Korean teachers' beliefs and practices in Korean early childhood education

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INTRODUCTION

Korean education is based on family values, religious beliefs, and a strong desire for education. The enthusiasm to search for education has very deep roots in Korean culture. Koreans have been long influenced by the Confucian culture of admiring letters and respecting learning. Korean parents and school administrators have provided as many opportunities for children to study as possible and their highest ideal for an individual is to become a person of letters, according to Chong (1986).

The Korean education process in both learning and pedagogy is viewed as a two-fold activity (Smith, 1994). First is the transmission of knowledge from one generation to the next. The concept of developing new ideas through a thorough understanding of the old is embedded in this transmission. Second, the school is where values, morals, and ethical priorities are to be learned. Seen as more than a transmitter of information, the traditional and modern teacher in Korea is responsible for shaping the moral and ethical views of students by his or her personal behavior and by what he or she demands of students.

The goals of Korean education, in the broadest sense, are to bring about personal enrichment and development, to engender social harmony, and to build a cadre of skilled men and women who can answer the challenges of their nations' industrial growth, population problems, and land and sea usage, and political and diplomatic activities (Smith, 1994). These goals of education are rooted in the historical evolution of the society to its current form.

Education in Korea begins with 3- to 6-year-olds in kindergartens and has started in the early 1990s (Lee, 1993). The first kindergarten curriculum was set up by the Ministry of Education in 1969. The kindergarten curriculum has been revised several times to include more specific considerations of developmentally appropriate levels for children and to emphasize an integrated approach to subject areas such as the physical, language, cognitive, emotional, and social domain. The number of kindergartens has increased rapidly since 1969 (Lee, 1993).

In recent years, Korean early childhood educators have considered the guidelines of the American early childhood professional organization, the National Association for the Education of Young Children (NAEYC), to be appropriate for Korean early childhood education. The guidelines are based on the premises of child development, individuality of children, integrated content of the subject areas, cultural values, parents' desires, and the knowledge that children need to function well in society (Lee, 1992).

NAEYC's position statement for early childhood education serving children from birth through age eight (Bredekamp, 1987) outlines guidelines for developmentally appropriate practice. A number of principles of early childhood education guidelines include:

1) stimulate learning in all developmental areas- physical, social, emotional and cognitive through an integrated approach.
2) responding to individual differences in ability, interests, development, and learning styles through the use of age-appropriate and individually-appropriate activities.
3) offering children choices of many activities, materials, and equipment, and time to explore through active involvement and interaction with children and adults.
4) providing children with concrete and real experiences that are relevant to their own life experiences.

Developmentally appropriate practice in early childhood education places emphasis on the importance of spontaneous, self-initiated exploration and autonomous play for young children's development and learning (Bredekamp, 1987). Child-initiated, child-centered, teacher-supported play is an essential component of the early childhood education developmentally appropriate practice framework. Bredekamp (1987) suggests that basic tenets of developmentally appropriate practice in early childhood education indicate the need for teachers to engage in supportive, responsive interactions with children during play if their developmental potential is to be maximized. Simply providing a stimulating play environment is insufficient to promote children's learning and development. On the other hand, the opposing situation of teachers engaging in instructive,

directive interactions during play may squelch children's developmental potential (Farran, Silveri, & Culp, 1991).

There is increasing interest in understanding the relationship between teachers' beliefs about teaching and their actual classroom practices. Using this continuum of non-directive to directive teaching philosophies, Hatch and Freeman (1988) examined philosophies and practices for implementing kindergarten programs from the perspectives of kindergarten teachers, elementary principals, and supervisors through ethnographic interviews. The findings showed a gap between what the current literature calls developmentally appropriate practices and actual kindergarten practices, and identified problems inherent in educational settings where philosophy-reality conflicts are created and perpetuated. Bell (1991) studied teachers' theoretical accounts of their own practices in a child care center and kindergarten in New Zealand. She found an apparent discrepancy between what teachers say about the importance of children's play and their actual teaching practices. Mayers (1991) found similar differences between kindergarten teachers' beliefs and practices using a written survey with full-day every day programs and half-day every day programs. Using naturalistic kindergarten classroom observations, Chung (1994) found that kindergarten classroom teaching practices and strategies differ from what the NAEYC has recommended as developmentally appropriate and to what the National Council of Teachers of Mathematics (NCTM) has suggested for the effective teaching of mathematics.

There is emerging interest in understanding teachers' practices in Korea. Kim (1993) reported why social education is important in kindergarten curriculum. Social education includes sociability, self-help abilities, and citizenship transmission orientation. Kim (1993) found conflicts between what Korean teachers say about social education and their actual teaching practices. The Korean teachers expressed beliefs in the importance of social education with child-centered inquiry learning, but they conducted the class based on teacher-led instruction. The most important finding of the study is that "sometimes teachers believed that when teachers led children, learning was greater than during child-centered activities" (p. 30). This study focused on only teachers' beliefs

about Korean social education and their actual practices, but did not deal with basic differences between teachers' beliefs about children learning and educational activities and practices across different institutions. Therefore, it is necessary to investigate how kindergarten and child care center teachers' beliefs and perceptions influence classroom practices and the context for learning in Korea.

This study examined the relationship between the beliefs, and practices of Korean teachers in child care centers, public kindergartens, and private kindergartens and characteristics of the three groups of educators and their early childhood programs. The five objectives of this study were to:

1) Investigate the differences between child care center teachers', public kindergarten teachers', and private kindergarten teachers' educational background in Korea.
2) Investigate the differences between child care center teachers', public kindergarten teachers', and private kindergarten teachers' experiences in Korea.
3) Investigate the differences between actual and desired kindergarten teaching practices of each type of early childhood program, i.e., child care centers, public kindergartens, and private kindergartens in Korea.
4) Investigate differences in the beliefs and practices of teachers across the three types of programs, i.e., child care centers, public kindergartens, and private kindergartens in Korea.
5) Investigate the relationship between child care center and kindergarten teachers' perceptions of the goals of early childhood education and their actual and desired teaching practices in Korea.

LITERATURE REVIEW

Introduction

In recent years, a growing body of research has emerged affirming that concrete, spontaneous, self-initiated, explorative, and autonomous play influences young children's development and learning (Bredekamp, 1987). According to the National Association for the Education of Young Children (NAEYC), the essential feature of appropriate early childhood experiences is play; play is the activity through which all areas of children express their development, and that through children's development will progress (Varga, 1992). Within group settings, the teacher is responsible for ensuring developmentally appropriate play by carrying out "observation and recording of each child's special interests and developmental progress" and for using their information to "prepare the environment for children to learn through active exploration and interaction with adults, other children and materials" (Bredekamp, 1987, p. 3). Therefore, child-initiated, child-directed, teacher-supported play is an essential component of developmentally appropriate practice (Fein & Rivkin, 1986).

Although Korean early childhood education has experienced dramatic change, especially in the number of programs available in the past thirty years (Chong, 1986), little research has been conducted about how Korean early childhood teachers perceive their role in classroom practices and the context for learning. Research is needed to explore Korean teachers' beliefs and practices of children's play as it relates to the developmentally appropriate guidelines developed by NAEYC. The background literature supporting the study falls into four categories: (a) the role of play in development- definition of play, cognitive development, toys and objects in environment, and social development; (b) the role of teachers in children's play; (c) developmentally appropriateness/ inappropriateness of teachers' beliefs and practices; and (d) Korean early childhood education.

The Role of Play in Development

Definition of Play As a vehicle for enhancing young children's development, play has been studied across the years and many attempts have been made to define childhood play. The concept

of play is difficult to define and understand because it appears in a variety of forms across the lifespan. Play is a common activity of young children, and adults, although it varies for each individual or player.

There is some consensus for young children that, "play is voluntary, meaningful, active, symbolic, rule bound and usually pleasurable, even when dealing with serious matters" (Fromberg, 1990, p.226). Definitions of play range from structural definitions (e.g., delineation of typical gestures or movements) to functional or causal definitions (e.g., delineation of enjoyable activities without considering the purpose of the activities) (Smith & Vollstedt, 1985). Play affects almost every human achievement and is the basis for human culture (Saracho, 1991). In this vein, many researchers have considered the immediate context in which play occurs, the content, the interaction of context, and the cultural environment (Fromberg, 1990). Schwartzman (1978) suggests that, although play is easily recognized, defining play is a very difficult task; therefore, "definitions are often speculative attempts by investigators to arbitrarily define the nature of play, with little attempt made to actually collect information or data on the subjects" (p. 291).

Some researchers attempt to define play by setting some criteria. Based solely on speculation, these criteria tend to be intangible. For instance, Rubin, Fein, and Vanderberg (1983) defined play in terms of observed behaviors and the contexts in which these behaviors occur. Their six criteria for defining play as dispositional factors are; (a) intrinsic motivation; (b) orientation toward means rather than ends; (c) internal rather than external locus of control; (d) noninstrumental actions rather than instrumental actions; (f) freedom from externally imposed rules; and (g) active engagement. Furthermore, they suggest that motives for engaging in an activity provide clues to determine play. Rubin, Fein, and Vanderberg (1983) claim that "applied additively, the features function to progressively restrict the domain of play" (p. 752). Thus, this line of argument provides no one definition of play, as such. Rather, there are various overlapping criteria; the more of these criteria present, the more certain it is that an observer will regard the behavior as being play (Smith, Takhvair, Gore, & Vollstedt, 1985).

Kransnor and Pepler (1980) provide a fully explicit model. They proposed that four criteria, namely flexibility, positive affect, nonliterality, and intrinsic motivation, intersect to delimit play increasingly. Smith and Vollstedt (1985) investigated a set of criteria (intrinsic motivation, nonliterality, positive affect, flexibility, and means/ends distinctions) to identify a play activity by testing the Kransnor and Pepler model. Their results showed that only three of these criteria were employed to determine a play activity. Intrinsic motivation was disregarded. Most observers used a combination of nonliterality, positive affect, and flexibility was used in more than half of the episodes using these criteria. Obviously, observers viewed play as enjoyable, flexible, and, most typically, as "pretend." Smith and Vollstedt (1985) sanctioned that these criteria become a tentative definition of play, even though there are other criteria also related to play. Specific criteria can facilitate the identification of play behavior, but it does not define play and it can also lead to dismissing some meaningful play episodes.

Smith et al. (1985) suggested that their model is plausible, but no empirical support is provided and the use of these criteria is questionable. Saracho (1991) also supported that their research has provided limited empirical support for selecting a set of characteristics to identify a play episode. In addition, Sutton-Smith and Kelly-Byrne (1984) have argued that play need not be flexible or voluntary.

Although no one specific definition of play has emerged as universally acceptable, it is supported that play should be defined with diverse aspects focusing on its content, motive, and context rather than merely identifying a single attribute. Context, especially, may include the physical environment, time, other children or adults present, and cultural sanctions and expectations.

Cognitive Development One of the critical benefits of children's play has long been its contribution to children's thinking ability. Children have been shown to acquire knowledge most easily through play activities and behaviors across a variety of contexts. Thus, different environmental experiences affect children's perceptions, practices, preferences, and achievements in distinct ways (Fromberg, 1992).

Piaget (1962), in one of his major works on infancy, argued that pretend play is an extreme form of assimilation. A present object that is only vaguely comparable to an absent one can evoke a mental image of it and be assimilated to it, resulting in the creation of a symbol. The ability to pretend depends on this capacity to represent absent objects and situations. This capacity is said to emerge during the second year of life.

For Piaget, early pretense symbolizing develops in a hierarchical fashion from familiar self-directed actions performed out of context, through the symbolic identification of one object with another, to increasingly complex symbolic combinations (Piaget, 1962). This account has been elaborated by McCune-Nicolich (1981), who suggested that late in the second year a fundamental shift in the child's symbolic play "allows games to be generated mentally," which requires "the coordination of at least two representational structures" (p.787).

Vygotsky (1967) placed great emphasis on the affective aspects of pretense. Imaginative play "originally arises from action" (p. 8) and from generalized "unsatisfied desires" (p. 9). Play teaches the child "to sever thought. . . from objects" (p. 12) and provides a means for developing abstract thought (cited in Leslie, 1987). Fein (1975) proposed that pretense can be thought of as involving transformation. By transformation she meant a process that mediates the selecting of some features of an immediate object, or situation and the ignoring of others, comparing such subjects with others drawn from memory; and, thereby, seeing an analogy between disparate entities. Such transformations could involve role shifts, animating inanimate objects, and substituting one object for another (Lesile, 1987).

Play tutoring has been employed successfully to improve the cognitive and academic skills of children from lower-class families. For example, Levenstein (1985) suggested that play skills need to be taught and mothers of children from low-income families could learn to assist their toddlers in improving play skills. Studying 54 children between 20 and 43 months of age from low-income families, she developed a training program that was shared with 33 mothers and their

children at home. The results showed that children's play was related to problem-solving, academic skills, classroom attitudes, and IQ.

Smilansky (1968) emphasized the relationship between pretend and sociodramatic play and cognitive development. She suggested that young children need adult intervention in their play. She observed 12 Israeli teachers for 67 hours during 9 weeks interacting with 420 preschool and kindergarten children who taught sociodramatic play. The results showed that less advanced sociodramatic play was related to academic failure and a disadvantaged socioeconomic background. When teachers intervened to stimulate the sociodramatic play of these preschool children, they found that the children became more flexible planners, used language more elaborately and expansively, sustained play for longer periods, and made more pretend verbalization.

Golomb, Growing, and Friedman (1982) investigated the effectiveness of direct conservation training which emphasized the provision of verbal rules, with nonspecific pretense play training, which provided rules for the pretense transformation. Experimenters provided an intervention procedure with 75 nonconserving children 3-to 5-year-olds and 47 nonconserving 4-to 5 1/2-year-olds. Their study included pretend play with inquiry, pretend play without inquiry, a combination of pretend play and training, and exposure to the relevant conservation tasks without instruction. Their use of pretense play with individual children led them to conclude that it facilitated the acquisition of conservation of quantity. Their study showed significance in the combination of pretend play and training as well. The teacher trained the children to conserve in a learning atmosphere for pretend play, including the development of knowledge, concepts, and skills and knowledge for instructional materials. The findings of these training studies and tests of children's reasoning ability indicate that children show advanced social-cognitive skills through pretend play.

