult is limited to providing the infant with sufficient and appropriate opportunity to explore its environment. Thus the smile the infant provides to the caregiver is not distinguished from the smile the infant directs to the familiar toy or object.

In contrast, according to Vygotsky, all of the development of the child centers on his or her interactions with adults. The earliest type of object-centered communication between the infant and adult caregiver lies with a gesture. Vygotsky (1983/1997) describes the infant's attempts to use gestural communication with the indicatory or pointing gesture. At first the infant reaches for an object but fails because the object lies too far away. The mother interprets this movement as an indication of desire, and procures the desired object for the infant. It is *she* who has conveyed meaning onto the infant's unsuccessful reaching movement. And it is this meaning, according to Vygotsky, which transforms the gesture into an indicatory movement, which can now be used as a tool by the infant. Thus the means of gesture is learned by the infant in the course of the object-centered interaction. This gesture, imbued with its new meaning, can then be appropriated by the infant as a tool.

By the end of the first year, caregivers' mediation and enrichment of emotional interactions with infants enable the infants to develop the motive of communication with adults and demonstrate that they have accepted caregivers as mediators of their object-centered activity. Vygotsky emphasized the metacognitive value of the gesture as an 'indicatory communication,' which signifies to the infant that s/he has acquired the means to direct the attention of another. This represents the starting point in the development of the infant's ability to control and to regulate its cognitive processes and behavior in general (Karpov, 2005). Similar ideas have been expressed by researchers of object-centered communication with the development of infant caregiver joint attention (Tomasello, 1999; Gauvain, 2001).

Karpov (2005) defines *joint attention* as the ability of the (two) social partners to focus on a common point of reference and to monitor each others' attention of this outside entity. Gauvain (2001) states that "The engagement of infants in joint attention has been shown to predict later developments in several domains, especially language." Tomasello (1999) refers to the emergence of these behaviors as the "nine month revolution." The infant's acquisition of the gestural means of object-centered communication is the first step to exceeding the bounds of their consciousness and creating the *zone of proximal development* of their mental processes (Karpov, 2005).

During the first year, mutually rewarding intersubjective interactions between mother and infant, involving face to face exchanges of emotion and parental acknowledgment of infant expressiveness, predicted complexity of mother-child pretense and children's use of mental state words (e.g., feel, pretend, imagine) during play at age two (Feldman & Greenbaum, 1997). Adult participation in make-believe that acknowledges and builds on toddlers' play behaviors through demonstrations, suggestions, turn-taking and joint involvement is especially effective at developing more mature make-believe play (Berk et. al, 2006). In contrast, parental directions and intrusions are associated with immature play behavior in which toddlers merely mouth and look at toys (Fiese, 1990). In a longitudinal study, Stilson and Harding (1997) found that maternal interactions that suggested play actions related to 1 ½ year old children's play activity continued to predict extended play sequences and imaginative object substitutions at age 3.

While Piaget (1936) included the object-centered manipulation observed in the first two years of the infant's life of as belonging to the sensorimotor stage of

development, Vygotsky (1984/1998) emphasized a major distinction between the first and second year. In the first year, the infant merely manipulates an object in accordance with its physical characteristics. As such, it is not necessary to have an adult demonstrate the physical properties of the object. When carrying out such independent actions, however, children are performing at their actual, not proximal level of development, which is not ideal for fostering their cognitive growth and mental development (Karpov, 2005). In contrast, according to Vygotsky and those who continued his research, children are unable to independently discover the social meaning of objects (Elkonin, 1989). Such involvement requires the context of adult mediation of the child's mental processes. "Child-adult joint object-centered actions are not only a must for children's mastery of the ways to use social objects, they also lead to the creation of the *zone of proximal development* of the child's mental processes."

Neo-Vygotskians divide the development of child-adult object-centered activity as proceeding through two stages, one from the first to the second year of life, the next from the second to the third. In the first stage, adults model the appropriate use of objects and toys in accordance with their social meanings. If adults have successfully demonstrated their appropriate use, object use will be emulated by the child i.e., nonspecific manipulations such as mouthing, banging and shaking will decrease and adult actions will be imitated by the young child. In the course of mastery of a new action, children look to adults for confirmation of their performance and they seek adult assistance (Karpov, 2005). Later children begin to apply their knowledge and skill to novel objects and situations.

In the second stage, Elkonin (1978) indicated that object substitutions would initially appear in a situation where a child was missing an object necessary to perform an action. Studies by neo-Vygotskians demonstrated that a child will engage in the substitution of a desired object only after an adult, in the context of joint play with objects, has suggested that a child use a novel object in the place of a missing one (Karpov, 2005, reviewing findings from Elkonin, 1978; Fradkina, 1946; Mikhailenko, 1975). By the end of the third year, children will demonstrate a high level of object substitutions, and will, in fact, use the same object to substitute for different missing objects.

One of the major developmental outcomes of adult mediation of children's object-centered activity is the development in children of the "motive" of symbolic (or pretend) play which by the end of the second year replaces children's "motive" of object-centered activity (Vygotsky, 1933). When a child begins to perform an action without an object, or with an object that does not correspond to such action, the 'action' becomes the 'representation of' the real action (Zaporozhets & Markova, 1980/1983). If a child 'drinks' from a block, this is not drinking, but is a 'representation' of drinking. In early childhood, the child is not aware of the replacement and is unable to assign the name of the object replaced. Such consciousness forms as a result of performing actions with substitute objects. "This consciousness attests to the transition to a new, uniquely human type of knowledge about reality, knowledge that is mediated through signal systems and that promotes the development of new types of activity; role play and productive activity (drawing, design, etc.)."

Vygotsky (1933) described this critical aspect of the child's development: "The child cannot yet sever thought from object; he must have something to act as a pivot. This expresses the child's weakness; in order to imagine a horse, he needs to define his actions by means of using the horse in the stick as the pivot." But nevertheless, the basic structure determining the child's relationship to reality is radically changed at this crucial point and represents a change in the child's underlying perceptual structure. At the crucial moment, when the stick is able to be a horse, the object takes on meaning and the "the stick, becomes the pivot for severing the meaning of horse from a real horse."

Pretending allows the child to separate meaning from real objects or actions so that meanings may be attached to other objects or actions in pretense. When the child separates the meaning of a car from real cars then that meaning can be attached to a block that the child pretends is a car. Vygotsky believed that this event represented a milestone in the foundation of symbolic thought, simultaneously reflected in the child's play and the child's development of language, with each activity reliant upon the ability to use, or substitute, symbols for action.

Zaporozhets and Markova (1980/1983) refer to this as the "three year old crisis," a crisis that means the child is demanding independence and placing his or her desires before those of grownups. Therefore, they state, role play [4] evolves, in which the child can 'play at' adult roles and help solve the crisis and satisfy the child's need to perform "grownup" activities. Role play becomes the new leading activity. "In role play, the child's basic needs and interest are expressed, new personality traits are developed and mental qualities improved, and new types of child activity are born."

[4] Although the term 'role play' is used, I believe that the actual definition of the term is more consistent with our description of 'pretend' or 'symbolic' play, and represents a translation issue.

Vygotsky (1933) attributed great importance to the role of play and its influence on a child's development. He continued: "A child learns to consciously recognize his own actions and becomes aware that every object has a meaning…. Play continually creates demands on the child to act against immediate impulse, i.e., to act according to the line of greatest resistance. I want to run off at once – this is perfectly clear – but the rules of the game order me to wait. Why does the child not do what he wants, spontaneously and at once? Because to observe the rules of the play structure promises much greater pleasure from the game than the gratification of an immediate impulse," Vygotsky quotes Spinoza who stated: "An affect can be overcome only by a stronger affect." In play, Vygotsky believes, a situation is created in which "a dual affective plan occurs." Through play the child must renounce his immediate impulse, and coordinate every act of his behavior with the rules of the game.

Vygotsky (1933) cited Groos (1898) as describing this situation "brilliantly." Groos proposed that a child's will both originates in, and develops from, play with rules, and described the game of 'sorcerer' in which the child must run away from the sorcerer in order not to be caught, but at the same time must help his companion to get him disenchanted. When the sorcerer has touched him, he must stop. At every step the child is faced with a conflict between the rules of the game and what he would do if he were free to act spontaneously. In the game he must act contrary to what he wants. "The child must achieve the maximum display of willpower in the sense of renunciation of an immediate attraction in the game in the form of candy, which by the rules of the game the children are not allowed to eat because it represents something inedible. Ordinarily, a child experiences subordination to a rule in the renunciation of something he wants, but here

subordination to a rule and renunciation of acting on immediate impulse are the means to maximum pleasure."

Vygotsky stated that it is at the preschool age where we first observe the "divergence between the fields of meaning and vision. It seems to me that we would do well to restate the notion of the investigator who said that in play activity thought is separated from objects, and action arises from ideas rather than from things." This type of subordination to rules is too difficult for the young child in everyday life, however, Vygotsky continues: "***In play it does become possible; thus, play also creates the zone of proximal development of the child. In play a child is always above his average age, above his daily behavior; in play it is as though he were a head taller than himself. As in the focus of a magnifying glass, play contains all developmental tendencies in a condensed form; in play it is as though the child were trying to jump above the level of his normal behavior***."

Vygotsky strenuously objected to those who conceived of play as an activity without purpose, to wit: "Play is purposeful activity for a child." Whereas in athletic games, one can win or lose; or come in first or second in a race. "Purpose as the ultimate goal determines the child's affective attitude toward play." He compares the play-development relationship with the instruction-development relationship, but determines that it is play "which provides a background for changes in needs and in consciousness of a much wider nature. ***Play is the source of development and creates the zone of proximal development*** (emphasis added). Action in the imaginative sphere, in an imaginary situation, the creation of voluntary intentions and the formation of real-life

plans and volitional motives – all appear in play and make it the highest level of preschool development."

Vygotsky described the creation of an imaginary situation on behalf of a child as a means leading to the development of abstract thought. He posited that it is the development of actions based upon rules which leads to actions "on the basis of which the division between work and play becomes possible, a division encountered as a fundamental fact at school age." He concluded by linking play to the next leading activity, that of school age learning, by describing the relationship between play and the ability to formulate abstract thinking, i.e., that unique and newly developed ability in the child to decenter from that which appears before him: "At school age play does not die away, but permeates the attitude toward reality. It has its own inner continuation in school instruction and work (compulsory activity based on rules). All examinations of the essence of play have shown that in play a new relationship is created between the semantic and the visible – that is, between situations in thought and real situations." At school age, play gets converted to internal processes, leading to internal speech, logical memory, and abstract thought.

Through symbolic play it becomes possible for a child to operate with the meaning severed from an object. By playing with a substitute object, the child separates meaning from the actual object and conveys it onto the substitute object (Duncan & Tarulli, 2003 citing Vygotsky 1967, 1978) which can then function as a cognitive mediator. The child functions with the meaning that s/he has arbitrarily attached to the substitute object, which is not based upon its physical or actual properties. The child then carries out specific actions with the substitute play object in accordance with the meaning

s/he has attached to it, regardless of its 'actual' physical properties. Decontextualized meaning is a challenging problem for young children: "It is terribly difficult for a child to sever thought (the meaning of a word) from an object. Play is a transitional stage in this direction." To separate the meaning of a "horse" from a "real horse" and to transfer this meaning to a stick, requires that the child has the ability to enable symbolic thought, i.e., to act with the stick as if it were a horse which represents a vital transitional stage to operating with meanings:

> A child first acts with meanings as with objects and later realizes them consciously and begins to think, just as a child, before he has acquired grammatical and written speech, knows how to do things but does not know that he knows, i.e., he does not realize or master them voluntarily. In play, a child unconsciously and spontaneously makes use of the fact that he can separate meaning from an object without knowing he is doing it; he does not know that he is speaking in prose just as he talks without paying attention to the words…. Henceforth play is such that the explanation for it must always be that it is the imaginary, illusory realization of unrealizable desires. Imagination is a new formation that is not present in the consciousness of the very young child, is totally absent in animals, and represents a specifically human form of conscious activity. Like all functions of consciousness, it originally arises from action. The old adage that children's play is imagination in action can be reversed: we can say that imagination in adolescents and schoolchildren is play without action."

The works of Vygotsky, Leontiev and others have firmly established the fact that the dominant preschool activity is play in its most expanded form, that of role-play (Elkonin, 1971). There are many aspects to the significance of play in the mental development of the child at this age. Elkonin advocated the belief that the primary significance "lies in the fact that in play the child imitates human actions in many ways, e.g., he assumes the role of the adult, the adult's functions and work in society; he reproduces object actions by generalizing them in representational thought; transfers meaning from one object to another, etc. An object action, taken in isolation, does not

have "written on it" the answers to questions such as: Why was it performed? What is its social meaning, its actual motive? It is only when an object action becomes incorporated into a system of human relations that we can discover its true social meaning, its purposefulness as regards other people."

Pretense is crucial to preserving the integrity of the child's real world representations. Pretending in childhood is 'a major point of entry' to dealing in the hypothetical, a skill that underpins much of human culture and progress (Lillard & Witherington, 2004). Through the use of role play, a child becomes "oriented toward the most universal, the most fundamental, meanings of human activity. On this basis the child begins to strive for socially meaningful and socially valuable activity, and in so doing, demonstrates the key factor in readiness for school. This is the chief significance of play for mental development; it is its dominant function." And it is this uniquely human and social aspect of interactive play that is sought throughout this study with a diverse, multicultural sample, comprised of children with and without special needs, to enrich the extant knowledge about the ways that parents today interact with their young children in play.

Can Adults 'Scaffold' the Play of Children?

The metaphor of "scaffolding" has also been used to describe adult collaboration with children to teach culturally valued skills (Rogoff, 2003). A scaffold is a dynamic flexible framework used to assist the child, who is viewed as the building in this metaphor, to acquire and master new competencies (Berk, 2001). In order to effectively promote development, the adult modifies his or her assistance to fit the child's changing level of performance, keeping the child in the "*zone of proximal development*," i.e., the

difference between what the child can perform independently to what the child can perform with the assistance of a more capable other. According to Lev Vygotsky and his disciples, this represents the optimal mechanism for transmission of culture, knowledge and learning. To foster cognitive growth, the adult adjusts the task so that the child is challenged by the demands, while tailoring the degree of adult intervention to the child's current learning needs (Berk, 2001). When confronted by a novel task, a child will be unaware of its goal. This will need to be demonstrated by a more knowledgeable other.