Similar findings in a related series of studies found that children were able to provide theoretical justifications for situations after play (Dias & Harris, 1988, 1990). Dias and Harris (1988, 1990) examined whether 2-to 6-year-old children can extend their deductive abilities to syllogisms whose content runs counter to their practical world knowledge. They presented premises within the

context of play, using suitable toys and props, or in the ordinary verbal mode. Syllogisms with known, unknown, and contrary facts were included. The results showed that the children's performance was not as accurate after the verbal mode was presented than when the premises were introduced in the context of play, particularly after syllogisms with contradictory facts were added. Also, it is the make-believe context of play rather than the visible presence of toys during play that facilities children's reasoning when the premises of the problems run counter to their experience. These studies could be interpreted to mean that children manifest an early ability to free their representations from their referents and that they can allow these freed representations to be modified through pretend play.

Children's interactions with their peers require them to process information that conflicts with their acquired knowledge (Saracho, 1991). When they have a contrasting point of view from others they must represent the other person's world through perspective-taking skills. This is revealed when two or more children assume roles in recreating a real-life situation through mental representations. For instance, if some children assume the roles of family members at the dinner meal or of fire fighters putting out a make-believe fire, they may assume such roles in the housekeeping and block-building areas of schools for young children (Christie, 1982).

It does appear that there is a recursive relationship between play and cognitive development. Advances in play are reflected in readiness for extended learning (Fromberg, 1992). As children learn more, they are better able to integrate new themes of extended language use in their play.

Toy and Objects in Environment Toys and other playthings are an important aspect of the child's world of play and they influence children's cognitive and social development. Vygotsky (1967) provided particularly focused and detailed analyses of the development of object pretense during the preschool years. Vygotsky contended that prior to the emergence of pretend play, the child's understanding of meaning is primarily mediated, i.e., the perception of an object predominates over its meaning and, thus, determined the child's actions. This fusion between meaning and what is seen renders the child unable to act independently of what she or he sees.

In Vygotsky's view, the emergence of pretend play profoundly alters this relationship. The child begins to operate with meanings other than those usually attached to an object or action. Complete separation of thought from objects is preceded by a transition period during which the child uses concrete objects or a pivot (e.g., stick) as a substitute for the absent object (e.g., horse). According to Vygotsky, when a stick is used as a pivot (e.g., horse), the meaning of the word horse is severed from a real horse and a new meaning predominates over the objects. In a similar way, prior to complete detachment of meaning of an action from the real action, the young child requires a pivot in the form of a substitute action (e.g., stamping the feet to represent riding a horse).

There are many studies on the effect of toy realism and the structure of dramatic play (Fromberg, 1992; Griffing, 1980; McLoyd, 1983; McLoyd, Thomas & Warren, 1984; Smilansky, 1968). For example, studying 3- to 6-year-old children, Smilansky (1968) reported that middle-class children, compared to lower-class children, engaged in more sociodramatic play, enacted a greater variety of roles and richer episodes, and showed a stronger preference for low-realism toys (e.g., tubes, blocks, boxes and pipe cleaners) and less preference for high-realism toys (e.g., tea sets, dolls, trucks). She contended that children find high-realism toys extremely satisfying emotionally because they help the child to portray more exact, detailed action or role pretense, and contribute to the sense that they really are performing the action or behaving like the adults being portrayed (McLoyd et al, 1984). In this vein, McLoyd (1983) examined the effects of high-structure versus low-structure objects on various types and components of pretend play in a sample of 36 low-income, predominantly African-American preschoolers. Twelve triads of children, equally divided by age and sex, were observed in four 30-minute play sessions. In two of the sessions, high-structure or replica objects (e.g., tea sets, dolls, trucks) were available; in the remaining two sessions, low-structure objects (e.g., tubes, blocks, boxes, and pipe cleaners) were provided. She found that high-structure toys significantly increased noninteractive (solitary and parallel) pretend play in 3 1/2-year-old, but not 5-year-old, triads. She also reported that these toys increased associative and total pretend play

(solitary, parallel, associative, and cooperative combined) in both age groups, but failed to increase cooperative pretend play.

Later McLoyd et al. (1984) investigated sequential dependencies in solitary and interactive states of social organization as a function of age, sex, and types of toy in 12 triads of 3- to 5-year-old children. The results showed that triads were more likely to remain in solitary play in the presence of high-specificity toys than in the pretense of low-specificity toys.

Some researchers have been interested in the effect of play objects on social development. For example, Rogers (1985) investigated the social behavior of 20 kindergarten children as they played with unit (small, solid, hardwood) blocks. The findings indicated that the children engaged in group, parallel, and solitary play with both types of blocks, but group play was more likely to occur with large hollow blocks while parallel and solitary play occurred more often with unit blocks. Children also spent more time playing with large, hollow blocks. The results from this study suggested that large hollow block play may provide young children with opportunities and experiences that encourage social development.

Fromberg (1990) argues that social development is related to the use of play objects. The indicators of decontextualization are symbolic transformation, substitutions, and inventive acts, as children become less dependent on prototypical representation. Furthermore, decentration requires children to anticipate others' reactions and to adapt their behavior. Finally, an increasing ability to combine individual action sequences into multischeme combinations characterizes children's integration. As children's play integrates schemas or action sequences, they also increase their use of speech.

Other researchers have emphasized the relation of language development and play centers (Pellegrini & Galda, 1982; Pellegrini, Galda & Rubin, 1984). For example, Pellegrini (1984) described the ways children used elaborated language in two play centers and how the use of elaborated language changed for children ages of 4 and 5 years. The ten 4-year-olds and ten 5-year-olds were observed in same-age and same-sex dyads on four occasions (twice in a constructive

context and twice in a dramatic context) in an experimental playroom. The results indicated that children produce more elaborated language in dramatic play centers than in constructive centers. Children generated more linguistic verbs, physically absent tenses, and less exploration in the dramatic center than in the block center.

Based on the research, teachers can facilitate the learning process by using directed discovery to draw children's attention to certain properties and relationships of the materials with which they are playing. If not overdone, guided discovery is an ideal way to utilize play for academic, language, and social development.

Social Development Play also has a key role in social development by providing a context in which children can acquire many important social skills such as turn-taking, sharing, and cooperation, as well as the ability to understand other people's thoughts, perceptions, or emotions (Johnson et al., 1987). For example, when children play and interact with their peers, children detect that their peers' points of view contradict their own. These situations require children either to understand their peers' points of view and transform those perspectives to correspond with their own, or accommodate to contradictory perspectives by recognizing a variety of points of view and accepting individual differences in the social atmosphere (Rubin & Hayvren, 1981). In this way, Hughes (1991) considered play as readily available, cost efficient, and a safe occasion for the exercise of socially acceptable conflict management since play is a lesson in life.

Many researchers have been interested in the social pretend play of toddlers, a kind of symbolic play that represents social interactions requiring the child to manipulate symbolic transformations and to communicate them to a partner. For example, Fenson (1984) suggested that social pretend play of children between 20 and 31 months, after modeling, both reflects and contributes to decentration. He found that children progress through the process of decentering, decontextualization, and integration, using the modeling levels of other-reference (e.g., children pretend that the doll is a real baby) and other agent-patient (e.g., children pretend to play both roles

of a play interaction with two dolls or animal figures). Development proceeds from a focus on the self toward active other-directed acts.

Black (1989) examined the interactions of preschool children's social and symbolic skills during their play. The 24 3-year-olds, and 28 4-year-olds were videotaped for 45 minutes each. Significance was mainly found in sex and age differences. Girls allocated more time discussing issues concerning taking turns and conversational dialogues. Girls and younger boys favored topics on daily incidents while older boys favored fanciful topics. Younger children depended more than older ones upon props and themes of daily incidents. Boys preferred to participate more in solitary pretend play.

Howes and Farver (1987) explored the age effects of partners in social pretend play. They found that 2-year-olds participated more in social pretend play with older partners than with same-age partners. During mixed play sessions, 2- and 5-year-olds participated in asymmetrical interaction. In addition, 5-year-olds utilized comparable social behaviors with same-age and younger partners.

Howe, Moller, and Chambers (1994) investigated the impact of novel dramatic play centers on the social and cognitive play of preschool children in a day-care center. Forty-five preschool children were assigned to five groups such as a hospital center, a bakery center, a pharmacy, a pirate ship (a wooden rocking boat) and a pizzeria. The social and cognitive play of the children was observed in the dramatic play center using Rubin's Pretend Observation Scale. Results indicated that the novel dramatic play centers elicited different types of social play in the children using these centers, facilitating more parallel and group play than solitary play. Also, dramatic play was the most frequent type of cognitive play. The other categories of cognitive play were either observed infrequently (functional, constructive, exploratory) or not at all (games with rules). They argued that, when designing dramatic play centers, the environment should be structured so children are more likely to engage in group interactions than in parallel or solitary play.

Doyle, Doethring, Tessier, and de Lorimier (1992) examined the transition to and from social pretend enactment to provide insights about children's social skills. They observed kindergarten and first-grade children, one-half frequent pretenders and one-half infrequent pretenders in dyads. The results indicated that the complexity of social interaction increases with the importance of social pretend play for the practices of social skills. Also, the transition to and from social pretend play often occurs in predictable sequences that may vary as a function of children's sex and frequency of pretend play. In this way, Howes and Matheson (1992) examined developmental sequences in children's play with peers from infancy through preschool, using a peer-play scale. The results showed that children developed play forms in the expected sequences and at the expected ages. Children's pattern of play, from emergence and proportion of time in more complex play forms, was related to subsequent indices of social competence. That is, children who developed cooperative social pretend play earlier or who spent a greater proportion of time engaged in that play form as older toddlers showed earlier emergence of complex social pretend play and spent a greater proportion of time in complex social pretend play as preschoolers. In this way, Slade (1987b) argues that children who spent more time in pretend play are more secure and develop their autonomy as organizers and planners.

In play, young children realize that they need to become sympathetic to their peers' feelings, to be patient, to wait for their turn, to be cooperative, to share materials and experiences, and to obtain immediate satisfaction when others they value like them (Saracho, 1986). When they share and cooperate they also determine ways to maximize their personal and their peers' resources. Consequently, peer play has an impact on young children's social and cognitive development.

The Role of Teachers in Children's Play

Attitudes about the role of the teacher in children's play have changed considerably in recent years. Until the 1960s, most early childhood educators were schooled in the psychoanalytic theory of play, and ,according to that theory, play's main function is to enable children to work out their inner conflicts (Issac, 1930). The teacher's role is to set the stage for play and to observe children's play

closely for clues about their emotional problems. The teacher is never to enter into or interfere in any way with children's play. It is believed that "teacher intervention would disrupt play, inhibit children from revealing their true feelings, and reduce play's therapeutic benefits" (Johnson et al., 1987, p. 21).

Tizard (1977) argued that in nursery schools, where the teacher adopted a passive role, the children's play was frequently of short duration, poorly elaborated, and repetitive, and involved a narrow sampling of available materials. He suggested that teachers should help children extend rather than merely reply and repeat experiences. In a survey, Smilansky (1968) found that teachers were reluctant to intervene in children's play and, thereby, they disregarded the research supporting teacher intervention in children's play.

More recent researchers have argued the importance of the teacher's grasp of theory, as well as the teacher's ability to recognize the distinguishing features of play, to understand the nature of play's development, and to be able to assess the play of children in their group (Almy, Monighan, Scales & Van Hoorn, 1984). There is evidence suggesting that a knowledgeable and sensitive teacher's role in play can facilitate and enhance children's play (Pellegrini & Galda, 1982; Pellegrini, 1984; Saltz & Johnson, 1974; Saltz, Dixon & Johnson, 1977). Pellegrini and Galda (1982) used the teacher-as-director variant of the procedure to help children (kindergarten, first-grade, and second-grade) enact folktales. Different groups of children reconstructed stories by drawing pictures, thematic-fantasy play, or adult-lead discussion. All children then retold the stories they reconstructed. They found that the stories retold by children who enacted the stories initiated by the teachers were more complete and explicit than the stories retold by children in other groups.

Teachers need to understand about play intervention in order to broaden their role from that of facilitator to participant (Saracho, 1991). In the facilitator role, the teacher provides and arranges carefully selected objects, materials, props, and preparatory experiences related to selected themes (Green, 1986). In the intervention role, the teacher must observe the children's play systematically to identify the critical elements of play that children may be lacking (Christie, 1982). Systematic

observation of children's play involves assessing children's knowledge about the way they assume roles, manipulate pertinent props, and use language. It requires teachers to intervene by supplementing the critical elements of play that are scant. The intervention should revitalize, clarify, and explain play, but it should not manage the activities.

Vygotsky (1962) emphasized the role of teachers by introducing the scaffolding model. Scaffolding is based on Vygotsky's notion of the "zone of proximal development," which is defined as the distance between a child's actual developmental level as determined by independent problem solving under teacher guidance or in collaboration with more capable peers. That is, scaffolding is "an especially descriptive word for setting up challenges and assisting children to work on the edge of their current competence or for pushing the limits of their current developmental level," according to Bredekamp & Rosegrant (1992, p. 40). Bruner, Jolly, and Sylva (1976) used the scaffold metaphor to describe the ideal teaching process whereby initially the teacher carries the major responsibility for the activity and thereby erects a scaffold.