Berk (2001) describes a father introducing a jack in the box to his child. First, he gets the child's attention by working the toy. When the clown emerges, he exclaims "What happened?" Gradually, the adult directs the child's attention to how to use the device, guiding the child's hand to turn the crank and push down the clown. As the child's motor, cognitive and language skills improve, going into the second year, the toddler will try to turn the crank herself, while looking to her father for assistance and confirmation. The adult can now move from physical guidance to verbal directions and gestures. As the child moves into the preschool years, scaffolding becomes "increasingly verbal" and takes on the advantages of language through flexible representations of meaning. The intensity of adult support depends on where the task falls within the ZPD of the child. When a task lies at the outer edge of a child's abilities, more direct intervention is necessary. As the child's understanding and performance increases, less adult guidance is needed.

In support of this claim, several researchers examined competent scaffolding and concluded that it must be performed in collaboration with an adult who is pleasant, warm, responsive (Berk & Winsler, 1995). In addition, success was achieved when the adult

delivered verbal praise and attributed competence to the child, as appropriate, e.g., "Great! You did it." Berk and Winsler (1995) liken competent scaffolding to an elaborate choreographed dance in which the adult remains in tune with the child's growing competence, carefully anticipating the child's moves and providing the right amount of support.

An investigation of 50 mother and toddler dyads (Damast, Tamis-Lemonda, & Bornstein, 1996) revealed that mothers adjusted their play to their children's play level by responding to their child with play that was either at the same level or at a higher level than their child's play. Furthermore, mothers who were more knowledgeable about early play development more often responded to their child's play by introducing a higher level of play in ways that could be seen to facilitate their child's development. These findings suggested that mothers with more knowledge about play development provided their child with appropriately challenging play interactions.

Regarding the generalizable nature of their findings, Damast et. al. (1996) stated that it is important to consider the characteristics of the sample being studied. Specifically, the mothers who participated in this study were reported to be "somewhat older, more educated, and of higher socioeconomic background." Maternal knowledge of and sensitivity to play may differ in younger mothers, less educated mothers, and mothers from other socioeconomic or cultural backgrounds. It is for this reason that additional research is warranted with culturally and economically diverse groups of parent-child dyads. The current study will contribute to the extant literature by engaging multicultural families of young children in a play activity.

Haight and Miller (1993) conducted an extensive longitudinal study of pretend play with nine mother-child dyads from one to six years of age. Families were described as fairly homogeneous with well educated parents and middle to upper SES. Pretending was observed to be infrequent at twelve months of age and increased with age, corroborating Piaget's claim that pretend play increases into the preschool years. Everyday pretending was observed to be embedded in a physical and social ecology and related cultural practice. Pretending was framed by particular social configurations and practices. Fathers were typically absent during weekday mornings and afternoons, whereas mothers were more invariably present. At early ages, access to peers was limited. Everyday pretend play was mediated by objects, in particular realistic replicas. "Parents made objects available; children appropriated them."

Everyday pretending emerged as social in the cultural practice in which it was embedded. Mothers served as the primary play partners. At twelve months, all of the mothers directed all pretend play; any child pretending was initiated by the mothers, with most of the verbal responses reproductions of the mother's speech. By twenty four months, pretend play was jointly established. There was consistency among findings that social pretending occurred exclusively with mothers for five of the children, and primarily with mothers for another three children. At twenty four months, mothers responded contingently to their children's pretend contributions and provided *elaborations* (defined in the study as the introduction of novel material or contributing additional information) and p*rompts* (defined statements that required a response from the child). A significant finding, indicative of the theoretical underpinnings of the current study, is that ***pretend episodes with mothers were twice as long as solo episodes*** (p.123).

At thirty six months children and mothers continued to seek out each other as play partners and to respond at high rates to each other's initiations. Mothers continued to elaborate on and prompt children's pretend contributions, although there was a decline in the proportion of social pretending involving mothers as play partners. As children grew older, pretend play episodes with peers began to appear, and by forty eight months of age, pretend episodes with peers were twice as long as solo episodes which were twice as long as episodes with mothers.

During extensive interviews conducted with 50 middle class European American parents, Haight (1991) found that both mothers and fathers rated pretend play as important to their child's development; more importantly, they believed that their participation facilitated their children's pretending. They were able to articulate distinct reasons for how pretend play facilitates development. In agreement with the theories of Vygotsky, many parents expressed the belief that pretending helps children to explore everyday roles and social situations.

In another study, Haight (1999) examined the play of middle class Irish Americans and Chinese children from 2.5 to 4 years of age. She found that the type of play observed was significantly related to the differing cultural expectations of the two communities. A study with 15 dyads with children aged approximately 20 and 28 months by O'Connell and Bretherton (1983) examined the presence of three types of play, characterized in a hierarchy as exploratory, combinatorial and symbolic play. Exploratory play consisted of manipulation and examination of toys by the children. Combinatorial play included the children putting toys together, e.g., stacking blocks or inserting shapes into the shape sorter. Symbolic play was described as pretend play, or

"acting as if." This category included using a toy as it was intended to be used e.g., pushing a toy car, pretense with object substitution, e.g., using a block as a toy cup or bottle, and the use of the toy as an independent agent, i.e., seating the pretend people or taking them for a ride in a toy car etc. A fourth category called ambiguous play was utilized to include play acts which could not conclusively be identified as belonging to one of the above three categories.

Following an initial fifteen minute observation of child playing alone in the presence of mother, with mother attending to an interviewer and a subsequent five minute observation of joint mother-child play, O'Connell and Bretherton found that the diversity of the child's play increased when mother and child played together, and further, that the play type in which this was manifested appeared to be a function of the child's age. They attributed these changes to the mother's active guidance of the child's play.

In their analysis, O'Connell and Bretherton (1983) presented their results as supportive of two seemingly opposite perspectives. The child accepted mother's suggestions at or above his/her current level of competence, i.e., the younger children were more apt to accept a combinatorial suggestion than one of symbolic play, and even when the action of the child looked more symbolic, e.g., seating the peg people in the bus, the children had no regard to the direction the "people" were facing. In contrast, the older children placed great importance on having the peg people face front, and in some instances, stopped the play car to adjust the people. In sum, the children were highly selective to the type of instruction offered by their mothers. The instruction was not uniformly successful.

Consistent with Vygotsky's beliefs, only instruction that paralleled the tasks emerging in the child's repertoire of skills was implemented, following the concept of the *zone of proximal development.* Furthermore, the age dependent differences of the children's acceptance of maternal directiveness revealed their acceptance of suggestions which were beneficial to their efforts to master new skills. O'Connell and Bretherton felt that since the child seemed "in charge" and accepted information only within the framework of their need, this demonstrated that it was the child's own constructive process rather than the manifestation of the child's internalized, socially constructed knowledge.

The fact that the child chose to selectively accept information useful to his or her goals does not seem to necessarily suggest that this skill is a result of an individually constructed process. Instead it seems more indicative of the child's successful reliance upon scaffolding that has been provided by a competent caregiver, within the child's *zone of proximal development*.

The traditional view of the stages of early childhood has been of the individual process of maturation, in which a child matures, independent of adult intervention, as his nervous system matures, independent of living conditions, upbringing and social exchanges. Zaporozhets, A.V. & Markova, T.A. (1980/1983) state that a substantial blow has been dealt to such concepts by more contemporary research in the Vygotskian perspective which demonstrates that children ***can*** learn knowledge and skills, resulting in cognitive activity that was hitherto considered beyond their reach.

In line with Vygotsky's *zone of proximal development*, very young children have been observed to act more competently when they play with a more mature partner (Berk

& Winsler, 1995). In several studies, researchers compared one to three year olds' solitary play with pretend play interactions with their mothers. In each investigation, children were shown to engage in twice as much make-believe when mothers were involved. In fact, caregiver support led early make-believe to move to a more advanced level (Berk & Winsler, 1995 citing Dunn & Wooding 1977; O'Connell & Bretherton, 1984; Slade 1987; Fiese, 1990; Tamis-Lemonda & Bornstein, 1991; Haight & Miller, 1993; O'Reilly & Bornstein, 1993) For example, when mothers took part, children were more likely to combine representational schemes into more complex sequences. Play themes were more varied and diverse during parent-child sequences than during solo play, and maternal verbal commentary was viewed as especially effective in raising both the duration and the level of play.

Around age two, mothers begin to talk about nonexistent fantasy objects, a change that may help children increase the range and complexity of their play symbols (Kavanaugh, Whittington & Cerbone, 1983). During the second and third years caregiver support led to more complex pretense (O'Connell & Bretherton, 1984; O'Reilly & Bornstein, 1993; Slade, 1987). Haight and Miller (1993) further found that parent-child make-believe led to the development of a variety of social skills including helping children manage their emotions, impulses and exhibit more mature behavior (Berk et. al, 2006).

Petit, Brown, Mize and Lindsey (1998) examined parent's behavior with their preschool children. The investigators studied three contexts related to the development of children's social competence, parent-child play interactions, parent involvement and support of peer interactions, and parent's direct instruction of social skills and social

problem solving. Their results demonstrated that parents who were highly involved in parent-child play, i.e., demonstrated an interest and participated in the play of their children, parented children who were more likely to be accepted by their peers. Father's involvement in parent-child pay was associated with greater social competence of their sons. Positive associations were also found for mother's direct instruction in social behavior and children's social competence, as well as father's involvement in child-peer interactions and children's peer acceptance.

Adult-Child Play Interactions across Cultures

In some cultures children learn about adult roles by observing, and adults expect them to learn through watching; middle class American and western European parents actively engage their young children's attention in dyadic, didactic interactions where activities are expressly modeled (Rogoff, 2003). This exchange comes to form the toddler's expectation, such that if the mother does not stop what she is doing to attend to her child, the child may grab her chin to turn her head or stand between her and another adult. Children have learned that social engagement is one to one and they want their turn (Rogoff, 2003). In Western cultures, play often occurs in a social setting (Haight & Miller, 1993).

"I know of no society where children do not play at all, but there is wide variation in time budgeted for play" (Lancy, 2002). Adults seem to take great care to furnish children with toys or scaled down versions of adult equipment, whereas children seem to grab whatever is at hand then let their imagination do the rest. In many societies, play is limited by the expectation that from a certain age, children will contribute to subsistence. If a child has sufficient skill to fashion replicas of tools, it is more likely that they are

apprentice toolmakers and are no longer playing with toys. Lancy (2002) further notes that in some cultures, play that is unrelated to adult work is frowned upon, and in some cases outright prohibited.

Rogoff and her colleagues conducted an analysis of 50 societies. They found evidence that in a majority of societies, between the fifth and seventh year, children were assigned certain responsibilities such as being expected to care for younger siblings and livestock (Lancy, 2002). In certain small hamlets, where children were to forgo play in favor of work at an early age, play groups were small. The groups consisted of mixed age and gender groups. Observed play consisted of more rudimentary games such as tag and target shooting.

Lancy (2002) discusses the embedded nature of cultural norms and expectations in play: In study after study Madsen (1981, as cited in Lancy, 2002) demonstrated that U.S. children inevitably treated a novel game as competitive while children from village-based societies treated the same game as requiring a cooperative approach. Thus in 'our' society, Lancy continued, the "default option" for play can be said to be competition, whereas in non-Western societies, the default option for play can be viewed as cooperation.

An extensive review of studies of culturally diverse populations by Göncü, Patt, & Kouba (2002) revealed that in many societies pretend play is not valued by adults and thus occurs with less frequency. Goncu et. al. found that adult values about pretend play were guided by their education, background, level and sources of income. In traditional non-Western societies, parents do not actively shape their children's play, and toy-making by adults is rare. Some examples include peasant communities in Rajastan, India

and San Pedro, Guatemala where caregivers considered pretend play to be inappropriate for adults or a waste of time. Children in these communities typically were observed to engage in more peer play, generally in mixed-age groups. Naturalistic observations revealed that Turkish and Chinese parents engaged in pretend play with their children in contrast with Italian, Mexican, Mayan and Indonesian parents who engaged in little or no parent-child pretending (Haight, Parke & Black,1997).

Gaskins (1999) reported that pretend play rarely occurs in Mayan children aged one to five. Gaskins attributed the infrequency of observed play, not to the inability of the children to engage in pretend play, but rather as a consequence of the lack of value it is accorded and to limited opportunity. Children are expected instead to contribute to the work life of the family; therefore, there is no time allocated to play activities. Martini (1994) studied the play activities of thirteen children aged 2-5, on the island of "Ua Pou," Marquesas Islands (French Polynesia). She reported that adults did participate in play with children. She observed that while children engaged in some pretend play, their play scripts were simple and repetitive. Martini attributed this to the children's desire to maintain harmonious relations and avoid creating conflict. Block (1989) noted that Senegalese children engage in varied types of pretend play but their primary partners are other children, not adults. Senegalese adults support their children's play but are unable to participate due to demands of workload.

In studies with Korean-American and European American preschool children (Farver, 1999; Farver, Kim & Lee, 1995; Farver & Shin, 1997) interviews revealed that whereas European American mothers thought of play as a learning experience, Korean-American mothers thought of play primarily as amusement for their children. Korean-

American children grew up in households that encouraged more structured academics, while European American parents considered pretend play as an educational opportunity. Additional findings yielded from this research demonstrated that child communicated in ways that reflected the underlying values of each community, e.g., Korean-American children's communication evidenced values of interdependence and collective orientation towards self, whereas European American children demonstrated more direct of questions consistent with a more independent and individualistic outlook. Korean parents believed that playing with children is a culturally inappropriate behavior for adults (Farver et. al. 1995).

Goncu et. al. (2002) stated that efforts to compare the play of children from different income levels have been rare and hardly any effort has been made to describe the play of low income children. They lament the dearth of research studies involving ethnically diverse children, Puerto Rican or African American children. They state that variations in play occur as a function of children's social class and cultural background; and additional research is needed in order to understand how the environmental factors contribute to the observed cultural variation in the pretend play of children. The proposed study will contribute to the literature by providing information about parent-child play interactions among low to moderate income and culturally diverse young children with typical and delayed development.

There are cultural differences present in the value for engagement of various types of play: i.e., if pretend play is not valued in a particular culture, it is unlikely to be demonstrated in an early childhood setting (Roopnarine, Lasker, Sacks & Stores, 1998). Because some cultures value visual and experiential strategies for learning in preference

to verbal modes, children from these groups may prefer to learn through observation and practice. Some children may be reticent to express their feelings during play. Some behaviors viewed by teachers as passive in one culture may be encouraged in other cultures (Rubin & Coplan, 1998). Children with limited language proficiency may be less likely to engage in interactive forms of play, therefore observations must be interpreted with caution from these contexts (Clawson, 2002). Culture also affects beliefs about who is an appropriate social play partner (Vandermaas-Peeler et. al, 2002). Families living in poor, urban settings socialize their children to be successful under very different circumstances that those experienced by middle class, Caucasian families (Fogle, 2003). Parents may differentially value conformity or independent thinking in their children depending upon whether those characteristics are valued in their workplace.