The Vygotskyian view of contextual or social influence in play can be contrasted with Piaget's perspective of play based on individual development. Piaget (1962) views that play activities based primarily on internal needs or motivations, without major adaptation to the real world, are not as likely to result in the acquisition of new cognitive structures. Through the teacher's involvement such as question-asking or other problem-solving techniques, however, children respond to, discover, and reflect upon the real physical environment, resulting more often in equilibrium between accommodation and assimilation and in advancements in their mental constructions of the world (Trawick-Smith, 1989).

In this vein, Smilansky (1968) supported the notion that it is adult-enriched activity, rather than play per se, that explains the success of training strategies. She identifies two types of interventions to use: (a) outside intervention, in which the adult remains outside the play episode but makes comments and suggestions, and (b) participation in the play, in which the adult takes part and models desired play behaviors.

Fromberg (1990) also identified two types of intervention: direct intervention and indirect intervention. The teachers can intervene in direct ways such as: (a) being present at a play site, (b) entering the play frame by taking a role, using a play voice or gesture, asking a question, or varying a routine, (c) raising a question about the play frame or about clarifying content, (d) modeling , by imitating children's play with extended or altered content, and (e) maintaining a playful attitude, and accepting and encouraging children's independent problem setting, problem solving, and connection making. As indirect interventions, teachers can provide space, add materials that stimulate thematic variety or removal of props, plan activities that add to the children's knowledge of themes through trips, films, literature, or resource visitors, and meet parents as conferences or groups. She emphasized the teachers' consideration of children's development and the context in which play takes place.

Smilansky (1968) investigated the effects of teacher play-tutoring, excursions, and a combination of both on a group of Israeli children, whose play had been found to be impoverished. Results showed that both the play training and a combination of treatments effectively increased the amount and quality of the children's sociodramatic play. Both treatments also appeared to improve certain aspects of the children's cognitive performance. The success of these results may be explained by their intensive teacher interventions, which were characterized by repeated teacher suggestions for more elaborate play or heightened social intervention, as well as teacher role-taking within children's self-selected play activities. These interventions might be effective, in terms of Piaget's framework, because they actually arouse children from their purely assimilative activity and prompt greater accommodation to the present physical world (Trawick-Smith, 1989).

Steel and Hmcir (1985) explored teacher involvement in children's play. In their study the teacher introduced two sets of objects judged as having either high or low prototypicality (real representation) to each of twenty children (10 males and 10 females). Comparison of the children's response to high and low prototypical objects were made under two conditions: (a) responses without teacher suggestions for play (i.e., "baby is sleepy," "put baby to bed," or "nighty-night, baby") and (b)

responses without suggestions for play. Results showed that children responded to both high and low prototypical objects at a significantly higher level with teacher suggestions for play than without such suggestions.

Others have attempted experimental studies in which teachers were provided special training for children's play (Burns & Brainerd, 1977; Collier, 1985; Golomb & Cornelius, 1977; Graul & Zeece, 1990; Saltz & Johnson, 1974; Wade, 1985; Yawkey, 1980). Collier (1985) studied the long- and short-term practical effects of training preschool teachers in techniques for facilitating preschool children's play during free play periods in a natural and uncontrolled preschool environment. The experimental teachers were trained in techniques for observing, providing, and involving themselves in fostering children's play. The play training effects for teachers were sustained after experimental treatment ceased, suggesting possible long-term results. In this vein, Graul and Zeece (1990) examined the effects of teacher's training on 2-to 4-year-old children's cognitive and play behavior. Results indicated that play training of teachers was an effective mechanism to enhance preschool children's verbal cognition.

Wade (1985) studied the effects of a specialized teacher training program on play behaviors of children and the verbal and nonverbal behaviors of their teachers in an outdoor play environment. A play category system and the "System for Coding Interaction with Multiple Phases" (SCIMP) were used to collect data on 69 nursery school children and their teachers. Play behaviors of the children were significantly different for several play categories before and after the specialized teacher training program. The specialized teacher training program also had significant effects on both children's and teacher's behavior outdoors. This line of research results shows some consensus that play interventions, like teacher training, enhance young children's play ability.

Intervention in children's play is effective when adults understand developmental correlates and developmentally appropriate techniques for facilitating children's play (Christie, 1985). The role of teacher intervention enriches the quality of children's play and is beneficial in other ways by providing a physical and social environment that is conducive to play and by responding to and

participating in the play (Almy et al, 1984; Harms & Clifford, 1980; Johnson et al, 1987; Phfye-Perkins, 1980).

Teachers target specific language, social, or play deficits of children and enhance these areas through modeling, question-asking, or other forms and providing guidance as children play (Smilansky, 1968; Trawick-Smith, 1989). For example, there are several ways for the teachers' role to help children's language competency such as the experience of back and forth communication; using open-ended and thought-inducing questions; helping children identify the issues, ideas, and feelings; and providing various alternatives for the children to consider (Mattick, 1981).

Bredekamp (1987) presents the role of teacher in NAEYC's guidelines for developmentally appropriate practice. The teacher's role in child-chosen activity is to prepare the environment with stimulating, challenging activity choices and then to facilitate children's engagement. In a developmentally appropriate program teachers provide a rich variety of activities and materials from which to choose; offer children the choice to participate in small group or solitary activity; assist and guide children who are not able to use materials and social activity easily and enjoy child-choice activity periods; and provide opportunities for child-initiated, child-directed practice of skills as a self-chosen activity.

Bredekamp and Rosegrant (1992) offer a continuum of teaching behaviors concerning interactive teaching to illuminate the complex activity of the teacher's role. The teaching continuum indicates the strategies of acknowledge, model, facilitate, support, scaffold, co-construct, demonstrate, and direct. These behaviors occur in adult-child interactions. The percentage of time each behavior is used will vary depending on the activity and the child, ranging from nondirective to directive conditions. With the continuum of teaching interactions, the teacher "orchestrates the learning environment by coordinating and facilitating numerous activities, moving around, monitoring children's social and cognitive needs, assisting when needed, encouraging and acknowledging children's efforts, and challenging them to new levels of learning" (p. 41).

In this regard, there appears to be a pressing need to educate teachers about the importance of the role of teachers in children's play and how to implement these strategies effectively. Through this perspective they may see possibilities for enhancing the presence of spontaneity, autonomy, and increasing competence in children's play, qualities that are the essence of play.

Developmental Appropriateness/Inappropriateness of Teachers' Beliefs and Practices

Isenberg (1990) believes that an important task for researchers is to collaborate with practitioners to identify their beliefs and translate them into standards of practice. Conventional research on teaching has focused on practice, ignoring the thought processes of teachers (Isenberg, 1990). Emerging research on teacher thinking, according to Isenberg (1990), indicates that there are inconsistencies between teachers' beliefs and practices that need to be identified so teachers can be supported in reflecting upon and analyzing their beliefs as they are related to practices.

Recent research has investigated teachers' thought process by examing how teachers make decisions based on "implicit theories" (e.g., Burts, Hart, Charlesworth, & Kirk, 1990; Spodek, 1988). Teachers' implicit theories are the ideas about instruction that teachers develop from their personal experiences and practical knowledge (Spodek, 1988; Isenberg, 1990). According to Spodek (1988), they differ from the explicit theories of the profession which are taught in education and child development courses, are exposed by professional organizations, and are expressed in the professional literature. He found that preschool teachers generated a greater variety of implicit theories about educational decisions than either kindergarten or first-grade teachers. There was an absence of theories related to play and developmental characteristics of children for primary teachers and an absence of evaluative theories regarding classroom decisions for preschool teachers. In addition, first-grade teachers emphasized concerns for children's learning whereas kindergarten teachers focused on goals for children's behavior and the preschool teachers focused on educational play. The implicit theories and beliefs of educators need to be recognized as beliefs that teachers have regarding what is important and not important and how these beliefs affect their children (Charlesworth, Hart, Burts, & Hernandez, 1991).

Differences between teachers with different types of teaching certification were also identified by Hatch and Freeman (1988). They conducted a qualitative study of the philosophies of kindergarten teachers, principals, and supervisors in 12 Ohio school districts. All of the kindergartens were required to follow a state-mandated curriculum with a skill-based set of objectives. Tape-recorded interviews with the educators were translated into formal research protocol formats and then analytic generalizations were made. Results indicate that the kindergartens were strongly focused academically and skill-oriented; i.e., teacher planning emphasized highly structured classroom activities, and the mode of instruction was teacher-directed and skill-based as opposed to child-initiated. Further, the authors suspect that teachers who implement this kindergarten programs may not believe these programs serve young children best; e.g., 66.7% of the kindergarten teachers and 58.3% of the principals had compliant attitudes toward implementing state-mandated objectives without adapting them to suit the student. More than half of the teachers (55.6%) held maturational or interactionist philosophies although they were teaching or supervising programs that were behavioristic in orientation. The authors argue that such contradictions seem to suggest that many individuals experience a difference in the reality of what they do daily in the classroom and what they believe young children need to experience in school. This struggle, termed a philosophy-reality conflict, was expressed by a higher percentage of teachers (66.7%) than principals or supervisors (50%).

Mayers (1991) examined the beliefs and desired practices of kindergarten teachers, first-grade teachers, and elementary school principals in both full-day every day and half-day every day kindergarten programs and the actual and desired practices of kindergarten teachers. Two hundred and eighty-seven subjects responded to a Teacher Information Questionnaire and a Teacher Questionnaire. Results show that there are differences between the beliefs and expressed practices among these educators. Kindergarten teachers, as compared to first-grade teachers or principals, tended to use more developmentally appropriate practices as reflected in their expressed beliefs and practices. However, kindergarten teachers, compared to principals, expected more frequent

involvement in large-group teacher-directed activities which seems to contradict the child-centered approach. This is interpreted to mean that there are inconsistent relationships between beliefs and practices for educators.

More recently various professional organizations have published guidelines for identifying appropriate educational practices. The organizations include NAEYC and the International Reading Association (IRA) and National Council for Teachers of Mathematics(NCTM). The National Association for the Education of Young Children (NAEYC) position statement addresses developmentally appropriate and inappropriate practices in programs serving children from birth through age 8 (Bredekamp, 1987). Appropriate practices are those that fit young children's stages of development relative both to their age and to their individual developmental level and their family and cultural backgrounds. Appropriate practice provides an environment for young children where knowledge can be constructed through the children's own actions during concrete, authentic experiences (Burts et al, 1992). In contrast, inappropriate practices include an almost exclusive use of teacher-directed, highly structured, large-group lessons and abstract paper-and-pencil tasks (e.g., workbooks and worksheets). Further, these inappropriate tasks often must be completed within an inflexible time frame, and focus on activities such as rote learning, direct teaching of discrete skills, lack of opportunities to move around the room and make choices, overreliance on punishment and extrinsic reward systems, and use of standardized assessment tests (Bredekamp, 1987). These guidelines also identify recommendations for academic preparation, staff-child ratios, and density of space for high-quality early childhood programs.

Oakes and Caruso (1990) investigated teachers' use of developmentally appropriate practices and their attitudes toward authority in the classroom. The subjects were twenty-five kindergarten teachers and their classrooms from one school district in a small midwestern city. The teachers and their classroom were observed by using the Teaching Strategies Checklist. The respondents were asked about their attitudes about the way of authority with children and to provide information about teachers' professional experience and education. The authors found that most

classrooms exhibited academically-oriented, skill-centered programs rather than developmentally appropriate practice programs. However, kindergarten teachers who rated themselves higher in authority sharing, as opposed to authority controlling, were more likely to use developmentally appropriate teaching strategies as delineated by NAEYC. Oakes and Caruso interpret the positive relationship between an authority-sharing attitude and developmentally appropriate practices as indicating the teachers' perspective and attitudes about adult/child authority orientation.

Chung (1994) examined the relations between the amount of time used for cognitive distancing strategies and developmental appropriateness of kindergarten classrooms. Using a time-sampling method, thirty kindergarten teachers and children in their classroom were observed. The teachers responded to the Kindergarten Teacher Survey, which seeks demographic information as well as information on teachers' familiarity with the NAEYC guidelines on developmentally appropriate practices and the NCTM's school mathematics standards. The Assessment Profile for Early Childhood Programs was use to evaluate the degree to which kindergartens' practices were developmentally appropriate. Results indicate that the degree of a kindergarten's developmental appropriateness was correlated with children's participation in all classroom activities but is not related to the teacher's cognitive distancing behaviors. This is interpreted to mean that the findings are incompatible with the prediction that teachers whose classroom practices were based more on the NAEYC developmentally appropriate guidelines would demonstrate more often higher cognitive distancing in teaching mathematics.

Hyson, Hirsh-Pasek, and Rescorla (1990) examined how school academic philosophies and practices impact upon specific domains of the child's development. The subjects were 90 prekindergarten children who lived in relatively affluent metropolitan areas in Pennsylvania and Delaware. A follow-up study was conducted on a subset of 56 children at the end of their kindergarten year. Differences between high-academic, developmentally inappropriate, vs. low-academic, developmentally appropriate programs were revealed in children's anxiety during parent-child tasks, creativity, letter and number skills, and attitudes toward school. The authors found that

children who attended inappropriate programs scored higher on tests of letters and numbers but did not maintain their gains during the kindergarten year. These children also had more negative attitudes about school by the kindergarten year, and were less creative and more anxious during parent-child tasks than were children who had attended developmentally appropriate preschool programs.

In summery, this section has reviewed studies concerning differences between the philosophies and practices of early childhood educators in the classroom context. It has been suggested that the assumptions and beliefs of educators are not always reflective of their classroom behaviors and expectations for child outcomes (Hatch & Freeman, 1988; Charlesworth et al., 1993).