Children of lower socioeconomic status may be at risk for developmental delays due to the paucity of materials to facilitate play in their home environments (Welteroth, 2002). Most research on parent-child play has been completed with college educated mothers employed outside the home, who were in the middle to upper socioeconomic range. It is not known whether previous research findings can be generalized to families living in poverty. There tends to be more limited parent education about child development. Some parents may not know how or enjoy playing with their child. "School" types of tasks may be more readily accepted.

Additionally, few studies have involved mothers who are not college educated and of lower socioeconomic status. Tizard and Hughes (1984) found that well educated British mothers tended to believe that pretend play was educational and actually participated in their children's pretend play. In contrast, studies of working class families

have yielded the belief that participation in pretend play was not common (cf. Newson & Newson, 1979, Dunn, 1986).

Do Parents Play differently with Children with Disabilities?

Play has also served as a useful window into the development of children with developmental disabilities and psychopathology. The assessment and diagnosis of children with developmental disabilities is a challenging process that involves the accumulation and analysis of data from different sources. For young children and those with significant and multiple impairments standardized testing is of limited value. At best, a clinician dealing with very young or lower functioning children may obtain only minimal responses which are difficult to interpret. A developmental approach to the need for assessment can involve the analysis of play of such children. Play assessment in the area of childhood diagnosis remains relatively underdeveloped (Gitlin-Weiner et. al, 2000).

Children with developmental delays and disabilities do not appear as intrinsically motivated as their typical peers (Lifter, 2000). Although the children may be competent in certain play activities the relatively simple quality of their activities may go unnoticed or be confusing to caregivers to interpret. Children with delays may be further compromised in their ability to engage in symbolic play by language deficiencies and difficulty engaging in social interactions (Lahey, 1988). Their difficulty achieving and sustaining more advanced forms of play may be due to their difficulty learning in general. For instance, if children are not cognizant of the particular properties of the play objects, i.e., the symbolic qualities of these objects and their relationship to other objects, the children will be unable to attend to, engage in, or understand the nature of the play

activities that are being used to enhance their language and social development (Lifter, 2000).

Parents of children with disabilities may unwittingly promote play deficits, which can lead to feelings of incompetence in their children. Research suggests that mothers of children with disabilities play less with, and are more controlling of, their children than are mothers of typically developing children (Hanzlik, 1989; Hanzlik & Stevenson, 1986; Kogan & Tyler, 1973). Interactions between mothers and their disabled infants indicate that infants provide fewer cues and initiate interaction less frequently then do their non-disabled peers. Mothers of these infants tend to dominate activities (Rogers, 1988) which has been noted to diminish optimal development (Mahoney & Powell, 1988). Interestingly, this pattern changes over time, as parents of toddlers with disabilities have been noted to withdraw from their child, playing less with them as the child grows older (Rogers, 1988).

For parents of young children with disabilities, the definitive role of parent as play partner and companion often becomes compromised by the dominance of the parent's role as a medical overseer/ coordinator. Spontaneous interactions become inhibited by the parent's anxiety over the medical condition of their child as well as by the reduced level of responsiveness that many children with disabilities exhibit (Jackson, Robey, Watjus, & Chadwick, 1991). This often leads to a self fulfilling prophecy, with less stimulation provided and lowered parental expectations, children respond less. With extra demands on their time and emotions, parents may even forget to have ordinary playful interactions with their child (Gerlock, 1982). Similarly, in a study with biologically "high-risk" children at four years of age, McGrath, Sullivan, Brem and Rocherolle (1995)

demonstrated significant interactions between perinatal status and mastery behaviors. Als and Brazelton (1981) discovered that when confronted with a problem solving task, preterm infants "played at a low level with the toy," had difficulty balancing sustained attention on the toy and the mother, and exhibited minimal affect. At the same time, differences assessed using the Bayley scales were minimal.

This is also apparent from studies of children with hearing impairments. Research demonstrates that a child born to hearing parents was said to score lower on cognitive and social emotional measures than a hearing impaired child born to hearing impaired parents. The play of deaf children born to deaf parents who use sign language were as likely to have advanced play and language development as hearing children of hearing parents (Spencer, 1996). The distal impairment created by the lack of communication between parent and child proves to have greater impact than the proximal presence of hearing impairment.

Children with mental retardation often exhibit less combinatorial play than would be expected based upon their other abilities. Self-directed pretend play appeared later than symbolic play actions on dolls. Atypically developing children are less likely to initiate play (Brooks-Gunn & Lewis, 1982). They often exhibit more isolated and toy directed behaviors, and spend less time in social interactive play; they are more dependent upon concrete toys and they play with a smaller variety of toys (Johnson & Ershler, 1985).

In studies of children with Down Syndrome (DS) Cichetti, Beeghly & Weiss-Perry (1994) reported that while object play developed on a similar trajectory to that of mental age matched controls, and was highly correlated with cognitive development,

children with DS differed on several measures of social behavior. They were found to engage in less social referencing with their mothers during object play, less joint attention, were rated as less socially responsive and initiated less free play. Similar characteristics have been reported in infants with DS (MacTurk, Hunter, McCarthy, Vietze & McQuiston, 1985). In addition, Sigman & Sena (1993) report that children with DS spend more time in visual exploration of toys and less time in manual exploration than controls matched for chronological and development age.

Like children with DS, children with autism exhibit severe linguistic and cognitive retardation and show difficulties in specific social behaviors and manifest wide individual differences in functioning. (Cicchetti, Beeghly & Weiss Perry, 1994) Three severe deficits in behavioral functioning distinguish autism from other disabling conditions: (1) symbolic play, (2) communication and language, and (3) social interaction. Many autistic children never develop language or symbolic play, but even in those who do, symbolic play is often rigid, repetitive, lacking the creativity and fluidity observed in normal or mentally retarded children (Cicchetti, Beeghly & Weiss Perry, 1994). Children with autism also exhibit a marked impairment in their ability to imitate. Dawson and Adams (1984) noted that many preschool children with autism showed the social skills of a normal 1-4 month old infant. They designed an intervention to promote social effectance in autistic children. Specifically, parents were taught to imitate the vocalizations and facial expressions of their children.

Sigman and Mundy (1987) suggest that the symbolic impairment observed in children with autism appears to involve aberrations in specific aspects of representational abilities (e.g., imitation, joint attention, shared reference) as well as the ability to process

social experience. Since both symbolic play and joint attention appear to be related to individual differences in language acquisition in children with autism. Mundy et. al. (1986) suggested that an assessment of symbolic play and nonverbal communication may provide the means of predicting language acquisition in children with autism.

4 Do Parental Beliefs Inform Parents' Play?

One possible source of individual and cross cultural variation in parental involvement in pretend play with their children is the belief system that frames and informs parental actions (Haight & Miller, 1993). Parents' understanding about the nature of children, how they develop and the meaning of behaviors are to large extent shared by members of a cultural group (Harkness & Super, 1996). These culturally organized understandings govern parental actions in many areas, including how they speak to their children, discipline their children, or seek advice from experts. In particular, parental interactions with their children are a function of their belief system(s). The emergence of parent's cultural beliefs as an area of inquiry has been paralleled in many studies by psychology, sociology, anthropology and interdisciplinary approaches to culture and human development.

With the increase in research of parental beliefs, has come the growing recognition that most parental cognition is itself socially or culturally organized. Interest in the cultural dimensions of parental beliefs is evidenced by studies of ethnic differences in expectations about child development and the identification of cultural themes in childrearing (cf. Ninio, 1979; Reid & Valsiner, 1986). Nonetheless, it is only recently that "developmental psychologists have begun to pay systemic attention to how cultural belief systems are instantiated in parent cognition and actions" (Sigel, McGillicuddy-DeLisi & Goodnow, 1992).

Valsiner and Litvinovic (1996) argue that culture is "not an independent variable" but serves as the main semiotic vehicle to organize the conduct and reasoning of parents. Of particular relevance to this study, Goodnow (1996) suggests that investigation into the

"ideas" of parents is essential both because it informs parental actions and provides a window into the context for the development of their child(ren). The study of diversity in parental ethnotheories is a central one in the study of human development (Harkness & Super, 1996). Among the possible variables, schooling emerges as an important factor, e.g., preschool teachers, who have more formal education related to child development, report later and more accurate, developmental expectation than do parents in some cultural settings. In the context of intracultural variations, for middle class American families, pediatricians play an important role, in other cultures, grandparents and elders are regarded as more influential.

Goodnow (1996) posited that the study of beliefs must include the context of culture since it is the culture that contains practices that provide rationales for actions and beliefs and indicate where flexibility or negotiation is possible. In relation to young children, some areas that have been studied include sleep practices, feeding practices, expectations of developmental timetables and play. Goodnow proposed that the "basic universal tasks of childrearing provide a natural basis for examining the cultural specificity of beliefs and behavior." Sigel and Kim (1996) present the "flow of influence" to be from parents' beliefs expressed in parents' teaching behaviors (p.89). Ogbu (1981) proposed that parents have different childrearing values and goals based upon their own cultural experiences and the extant environment for their children to attain the requisite competencies. Research has documented these differences among the childrearing goals of culturally diverse families (García Coll, Lamberty, Jenkins, McAdoo, Crnic, Wasik, & Vazquez García, 1996). Because culture is a key determinant of parenting beliefs, the study of culturally diverse families is greatly enhanced by the assessment of parental

beliefs and attitudes (Fogle, 2003). To understand child rearing practices, one must understand the values guiding a behavior and the desired goals by the parent.

Parental beliefs form and influence parents' expectations about all aspects of their children's lives including how children learn, acquire new skills and develop, the role of parents in the life of their child and theories of intelligence. Parental beliefs and attitudes can be a function of economic constraints, ethnic factors, religious practices, as well as the unique experiences of parents (Garcia Coll et. al, 1996). Research demonstrates that the context of pretend play is informed by beliefs about adult-child relationships in general (Haight & Miller, 1993).

One of the most important reasons to study parental beliefs is to understand how they may affect child development, both contemporaneous and subsequent. While it may seem self evident that such belief systems influence child outcomes, the relationship has not proven easy to demonstrate empirically (Harkness & Super, 1996). Sigel and Kim (1996) question whether one of the possible causes for this difficulty may relate to the way questions have been phrased, e.g., whether they begin with "Children should _____," or "My child should _____." Focusing on an individual child in a particular context might evoke a specific representation whereas using the third person might arouse a more abstract representation relative to some general cultural norm or belief. To date, research in this specific area is limited. One of the concerns raised is that parents might respond to questions asked in the third person in terms of cultural norms, what is expected of them, or what they believe is best for others, none of which has to do with how the parent relates to his or her own child (Becker & Krug, 1965). This is consistent with the questions Goodnow and Collins (1990) pose regarding who is *the*

child in the literature: “Shall we ask for ideas about children generally, typical children of a particular age group “ideal children” or the parent’s own child?” (p.156). How the questions are phrased will no doubt influence the accuracy and generalizability of the responses obtained. Based on these findings, in this study, questions were phrased to use both formats to ensure that the maximal range of responses is obtained for analysis.

Sigel and Kim (1996) conducted a study with 78 dyads designed to asses the relationship between parental beliefs and teaching strategies. Parental interview and observations were utilized. Instruction strategies and parental beliefs were coded in terms of beliefs and cognitive processing, or direct instruction provided. Cognitive processing means that parental belief that children learn by using their own imagination and figuring things out for themselves. Direct instruction refers to parental beliefs that a child learns when provided with instructions and explicit guidance. For mothers, the more general the target of the probe, the stronger the correlation was with observed behaviors. For fathers, on the other hand, the specific contexts had the most significant correlation, but not the strongest.

In reported literature of parental beliefs and play, the relationship between stated parental beliefs and observed parent-child interaction has been equivocal. For example, in a study of parent-child dyads from Northern and Southern Italy, Bornstein et. al. (2001) found that while parents reported that their style of interaction with their toddlers was primarily social, observation demonstrated it was in fact didactic in nature. No significant correlations between the stated parental beliefs and the behaviors of the parents emerged in either group.

A study with 36 Japanese American and 41 South American mothers who were immigrants to the United States revealed similar findings (Cote & Bornstein, 2000). Both Japanese American and South American immigrant mothers reported in a questionnaire that they engaged in more social than didactic interactions with their infants. However, Japanese American mothers were observed to engage in significantly fewer social than didactic behavior, a finding that conflicted with mother's own reports. Cote and Bornstein (2000) suggest that mothers from different cultures may interpret the same questionnaire differently. In addition, findings of statistically significant differences between the parents' reported beliefs and their actual behaviors suggest that cultural groups may respond differently to questionnaires or self report because their self perception differs.

In a study with 60 low income adolescent mothers who were asked to estimate developmental timings of cognitive, language, social and play development, mothers were more accurate at ordering developmental progressions but they tended to underestimate them, that is to predict that developmental milestones were attained earlier than they actually were. Mothers' knowledge about the communication, cognitive and motor domains were stronger than their knowledge about abilities in the social daomain and play development (Tamis-Lemonda, Shannon, & Spellman, 2002).

A concern, addressed by the study of parental beliefs, is knowledge about child development which is guiding parents' expectations and interactions with their young children. In addition, Lemonda (2002) posits that the study of parents' knowledge about child development offers a window into their thoughts about their children, as well as

their role as parents. Current research indicates that maternal knowledge is affected by socioeconomic status, maternal education, culture and maternal age.

Thus, the proposition that the answer depends upon the question, must be considered when asking questions regarding parental beliefs. This study will contribute to the extant literature by providing information about families from different cultural backgrounds, in general, and their beliefs about the value of pretend play with their children, in particular. The beliefs of parents are informed by the normative practices in their cultural milieu. Certain parental behaviors may serve either to enhance or restrict children's development. It is not possible to draw conclusions about observed behaviors without first understanding the traditions and cultural norms of the family and community under observation. Parents from diverse backgrounds may encounter unique stressors that challenge their resilience, often with limited support systems. Parents, and other significant adults in the child's life, structure routines and present children with cultural lessons throughout each day by channeling development toward their cultural norms. One may go so far as to say that culture suffuses every aspect of the child's experiences from awakening to sleep (Tamis-Lemonda, 2002).

In the present study, play interaction(s) of parent and child will be observed in the context of parent's stated beliefs about the development and the significance of play. Much of the extant literature is derived from observing families of children with middle to upper SES, well educated, Caucasian families. As a result, for this study, families from diverse cultures, of differing SES and maternal education levels were sought to enrich analysis of the potential effects of parental beliefs regarding the developmental significance of play and its relationship to the observed parent-child play interaction.

Hypotheses

The primary hypothesis guiding this study is that parents who believe that play with adults enhances and supports development will demonstrate a more active style of scaffolding their child in play. A secondary hypothesis is that these children will demonstrate more developed play skills than children whose parent believes that development is solely based upon genetic endowment (termed the *fixed* group) or is purely a function of age (the *maturational* group). Additionally, it is hypothesized that the presence of symbolic play requires the ability to engage in joint attention.

1. Parents who believe that playing with a child enhances his or her development will be more likely to use a more active style of scaffolding in play than parents who do not believe that playing with a child enhances his or her development.
2. Parents who believe that playing with a child enhances his or her development will show a more developed level of (symbolic) play than parents who do not believe that playing with a child enhances his or her development.
3. Children who engage symbolic play will engage in joint attention, i.e., symbolic play requires the presence of joint attention.

The following table illustrates the relationship of the hypotheses to the coding categories.

	Beliefs	Scaffolding	Joint Attention	Symbolic Play
Hypothesis 1	High	High		
Hypothesis 2		High		High
Hypothesis 3			High	High
Conclusion	High	High	High	High

5 Methods

This is an observational study of culturally diverse families. Parents were observed as they played with their young children (aged 18-42 months). This age range was selected based upon the assumption that joint attention is a prerequisite skill to symbolic play, and that it should be well established by eighteen months.

Parents were asked to complete a questionnaire of Parental Beliefs about Play and Development and to play with their children. Parents' play interaction with their child was coded, analyzed and then compared to parental beliefs determined by their responses to the questionnaire. The results of the questionnaire were consolidated into 3 primary and 1 secondary summary measures. The level of play exhibited by the mother-child dyad, i.e., presymbolic, symbolic and the presence of maternal scaffolding behavior in the play interaction was studied. Other factors considered are whether or not the child was reported to have a developmental delay, the level of maternal education, ethnicity. In addition, the family's Medicaid status was used as a proxy for SES.

All parents were asked to complete the Parental Beliefs about Play and Development questionnaire and to participate in a videotaped play session with their child. Plans were to include all questionnaire data even if the family chose not to participate in the observed play sequence. In such cases, the summary measures from the questionnaire would be analyzed based upon the demographic information reported by the family, i.e., their constellation of beliefs, maternal education level, ethnicity and presence/absence of a disability in their child. All parent-child dyads participated in both aspects of the study; so it was not necessary to implement this procedure.

Exclusions from the sample included families whose primary language was other than Chinese, Spanish or English into which the questionnaire has been translated. A further exclusion was a child with a diagnosis of autism or severe cognitive delays since previous research demonstrated that it is unlikely that symbolic play will be observed by these populations. Children with severe impairments in motor functioning were also excluded, due to their physical inability to complete the required tasks.

Participants

Participants were recruited from local churches, neighborhood daycares and early childhood programs as well as early intervention programs. Children resided in New York City, primarily in the Boroughs of Brooklyn and Manhattan. Children with Autism Spectrum Disorders, severe cognitive deficits and severe motor impairments were excluded from the sample.

The sample consisted of 30 mother-child dyads. 10 were immigrant families from China; 10 were Hispanic immigrants, and 10 were Caucasian-Americans. Sample characteristics are presented in Table 1. The age of the mothers ranged from 23-39 (*M* = 31, *SD* 3.81). The age of the fathers ranged from 25-41 (*M* = 33.34, *SD* 4.40). The age of the children ranged from 18 – 36 months, (*M* = 26.70 months, *SD* 6.05). Of the 30 children, 17 were male, 13 were female. The education level of the Mothers and Fathers ranged from Junior High School through Graduate School. Twenty four of the 30 children in the study had siblings; 17 had 1 or more siblings, 6 had 2 or more siblings and 1 child each had 4, 5, or 6 siblings. Of the children in the dyad, the mothers reported that 8 had received a therapeutic service[5]. Of the 30 children, siblings of 8 of them were reported to have received a therapeutic service. In the sample, 15 families reported that

[5] Such as speech therapy, physical or occupational therapy,

they had Medicaid, and 15 reported that they had private health insurance. Medicaid status was used as a proxy for income.

Table 1

Mean Age of Parents and Children.

	Minimum	Maximum	*M*	*SD*
Age of Mother	23	39	31.00	3.815
Age of Father	25	41	33.43	4.400
Age of Child[a]	18	36	26.70	6.047

[a] = age of child reported in months.

Table 2

Maternal Educational Level and Health Insurance Status (Percent) by Ethnicity

	Chinese	Hispanic	Caucasian	Total Sample
Maternal Education				
Junior HS	0	3.3	0	3.3
High School	23.3	13.3	16.7	53.3
Some College	6.7	13.3	3.3	23.3
Graduate School	3.3	3.3	13.3	20.0
Private Insurance	10	20	20	50.0
n	10	10	10	30

Note. Percentage reflects proportion of total sample. Analyses revealed no significant differences for education or health insurance within or across ethnic groups.

Procedures

Parents were informed about the study in New York City, at churches, daycare centers, and early childhood intervention programs. Signs were posted; teachers and babysitters were asked to inquire if any parents in their programs would consider participating in a study about play. When parents agreed to participate, they were asked to choose the most convenient location to engage in a parent-child play session. Of the 30 mother-child dyads, 27 chose their own homes, 1 chose a daycare center, 1 chose a church group space and 1 chose the site of an early intervention program. The parents provided consent for the interaction to be recorded by video camera in order to facilitate coding after the play session. Parents were assured that the materials would be kept confidential and their identity would not be used.

After signing the consent, parents were provided with the complete selection of toys (described below) and asked to play with their child as they normally would for approximately 10 minutes. Parents were advised that there is no right or wrong way to play with their child, and that this study was looking at how parents from different cultures play with their young child. Parents were informed that they could request that the play session be terminated at any time if they were uncomfortable continuing. None of the 30 parents asked for the play session to end prior to the 10 minutes. After the play session, parents were asked to complete a questionnaire about their beliefs about play, and whether they believed it had any purpose in enhancing the development of their child.

Persons videotaping the interaction were instructed not to provide parents with any instructions regarding how to play with their child. The instructions provided were

as follows: “Please do not give parents any direction regarding how to play with their child. Please lay out all the toys in front of them and tell them to choose whatever toys they wish. Then video the play interaction for approximately 10 minutes. If the child is concerned by the presence of strangers, try to record from outside the child’s direct line of vision. If the parent needs to interrupt playing with child, for any reason, such as the child needing the bathroom, or the doorbell or telephone ringing, just stop recording and resume when parent or child are ready to play again together.”

Measures

Questionnaire of Parental Beliefs.

The questionnaire consisted of 22 questions with a six point likert scale ranging from strongly agree to strongly disagree, with several questions about demographic information. The questionnaire was pilot tested with approximately 10 parents of young children to ensure that the items were culturally appropriate and easily understandable by each group. Questions that were viewed as ambiguous by the parents in the pilot test were removed or clarified. It is expected that the level of literacy of the parents would have a wide range, so it was important that the questions were written in a straightforward manner, with no technical terms or jargon. The questionnaire was written in both male and female form, to correspond to male and female children. (See Appendix A). Questions were translated into Spanish and Chinese.

The play skills of the dyad and teaching styles of the parent were analyzed for each participant. Additional analysis was related to the demographic information provided by the participants, summary measures derived from the Parental Beliefs about Play and Development Questionnaire, and the parent-child play interaction.

Rating of Questionnaire.

The questionnaire elicited parental beliefs about play and development. Responses to the questionnaire of Parental Beliefs were summarized in 3 primary and 1 secondary categories. Parents who believed that their child's intellect (intelligence, smartness and/or ability to learn) increased as a result of play were termed ***interactive***. Parents who believed that their child's intellect was determined at birth were termed ***fixed;*** parents who believed that their child's intellect merely increased with age were classified as ***maturational***. Parents were also asked if they play just to have fun with their child, this variable was classified as ***fun***. A high score represented belief in that summary measure.

Observation of Parent -Child Play.

Each parent-child dyad was asked to participate in a video taped play session involving a joint play segment. Parents were instructed to engage in their normal style of play with their child. In an effort to standardize the play session, all parents were provided with a selection of age appropriate toys rather than using their own toys. The selection provided included a miniature tea set with pitcher, tea cups, saucers and plates, colored blocks, a series of small domestic and farm animals and some small non-gender specific stuffed animals. A broad array of toys was available so as to appeal to a wide variety of young children across several cultural groups. Parents were provided with the option of whether the play session would occur at their home, or at the child's educational program so that parent and child would be as comfortable as possible.

Each play session was videotaped. Observers, who were blind to the research hypotheses, were asked to code the play session by observing mother-child interactions

and identifying specific behaviors using the criteria identified on the rating sheets. Interrater agreement was obtained by having two coders independently score all play interactions for the full time period of the video for 50% of the sample. Percentage of agreement exceeded 92%. This was derived by calculating any instance of disagreement in the level of a coded behavior.

Rating of Parent-child Play.

Transactions between the dyads were analyzed based upon the following: (1) Level of scaffolding exhibited by the parent; (2) Presence of joint attention; (3) Child's behavior (4) Type and level of play observed. The codes for scaffolding and joint attention were adapted from Bigelow, MacLean and Proctor (2004). Levels of symbolic play were measured based upon the initial criteria used by Slade (1987) which was modified by the addition of 2 more advanced levels of symbolic play with plots.

Scaffolding. Parental scaffolding was coded into three levels, 1) Non responsive or None 2) Basic, and 3) Active. In episodes coded as level 1, the mother showed no scaffolding and was termed *None,* i.e., she was either passive to or monopolized the play activity. In episodes coded as Level 2, the mother's scaffolding was coded as *Basic,* since she demonstrated 'low scaffolding,' i.e., she provided some verbal encouragement, but did not take an active role in the play interaction. In episodes scored as level 3, the mother's scaffolding was termed *Active,* i.e. she actively facilitated the toddler's play through positioning objects, modeling and turn-taking.

Child Behaviors. *Child behaviors* were coded independently of mother's behaviors as paying attention, being on-task, whether the child sought help verbally or

nonverbally, whether the child sought directions or followed any that were provided, or were off-task.

Joint Attention. Bigelow *et. al*. (2004) adapting Bakeman & Adamson, 1984, defined coordinated joint attention as infant-mother involvement with the same object or activity for a period of greater than three seconds: wherein the infant demonstrates awareness of the mother's involvement with the object or activity by looking at the mother's face, gesturing, vocalizing or turn-taking. Either member of the dyad may have initiated the interaction, and during extended episodes may look away briefly, but for no longer than three seconds.

Play. Play was divided into two categories, presymbolic and symbolic. There were 3 categories used in the analysis of presymbolic play. Yarrow McQuiston, MacTurk, McCarthy, Klein & Vietze (1983) established a hierarchy of infant's actions as ranging from looking, exploring, to persisting, as the more sophisticated form of mastery motivation. Mastery motivation was defined as "striving for competence… and persisting in goal-oriented behaviors."

MacTurk, McCarthy, Vietze & Yarrow (1987) further divided "off-task" into "social" and "off-task" categories. Thus, the child's pre-symbolic play skills were coded as *off-task, looking* at materials, engaging *socially* with parent during play, *exploration* of materials and ultimately *mastery* – using play objects as they are intended (adapted from MacTurk, Hunter, McCarthy, Vietze & McQuiston, 1985). Off-task was applied when a child was not engaged with either the parent or the toy object, such as walking away from the toys, dropping the toys and leaving the area.

Level of Symbolic Play. Level of symbolic play was coded based upon Slade (1987) using Nicolich's (1977) system in which levels of play increase in complexity. These levels and examples of their application were adapted and coded as follows: 0 for presymbolic was eliminated since there was already a presymbolic play analysis being performed. Symbolic play was coded on a scale from 1 – 6. (1) Self-directed pretend, e.g., combing one's own hair, (2) Decentered or object-directed pretend, e.g., feeding the doll (3) Object combinations e.g., giving the toy doll and toy monkey a ride in a truck (4) Object combinations with vocalizations, (5) Presence of a theme or plot and (6) Planning a pretend sequence – i.e., presence of theme or plot with elaboration, prior to its enactment.

Transactions between the dyads were analyzed and coded based upon the following: Off-task behavior was coded when the child was not engaged in the play activity. Criteria for defining the beginning of an episode of play was based upon Slade (1987) either when a child picked up a toy or there was a stated intention to pretend followed by the search for a toy. Termination of a play episode was defined by the child dropping the object they were playing with.

6 Results

Parental Beliefs

Results of the Parental Beliefs about Play and Development Questionnaire are presented in Table 3. For all of these summary measures a score of 1 was low and a score of 6 was high. Table 3 reports the summary results for the four measures derived from the questionnaire of Parental Beliefs. This was obtained by dividing the score of all items in this measure by the number of items in the measure. A higher score indicated a greater belief in that measure.

The summary measures derived from the questionnaire of Parental Beliefs were as follows: Questions that elicited the parental belief that the child's intellect (intelligence, smartness and/or ability to learn) increased as a result of play were termed *interactive (*labeled as *intertot)*. Questions that elicited the parental belief that the child's intellect was determined at birth were termed *fixed* (labeled as *fixedtot)*; questions that elicited the belief that the child's intellect merely increased with age were classified as *maturational* (labeled as *mattot)*. Questions that elicited the belief that parents play just to have fun with their child, were termed *fun* (labeled as *funtot).*

Table 3

Parental Belief Questionnaire Summary Measures –
Minimum and Maximum Scores, Means and Standard Deviations.

Parental Belief Summary measures	Minimum	Maximum	*M*	*SD*
Interactive	1.083	3.500	1.967	.553
Fixed	1.200	4.600	2.333	.934
Maturational	2.000	6.000	3.889	.984
Fun	1.500	5.000	3.400	.977

Note: higher scores reflect higher levels of parental beliefs in the respective measures.

Table 4

Results of Play Observation

Play Interaction Variables [a]	Minimum	Maximum	*M*	*SD*
Parental scaffolding	1	3	2.567	.679
Child Behavior	1	3	2.483	.771
Joint attention	1	4	2.767	1.016
Symbolic play	0	6	2.800	2.384

[a] = Higher scores reflect higher levels of the play observation coded variable

Analysis of Dyadic Play Interaction

The coders were provided with the recorded interactions and a laptop computer upon which to view them. They were given coding sheets to complete with guidelines provided for each level of each category. Parental Scaffolding was coded on a scale from 1 to 3. Child behavior was coded from 1 to 3. Joint attention was coded from 1 to 4. Symbolic play was coded from 0 to 6. Each coder completed a sheet which was entered into an excel spreadsheet for further analysis.

Parental Beliefs and Parental Scaffolding.