Korean Early Childhood Education

Early childhood education in Korea began in the early 1900s with programs for young children, although only recently has academic research and extensive government involvement occurred. Korean early childhood education institutions include kindergartens, Saemaul nursery schools, private nursery schools, child care centers, and family day care programs. Generally, these programs are for 3- to 6-year-old children, and are administered by either the Ministry of Education or Ministry of Health and Social Affairs. Kindergartens are divided into private and public institutions and generally are offered as three-hour, half-day programs, Monday to Saturday for 3- to-6-year-old children. They are administered by the Ministry of Education. Public kindergartens are established only in places where it is difficult to open private kindergartens, such as in small and medium-sized cities and on islands. The number of public kindergartens has exceeded that of private kindergartens since 1982. Most public kindergartens receive full government aid for personnel and operating expenses, whereas public kindergartens in cities receive tuition from parents and are independent of financial aid from the Ministry of Education.

Private kindergartens are operated by individuals, by churches and Buddhist religious institutions, or they are affiliated with schools. They do not receive government financial aid, but,

due to the abolition of fixed tuition fees since 1985, directors of private kindergartens set the amount of their tuition with consent of the parents.

The Saemaul nursery schools, unique to Korea, were started in March 1981 under the supervision of the Ministry of Home Affairs. Their objectives are similar to those of the early stages of the Head Start program in the United States. Their objectives are to protect and educate 3- to 6-year-old children from low-income families, and to provide all-day care for children of families where both parents work. Thus Saemaul nursery schools serve a dual purpose as education and child care. The Saemaul nursery schools have changed into child care center models, emphasizing the purpose of education more since the Infant and Child Care Law was enacted in 1991. This legislation governs the operation of child care arrangements such as the staff-child ratio, minimum space and equipment, and safety/health standards (Ministry of Health & Social Affairs, 1991).

Although kindergartens are the major childhood education institutions in Korea, several universities offer experimental nursery schools and other programs available as half-day programs for 3- to 4-year-old children. In addition, private nursery schools have been established in many apartment complexes. Many unauthorized nursery schools are in operation, as there are no legal regulations governing nursery schools.

Child care centers for full-day arrangements are divided into four main types: private child care centers, public child care centers, family day care centers, and child care centers provided by employers. There were about 2,588 day care arrangements in 1991, with 265 private child care centers, 51 public child care centers, 1,854 family day care centers, and 19 employer-provided child care centers (Lee, 1993). Only 30,000 (3.8%) of all eligible children (820,000) received child care services in 1991 (Lee & Lee, 1990). The children served in child care arrangements range from infancy to 6 years of age. There are several studies that indicate a special problem in the lack of adequate care for children under 3 years (Chang & Lee, 1982; Shin, 1985).

The kindergarten education curriculum is set by the Ministry of Education and is followed by most of the kindergartens and child care centers. The current kindergarten curriculum was ratified in

1969 and revised in 1979, 1981, and 1987. The "Kindergarten Education Curriculum Enforcement Law" of 1987 identifies five developmental areas as physical, emotional, linguistic, cognitive, and social development. According to the Ministry of Education in 1987, the kindergarten curricular goal is to further the development of the whole child. The following objectives were established to fulfill these goals: (a) to develop good habits, basic abilities of perception and movement, habits of health and safety, and harmonious physical development; (b) to develop the ability to understand others and express one's opinion verbally; (c) to help children take interest in various phenomena surrounding them and to foster an inquiring attitude; (d) to help children take pride in their work and to express feelings and thoughts about their surroundings in a personal way; and (e) to foster basic habits essential in daily life, and to cultivate respectful and loving attitudes towards family and neighbors.

The early childhood institutions are divided into 180 half-days and full-days, with a standard school day of 3 to 4 hours; however, this varies according to regional characteristics, a child's level of development and area of interest, the weather or season, and the curriculum. Most half-day or full-day programs start at 9:00 a.m., even though some programs start earlier. Half-day programs end between noon and 1:00 p.m., and full-day programs end between 3:00 and 4:00 p.m. Some half-day programs are offered in the afternoon between 12:30 and 4:00 p.m.

The main activities of the kindergarten and child care center are indoor play; reading books and poems; providing time for conversation; providing time and space for dancing, movement activities, or doing musical activities such as singing or listening to records and tapes; and snack and clean-up (Park, 1987). Based on the daily activity schedule, the programs look very similar to one another and they are dependent on the kindergarten education curriculum set by the Ministry of Education.

Many changes in Korean early childhood education regulations have occurred in recent years, but little is known about teacher practices. There is no empirical evidence about developmentally appropriate teaching strategies and curriculum developed by Bredekamp in Korea

(NAEYC, 1987). According to NAEYC guidelines, the degree to which both teaching strategies and the curriculum are developmentally appropriate is a major determinant of program quality. A developmentally appropriate program is both age-appropriate and individually-appropriate; that is, the programs are designed for the age group served and implemented with attention to the needs and differences of the individual children enrolled. Under these foundations, it is necessary to provide a variety of programs and materials for the unique needs of each early childhood institution, developmentally appropriate according to age and individual interests and needs of children, and train teachers for creative programming and activities.

Furthermore, most daily schedules of Korean kindergarten and child care center emphasized indoor play, large-group, and teacher-directed activities. According to Hendrick (1987), the daily schedule should include several components as follows: (a) alternating periods of quieter and more active experiences; (b) indoor and outdoor play; (c) a reasonable pace throughout the day; and (d) a balance between individual self-selected learning experiences and participation in the more regulated small-group times. Bredekamp (1987) pointed out that children select many of their own activities from among a variety of learning areas the teacher prepares and work individually or in small, informal groups most of the time. Thus, the kindergartens and child care centers need to change their focus from teacher-directed activities to children-initiated play and activities as well as to provide a variety of environments in outdoor play.

Teacher training in kindergarten and child care center education in Korea is predominantly in two-year colleges and four-year colleges and universities (Lee, 1993). For example, the four-year education programs graduated about 810 kindergarten teachers, while the two-year programs produced about 7,720 kindergarten teachers, in 1988. The content and requirements for early childhood teacher training differ between 2- and 4-year programs. The typical four-year university program consists of at least 140 semester credits including general education (42 credits); foundations (18 credits); major area (59 credits), including child development, psychology, and early childhood education courses; and the minor area (21 credits). The typical two-year junior college

program consists of at least 90 semester credits, including general education (20 credits); foundations (16 credits); major courses (48 credits), including child development, psychology, and early childhood education methods courses; and electives (6 credits).

The general standards for teacher preparation and qualifications for early childhood personnel (teacher, director, assistant teacher) in Korea are established by education law and enforcement ordinances of the Ministry of Education and are enforced within each educational institution. Standards for early childhood personnel vary with the position (director, elementary school teacher, kindergarten teacher, and assistant teacher).

Among recent developments in the preparation of teachers in Korea is the growing emphasis on teaching practices. There is a trend toward improving the quality of teacher education, with increased importance being placed on professionalism in early childhood education (Lee, 1993). The availability of in-service teacher education has increased as well. Continuing education institutions have been established in four-year colleges. They provide one-year early childhood education courses for parents as well as kindergarten directors and teachers following the regulations of the 1991 Infant and Child Care Ordinance.

Although early childhood education institutions in Korea offer a variety of programs such as public kindergarten, private kindergarten, child care center (Saemaul nursery school), and family day care center, there is little research about how teacher beliefs and perceptions influence classroom practices and the context for learning. Research is needed to explore Korean teacher' beliefs and practices of children's play as they relate to the developmentally appropriate education guidelines developed by NAEYC.

METHOD

Subjects

The subjects in this study were 45 public kindergarten teachers, 58 private kindergarten teachers and 54 child care center teachers (n =157) in the 9 educational districts of Seoul, Korea- i.e., the districts of Tonbu, Sobu, Nambu, Pukbu, Chungbu, Kangdong, Kanso, Kangnam, and Tongiak. These educational districts offered programs for young children in child care centers or private kindergartens and public kindergartens. There were a total of 378 child care centers, 23 public kindergartens and 1092 private kindergartens in these nine educational districts. There were from 38-46 child care centers, 2-3 public kindergartens and 116-128 private kindergartens in each district. Listings of these programs were received for seven districts. All public kindergartens (n = 23) were selected for this study. At least 7 or 8 (n =52) of the possible 38-46 child care centers and at least 7 or 8 (N=50) of the possible 116-128 private kindergartens in an educational district were randomly selected.

One hundred and twenty-five principals were contacted by telephone to obtain permission for their early childhood teachers to participate in this study. Permission was granted by 27 principals of the child care centers (52%), 22 public kindergarten principals (96%), and 29 of the private kindergarten principals (58%). The forty-five public kindergarten teachers, fifty-eight private kindergarten teachers, and fifty-four child care center teachers who participated in this study as subjects were selected by the principals of their schools.

Instruments

The Early Childhood Teacher's Beliefs and Practices Questionnaire was organized into two sections, a program and teacher information section and a teacher practices and beliefs section (see Appendixes B, C). Program and teacher information items were designed to collect demographic information for the early childhood programs, such as type of program, class size, daily schedule and time allotment for daily activities, as well as information about the teachers completing the survey

such as their education and teaching experiences. This demographic section of the questionnaire was adapted from Mayers (1991) and Banks (1990).

The teacher practices and beliefs section was adapted to the Korean early childhood programs from the two subscales of Charlesworth, Hart, Burts, and Hernandez (1989), as modified by Mayers (1991). Reliability and validity have not identified in this model. These scales were developed to assess appropriate and inappropriate perceptions of children's play using the NAEYC guidelines for developmentally appropriate practices (Bredekamp, 1987). Teachers were asked to determine how frequently they provide various classroom activities for children in their program. The Teacher Beliefs and Practice scale asks the teachers to report their "Actual" children's activities (Charlesworth et al., 1989) and their "Desired" children's activities (Mayers, 1991). Twenty-eight of the 32 items used from the scale by Mayers (1991) were selected to fit the Korean situation. The 5-point Likert scale ranged from 1, defined as "never or almost never (less than monthly)" to 5, defined as "very often (daily)." Teachers marked each item, such as "building with blocks," "using isolation to obtain child compliance," "practicing handwriting on lines," and "math incorporated with other subject areas, " on the 1 to 5 scale.

Items on the Teacher Questionnaire represent developmentally appropriate and developmentally inappropriate kindergarten curriculum approaches as specified by Charlesworth et al. (1989), who designed the original version of this questionnaire. This instrument was designed using the National Association for the Education of Young Children guidelines on developmentally appropriate practices.

Procedures

Step 1 The instrument was translated into Korean for this study. A translation procedure called "back-translation" (Lonner & Berry, 1986) was used. Back-translation employs a principle called "decentering," which means that one language is not "centered" over the other.

For this study, the researcher translated the questionnaire from English into Korean, second, a bilingual early childhood professor in Korea reviewed the appropriateness of the questionnaire to

determine whether it fit the Korean situation and the accuracy of the translation by reviewing both the English and Korean versions of the questionnaire. Then, four Iowa State University Korean doctoral students in Human Development and Family Studies translated the Korean version into an English version. This last procedure was repeated twice until the translated version closely approximated the English version of the instrument.

Step II Iowa State University Human Subjects Committee approval was obtained. In May, the researcher returned to Korea and obtained the list of government-authorized kindergartens and child care centers from each district office. Each of the nine educational districts was telephoned to request permission to contact the child care center and kindergarten principals in their respective district, and seven districts gave their verbal consent. These seven educational districts provided program names, addresses, and telephone numbers and names of principals for child care centers (n = 297) and private kindergartens (n = 854) for their respective districts. The list of all public kindergarten programs for Seoul was obtained from the Sobu district, and all of these programs were contacted to participate in this study.

Principals of 23 public kindergartens, 50 private kindergartens, and 52 child care centers in the seven educational districts of Seoul, Korea were randomly selected from an (Korean) alphabetized list and contacted by telephone to obtain their permission for at least two of their early childhood teachers to participate in this study.

RESULTS

This section presents differences between educators in the following categories: program characteristics; and educator's characteristics, i.e., child care center teachers, public kindergarten teachers, and private kindergarten teachers, as reported in the Teacher Questionnaire (Appendix B). The tables are located in Appendix A.

Program Characteristics

Types of Child Care Center and Kindergarten Programs

There were 27 child care centers, 23 public kindergartens, and 29 private kindergartens in Seoul, Korea in this study. The large majority of child care center programs were full-day programs (n =53, 98.1%) while a majority of public (n =42, 93.3%) and private kindergarten programs (n =55, 94.8%) were morning half-day programs, respectively (see Table 1 in Appendix A).

Average Number of Children

The average number of boys in child care center classrooms was 11.64 (SD = 4.63) and 10.76 (SD = 4.95) girls, based on teacher reports, while for public kindergarten classrooms the average was 19.22 (SD = 3.42) boys and 17.18 (SD = 3.91) girls. For private kindergarten classrooms it was 14.81 (SD = 4.62) for boys and 13.26 (SD = 4.53) for girls. Overall, the average number of children in the public kindergarten programs were greater than the child care center and private kindergarten programs (see Table 2).

Number of Children

The teachers were asked to report the total number of boys and girls by age within programs enrolled in their classroom and they were reported by total percentage of children by age within each type of program (see Table 3). The majority of children enrolled in child care centers were 5-year-olds (n = 490, 36.68%) and 6-year-olds (n = 433, 32.41%). There were a total of 167 (12.5%) 3-year-old girls, and 246 (18.41%) 4-year-old girls.

There were more 5-year-old children (n = 875, 55.07%) in public kindergartens than other age groups. There were very few 3-year-olds(n = 30, 1.9%) enrolled and fewer 6-year-olds (n = 279, 17.56%) than 5-year-olds.

There were more 5-year-old children (n = 619, 38.05%) in private kindergartens than other age groups. There were a total of 195 (11.99%) 3-year-old girls, 322 (17.79%) 4-year-old girls and 491 (30.18%) 6-year-old girls. No enrollment pattern of difference for boys and girls were rated within the programs.

Length of School Day

The teachers in child care centers and kindergartens were asked to report the length of school day for each age group enrolled in their classroom. The 3-year-olds, in each type of program reported, had the longest school day. The school day arranged 10 hours and 40 minutes in child care centers, 3 hours and 39 minutes in public kindergartens, and 4 hours and 26 minutes in private kindergartens (see Table 4).

There were significant differences in the length of the school day between half-day public kindergarten and private kindergarten programs across age groups (see Table 5). The length of school day in the public kindergarten programs were shorter than in private kindergarten programs for 3-year-olds ($p < .025$), 5-year-olds ($p < .008$) and 6-year-olds ($p < .006$).

Numbers of Days per Week Korean Early Childhood Programs

The teachers were asked to report the numbers of days per week of their programs for each age group. A majority of child care center teachers (n =35, 64.8%) worked Monday through Saturday for all age groups, while a majority of public (n =41, 91.1%) and private (n =49, 84.5%) kindergarten teachers worked Monday through Friday for all age groups (see Table 6).

The Length of Time per Activity

The teachers in child care centers and private and public kindergartens were asked to report the length of time spent per specific activities scheduled in their classroom; the average of mean and standard deviations are reported here (see Table 7). The longest activity time in the child care

centers was spent in self-selection/free play (84 minutes) and sleeping/resting/ quiet time (57 minutes). In the afternoon of these full-day programs, sleeping/ resting/quiet time (96 minutes)and self-selection/free play (69 minutes) were the longest activities.

A majority of length of time in public kindergartens was spent in self-selection/free play (63 minutes) and small-group time (29 minutes), while the most time for private kindergartens was self-selection/ free play (55 minutes) and snack/meals (37 minutes).

There were significant differences in the length of time per specific activities between public and private kindergarten programs (see Table 8). The length of time per snack/meals ($p < .0001$) and for sleeping/resting/quiet time ($p < .001$) in private kindergartens was significantly longer than for public kindergartens, whereas the time of self-selection/free play ($p < .027$) and outdoor play of public kindergartens ($p < .010$) was significantly shorter than private kindergartens.

Classroom Equipment/Material

The teachers in child care centers, public kindergartens and private kindergartens were asked to report the favorite classroom equipment/material use by their children (see Table 9). Building blocks were the children's most preferred classroom equipment and materials in child care centers (n =20, 37%), whereas playing with games was most preferred in public (n =11, 24.1%) and private kindergartens (n =18, 31%). Playing with manipulative materials such as pegboards, puzzles, and/or legos was reported as the second preferred material in child care centers (n =13, 24.1%) and public kindergartens (n =5, 11.1%), whereas private kindergarten teachers reported their material was least preferred (n =1, 1.7%).

Educator Characteristics

Total teaching Experience

The teachers reported their years of teaching experience. A plurality of child care center teachers (n =18, 33.3%) and a majority of private kindergarten teachers (n =36, 62.1%) had 2-5 years of teaching experience while a majority of public kindergarten teachers (n =21, 46.7%) had 6-10 years teaching experience. Overall, public kindergarten teachers have more teaching experience than private kindergarten teachers, and teachers in child care centers have the least teaching experience of the three types of programs (see Table 10). There was no significant difference between public kindergarten teachers and private kindergarten teachers in years of teaching experience ($t = 1.48$, $p > .143$).

Education and Certification of Child Care Center and Kindergarten Teachers

A majority of the teachers in child care centers (n =32, 59.3%) and private kindergartens (n =39, 67.2%) have attended community college as the highest level of education completed, whereas the largest percentage of teachers in public kindergartens (n =21, 46.7%) have a bachelor's degree. A few teachers in the three types of programs have a master's degree (see Table 11).

A large percentage of teachers in all three types of programs have majored in early childhood education and/or child development (77.8% child care centers, 91.1% public kindergartens, 96.6% private kindergartens) (see Table 12).

Differences between Actual and Desired Practices of Korean Early Childhood Teachers

Teachers in child care centers, public kindergartens, and private kindergartens were examined to determine differences between actual and desired teaching practices by paired t-test analyses. Whenever an actual teaching practice rating exceeds the desired rating for the same items (positive mean difference) it is interpreted to mean that teachers are involved in a specific activity more often than they desire. When the desired practice rating for a specific item exceeds actual rating (negative mean difference), it is interpreted to mean that these teachers would like this activity to occur more often.

Actual and Desired Teaching Practices of Early Childhood Educators

In the "appropriate practices" category, eleven of the sixteen possible items were significant beyond the $p \leq .05$ level (see Table 13). Early childhood educators would like to use more of these practices than they currently use. The significant findings were: children selecting centers ($\underline{n} = 4.27$, $\underline{n} = 4.46$, $\underline{t} = -2.74$, $\underline{p} = .007$); children coordinating their own activities in centers ($\underline{n} = 4.60$, $\underline{n} = 4.73$, $\underline{t} = -2.13$, $\underline{p} = .035$); participating in dramatic play ($\underline{n} = 3.05$, $\underline{n} = 3.70$, $\underline{t} = -9.56$, $\underline{p} = .0001$); doing creative writing ($\underline{n} = 2.91$, $\underline{n} = 3.48$, $\underline{t} = -8.04$, $\underline{p} = .0001$); playing with games and puzzles ($\underline{n} = 4.02$, $\underline{n} = 4.14$, $\underline{t} = -1.98$, $\underline{p} = .049$); exploring animals, plants, and/or wheels and gears ($\underline{n} = 2.81$, $\underline{n} = 3.67$, $\underline{t} = -10.33$, $\underline{p} = .0001$); cutting their own shapes from paper ($n = 3.92$, $n = 4.32$, $\underline{t} = -5.84$, $\underline{p} = .0001$); creative movement ($n = 3.34$, $n = 3.79$, $\underline{t} = -6.49$, $\underline{p} = .0001$); specifically planned outdoor activities ($\underline{n} = 2.94$, $\underline{n} = 3.55$, $\underline{t} = -7.85$, $\underline{p} = .0001$); drawing, painting, working with playdough, and other art media ($\underline{n} = 3.75$, $\underline{n} = 4.11$, $\underline{t} = -5.55$, $\underline{p} = .0001$); and math incorporated with other subject areas ($\underline{n} = 3.42$, $\underline{n} = 3.89$, $\underline{t} = -8.20$, $\underline{p} = .0001$).

In the "inappropriate practices" category, seven of the possible twelve items were significant beyond the $p \leq .05$ level (see Table 13). Teachers were using flashcards with sight words and/or math facts ($\underline{n} = 2.60$, $\underline{n} = 2.87$, $\underline{t} = -4.55$, $\underline{p} = .0001$), practicing handwriting on lines ($\underline{n} = 2.03$, $\underline{n} = 2.18$, $\underline{t} = -2.54$, $\underline{p} = .012$), children reading in ability level groups ($\underline{n} = 3.02$, $\underline{n} = 3.36$, $\underline{t} = -4.30$, $\underline{p} = .0001$), and rote counting ($\underline{n} = 3.08$, $\underline{n} = 3.21$, $\underline{t} = -2.73$, $\underline{p} = .007$) than they thought was desirable. The significant practices they wanted to decrease were: large-group, teacher-directed instruction ($\underline{n} = 4.06$, $\underline{n} = 3.79$, $\underline{t} = 4.55$, $\underline{p} = .0001$); using isolation to obtain child compliance ($\underline{n} = 2.68$, $\underline{n} = 2.28$, $\underline{t} = 5.79$, $\underline{p} = .0001$); and games/activities directed by or made by teachers ($\underline{n} = 3.32$, $\underline{n} = 3.18$, $\underline{t} = 2.68$, $\underline{p} = .008$).

Although each separate test has a .05 risk of falsely rejecting the null hypothesis of no difference, the probability of committing this Type I error is increased when we consider the entire set of results. Therefore, the error rate for incorrectly rejecting any one null hypothesis out of the entire set is greater than .05, and at least a "rule of thumb" adjustment should be made to the usual .05

cutoff for the reported p-values. In this set of conclusions, therefore, only the smallest p-values (those closest to zero) should be taken as providing clear evidence statistically that a meaningful difference does exist. As a practical matter, p-values of about .002 or less provide convincing evidence against the null hypothesis of no difference (Boweman, & O'Connell, 1990).

Actual and Desired Teaching Practices of Child Care Center Teachers

In the "appropriate practices" category, nine of the sixteen possible items were significant at the $p \leq .05$ level (see Table 14). The items that child care center teachers wanted to use more were: participating in dramatic play ($\underline{n}$ = 2.83, $\underline{n}$ = 3.52, $\underline{t}$ = -5.31, $\underline{p}$= .0001); doing creative writing ($\underline{n}$ = 2.67, $\underline{n}$ = 3.42, $\underline{t}$ = -7.43, $\underline{p}$= .0001); playing with games and puzzles ($\underline{n}$ = 3.68, $\underline{n}$ = 3.91, $\underline{t}$ = -2.46, $\underline{p}$= .017); exploring animals, plants and/or wheels and gears ($\underline{n}$ = 2.33, $\underline{n}$ = 3.39, $\underline{t}$ = -8.08, $\underline{p}$= .0001); cutting their own shapes from paper ($\underline{n}$ = 3.72, $\underline{n}$ = 4.28, $\underline{t}$ = -5.15, $\underline{p}$= .0001); creative movement ($\underline{n}$ = 3.39, $\underline{n}$ = 3.92, $\underline{t}$ = -4.58, $\underline{p}$= .0001); specially planned outdoor activities ($\underline{n}$ = 2.70, $\underline{n}$ = 3.44, $\underline{t}$ = -5.37, $\underline{p}$= .0001); drawing, painting, working with playdough, and/or other art media ($\underline{n}$ = 3.37, $\underline{n}$ = 3.87, $\underline{t}$ = -4.37, $\underline{p}$= .0001); and math incorporated with other subject areas($\underline{n}$ = 2.89, $\underline{n}$ = 3.57, $\underline{t}$ = -7.24, $\underline{p}$= .0001).

In the "inappropriate practices" category, seven of the twelve possible items were significant at the $p \leq .05$ level. The significant practices they wanted to decrease from their actual practices were : large-group, teacher-directed instruction ($\underline{n}$ = 4.07, $\underline{n}$ = 3.85, $\underline{t}$ = 2.12, $\underline{p}$= .038); and using isolation to obtain child compliance ($\underline{n}$ = 3.11, $\underline{n}$ = 2.61, $\underline{t}$ = 3.73, $\underline{p}$= .0001). The child care center teachers, however, would like to use some items more often, specifically using flashcards with sight works and/or math facts ($\underline{n}$ = 2.70, $\underline{n}$ = 3.33, $\underline{t}$ = -5.29, $\underline{p}$= .0001); competitive math activities to learn math facts ($\underline{n}$ = 2.31, $\underline{n}$ = 2.65, $\underline{t}$ = -3.15, $\underline{p}$= .003); children reading in ability level groups ($\underline{n}$ = 2.78, $\underline{n}$ = 3.17, $\underline{t}$ = -2.11, $\underline{p}$= .039); rote counting ($\underline{n}$ = 3.42, $\underline{n}$ = 3.71, $\underline{t}$ = -3.11, $\underline{p}$= .003); and practicing handwriting on lines ($\underline{n}$ = 2.28, $\underline{n}$ = 2.67, $\underline{t}$ = -3.63, $\underline{p}$= .001).

Actual and Desired Teaching Practices of Public Kindergarten Teachers

In the "appropriate practices" category, twelve of the sixteen possible items were significant at the $p \leq .05$ level (see Table 15). The public kindergarten teachers would like to use more of these practices than they currently do. The significant practices they wanted to increase were: children coordinating their own activities in centers ($n = 4.89$, $n = 5.00$, $t = -2.35$, $p = .024$); participating in dramatic play ($n = 3.58$, $n = 4.09$, $t = -4.53$, $p = .0001$); doing creative writing ($n = 3.20$, $n = 3.62$, $t = -4.31$, $p = .0001$); playing with games and puzzles ($n = 4.51$, $n = 4.71$, $t = -2.15$, $p = .037$); exploring animals, plants, and/or wheels and gears ($n = 3.47$, $n = 4.09$, $t = -4.85$, $p = .0001$); cutting their own shapes from paper ($n = 4.22$, $n = 4.42$, $t = -2.45$, $p = .018$); creative movement ($n = 3.56$, $n = 4.00$, $t = -3.95$, $p = .0001$); singing and/or listening to music ($n = 4.22$, $n = 4.40$, $t = -2.70$, $p = .010$); playing with manipulatives such as pegboards, puzzles, and/or legos ($n = 4.67$, $n = 4.82$, $t = -2.85$, $p = .007$); specially-planned outdoor activities ($n = 3.38$, $n = 3.82$, $t = -3.67$, $p = .001$); drawing, painting, working with playdough, and other art media ($n = 4.22$, $n = 4.58$, $t = -4.51$, $p = .0001$); and math incorporated with other subject areas ($n = 3.98$, $n = 4.18$, $t = -2.03$, $p = .048$).

In the "inappropriate practices" category, two of the twelve possible items were significant at the $p \leq .05$ level. The significant practices they wanted to decrease were large-group, teacher-directed instruction ($n = 4.02$, $n = 3.75$, $t = 3.32$, $p = .002$) and using isolation to obtain child compliance ($n = 2.18$, $n = 1.73$, $t = 3.67$, $p = .001$). The public kindergarten teachers, however, would like to use children reading in ability level groups ($n = 3.47$, $n = 3.80$, $t = -3.32$, $p = .002$).