Hypothesis 1 predicted that parents who believe that playing with a child enhances his or her development will likely use a more active scaffolding style in play. In order to test this hypothesis, a one way ANOVA was carried out with Parental Scaffolding as the dependent variable and Parental Belief in the Developmental Value of Play as the independent variable. Results of this analysis showed that the parents who demonstrated Active Scaffolding had higher levels of Belief in the Developmental Value of Play[6] *(F* (2,27)=4.74 [p=0.017]) This is illustrated in Figure 1. Post-hoc analyses (Fisher's LSD) indicated that the Active group differed significantly from the other two groups (p=0.017 and p=0.039) which did not differ from one another. Thus, Hypothesis 1 was supported.

[6] Some researchers argue (e.g., Kuczynski, 2004) for the role of bidirectional effects in interactions between parents and children. From this approach, the relationship between parental beliefs and the parental behavior observed in the dyadic play could be viewed as a manifestation of such bidirectionality, that is, entailing the effects of the child's behavior and characteristics upon the parent. However, in the context of this work, the interpretation follows the sociocultural theory in its key tenet about the central role of parental cultural mediation of interactions with their children. This tenet is followed, in particular, given the young age of the children studied here i.e. 18-36months.

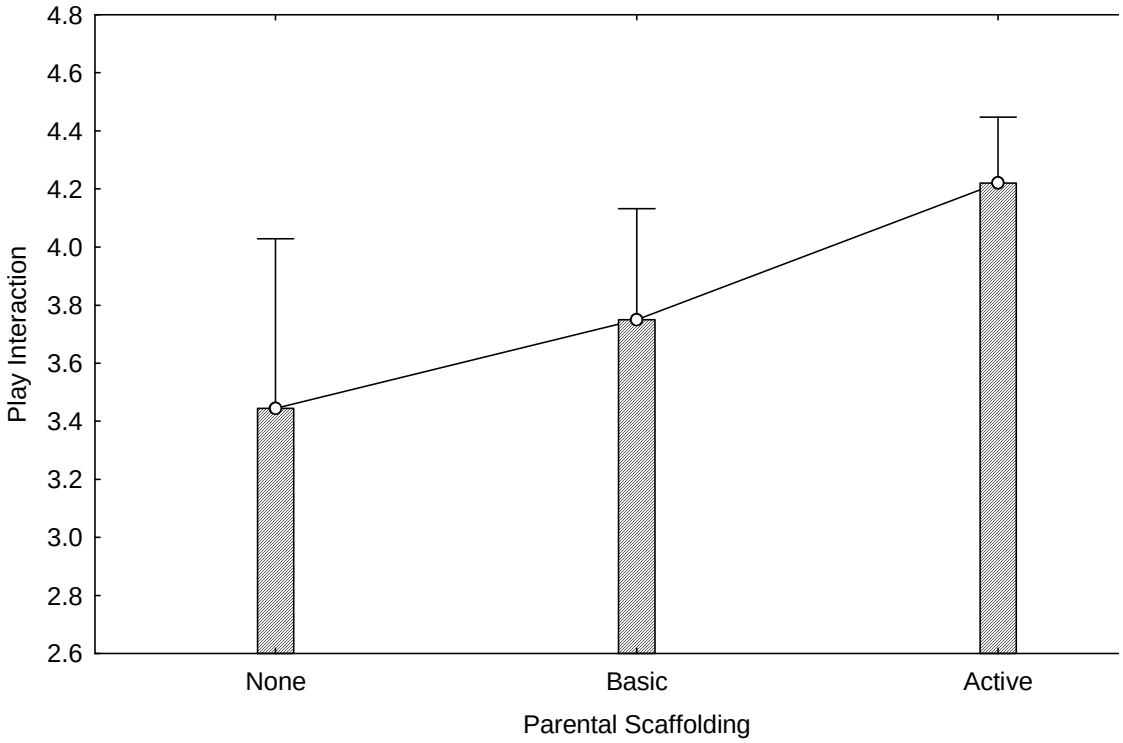

Figure 1. Relationship between parental belief of interactive role of play and development and level of parental scaffolding. Error bars represent 0.95 confidence intervals.

Table 5

Correlations between Parental Belief Questionnaire variables and with play variables

Variable Name	1	2	3	4	5	6	7	8
l. Interactive summary score	--							
2. Fixed summary score	-0.626***	--						
3. Maturation summary score	-0.195	0.354	--					
4. Fun summary score	-0.488**	0.570***	-0.126	--				
5. Parental scaffolding	0.507**	-0.439*	-0.143	-0.275	--			
6. Symbolic Play score	0.212	-0.334	-0.191	0.050	0.690***	--		
7. Child behavior	0.072	-0.064	-0.222	0.204	0.414*	0.702***	--	
8. Joint attention	0.128	-0.179	-0.329	0.221	0.654***	0.857***	0.817***	--

* Correlation is significant at the $p < .05$ level. ** Correlation is significant at the $p < .01$ level. *** Correlation is significant at the $p < .001$ level.

Additional Results.

Findings that further contribute to the strength of the summary measure of Parental Belief in the developmental value of play is its extremely strong inverse correlation with the Parental Belief that development is fixed (-0.626) $p<0.001$ and the Parental Belief that play is just to have fun (-0.488) $p<0.01$. In furtherance of this point is the confirmation of the primary hypothesis guiding this study, that parents who believe in the developmental value of play will engage in a more active style of their child in play (0.507) $p<0.01$.The inverse was also demonstrated, in that the relationship of active scaffolding of child in play to the Parental Belief that development is fixed was negative (-0.439) $p<0.05$.

Parental Beliefs and Symbolic Play.

Hypothesis 2 predicted that parents who believe that playing with a child enhances his or her development will show a more developed level of symbolic play than parents who do not belief that playing with a child enhances his or her development. In order to test this hypothesis, a one way ANOVA was carried out with Symbolic Play as the dependent variable and Parental Belief in the Developmental Value of Play as the independent variable. Results of this analysis did not demonstrate significant levels of difference, thus Hypothesis 2 was not supported. One explanation may be the small sample size, which was extended over the six levels of symbolic play, making significance more difficult to attain.

Analysis demonstrated that Parents who believe in the Developmental Value of Play are better at scaffolding the play of their children, and additional analysis demonstrated that parents who are active scaffolders of their child's play have children

who demonstrate higher levels of symbolic play as illustrated in Figure 2. Thus it appears that this interaction is mediated through a different (as yet unidentified) channel, $F(2, 27) = 17.815$, $p<.001$. This is illustrated in Figure 2.

Table 6

Symbolic Play as a Function of Parental Scaffolding

Level of Parental Scaffolding		*M*	*SE*	**95% CI**		*n*
				LL	*UL*	
1	None	0.333	0.936	-1.588	2.255	3
2	Basic	0.286	0.613	-0.972	1.544	7
3	Active	4.050	0.363	3.306	4.794	20

Note. CI = confidence interval; LL=lower limit, UL = upper limit.

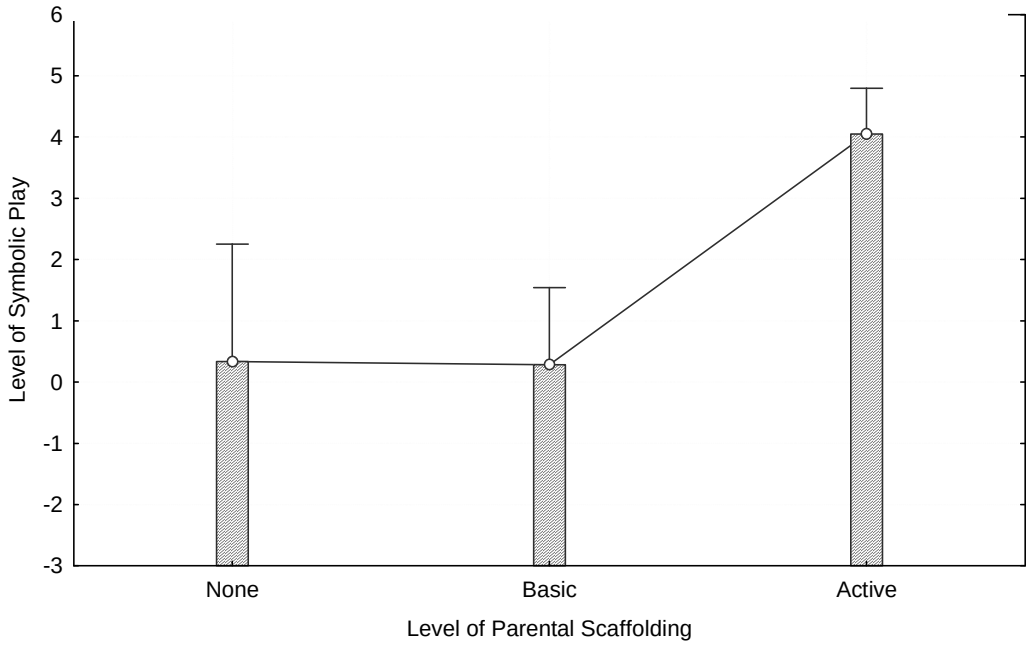

Figure 2. *Symbolic Play as a Function of Parental Scaffolding.* Error bars represent 0.95 confidence intervals.

Post-hoc analyses between symbolic play and levels of parental scaffolding using Fisher's LSD indicated that the Active group differed significantly from the other two groups (p=0.001 and p=0.000) which did not differ from one another. Thus although Hypothesis 2 is not supported, it is clear that there is a significant difference in symbolic play between parents who are active scaffolders of their children in play and such parents are also likely to believe in the developmental value of play. The mechanism through which this is mediated is not identified at this time and warrants further research.

Symbolic Play and Joint Attention.

Hypothesis 3 predicted that children who will engage in symbolic play will engage in joint attention, i.e., symbolic play requires the presence of joint attention. In order to test this hypothesis, a one way ANOVA was carried out with levels of symbolic play as the dependent variable and level of joint attention as the independent variable. Results of this analysis showed that the children who displayed higher levels of symbolic play demonstrated more advanced joint attention. $F(3, 26)=39.966$, $p<.001$. This is illustrated in Figure 3.

Table 7

Symbolic Play as a Function of Joint Attention

Level of Joint Attention	*M*	*SE*	95% CI		*n*
			LL	*UL*	
1	0.000	0.531	-1.092	1.092	4
2	0.143	0.402	-0.683	0.969	7
3	3.818	0.320	3.159	4.477	11
4	5.125	0.376	4.353	5.897	8

Note. CI = confidence interval; LL=lower limit, UL = upper limit.

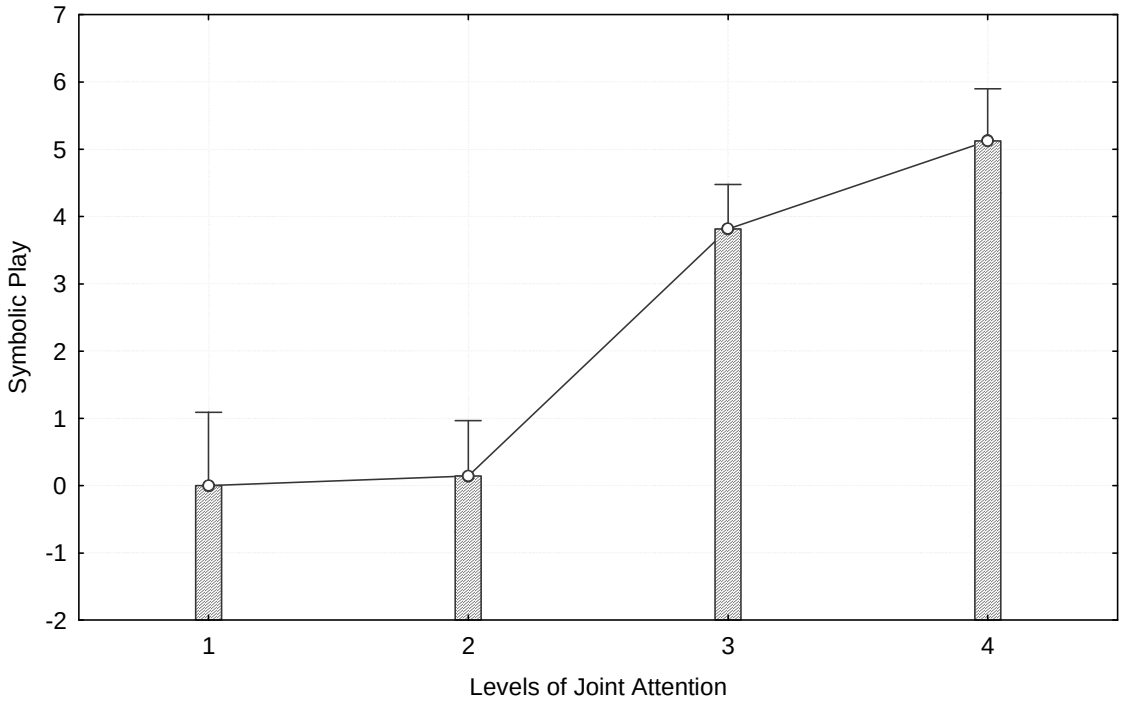

Figure 3. Relationship between Symbolic Play and Joint Attention. Error bars represent 0.95 confidence intervals.

Post-hoc analyses (Fisher's LSD) indicated that groups 3 and 4 differed significantly from the groups 1 and 2 ($p<.001$ and $p<001$) which do not differ from one another. Thus, Hypothesis 3 was supported.

Effects of Demographic Variables

As described in the hypotheses analysis would be preformed based upon the demographic information provided by the participants. Thus analysis was conducted using Ethnicity, Level of Maternal Education and Medicaid Status against each of the summary measures derived from the Parental Belief Questionnaire. The results are illustrated in Figures 4-8 below.

Ethnicity and Parental Beliefs.

Since each ethnic group included a cross section of maternal education and private insurance, analysis was performed to determine if there was a relationship between Parental Beliefs and their ethnicity. Caution must be used in interpreting any findings based upon the small sample size.

Parental Belief in the Developmental Value of Play. For parental beliefs in the developmental value of play, ethnicity was not significant i.e., there was no significant finding for parental belief in the developmental value of play by ethnicity.

Parental Belief that Development is Fixed. In order to assess the relationship between ethnicity and parents who believe that development is fixed, a one way ANOVA was performed with the summary measure fixed as the dependent measure and ethnicity as the independent measure. The results were significant $F(2, 27)=8.8236$, $p<001$. Thus ethnicity had a significant relationship with parental beliefs that development was fixed.

Table 8

Effect of Ethnicity on the Parental Belief that Development is Fixed

			95% CI		
Ethnicity	*M*	*SE*	*LL*	*UL*	*n*
Caucasian	1.820	0.238	1.332	2.308	10
Hispanic	3.140	0.238	2.652	3.628	10
Chinese	2.040	0.238	1.552	2.528	10

Note. CI = confidence interval; LL=lower limit, UL = upper limit.