Actual and Desired Teaching Practices of Private Kindergarten Teachers

In the "appropriate practices" category, eight of the sixteen possible items were significant at the $p \leq .05$ level (see Table 16). The teachers would like to use more of these strategies than they currently practice. The significant findings were: children coordinating their own activities in centers ($n = 4.50$, $n = 4.69$, $t = -2.03$, $p = .047$); participating in dramatic play ($n = 2.84$, $n = 3.59$, $t = -6.65$, $p = .0001$); doing creative writing ($n = 2.91$, $n = 3.43$, $t = -3.49$, $p = .001$); exploring animals, plants, and/or wheels and gears ($n = 2.74$, $n = 3.62$, $t = -5.45$, $p = .0001$); cutting their own shapes from

paper ($\underline{n}$ = 3.87, $\underline{n}$ = 4.29, $\underline{t}$ = -2.93, $\underline{p}$= .005); creative movement ($\underline{n}$ = 3.12, $\underline{n}$ = 3.50, $\underline{t}$ =2.98, $\underline{p}$= .004); children reading in ability level groups ($\underline{n}$ = 3.47, $\underline{n}$ = 3.80, $\underline{t}$ = -3.32, $\underline{p}$= .002); specially planned outdoor activities ($\underline{n}$ = 2.83, $\underline{n}$ = 3.43, $\underline{t}$ = -4.48, $\underline{p}$= .0001); and math incorporated with other subject areas ($\underline{n}$ = 3.46, $\underline{n}$ = 3.96, $\underline{t}$ = -5.04, $\underline{p}$= .0001).

In the "inappropriate practices" category, four of the twelve possible items were significant at the $p \leq .05$ level. Private kindergarten teachers used more of the following practices than they found desirable. The significant practices they wanted to decrease were large-group, teacher-directed instruction ($\underline{n}$ = 4.07, $\underline{n}$ = 3.76, $\underline{t}$ = 2.81, $\underline{p}$= .007), using isolation to obtain child compliance ($\underline{n}$ = 2.67, $\underline{n}$ = 2,40, $\underline{t}$ = 2.66, $\underline{p}$= .01), and games/activities directed by or made by teachers ($\underline{n}$ = 3.29, $\underline{n}$ = 3.09, $\underline{t}$ = 2.45, $\underline{p}$= .017). The private kindergarten teachers, however, would like to use children reading in ability level groups ($\underline{n}$ = 3.47, $\underline{n}$ = 3.80, $\underline{t}$ = -3.32, $\underline{p}$= .002).

Differences between Child Care Center, Public Kindergarten and Private Kindergarten Teachers in their Actual Classroom Practices

One-way ANOVA revealed main effects for appropriate practice and inappropriate practice categories for types of programs, i.e., child care centers, public kindergartens and private kindergartens. In addition, post hoc analysis using Duncan multiple range test identified differences between the teachers in the three types of programs.

In the "appropriate practices" category, eight of 16 possible items were significant at the .05 level (see Table 17). The significant items were: children selecting centers, $\underline{F}$ (2,154) = 5.27, $\underline{p}$= .006; children coordinating their own activities in centers, $\underline{F}$ (2,154) = 4.24, $\underline{p}$= .016; participating in dramatic play, $\underline{F}$ (2,154) = 5.71, $\underline{p}$= .004; playing with games and puzzles, $\underline{F}$ (2,154) = 10.20, $\underline{p}$= .0001; specially planned outdoor activities, $\underline{F}$ (2,154) = 5.01, $\underline{p}$= .0078; and drawing, painting, working with playdough, and other art media, $\underline{F}$ (2,154) = 9.96, $\underline{p}$= .0001. Public kindergarten teachers expected more frequent involvement in these activities than child care center teachers and private kindergarten teachers.

Duncan's multiple range test revealed differences between the teachers in child care centers, public kindergartens, and private kindergartens at the .05 level of significance (see Table

18). The statistically significant items were exploring animals, plants, and/or wheels and gears, F (2,154) = 13.95, p= .00001, and math incorporated with other subject areas F (2,154) = 13.08, p= .00001. Public kindergarten teachers placed more importance on these items than either child care center teachers or private kindergarten teachers. Further, private kindergarten teachers expected more frequent involvement in these activities than child care center teachers.

In the "inappropriate practices" category, nine of the twelve possible items were significant. The significant items were: copying from the chalkboard, F (2,154) = 15.16, p= .00001; coloring and/or cutting predrawn forms, F (2,154) = 9.80, p= .0001; using isolation to obtain child compliance, F (2,154) = 7.02, p= .0012; circling, underlining, and/or marking on items on worksheets, F (2,154) = 13.64, p= .00001; competitive math activities to learn math facts, F (2,154) =10.13, p= .0001; practicing handwriting on lines, F (2,154) = 12.80, p= .00001; children reading in ability level groups, F (2,154)= 4.09, p= .018; and reciting the alphabet, F (2,154) = 8.40, p= .0003. Child care center teachers and private kindergarten teachers placed more importance on these items than public kindergarten teachers. Child care center teachers expected more frequent involvement in rote counting, F (2, 154) = 4.86, p= .009 than public kindergarten teachers.

Differences between Child Care Centers and Public and Private Kindergarten Teachers on their Desired Classroom Practices

One-way ANOVA revealed main effects for the appropriate practice and inappropriate practice categories for the three types of programs, i.e., child care centers, public kindergartens, and private kindergartens. In addition, post hoc analysis using the Duncan multiple range test identified differences between the teachers in the three types of programs.

If the overall F was significant, then Duncan's multiple range test revealed a number of differences at the .05 level of significance (see Table 19). In the "appropriate practices" category, ten of the sixteen possible items were significant (see Table 14). The significant items were: children coordinating their own activities in centers, F (2,154) = 6.69, p= .0016; participating in dramatic play, F (2,154) = 4.69, p= .0106; playing with games and puzzles, F (2,154) = 16.10, p= .00001; exploring animals, plants, and/or wheels and gears, F (2,154) = 8.02, p= .0005; children reading in ability level

groups, F (2,154) = 4.69, p= .0105; playing with manipulative materials such as pegboards, puzzles, and/or legos, F (2,154) = 8.50, p= .0003; specially planned outdoor activities, F (2,154) = 3.39, p= .0363; and drawing, painting, working with playdough, and other art media, F (2, 154) = 8.90, p= .0002. Public kindergarten teachers place more importance on these activities than child care center teachers and private kindergarten teachers. Another significant item was children selecting centers, F (2,154) = 3.79, p= .0247. Public kindergarten teachers expected more frequent involvement for this item as compared to child care center teachers.

Additional Duncan's multiple range tests revealed differences between the teachers in child care centers, public kindergartens, and private kindergartens for appropriate practice category items at the .05 level of significance. The significant item was creative movement, F (2,154) = 6.71, p= .0016. Child care center teachers and public kindergarten teachers expected more frequent involvement than private kindergarten teachers. Also, public kindergarten teachers and private kindergarten teachers placed more importance as compared to child care center teachers in math incorporated with other subject areas, F (2, 154) = 4.50, p= .0126.

In the "inappropriate practices" category, eleven of the twelve possible items were significant. The significant items were: copying from the chalkboard, F (2,154) = 18.73, p= .00001; circling, underlining, and/or marking on items on worksheets, F (2,154) = 20.44, p= .00001; competitive math activities to learn math facts, F = (2,154), p= .00001. Child care center teachers placed more importance on these activities than public kindergarten teachers and private kindergarten teachers. Private kindergarten teachers also expected more involvement in these items than public kindergarten teachers

Duncan's multiple range test revealed differences between the teachers in child care centers, public kindergartens, and private kindergartens at the .05 level of significance. The significant items were: coloring and/or cutting predrawn forms, F (2,154) = 12.10, p= .00001; using isolation to obtain child compliance, F (2,154) = 7.48, p= .0008; practicing handwriting on lines, F (2,154) = 18.44, p= .00001; children reading in ability level groups, F (2,154) = 4.69, p= .0105; and

reciting the alphabet, F (2,154) = 10.63, p= .00001. Child care center teachers and private kindergarten teachers placed more importance on these activities than public kindergarten teachers.

Duncan's multiple range test revealed differences between the teachers in child care centers, public kindergartens, and private kindergartens at the .05 level of significance. The significant items were: using flashcards with sight words and/or math facts, F (2,154) = 8.58, p= .0003; rote counting, F (2,154) = 7.57, p= .0007; tangible rewards for appropriate behavior and/or performance, F (2,154) = 3.42, p= . 0353. Child care center teachers expected more frequent involvement in these activities than public kindergarten teachers and private kindergarten teachers.

Differences between Korean Early Childhood Educators' Beliefs and Practices

In order to test the hypothesis that no relationship exists between teachers' beliefs and practices, Somers' D correlations were computed. Of a possible 28 items for teachers' actual practices, there were three significant items, while of a possible 28 items for teachers' desired practices there were five significant items (see Table 20). The hypothesis of no relationship between Korean teachers' beliefs and practices could not be rejected.

Actual Practices

In the "inappropriate practices" category, three of the twelve possible items showed a significant association between teachers' beliefs and practices (see Table 20). Korean early childhood educators who want to use nondirective teaching strategies seldom would like to use copying from chalkboard (r = .46, t = 2.98) and reciting the alphabet (r = .35, t = 2.11) and they sometimes use rote counting (r = .30, t = 2.17). However, private kindergarten teachers (r = .47, t = 2.41) want to use rarely copying from the chalkboard (r = .52, t = 2.06) and child care center teachers want to use sometimes copying from the chalkboard (r = .47, t = 2.41) (see Table 21, 22).

In the "appropriate practices" category, child care center teachers want to use rarely exploring animals, plants, and/or wheels and gears (r = .51, t = 2.14) while they want to use regularly drawing, painting, working with playdough, and other art media (r = -.46, t = -2.20) (see Table 21).

Desired Practices

In the "appropriate practices" category, two of the sixteen possible items showed a significant association between teachers' beliefs and practices, i.e., child care center teachers, public kindergarten teachers, and private kindergarten teachers (see Table 20). Early childhood educators who prefer nondirective teaching strategies most often like to use these activities in their classroom. The items strongly correlated nondirective teaching strategies of building with blocks ($r = -.31$, $t = -2.01$) and children coordinating their own activities in centers ($r = -.31$, $t = -2.07$). Private kindergarten teachers very often want to have children coordinating their own activities in centers ($r = -.47$, $t = -2.08$) (see Table 24).

In the "inappropriate practices" category, three of the twelve possible items showed a significant association between teachers' beliefs and practices. Early childhood educators who prefer nondirective teaching strategies rarely would use isolation to obtain child compliance ($r = .35$, $t = 2.33$), would sometimes use rote counting ($r = .36$, $t = 2.39$) and almost never use reciting the alphabet ($r = .33$, $t = 2.01$). Child care center teachers sometimes want to use copying from the chalkboard ($r = .53$, $t = 2.17$) (see Table 23). Although there is a trend for teachers' who have nondirective teaching strategies to use fewer inappropriate practices, child care center teachers are more likely to use these strategies than public kindergarten teachers and private kindergarten teachers. This is interpreted to mean that child care center teachers have more inconsistent beliefs in their practices than either public kindergarten teachers or private kindergarten teachers.

Additional Findings

Reading Skills

The teachers in child care centers, public kindergartens, and private kindergartens were asked how they promote reading (literacy) skills in their classroom (see Table 25). A large percentage of teachers in all three types of programs used singing, books, and poems for promoting children's reading in their classrooms (23.1% child care centers, 25.7% public kindergartens, and 32.1 private kindergartens). The teachers in child care centers ($n = 10$, 19.2%) and private

kindergartens (n =11, 19.6%) used labeling everything around children whereas public kindergarten teachers (n =8, 22.9%) used flashcards with sight word or memorizing words.

Children's Play

The teachers in child care centers, public kindergartens, and private kindergartens were asked to report how to promote children's play in their classroom (see Table 26). A majority of teachers in child care centers (n=14, 26.9%) and public kindergartens (n=9, 28.1%) provided different materials/equipment, whereas private kindergarten teachers participated in play with children for interaction.

DISCUSSION

Program and Educator Characteristics

Demographic features of the programs in the present study revealed a number of differences. The sample is representative of the number of early childhood programs in Seoul, Korea. There were fewer public kindergartens in comparison to many child care centers and private kindergartens and they mirror the 23 public kindergartens, 378 child care centers, and 1092 private kindergartens in Seoul (Seoul Metropolitan Office of Education, 1991).

It is difficult to compare the Korean kindergarten programs and teachers with the United States, and Iowa, with the situation since the term kindergarten is considered to apply to 3- to 6-year-old in Korea whereas in the United States it generally refers to 5-year-olds. Staff-child ratios in Korea vary by type of program, with the public kindergartens having the largest ratio, of 36.6, for 3- to 6-year-old children per classroom. The child care centers and private kindergartens had ratios of 22.4 and 28.1, respectively. The situation in Iowa and the United States is quite different. For example, Banks (1990) reported that an average kindergarten class size for full-day everyday programs was 19.1 and 21.3 for full-day alternate day programs for Iowa 5-year-olds. Bredekamp (1987) recommends a class size of 20 children, with 2 teachers for three-year-olds, four-year-olds, and five-year-olds. The average class size in Korea is larger than in America; however, it is similar to other Asian countries.

Teachers reported the length of the school day. Surprisingly, the 3-year-olds in each type of program had the longest school day than the other age groups, with 10.40 hours for child care centers, 3.39 for the part day public kindergartens, and 4.26 for the part day private kindergartens. The length of school day in the public kindergarten programs was shorter than in private kindergarten programs for three of the four age groups, i.e., 3-year-olds, 5-year-olds, and 6-year-olds. Explanations for these differences are unclear. A majority of the public and private kindergarten programs were offered 5 days per week, whereas child care centers were available 6 days a week.

Teachers reported the length of time spent per specific activities scheduled in their classroom. Half-day private kindergarten programs spent the longest time periods in routines, i.e., snack/meals and sleeping/resting/quiet time. In contrast, the longest activity time in full-day child care centers and public kindergartens was spent in self-selection/free play. Generally, routines involve more teacher-directed and controlled situations and they are more difficult transition times for young children.

When comparing the frequency of children's most preferred classroom equipment and materials, child care center teachers reported frequent use of building blocks whereas playing with games was most preferred in public and private kindergartens. Considering the number of children per classroom, however, it is still questionable about the amount of available equipment and materials in Korean early childhood programs.

Korean early childhood teachers vary in their academic preparation and years of teaching experiences. Public kindergarten teachers have more education, i.e., a bachelor degree, whereas a majority of the teachers in the child care centers and private kindergartens attended community college. A majority of child care center teachers and private kindergarten teachers have 2-5 years of teaching experience, while public kindergarten teachers have more experience, i.e., 6-10 years. Child care center teachers have the least teaching experience of the three types of programs. Overall, Korean public kindergarten teachers have the highest academic preparation and more teaching experience. More than 75% of the teachers in all three types of programs majored in early childhood education and/or child development. Mayers (1991) and Chung (1994) reported that the average length of kindergarten teaching experience was 11 years in Iowa. Korean public kindergarten and private kindergarten teachers had less teaching experience than American kindergarten teachers. It should be noted that child care center teachers in the United States have a high turnover rate, although kindergarten teachers have more years teaching experience and higher educational qualifications.

Teacher-Reported Actual and Desired Teaching Practices of Korean Early Childhood Teachers

Korean early childhood education has explained teachers' beliefs and their teaching practices in recent years (Kim, 1993). No Korean empirical studies were found that addressed teachers' actual and desired teaching practices and beliefs. The present study is unique in addressing both the reported actual and desired teaching of child care center teachers, public kindergarten teachers, and private kindergarten teachers in Korea. Previous work has examined reported practice or observed teaching behavior of American kindergarten teachers (Durkin, 1987; Hatch & Freeman, 1988; Hintz & Wright, 1988; Kagan & Smith, 1988). The present study revealed main significant findings between teachers' actual and desired practices in the categories addressed, i.e., appropriate and inappropriate practices.

Korean early childhood teachers found it desirable to use more appropriate practices than they currently were using for twelve of sixteen possible items. The more desirable practices they identified were participating in dramatic play; doing creative writing; playing with games and puzzles; exploring animals, plants, and/or wheels and gears; cutting their own shapes from paper; specially planned outdoor activities, drawing, painting; and math integrated with other subject areas. Child care center teachers and private kindergarten teachers wanted to use more drawing, painting, working with playdough, and other art media than public kindergarten teachers. Public kindergarten teachers found it desirable to use more singing and/or listening to music and playing with manipulatives such as pegboards, puzzles, and/or legos than they currently use than either child care or private kindergarten teachers.

In the "inappropriate practice" category, teachers in all three types of programs used more large-group, teacher-directed instruction, and more isolation to obtain child compliance than they considered desirable. The child care center teachers, however, used more flashcards with sight works and/or math facts, children reading in ability level groups, competitive math facts, rote counting, and practicing handwriting on lines than teachers in the other two types of programs. These learning activities are considered to be inappropriate practices for young children since they

focus on abstract learning rather than concrete, meaningful experiences (Charlesworth et al., 1989; Hatch & Freeman, 1989; NAEYC, 1986); therefore, it is desirable to decrease their use. It is not feasible to know from this study how often these activities were actually used since this information is based on teachers' reports rather than actual classroom observations.

There were differences in the classroom practices between the programs. In the "appropriate actual and desired practice" category, public kindergarten teachers expected children to be more involved in these activities than child care center teachers and private kindergarten teachers. Interest in using more desirable practices were identified more often by public kindergarten teachers than child care center and private kindergarten teachers- that is, children coordinating their own activities in centers; participating in dramatic play; playing with games and puzzles; playing with manipulatives such as pegboards, puzzles, and/or legos; specially planned outdoor activities; and drawing, painting, working with playdough and other art media.

In the "appropriate actual practice" category, public kindergarten teachers placed more importance on these items than either private kindergarten teachers or child care center teachers. The items they identified were exploring animals, plants, and/or wheels and gears and math incorporated with other subject areas. Private kindergarten teachers also had more frequent involvement in these activities than child care centers.

In the "appropriate desired practice" category, child care center teachers and public kindergarten teachers expected more frequent involvement in creative movement than private kindergarten teachers in desired practices. In addition, public kindergarten teachers and private kindergarten teachers placed more importance, as compared to child care center teachers, in math incorporated with other subject areas. Child care centers are full-day programs, whereas public and private kindergartens are half-day programs. Banks (1990) and Mayers (1991), however, did not find significant differences between the desired teaching practice of half-day every day and full-day every day kindergarten teachers.

In the "inappropriate actual and desired practice" category, child care center teachers placed more importance on copying from the chalkboard, circling, underlining, and/or marking on items on worksheets, children reading in ability level groups, and competitive math activities to learn math facts than public kindergarten teachers and private kindergarten teachers. When considering aspects of their actual practices, child care center teachers, especially, expected more involvement in using isolation to obtain child compliance and practicing handwriting on lines and reciting the alphabet than desirable practices. Also, child care center teachers expected more frequent involvement in rote counting than did public kindergarten teachers.

When considering aspects of desired practices, private kindergarten teachers expected more involvement in inappropriate activities than public kindergarten teachers. Also, child care center teachers and private kindergarten teachers placed more importance on coloring and/or cutting predrawn forms, using isolation to obtain child compliance, and participating handwriting on lines than public kindergarten teachers. In addition, child care center teachers expected more frequent involvement in using flashcards with sight words and/or math facts, and rote counting and tangible rewards for appropriate behavior and/or performance, than public kindergarten teachers and private kindergarten teachers.

Public kindergarten teachers, in general, expressed less interest in inappropriate practices for their classroom than the two other groups. There are several plausible explanations for the differences between public kindergarten teachers and child care center and private kindergarten teachers. Public kindergarten teachers had more professional preparation than private and child care center teachers. The educational preparation of public kindergarten teachers provide teachers with a framework for understanding what constitutes developmentally appropriate practices. Sinder and Fu (1990) also emphasized the importance of teachers' educational preparation on classroom practices. Also, public kindergarten teachers receive higher wages, and have better adult work environments and lower teaching staff turnover than private kindergarten and child care center teachers. The quality of services reported by public kindergarten programs suggests the teachers

are more sensitive and appropriate with the children. Whitebook, Howes, and Phillips (1991) reported that the amount of formal education obtained by a teachers was the strongest predictor of appropriate teaching practices in the United Sates.

Overall, child care center teachers used more inappropriate learning activities than public kindergarten teachers and private kindergarten teachers, whereas public kindergarten teachers wanted less participation in inappropriate activities. Child care center teachers had the smallest class size, the longest day, and most days per week, and the least teaching experience than the public and private kindergarten teachers. In addition, they had less academic preparation in early childhood.

Correlations between Teachers' Beliefs and Practices

Significant relationships were found between teachers' beliefs of teaching strategies and their actual classroom practices. Teachers with non-directive teaching strategies were more likely to use building blocks and children coordinating their own activities in centers. Private kindergarten teachers, especially, very often wanted to have children coordinating their own activities in centers. Also, teachers from the three types of programs who preferred non-directive teaching strategies were less likely to use isolation for obtaining child compliance and reciting the alphabet, although they sometimes used rote counting. Child care center teachers sometimes wanted to use copying from the chalkboard.

In spite of teachers' expressed beliefs of non-directive teaching strategies, their actual practices showed some directive teaching strategies such as reciting the alphabet and rote counting. It is interpreted to mean that there was a gap between teachers' beliefs and their actual practices. However, it is not clear which explanation best accounts for the discrepancy found here between reported beliefs and classroom practices. Thus, research is needed to observe teachers' expressed beliefs and their actual classroom behaviors.

Chung (1994) reported inconsistent teaching strategies and classroom practices with what NAEYC has recommended as developmentally appropriate practices. Bell (1991) also reported

significant gaps in teachers' theoretical accounts of their own teaching practices. When examining the Teacher Questionnaire, Charlesworth et al (1991) found that developmentally appropriate beliefs were moderately correlated with developmentally appropriate practices, and that developmentally inappropriate beliefs had a strong relation to developmentally inappropriate practices.

Studies by Isenberg (1990), Oakes and Caruso (1990), Burt et al. (1991), Spodek (1988), and Rosental (1991) pointed out that inconsistencies between teachers' beliefs and practices were not indicators of developmental appropriateness in high-quality early childhood program. It is unlikely that teachers will alter their current beliefs and teaching practices. Pajares (1992) argues that changes in teachers' belief are a relative rare phenomenon, the most common cause being a conversion from one authority to another or a gestalt shift. Teachers' beliefs and their practices in the classroom have a strong relationship and teachers tend to hold on to beliefs based on incorrect or incomplete knowledge, even after scientifically correct explanations are presented to them.

This research suggests that many teachers experience conflict between their own beliefs and what they are expected to do in practice (Hatch & Freeman, 1988). There are plausible explanations about such discrepancies. According to Lawler and Vance (1987), supervisors, principals, and other policy makers often intervene in instructional decision-making practices, thereby influencing kindergarten teachers to teach in ways which neither support their personal philosophies nor coincide with theories they know to be sound and valid. Johnson and Nussbaum (1984) maintain that authoritarian administrative systems usually are generated from the top-down, with the structure being rigidly imposed by administrators rather than from other components for the school system, i.e., teachers and parents. Although it is not feasible to know from this study how much supervisors, principals, other policy makers, and parents influence teachers' beliefs and practices in their classroom, it is possible for them to intervene in teachers' instructional decision-making practices. For example, early childhood education programs are dependent on the kindergarten education curriculum set by the Ministry of Education.

SUMMARY AND IMPLICATIONS

The present study examined the relationship between the beliefs and practices of Korean teachers in child care centers, public kindergartens, and private kindergartens and characteristics of the three groups of educators and their early childhood programs. This study supports and extends other research that has addressed aspects of this topic (Charlesworth et al., 1989, 1991; Isenberg, 1990; Hatch & Freeman, 1988; Oakes & Caruso, 1990; Spodek, 1988). Specially, this study provides an exploration of Korean teachers' beliefs and practices of instructional practices as it relates to the developmentally appropriate guidelines developed by the National Association for the Education of Young Children (NAEYC).

One hundred and fifty-seven subjects responded to an Early Childhood Teacher's Beliefs and Practices Questionnaire. It was organized into two sections. The first section of the questionnaire sought information about the early childhood programs and the teachers, while the second section sought information on teachers' beliefs and actual and desired practices.

Results concerning the beliefs and expressed practices of child care center teachers, public kindergarten teachers and private kindergarten teachers suggest that there are differences among these educators. Public kindergarten teachers expected children to be involved in more appropriate actual and desired activities than child care center teachers and private kindergarten teachers. More desirable practices were identified by public kindergarten teachers than child care center and private kindergarten teachers: children coordinating their own activities in centers; participating in dramatic play; playing with games and puzzles; playing with manipulatives such as pegboards, puzzles, and/or legos; specially planned outdoor activities; and drawing, painting, working with playdough, and other art media. These activities are considered more appropriate for fostering the children's learning (National Association for the Education of Young Children, 1987).

Child care center teachers placed more importance on copying from the chalkboard, circling, underlying, and/or marking on items on worksheets, children reading in ability level groups, and competitive activities to learn math-inappropriate practices than public and private kindergarten

teachers. When considering aspects of their actual practices, child care center teachers especially reported more isolation to obtain child compliance and practicing handwriting on lines and reciting the alphabet than desirable practices. Also, child care center teachers expected more frequent involvement in rote counting than public kindergarten teachers.

When considering aspects of their desired practices, private kindergarten teachers expected more involvement in inappropriate activities than public kindergarten teachers. Also, child care center and private kindergarten teachers placed more importance on coloring and/or cutting predrawn forms, using isolation to obtain child compliance, and participating in handwriting on lines than public kindergarten teachers. In addition, child care center teachers expected more frequent involvement in using flashcards with sight words and/or math facts, and rote counting and tangible rewards for appropriate behavior and/or performance than public and private kindergarten teachers.

Teachers from the three types of programs who preferred nondirective teaching strategies were less likely to use isolation for obtaining child compliance and reciting the alphabet, although they sometimes used rote counting. Child care center teachers sometimes wanted to use copying from the chalkboard, whereas private kindergarten teachers very often wanted to have children coordinating their own activities in centers. Although the teachers had the beliefs of nondirective teaching strategies, their actual practices showed directive teaching strategies such as reciting the alphabet and rote counting. This finding is interpreted to mean that there was a gap between teachers' beliefs and teaching practices.

Results from this study have supported the research findings of differences between educators' beliefs and practices (Charlesworth et al., 1989, 1991; Durkin, 1987; Isenberg, 1990; Hatch & Freeman, 1988; Oakes & Caruso, 1990; Spodek, 1988). It also has extended these studies by addressing the actual and desired teaching practicing of Korean early childhood educators. Replication studies addressing this issue and comparison between the Korea and the United States are needed.

One, however, needs to be cautious about the social desirability factor influencing teachers' responses as the current emphasis on changes towards more developmentally appropriate classroom practices may influence the responses they give. In addition, teachers' expressed beliefs and desired classroom practices may not translate into actual classroom behaviors. Direct observational research is needed to verify teachers' expressed views. Kim (1993) found that teachers in their study were aware of what was the importance of social education with child-centered inquiry learning, but they conducted the class based on teacher-led instruction. Hintz and Wright (1988) also found that teachers in their study were aware of what was appropriate practice, but they did not want (to take the effort) to make the needed changes. In this regard, Pajares (1992) argues that teachers' belief changes are a relatively rare phenomenon, the most common cause being a conversion from one authority to another or a gestalt shift.

This line of research suggests that many teachers experience conflict between their own beliefs and what they are expected to do in practice (Hatch & Freeman, 1988). It is necessary to address these differences and the source of the conflict through empirical investigation. One must not only understand teachers' instructional practices and observed behavior but also the teachers' thought processes regarding teaching and the implicit theoretical system that drives these process (Spodek, 1988).