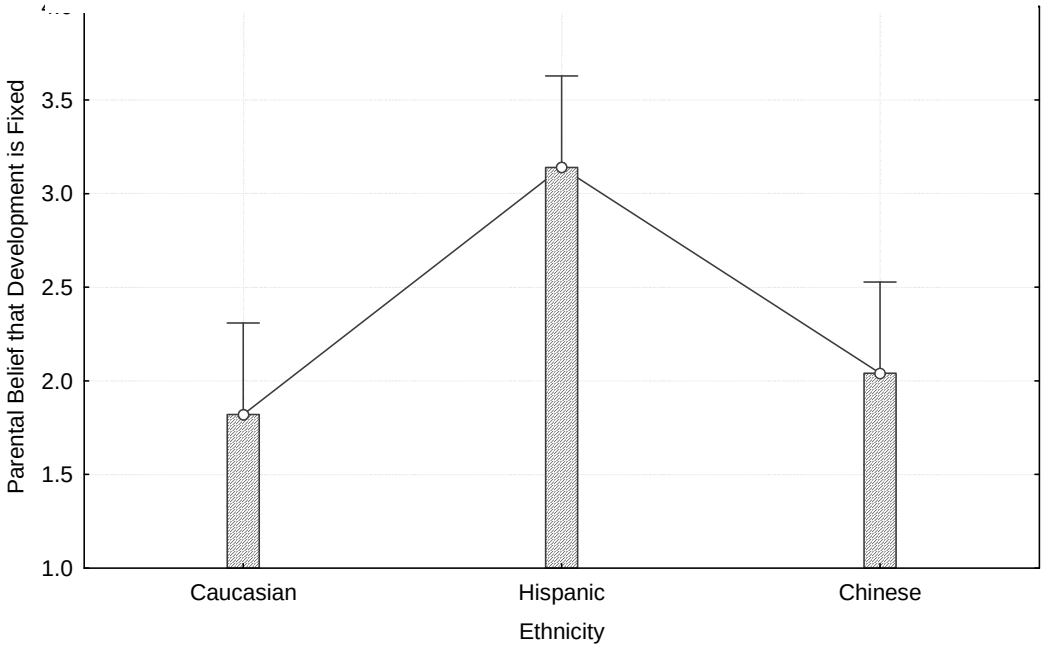

Figure 4. Relationship between Ethnicity and Parental Belief that Development is Fixed Error bars represent 0.95 confidence intervals.

Post-hoc analyses (Fisher's LSD) indicated that for the Parental belief that development is fixed, i.e., does not change from birth, Group 2 Hispanic, differed substantially on this summary measure from Group 1 Caucasian and Group 3 Chinese, 2 ($p<.001$ and $p=0.003$) both of whom did not differ significantly from each other.

Parental Belief that development is maturational. In order to assess the relationship between ethnicity and parents who believe that development is maturational, a one way ANOVA was performed with the summary measure *maturation* as the dependent measure and ethnicity as the independent measure. The results were significant $F(2, 27)=11.325$, $p<.001$ Thus ethnicity had a significant relationship with the Parental Belief that development was maturational.

Table 9

Effect of Ethnicity on the parental belief that development is maturational

			95% CI		
Ethnicity	***M***	***SE***	***LL***	***UL***	***N***
Caucasian	2.967	0.2378	2.479	3.455	10
Hispanic	4.400	0.2378	3.912	4.888	10
Chinese	4.300	0.2378	3.812	4.788	10

Note. CI = confidence interval; LL = lower limit, UL = upper limit

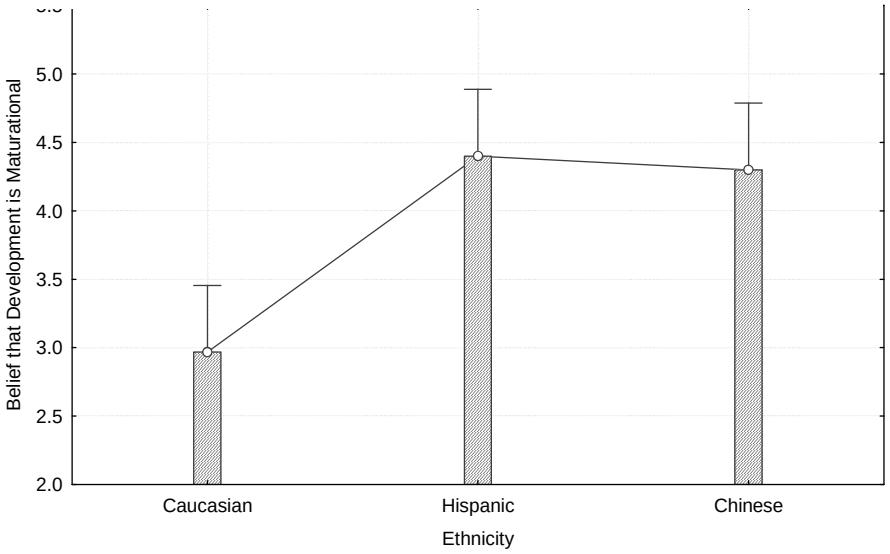

Figure 5. Relationship between Ethnicity and Parental Belief that Development is Maturational. Error bars represent 0.95 confidence intervals.

Post-hoc analyses (Fisher's LSD) indicated that the Caucasian group differed significantly from the other two groups (p=0.017 and p=0.039) Hispanic and Chinese respectively which did not significantly differ from one another. Thus Ethnicity had a significant relationship with the Parental Belief that development was maturational.

Parental Belief that Play is for Fun. In order to assess whether there was a relationship between ethnicity and Parents who believe that play is for fun, a one way ANOVA was performed with the summary measure *fun* as the dependent measure and ethnicity as the independent measure. The results were significant $F(2, 27) = 5.058$, $p = 0.014$ Thus ethnicity had a significant relationship with parental beliefs that the purpose of play is to have fun.

Table 10

Effect of Ethnicity on the Parental Belief that Play is for Fun

			95% CI		
Ethnicity	*M*	*SE*	*LL*	*UL*	*n*
Caucasian	3.650	0.273	3.089	4.211	10
Hispanic	3.850	0.273	3.289	4.411	10
Chinese	2.700	0.273	2.139	3.261	10

Note. CI = confidence interval; LL=lower limit, UL = upper limit.

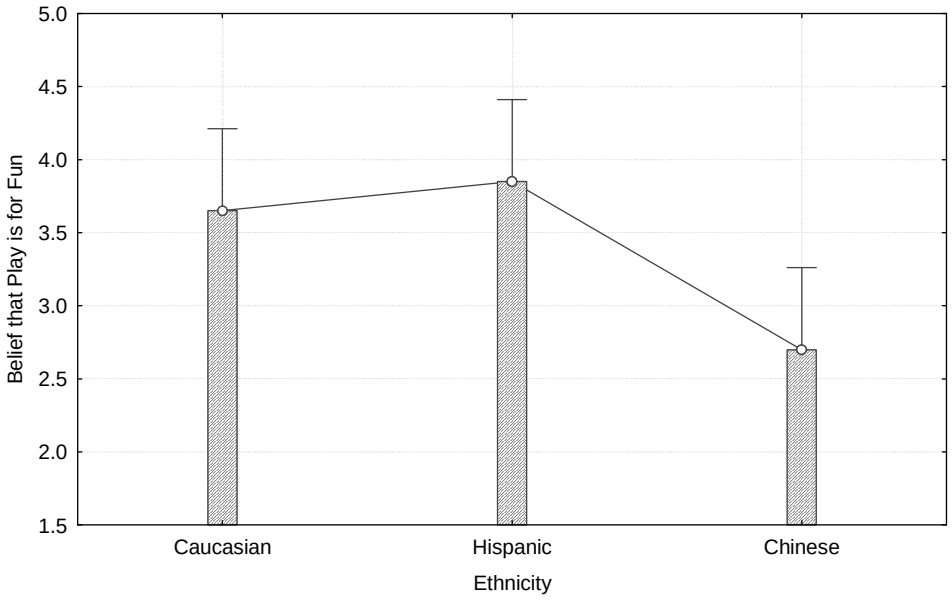

Figure 6. Relationship between Ethnicity and Parental Belief that Play is For Fun Error bars represent 0.95 confidence intervals.

Post-hoc analyses (Fisher's LSD) indicated that the Chinese group differed significantly from the other two groups (p=0.021 and p=0.006) which did not differ significantly from one another. Thus Ethnicity had a significant relationship with the Parental Belief that play was just to have fun.

Maternal Education. A one way ANOVA was run with each of the summary measures derived from the Parental Beliefs Questionnaire (intertot, fixedtot, mattot and funtot) as the dependent variable and level of maternal education as the independent variable. No significant relationships were observed. A possible explanation may be that there were 5 levels of education dividing a small sample which left few participants in some of the educational levels.

Medicaid Status. A one way ANOVA was run with each of the summary measures derived from the Parental Beliefs Questionnaire (intertot, fixedtot, mattot and funtot) as the dependent variable and Medicaid status as the independent variable. There were no significant effects for these analyses. Since Medicaid status was a proxy for SES, then SES was not a factor in determining parental beliefs.

Child Developmental Delay Status. Whether or not the child received therapy from the early intervention program was not correlated with any of the variables under consideration. This finding is quite significant since it has long been considered in the literature that parents play differently with children and without disabilities. This must be interpreted with caution due to the small sample size of children who received therapy, 8 out of 30.

7 Discussion

In this study, 30 mother-child dyads were observed in a free play with the same toys in order to analyze the relationship of responses to the questionnaire of Parental Beliefs about Play and Development to the way that parents play with their young child, in particular the style of scaffolding they exhibit during play. Significant support was found for the hypothesis that parents who believe in the developmental value of play display a more active style of scaffolding while playing with their child.

Several aspects of this study made unique contributions to the strength of the findings. One element was the development of a questionnaire of Parental Beliefs about Play and Development, as well as an observational study in a culturally diverse sample which also included young children with and without disabilities. Another is the distribution of substantially all levels of Maternal education and Medicaid status in each ethnic group. In contrast, much of the play research has historically included only upper middle class Caucasian families (c.f. Damast et. al,1996; Haight & Miller,1993; O'Connell & Bretherton, 1983) Few studies have involved mothers who are not college educated and of lower socioeconomic status(Tizard & Hughes,1984). Studies that did involve working class families have yielded the belief that participation in pretend play was not common (cf. Newson & Newson, 1979, Dunn, 1986). On the other hand, in this study there was no significant contribution demonstrated by the ethnicity, maternal education or SES to the Parental Beliefs about Play and Development Questionnaire. Of course, this bears further inquiry based upon the small sample size overall.

In contrast to much of the extant literature on pretend play, the participants in this study were diverse on the basis of culture, language, maternal education and Medicaid

status (a proxy used for SES). Participants were 10 immigrant Chinese families, 10 immigrant Hispanic families and 10 Caucasian Americans. An important distinction of the participants in this study is that level of Maternal Education and Medicaid status did not differ by ethnic group.

Relationship between Parental Beliefs and Ethnicity

As a result of responses to the questionnaire, Parental Beliefs about Play and Development were grouped into 3 primary measures and 1 secondary summary measure. There were significant differences by ethnic group for the parental beliefs that the child's intellect is fixed at birth i.e., does not change from birth, that development is maturational, i.e., the child gains in intellect just because the child gets older and that play is merely to have fun. Hispanic immigrants scored higher, indicating a greater level of belief, in the belief that development is fixed than Chinese immigrants or Caucasian Americans. Both Hispanic and Chinese immigrants scored high, indicating a greater level of belief for the parental belief that development is maturational, significantly higher than Caucasian Americans. For the parental belief that play is just for fun, Caucasian Americans and Hispanic immigrants scored significantly higher on this measure than Chinese immigrants.

The primary focus of this study was that Parental Beliefs influence the way that parents scaffold their children in play. Although the focus of this study was not cross cultural, members of different SES, race and cultures were included to ensure that the findings are likely to apply to parents in general rather than to one group.

Limitations

This study included 10 parent-child dyads belonging to three ethnic groups. The groups were diverse by SES and maternal education. Findings reported represent the results of those sampled: a larger sample size would be required before findings could be generalized to other members of any given culture.

Relationship between Parental Beliefs and Parent-Child Play

In the reported literature of parental beliefs and play, the relationship between stated parental beliefs and observed parent-child interaction has been equivocal. It has been found that no significant correlations between the stated parental beliefs and the behaviors of the parents emerged. See for example Bornstein *et. al*. (2001) which found that while parents reported that their style of interaction with their toddlers was primarily social, observation demonstrated it was in fact didactic. Few researchers have explored parental beliefs at early ages (e.g., Chuang & Su 2009, Tamis-Lemonda, Kahana Kalman, Yoshikawa & Smith, 2009). As noted by Miller (1988) few studies that investigate parental beliefs and behaviors focus on parents' general beliefs, not their beliefs about their own children. These studies have demonstrated either very modest or no relations between beliefs and behaviors. The research conducted here contributes to the extant literature. In this study, there were significant correlations across all ethnic groups between Parents' stated beliefs about the developmental value of play and the scaffolding level demonstrated by the parent during play with their child.

Children with Disabilities

Research suggests that mothers of children with disabilities play less with, and are more controlling of their children than are mothers of typically developing children

(Hanzlik, 1989; Hanzlik & Stevenson, 1986; Kogan & Tyler, 1973). Interactions between mothers and their disabled infants indicate that infants provide fewer cues and initiate interaction less frequently then do their non-disabled peers. Mothers of these infants tend to dominate activities (Rogers, 1988) which has been noted to diminish optimal development (Mahoney & Powell, 1988). In this study, although the number of children with disabilities was small (8 out of 30) there were no significant differences found with the way that their parents responded to the questionnaire of Parental Beliefs or the way parents engaged their children in play.

Role of Parental Beliefs

Parental beliefs form and influence parents' expectations about all aspects of their children's lives including how children learn, acquire new skills and develop, the role of parents in the life of their child and theories of intelligence. Parental beliefs and attitudes can be a function of economic constraints, ethnic factors, religious practices, as well as the unique experiences of parents (Garcia Coll et. al, 1996). Research demonstrates that the context of pretend play is informed by beliefs about adult-child relationships in general (Haight & Miller, 1993). The importance of parental beliefs was demonstrated parents who believed in the developmental value of play were more likely to provide active scaffolding to their child in play interactions.

Results that further contributed to the strength of the summary measure derived from the Parental Beliefs about Play and Development Questionnaire is its strong inverse correlation with the parental belief that development is fixed, -0.626 $p<0.001$ and with the parental belief that play is just to have fun, 0.488 $p<0.01$. In furtherance of this point is the confirmation of the primary hypothesis guiding this study, that parents who believe

in the developmental value of play will engage in a more active style of their child in play, 0.507 $p<0.01$.The inverse was also demonstrated, in that the relationship of active scaffolding of a child in play to parental belief that development is fixed was negative, -0.439 $p<0.05$.

. This study provides a glimpse into the rarified world of pretend play of three groups, Chinese immigrants, Hispanic immigrants and Caucasian Americans. The relationship between responses to the questionnaire of Parental Beliefs about Play and Development, and observed play interactions with mother-child dyads was strong. Levels of maternal education and Medicaid, a proxy for SES, were present in each group. Additional research could examine play interactions with children of varied ages, some older and younger, to see if the relationship between parental beliefs and play is stable across ages. Interventions should be designed, using the knowledge gained from play studies with culturally diverse samples, to determine which constellation of factors can improve parent-child play skills and parental scaffolding for children at greater risk, such as families living in poverty or children with significant developmental delays or disorders

Appendix A - Parent Questionnaire[7] (male child version)

Parent Questionnaire (male child version)

1=Strongly Agree 2=Agree 3=Agree a little
4=Disagree a little 5= Disagree 6= Strongly Disagree

I believe that:

	1 STRONGLY AGREE	2	3	4	5	6 STRONGLY DISAGREE	
1. Children are born with a certain amount of intelligence and there is not much parents can do to change that.	☐	☐	☐	☐	☐	☐	1
2. Whether a child will grow to be smart or not so smart is fixed (does not change) from his birth.	☐	☐	☐	☐	☐	☐	2
3. My child gets smarter just because he grows older.	☐	☐	☐	☐	☐	☐	3
4. How parents interact with their child will make a difference to their child's intelligence.	☐	☐	☐	☐	☐	☐	4
5. Children's ability to learn is fixed – does not change - from when they are born.	☐	☐	☐	☐	☐	☐	5
6. I play with my child just to have fun with him.	☐	☐	☐	☐	☐	☐	6
7. When parents play with their child they are helping him to grow smarter.	☐	☐	☐	☐	☐	☐	7
8. Children learn through play.	☐	☐	☐	☐	☐	☐	8
9. There is not much a parent can do to change their child's intelligence.	☐	☐	☐	☐	☐	☐	9
10. Whether a child will grow to be smart or not so smart depends on how his parents interact with him.	☐	☐	☐	☐	☐	☐	10
11. A child's intelligence stays pretty much the same regardless of his experiences.	☐	☐	☐	☐	☐	☐	11
12. My child will grow more intelligent because I play with him.	☐	☐	☐	☐	☐	☐	12
13. When I play with my child I am helping him to learn.	☐	☐	☐	☐	☐	☐	13
14. My child's ability to learn increases because I play with him.	☐	☐	☐	☐	☐	☐	14
15. Children's ability to learn increases just because they grow older.	☐	☐	☐	☐	☐	☐	15
16. Children are learning when their parents interact with them.	☐	☐	☐	☐	☐	☐	16
17. Children's intelligence can increase through play.	☐	☐	☐	☐	☐	☐	17
18. By interacting with their child, parents are helping him to learn.	☐	☐	☐	☐	☐	☐	18
19. Children's intelligence changes just because they grow older.	☐	☐	☐	☐	☐	☐	19
20. My child will grow smarter if I play with him.	☐	☐	☐	☐	☐	☐	20
21. When parents play with their child it is just to have fun.	☐	☐	☐	☐	☐	☐	21
22. For young children, play is as important as learning at school is for older children.	☐	☐	☐	☐	☐	☐	22

[7] Spanish and Chinese versions are available by writing to the author at lelax@caresnyc.org

Appendix B

Verbal Instructions to Parents:

We are just looking at how different families and people from different cultures play together as parent and child. There is no right or wrong ways for you to play with your child. You are not being evaluated as a parent. Just play how you would ordinarily play with your child. We want to see how parents think about issues such as the development of their child, how children learn new skills in order to help us develop programs for children and parents. We would like to ask you a few questions, and we would like if we could watch how you normally play with your child for 10-15 minutes and tape the session. Everything you say is confidential, nothing will contain your name or any other identifying information. The tapes will only be seen by me and my advisor to assist us to develop educational programs for young children and their families. If you feel uncomfortable you may ask for the interview to end at any time.

Appendix C

Coding of Play Interaction

	Always	Never	Sometimes	Notes or comments
Parental Scaffolding				
Level 1 – Non-Responsive				
Level 2 – Basic				
Level 3 – Active				
Child Behavior				
Off-task				
Attends to the task				
Seeks help				
Follows directions				
Joint Attention				
Gaze following				
Gesturing or pointing				
Vocalizing				
Turn-taking				
None of these				
Child's play				
Inattentive/not engaged				
Child looks at materials				
Social- does child look at parent during play, or take social cues from parent during play				
Presymbolic				
Non Purposeful use of the toy such as Mouthing, Banging, etc.				
Exploration – exploring the object				
Mastery – using the object the way it is intended to be used.				
Symbolic				
Self-directed pretend				
De-centered or object-directed				
Object combinations				
Object combinations with vocalization				
Planned pretend sequences, i.e. presence of plot				
Presence of pretend plot w/explanations				

References

Als, H. & Brazelton T. B. (1981): "Assessment of the behavioral organization of a preterm and full term infant." J. of the Amer. Academy of Child Psychiatry (20) 239- 263. American Psychological Association. (2005). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC.

Becker, W. C. & Krug, R. S. (1965) The parent attitude research instrument-A research review, *Child Development, (36) 329-365*

Bergen, D. (1988). *Play: As a medium for learning and development: A handbook of theory and practice* (137-161). Portsmouth, NH: Heinemann.

Berk, L. (2001) *Awakening Children's Minds: How Parents and Teachers Can Make a Difference*: Oxford University Press.

Berk, L. E. & Winsler, A. (1995). *Scaffolding children's learning: Vygotsky and early childhood education.* Washington, D. C.: National Association for the Education of Young Children.

Berk, L. E., Mann, T. D. & Ogan, A. T. (2006). Make-believe play: Wellspring for development of self-regulation. In D. G. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds) *play=learning: how play motivates and enhances children's cognitive and social-emotional growth*. New York: Oxford University Press.

Bigelow, A.E., MacLean, K. & Proctor, J. (2004) The role of joint attention in the development of infants' play with objects *Developmental Science 7 (5)* 518–526

Bloom, 1993 cited by Lifter, K. (2000). Linking assessment to intervention for children with developmental disabilities or at-risk for developmental delay: The developmental play assessment (DPA) instrument. In K. Gitlin-Weiner, A. Sandgrund, & C. Schafer (Eds.) *Play diagnosis and assessment* (2nd ed., pp.228-261). New York: John Wiley and Sons.

Bornstein M.H. & Cote, L.R. (2001) Mother-infant interaction and acculturation: Behavioral comparisons in Japanese American and South American families. *Int J Behav Dev. 25*, 549-563.

Braswell, G.S. (2006). Sociocultural contexts for the early development of semiotic production. *Psychological Bulletin* 132 (6) 877-894.

Brooks-Gunn J. & Lewis, M. (1982) Development of play behavior in normal and handicapped infants. *Topics in Early Childhood Special Education, 2* (3) 1-27

Bruner, J. S. (1972). Nature and Uses of Immaturity. *American Psychologist 2* (8) 28-60.

Bugrimenko, E. & Smirnova, E. (1994) Paradoxes of children's play in Vygotsky's theory. In G. Cupchick & J. Laszlo (Eds.) *Emerging visions of the aesthetic process.* (286-299). Cambridge: Cambridge University Press.

Chuang**,** S., Su, Y. (2009). Do we see eye to eye? Chinese mothers' and fathers' parenting beliefs and values for toddlers in Canada and China. *Journal of Family Psychology, Vol 23(3), Jun, 2009* pp. 331-341.

Cichetti, D.S., Beeghly, M & Weiss-Perry, B., (1994). Symbolic development in children with Down syndrome and in children with autism: an organizational developmental psychopathology perspective. In: Slade A, Wolf D, (Eds.) *Children at play: clinical and developmental approaches to meaning and representation*. New York: Oxford University Press.

Clawson, M. (2002). Play of language: Minority children in an early childhood setting. In J. L. Roopnarine (Ed.) *Conceptual, social-cognitive, and contextual issues in the fields of play (Vol. 4, 93-116)*. Westport, CT: Ablex.

Coolahan, K., Fantuzzo, J., Mendez, J. & McDermott, P. (2000) Interactive peer play and readiness to learn: relationships between play competencies and classroom learning behaviors and conduct. Journal of Educational Psychology.

Cote, L. R. & Bornstein, M.H. (2000). Social and Didactic Parenting Behaviors and Beliefs Among Japanese American and South American Mothers of Infants. *Infancy, 2000, (l) 3,* 363-374.

Creasey, G. L., Jarvis, P. A. & Berk, L. (1998). Play and social competence. In O. N. Saracho & B. Spodek (Eds.) Multiple perspectives on play in early childhood education (116-143). Albany, NY: State University of New York Press.

Damast, A., Tamis-LeMonda, C. S. & Bornstein M.H. (1996). Mother-Child Play: Sequential Interactions and the Relation between Maternal Beliefs and Behaviors. *Child Development(*67)1752-1766.

Davydov, V.V. & Markova, A.A. (1983) A concept of educational activity for school children. *Soviet Psychology, 2*(2) 50-76.

Dawson, G. & Adams, A. (1984). Imitation and social responsiveness in autistic children. *Journal of Abnormal Child Psychology, 12,*209-226.

Duncan R.B. & Tarulli, D. (2003) Play as the Leading Activity of the Preschool Period: Insights from Vygotsky, Leont'ev and Bakhtin. *Early Education and Development, 14* (3) 272-292.

Dunn, J. (1986). Pretend play in the family. In A. Gottfried & C. Caldwell Brown (Eds.) *Play interactions* (149-161). Lexington, MA: Lexington Books.

Dunn, J. & Wooding, C. (1977). Play in the home and its implications for learning. In B.Tizard and D.Harvey (Eds.) *Biology of play* (45-58). London: Heinemann.

Elkonin, D.B. 1971. Toward The Problem of Stages in the Mental Development of Children. Voprosy psikhologii, 1971. No. 4, 6-20(1); Soviet Psychology; Online Version: Psychology and Marxism Internet Archive, (marxists.org) 2000.

Elkonin, D.B. 2005/1977. The Psychology of Play. Journal of Russian and East European *Psychology, vol. 43 no.1,* January-February 2005 11-21.

Elkonin, D.B. 2005/1977. *Journal of Russian and East European Psychology,* March-April 2005 3–89. English translation © 2005 M.E. Sharpe, Inc., from the Russian text, "Teoriiigry," in *Psikhologiia igry*, 2d ed. (Moscow: Gumanit. izd.tsent VLADOS, 1999) 74–175. Translated and published with permission of Boris Daniilovich Elkonin. Translated by Lydia Razran Stone.

Farver, J. A. (1999). Best Practices in Promoting Literacy in Young Ethnic Minority Children: Lessons from the United States.

Farver, J.A., Kim, Y.K & Lee, Y (1995) Cultural Differences in Korean- and Anglo-American Preschoolers' Social Interaction and Play Behaviors *Child Development,* 66(4)1088-1099.

Farver, J.A. & Shin, Y.L. (1997) Social Pretend Play in Korean- and Anglo American Preschoolers *Child Development 68 (3)* 544–556.

Fein, G. G. (1981). Pretend play in childhood: An integrative review. *Child Development 52,* 1095-1118.

Feldman, R. & Greenbaum, C.W. (1997). Affect regulation and synchrony in mother-infant play as precursors to the development of symbolic competence. *Infant Mental Health Journal 18,* 4-23.

Fenson, L. (1984) Developmental trends for action and speech in pretend play. In I. Bretherton (Ed.) *Symbolic play: the development of social understanding.* (249-270). Orlando, FL: Academic Press.

Fiese, B. H. (1990). Playful relationships: A contextual analysis of mother-toddler interaction and symbolic play. *Child Development,* 61, 1648-1656.

Fogle, L. (2003). Parent Beliefs about Play: Relations with Parent-Child Play Interactions and Child Peer Play Competence. Dissertation. University of South Carolina.

Freud, S. (1961) *Beyond the pleasure principle*: New York: Norton.

Gander, M. J. & Gardiner H. J. (1981). *Child and adolescent development.* Boston: Little, Brown and Company.

García Coll, C.T. , Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Vazquez García, H. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*(5)1891-1914.

Garvey, C. (1977). *Play*. Cambridge, MA: Harvard University Press.

Gaskins, S. (1999) Children's daily lives in a Mayan village: A case study of culturally constructed roles and activities. In A. Goncu (Ed.) *Children's engagement in the world: Sociocultural perspectives* (25-61) Cambridge: Cambridge University Press.

Gauvain, M. (2001). *The social context of cognitive development.* New York: Guilford Press.

Gitlin-Weiner, K., Sandgrund, A. & Schaefer, C. (2000) *Play Diagnosis and Assessment*: 2nd Ed. New York: John Wiley and Sons.

Gerlock, (1982) *Parent group guide: Topics for families of young children with handicaps.* Nashville, TN: John F. Kennedy Center for Research on Education and Human Development, Families, Infant and Toddler Project.

Göncü, A., Patt, M. B & Kouba, E. (2002). Understanding children's pretend play in context. In P. K. Smith & C. H. Hart (Eds.) *Blackwell handbook of childhood social development*(418-437) Oxford: Blackwell.

Goodnow, J. J. & Collins, W. A. (1990). *Development according to parents: The nature, sources, and consequences of parents' ideas.* Hillsdale, NJ: Erlbaum.

Goodnow, J.J. (1996) From household practices to parents ideas about work and interpersonal relationships. In Harkness, & Super (Eds). *Parents' Cultural Belief Systems: Their Origins, Expressions, and Consequences.* 313-344. New York:Guilford Press.

Groos, K. (1898). *The play of animals.* New York: D. Appleton.

Haight, W. L. (1999). The pragmatics of caregiver-child pretending at home: understanding culturally specific socialization practices. In Artin Göncü (Ed.) *Children's engagement with the world: sociocultural perspectives*, 128-147. Cambridge and New York: Cambridge University Press.

Haight, W. L. & Miller, P. J. (1993). *Pretending at home*. Albany, NY: SUNY.

Haight, W.L. & Miller, P.J. (1992) The development of everyday pretend play: A longitudinal study of mothers participation. Merrill-Palmer Quarterly 38 331-349.

Haight, W.L., Ostler, T., Black, J., Sheridan, K. & Kingery, L. (2006). A child's eye view of parent methamphetamine abuse: Implications for helping foster families to succeed. Children and Youth Services Review.

Haight, W.L, Parke, R.D. & Black J.E. (1997) Mothers' and fathers' beliefs about and spontaneous participation in their toddlers' pretend play. *Merrill Palmer Quarterly, 43* (2) 271-290.

Hall, G.S. & Ellis, A.C. (1896) *A Study of Dolls. Pedagogical Seminary, 4,* 129-175.

Hanzlik, J. R. (1989). The effect of intervention on the free-play experience for mothers and their infants with developmental delay and cerebral palsy. *Physical &Occupational Therapy in Pediatrics, 9*(2) 33-51.

Hanzlik, J.R. & Stevenson, M. (1986). Mother-infant interaction in families with infants who are mentally retarded, mentally retarded with cerebral palsy or nonretarded. *American Journal of Mental Deficiency, 90,* 513-520.

Harkness S. & Super, C.M. (1996) *Parents cultural belief systems: Their origins, expressions, and consequences.* New York: Guilford Press.

Hustedt, J.T. & Raver, C.C. (2002) Scaffolding in low income mother-child dyads: relations with joint attention and dyadic reciprocity. *International Journal of Behavioral Development 26* (2)113-119.

Jackson, S.C., Robey, L., Watjus, M.& Chadwick, E.(1991). Play for all children: The toy library solution. *Childhood Education, Fall,* 27-31.

Johnson, J., Christie, J., & Yawkey, T. (1999). *Play and early childhood development* (2nd ed.) New York: Longman.

Karpov, Y.V. (2005) The neo-Vygotskian approach to child development, New York: Cambridge University Press.

Kavanaugh, R.D.S., Whittington, S. & Cerbone, M.J. (1983) Mothers' use of fantasy in speech to young children. *Journal of Child Language 10,* 45-55.

Keren, M. Feldman R & Namdari-Weinbaum I.. (2005).Relations between parents' interactive style in dyadic and triadic play and toddlers' symbolic capacity. *American Journal of Orthopsychiatry 75* (4) 599-607.

Kogan, K. L., & Tyler, N. (1973). Mother-child interaction in young physically handicapped children. *American Journal of Mental Deficiency, 77*(5) 492-497.

Kuczynski, L. (2003). Beyond bidirectionality: bilateral conceptual frameworks for understanding dynamics in parent-child relations (pp.1-24). In L. Kuczynski (Ed.) *Handbook of Dynamics in Parent-Child Relations*. Thousand Oaks CA: Sage.

Lahey, M. (1988) *Language disorders and language development*. New York: Macmillan

Lancy, D. F. (2002) Cultural Constraints on Children's Play. in J. L. Roopnarine (Ed). *Conceptual, social-cognitive and contextual issues in the fields of play*. 53-60. Westport, CT: Ablex Publishing.

Leontiev, A.N.(1981) The problem of activity in psychology. In J.V. Wertsch (ed.). *The concept of activity in soviet psychology* (37-71) Armonk, NY: Sharpe (original work published 1972).

Lifter, K. (2000). Linking assessment to intervention for children with developmental disabilities or at-risk for developmental delay: The developmental play assessment (DPA) instrument. In K. Gitlin-Weiner, A. Sandgrund, & C. Schafer (Eds.), *Play diagnosis and assessment* (2nd ed.228-261). New York: John Wiley and Sons.

Lifter, K.& Bloom, L. (1998). Intentionality and the role of play in the transition to language. In A. Wetherby, S. Warren, & J. Reichle (Eds.), *Transitions in prelinguistic communication: Preintentional to intentional and presymbolic to symbolic* (161-196).Baltimore: Brookes.

Lillard, A.S. & Witherington, D.C. (2004). Mothers' behavior modifications during pretense and their possible signal value for toddlers. *Developmental Psychology*,*40* (1) 95-113.

Linder, T. W. (1990). Transdisciplinary play-based assessment: A functional approach to working with young children. Baltimore: Paul H. Brookes Publishing Co.

Lorton, J. W. & Walley, B. L. (1979). *Introduction to early childhood education.* New York: D. Van Nostrand Company.

Lowenfeld, M. (1939).The world pictures of children: A method of recording and studying them. *British Journal of Medical Psychology. 18,* 65-101.

MacTurk, R.H., Hunter, F.T, McCarthy, M.E. Vietze, P.M. & McQuiston,S. (1985). Social mastery motivation in Down Syndrome and nondelayed infants. *TECSE 4* (4) 93- 109.

MacTurk, R. H., McCarthy, M.E., Vietze, P.M. &Yarrow, L. J. (1987). Sequential analysis of mastery behavior in 6-and 12 month old infants. *Developmental Psychology 23* (2) 199-203.

Mahoney, G. & Powell, A.(1988). Modifying parent-child interaction: enhancing the development of handicapped children. *Journal of Special Education, 22* (1) 82-96.

Martini, M. (1994) Peer interactions in Polynesia: A view from the Marquesas. In J. L. Roopnarine, J. E. Johnson, and F. H. Hooper (Eds.), *Children's play in diverse cultures* (73-103). Albany: SUNY Press.

Miller, S.A. (1988) Parents' beliefs about children's cognitive development. *Child Development, 59*, 259-285.

Mundy, P., Sigman, M., Ungerer, J. & Sherman, T., 1987, Nonverbal communication and play correlates of language development in autistic children. Journal of Autism and developmental disorders, 17, 349-364.

Nelson & Shaw, L.K. (2002) . Developing a socially shared symbolic system. In E. Amsel & J.P. Byrnes (Eds.). Language, literacy,and cognitive development: The development and consequences of symbolic communication (pp.25-57). Mahwah, N.J.: Erlbaum.

Newson, J. & Newson, E. (1975) Intersubjectivity and the transmission of culture. : On the social origins of symbolic functioning. *Bulletin of the British Psychological Society, 28,* 437-446.

Ninio, A. (1979) The naive theory of the infant and other maternal attitudes in two subgroups in Israel. *Child Development, 50,* 976–980.

O'Connell, B.& Bretherton, I. (1983). Toddler's play, alone and with mother: The role of parental guidance. In I. Bretherton (Ed.), *Symbolic play: The development of social understanding* (337-368). Orlando, FL. Academic Press.

O'Conner, K. & Ammen, S. (1997). *Play therapy treatment planning and interventions: The ecosystemic model and workbook.* San Diego, CA: Academic Press.

Ogbu, J. U. (1981). Origins of human competence: A cultural ecological perspective. *Child Development(52)* 413–429.

O'Reilly, A.W. & Bornstein, M. H. (1993). Caregiver-child interaction in play. In M. H. Bornstein and A. W. O'Reilly (Eds.). The role of play in the development of thought. New Directions for Child Development, 59, San Francisco, CA: Jossey-Bass.

Ortega, R. (2003). Play, activities and thought: Reflections of Piaget's and Vygotsky's theories. In D.E. Lytle (ed.) *Play and educational theory and practice.* (99-115) Westport, CT: Praeger.

Owocki, G. (1999). *Literacy through play*. Portsmouth, NH: Heinemann.

Parten, M. (1932). Social participation among preschool children. Journal of Abnormal and *Social Psychology, 27(3)* 243-269.

Pettit G.S., Brown E.G., Mize J. & Lindsey E.W. (1998). Mothers' and fathers'

socializing behaviors in three contexts: Links with children's peer competence. *Merrill Palmer Quarterly, 44*,173-193.

Piaget, J. (1936, 1963) *The origins of intelligence in children*. New York: W.W. Norton & Company, Inc.

Piaget, J. (1962). *Play, dreams, and imitation in childhood.* New York: W. W. Norton.

Raver, C.C. (2002) Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report, 16(3).*

Reid, B. V. & Valsiner, J. (1986). Consistency, praise, and love: Folk theories of American parents. *Ethos, 14*(3) 282-304.

Rogers, S. J. (1988). Characteristics of social interactions between mothers and their disabled infants: A review. *Child: Care, Health and Development, 14*, 301-307.

Rogoff, B. (2003). *The cultural nature of human development.* Oxford: Oxford University Press.

Roopnarine, J. L, Lasker, J., Sacks, M., & Stores, M. (1998). The cultural context of children's play. In O.N. Saracho & B. Spodek (Eds.), *Multiple perspectives on play in early childhood education* (194-219). Albany, NY: State University of New York Press.

Rubin, K. H., Fein, G. & Vanderberg, B. (1983). Play. In P. Mussen & E. M. Hetherington (Eds.), *Handbook of child psychology: Vol. 4. Socialization, personality, and social development* (693-774). New York: Wiley.

Rubin, K.H. & Coplan, R.J. (1998). Social and nonsocial play in childhood: An individual differences perspective. In O.N. Saracho & B. Spodek (Eds.), *Multiple perspectives on play in early childhood education* (1-2). Albany, NY: State University of New York Press.

Sigel, I.E. & Kim, M. (1996). The answer depends on the question: A conceptual and methodological analysis of a parent belief-behavior interview regarding children's learning. In Harkness, & Super (Eds). *Parents' Cultural Belief Systems: Their Origins, Expressions, and Consequences.* 83-120. New York: Guilford Press.

Sigel, I. E., McGillicuddy-DeLisi, A. V. & Goodnow, J. J. (Eds.). (1992). *Parental belief systems: the psychological consequences for children* (2d ed.). Hillsdale, NJ: Erlbaum.

Sigman, M. & Mundy, P. (1987). Symbolic processes in young autistic children. In D.Cicchetti (Ed.), *New directions in Child Development: Symbolic development in atypical children,*(31 - 45). San Francisco: Josey-Bass.

Sigman, M. & Sena, R. (1993). Pretend play in high-risk and developmentally delayed children. *New Dir Child Dev. Spring (59)*29-42.

Singer, D, Golinkoff, R.M. & Hirsh-Pasek, K (2006). *play=learning: how play motivates and enhances children's cognitive and social-emotional growth*. New York: Oxford University Press.

Slade, A. (1987). A longitudinal study of maternal involvement and symbolic play during the toddler period. *Child Development (58)* 367-75.

Smilansky, S.(1968). *The effects of sociodramatic play on disadvantaged preschool children.* New York: Wiley.

Smilansky, S. & Shefatya, L. (1990). Facilitating play: A medium for promoting cognitive, socioemotional and academic development in young children. Gaithersburg, MD:*Psychosocial and Educational Publications*.

Spencer, H. (1898). *The Principles of Psychology*, 2nd ed. New York: Appleton.

Spencer, P.E. (1996). The association between language and symbolic play at two years: Evidence from deaf toddlers. *Child Development*, 67(3) 867-8766.

Spitz, R. A. (1945). "Hospitalism: An inquiry into the genesis of psychiatric conditions in early childhood." *Psychoanalytic Studies of the Child 1*, 53-74; 2, 113-117.

Stetsenko, A. (2005) Activity as Object-Related: Resolving the Dichotomy of Individual and Collective Planes of Activity. *Mind, Culture, and Activity 7* (1) 70-88.

Stilson, S. R. & Harding, C. G.(1997). Early childhood social context as it relates to symbolic play: A longitudinal investigation, *Merrill Palmer Quarterly, 43*, 682-693.

Sutton-Smith, B. (2005). *Play: An Interdisciplinary Synthesis. Play and Culture Studies Vol. 6* F.F. McMahon, D. Lytle and B. Sutton-Smith (Eds).University Press of America.

Tamis-LeMonda, C. S. & Bornstein, M. H. (1991). Individual variation, correspondence, stability and change in mother and toddler play. *Infant Behavior and Development*, 14, 143-162.

Tamis-LeMonda, C. S., Kahana Kalman, R., Yoshikawa, H., & Smith, A. (2009). Father involvement in immigrant and ethnically diverse families from the prenatal period to the second year: Prediction and mediating mechanisms. *Sex Roles, 60*, 496–509.

Tamis-Lemonda, C.S., Shannon, J. & Spellman, M. (2002). Low income adolescent mothers' knowledge about domains of child development. *Infant Mental Health Journal, 23* (1-2) 88-103.

Tomasello, M., (1999). *The Cultural Origins of Human Cognition*. Cambridge, MA: Harvard University Press.

Tizard, B. & Hughes, M. (1984). *Young Children Learning*. Cambridge, Mass.: Harvard University Press.

Valsiner & Litvinovic (1996). Processes of Generalization in Parental Reasoning. In Harkness, & Super (Eds). *Parents' Cultural Belief Systems: Their Origins, Expressions, and Consequences.* 57-82. New York: Guilford Press.

Vandererg, B.(1986). Play theory. In G. Fein & Rifkin, (Eds.) The young child at play, (pp.17-22). Washington, DC: National Assn. for the Education of Young Children.

Vandermaas-Peeler, M., King, C., Clayton, A., Holt, M., Kurtz, K., Maestri, L., Morris, E.& Woody, E. (2001). Parental scaffolding during joint play with preschoolers. In J.L. Roopnarine (Ed.). *Conceptual, Social-Cognitive, and Contextual Issues in the Fields of Play. Play and Culture Studies, 4*, 165-181.

Vygotsky, L. S. (1967). Play and its role in the mental development of the child. *Soviet Psychology*, 5, 6-18.

Vygotsky, L.S. (1976). Play and its role in the mental development of the child. In J. S. Bruner, A. Jolly & K. Sylva. (Eds.). Play: Its role in development and evolution (537-554). New York: Basic Books. (Original work published 1966).

Vygotsky, L.S. (1978). *Mind in society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1978). The role of play in development. In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.). *Mind in Society. The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Vygotsky, L.S. (1997). *The collected works of L.S. Vygotsky: Vol.4: the history of the development of higher mental functions.* R.W. Rieber (Ed.) New York: Plenum (original work published 1983).

Vygotsky, L.S. (1998). *The collected works of L.S. Vygotsky: Vol.5: Child psychology.* R.W. Rieber (Ed.) New York: Plenum (original work published 1984).

Welteroth, S. (2002) Increasing play competence for very young children: How two early head start home visitors conceptualize and actualize their roles. In J.L. Roopnarine (Ed.) *Conceptual, social-cognitive and contextual issues in the fields of play*.183-207.Westport, CT: Ablex Publishing.

Yarrow, L.J, McQuiston, S., MacTurk, R. H., McCarthy, M.E., Klein, R. P., Vietze, P. M (1983). The assessment of mastery motivation during the first year of life. *Developmental Psychology, 19*,159-171.

Zaporozhets, A.V. & Markova, T.A. (1980/1983). Principles of preschool pedagogy, Part I Chapter III: The psychological foundations of preschool education. Sovitet Education, 25 (3) 71-90 [translated from Russian text, 1980, *Osnovy doshkol'noi pedagogiki*. Moscow: "Pedagogkia" Publishers.]