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APPENDIX A: TABLES

Table 1. Length of school day by Korean early childhood programs reported by teachers

Program	Morning only Frequency (percentage)	Afternoon only Frequency (percentage)	Full-day Frequency (percentage)
Child Care Center	1 (1.9)	0	53 (98.1)
Public Kindergarten	42 (93.3)	3 (6.7)	0
Private Kindergarten	55 (94.8)	3 (5.2)	0

Table 2. Average number and standard deviations of children per Korean early childhood classroom

Type of Program	Number of Boys	Number of Girls
Child Care Center	11.64 (4.63)	10.76 (4.95)
Public Kindergarten	19.22 (3.42)	17.36 (3.91)
Private Kindergarten	14.81 (4.62)	13.26 (4.52)

Table 3. Number of boys and girls by age within programs enrolled in three types of Korean early childhood programs

Age of Children	Child Care Center (n=54) Frequency (percentage)	Public Kindergarten (n=45) Frequency (percentage)	Private Kindergarten (n=58) Frequency (percentage)
3-year-olds	167 (12.5%)	30 (1.9%)	195 (11.99%)
4-year-olds	246 (18.41%)	405 (25.49%)	322 (17.79%)
5-year-olds	490 (36.68%)	875 (55.07%)	619 (38.05%)
6-year-olds	433 (32.41%)	279 (17.56%)	491 (30.18%)
Total Number	1336 (100%)	1589 (100%)	1627 (100 %)

Table 4. Average length of early childhood school day

Age of Children	Child Care Center	Public Kindergarten	Private Kindergarten
3-year-olds	10 hours, 40 minutes	3 hours, 39 minutes	4 hours, 26 minutes
4-year-olds	9 hours, 11 minutes	3 hours, 19 minutes	3 hours, 53 minutes
5-year-olds	9 hours, 22 minutes	3 hours, 22 minutes	4 hours, 24 minutes
6-year-olds	9 hours, 18 minutes	3 hours, 23 minutes	4 hours, 6 minutes
Average hours	10 hours, 7 minutes	3 hours, 15 minutes	4 hours, 20 minutes

Table 5. Comparison of length of school day of Korean public kindergartens and private kindergartens reported by teachers using t-tests

Age of Children	Public Kindergarten (n = 45)	Private Kindergarten (n = 58)	t-value	2-tail prob.
3-year-olds	3 hours, 39 minutes	4 hours, 26 minutes	-2.46	.025
4-year-olds	3 hours, 20 minutes	3 hours, 54 minutes	-1.70	.097
5-year-olds	3 hours, 23 minutes	4 hours, 24 minutes	-2.79	.008
6-year-olds	3 hours, 23 minutes	4 hours, 6 minutes	-2.94	.006

Table 6. Number of school days per week for Korean early childhood programs

Days a Week	Child Care Centers Frequency (percent)	Public Kindergartens Frequency (percent)	Private Kindergartens Frequency (percent)
M thr Sa	35 (64.8%)	4 (8.9%)	1 (1.7%)
M thr Fr.	19 (35.2%)	41 (91.1%)	49 (84.5%)
M thr Tr.			3 (5.2%)
M, W, Fr. or T, W, Thr.			4 (6.9%)
Others			1 (1.7%)

Table 7. Mean and standard deviations of minutes per type of activity in Korean early childhood programs

Daily Schedule	Child Care Center (n=54) Morning (n=54)	Afternoon (n=54)	Public Kindergarten (n=45) Morning (n=42)	Afternoon (n=3)	Private Kindergarten (n=58) Morning (n=55)	Afternoon (n=3)
Self-selection	84 (49.28)	69 (48.30)	63 (16.17)	70(17.32)	55 (19.51)	21 (9.81)
Large-group time	30 (26.01)	27 (16.90)	22 (8.11)	20 (0.00)	21 (9.81)	0 (0.00)
Snack/meals	43 (18.76)	39 (28.75)	24 (11.81)	35 (17.32)	37 (18.61)	60 (0.00)
Sleeping/resting/ quiet time	57 (33.76)	96 (36.97)	11 (3.51)	0 (0.00)	16 (6.21)	57 (46.46)
Small-group time	42 (26.15)	44 (25.82)	29 (14.25)	23 (14.43)	28 (10.89)	35 (35.35)
Outdoor play	43 (24.86)	45 (16.88)	31 (9.45)	25 (12.25)	25 (11.43)	23 (5.78)
Self-help/clean-up/ transition	17 (6.86)	21 (7.40)	13 (5.40)	15 (5.77)	13 (5.22)	31 (56.00)
Dismissal	20 (11.01)	36 (33.50)	10 (4.22)	17 (7.07)	12 (6.44)	18 (7.75)

Table 8. Comparison of types of activities in Korean public kindergartens and private kindergartens

Daily Schedule	Public Kindergarten (n = 45)	Private Kindergarten (n = 58)	t-value
Self-selection/ free play	63 minutes	55 minutes	2.24*
Large-group time	22 minutes	21 minutes	.07
Snack/meals	24 minutes	37 minutes	-4.09****
Sleeping/resting/ quiet time	11 minutes	16 minutes	-3.54***
Small-group time	29 minutes	28 minutes	.55
Outdoor play	31 minutes	25 minutes	2.63**
Self-help/cleanup/ transition	13 minutes	13 minutes	-.74
Dismissal	10 minutes	12 minutes	-1.55

* $p < .05$
** $p < .01$
*** $p < .001$
**** $p < .0001$

Table 9. Frequency of teachers' perceptions of children's preferred classroom equipment and materials by types of Korean early childhood programs

Category	Child Care Centers	Public Kindergartens	Private Kindergartens
Building with blocks	20 (37.0%)	5 (11.1%)	15 (25.9 %)
Playing with games or puzzles	7 (13.0%)	11 (24.4%)	18 (31.0%)
Playing with manipulative materials (i.e., pegboards, puzzles, and/or legos)	13 (24.1%)	5 (11.1%)	1 (1.7%)
Drawing, painting, working with playdough, and other art media	4 (7.4%)	4 (8.9%)	9 (15.5%)
Role play, housekeeping play	8 (14.8%)	4 (8.9%)	8 (13.8%)
Exploring animals, plants, and/or actual wheels and gears	1 (1.9%)	4 (8.9%)	5 (8.6%)
Others	1 (1.9%)	2 (4.4%)	5 (8.6%)

Table 10. Frequency of years of early childhood teaching experience by type of Korean early childhood programs

Category	Child Care Center	Public Kindergarten	Private Kindergarten
Less one year	11 (20.4%)	4 (8.9%)	3 (5.2%)
One year	11 (20.4%)	1 (2.2%)	2 (3.4%)
2-5 years	18 (33.3%)	9 (20.0%)	36 (62.1%)
6-10 years	9 (16.7%)	21 (46.7%)	8 (13.8%)
11-20 years	5 (9.3%)	9 (20.0%)	4 (6.9%)
20+ years	0 (0.0%)	1 (2.2%)	5 (8.6%)

Table 11. Frequency of highest level of education completed by Korean early childhood teachers in various types of programs

Category	Child Care Center Teachers	Public Kindergarten Teachers	Private Kindergarten Teachers
Community college	32 (59.3%)	16 (35.6%)	39 (67.2%)
B.A/B.S	15 (27.8%)	21 (46.7%)	15 (25.9%)
M.A/M.S		6 (13.3%)	4 (6.9%)
CCCTEI*	7 (13.0%)		
Other		2 (4.4%)	

* Child care center teachers' training and education institution

Table 12. Frequency of academic preparation for teachers by types of Korean early childhood programs

Category	Child care center teachers	Public kindergarten teachers	Private kindergarten teachers
ECE, CD	42 (89.4%)	41 (91.1%)	56 (96.6%)
Social Work or Education	4 (8.5%)	3 (6.7%)	1 (1.7%)
Teachers' Education & Training	7 (2.1%)	0 (0.0%)	0 (0.0%)
Others	0 (0.0%)	1 (2.2%)	1 (1.7%)

Table 13. Comparison of differences between actual and desired practices of Korean early childhood educators giving means (M), standard deviations (SD), t-test values, and p-values

	Actual Practice	Desired Practice	t-test value
	M (SD)	M (SD)	
Appropriate Practices			
Building with blocks	4.33 (.96)	4.24 (.87)	1.53
Children selecting centers (home, book, math, science, writing, etc.)	4.27 (1.11)	4.46 (.99)	-2.74**
Children coordinating their own activities in centers	4.60 (.79)	4.73 (.63)	-2.13*
Participating in dramatic play	3.05 (1.28)	3.70 (1.02)	-9.56****
Doing creative writing (combining symbols/invented spelling and drawing)	2.91 (1.12)	3.48 (.95)	-8.04****
Playing with games and puzzles	4.02 (.97)	4.14 (.87)	-1.98*
Exploring animals, plants, and/or wheels and gears	2.81 (1.15)	3.67 (.91)	-10.33****
Cutting their own shapes from paper	3.92 (1.14)	4.32 (.83)	-5.84****
Creative movement	3.34 (.96)	3.79 (.79)	-6.49****
Singing and/or listening to music	4.27 (.80)	4.33 (.73)	-1.34
Playing with manipulatives such as pegboards, puzzles, and/or lego	4.46 (.85)	4.46 (.74)	.00
Specifically planned outdoor activities	2.94 (1.14)	3.55 (.85)	-7.85****
Social reinforcement (verbal praise approval, attention) etc.) for appropriate behavior and/or performance	4.52 (.74)	4.57 (.77)	-.83
Drawing, painting, working with play dough, and other art media	3.75 (1.00)	4.11 (.93)	-5.55****

Table 13. Continued

	Actual Practice M (SD)	Desired Practice M (SD)	t-test value
Math incorporated with other subject areas	3.41 (1.14)	3.89 (1.05)	-8.20****
Inappropriate Practices			
Copying from the chalkboard	2.45 (1.12)	2.53 (1.11)	-1.61
Large-group, teacher-directed instruction	4.06 (.91)	3.79 (.91)	4.55****
Coloring and/or cutting predrawn forms	2.67 (1.16)	2.62 (1.11)	.93
Using isolation (standing in the corner or outside of the room) to obtain child compliance	2.68 (1.28)	2.28 (1.21)	5.79****
Games/activities directed by or made by teachers	3.32 (.81)	3.18 (.85)	2.68***
Circling, underlining, and/or marking on items on worksheet	2.31 (1.26)	2.33 (1.21)	-.32
Using flashcards with sight words and/or math facts	2.60 (1.10)	2.87 (1.18)	-4.55****
Competitive math activities to learn math facts	1.95 (1.15)	2.04 (1.21)	-1.64
Children reading in ability level groups	3.02 (1.28)	3.36 (1.16)	-4.30****
Rote counting	3.08 (1.14)	3.21 (1.29)	-2.73***
Tangible rewards for appropriate behavior and/or performance	3.69 (1.18)	3.76 (1.22)	-1.42
Practicing handwriting on lines	2.03 (1.18)	2.18 (1.15)	-2.54**
Reciting the alphabet	1.88 (1.21)	1.97 (1.18)	-1.73

* $p < .05$
** $p < .01$
*** $p < .001$
**** $p < .0001$

Table 14. Comparison of differences between actual and desired practices of Korean child care center teachers giving means (M), standard deviations (SD), t-test values, and p-values

	Actual Practice	Desired Practice	t-test value
	M (SD)	M (SD)	
Appropriate Practices			
Building with blocks	4.37 (.92)	4.17 (.95)	1.90
Children selecting centers (home, book, math, science, writing, etc.)	3.96 (1.32)	4.24 (1.21)	-1.74
Children coordinating their own activities in centers	4.48 (.88)	4.55 (.79)	-.54
Participating in dramatic play	2.83 (1.46)	3.52 (1.21)	-5.31****
Doing creative writing (combining symbols/invented spelling and drawing)	2.67 (1.01)	3.42 (.88)	-7.43****
Playing with games and puzzles	3.68 (.89)	3.91 (.73)	-2.46*
Exploring animals, plants, and/or wheels and gears	2.33 (.93)	3.39 (.76)	-8.08****
Cutting their own shapes from paper	3.72 (1.17)	4.28 (.90)	-5.15****
Creative movement	3.39 (.94)	3.92 (.97)	-4.58****
Singing and/or listening to music	4.31 (.75)	4.33 (.64)	-.21
Playing with manipulatives such as pegboards, puzzles, and/or legos	4.37 (1.00)	4.26 (.85)	1.06
Specifically planned outdoor activities	2.70 (1.24)	3.44 (.92)	-5.37****
Social reinforcement (verbal praise approval, attention) etc.) for appropriate behavior and/or performance	4.63 (.65)	4.70 (.63)	-.85
Drawing, painting, working with play dough, and other art media	3.37 (1.00)	3.87 (.99)	-4.37****

Table 14. Continued

	Actual Practice	Desired Practice	t-test value
	M (SD)	M (SD)	
Math incorporated with other subject areas	2.89 (1.08)	3.57 (1.04)	-7.24****
Inappropriate Practices			
Copying from the chalkboard	2.91 (.99)	3.05 (1.05)	-1.31
Large-group, teacher-directed instruction	4.07 (1.04)	3.85 (.92)	2.12*
Coloring and/or cutting predrawn forms	2.98 (1.04)	3.00 (1.06)	-.15
Using isolation (standing in the corner or outside of the room) to obtain child compliance	3.11 (1.46)	2.61 (1.56)	3.73****
Games/activities directed by or made by teachers	3.39 (.86)	3.30 (.88)	.90
Circling, underlining, and/or marking on items on worksheet	2.72 (1.16)	2.92 (1.08)	-1.85
Using flashcards with sight words and/or math facts	2.70 (.98)	3.33 (1.01)	-5.29****
Competitive math activities to learn math facts	2.31 (1.36)	2.65 (1.46)	-3.15**
Children reading in ability level groups	2.78 (1.38)	3.17 (1.13)	-2.1*
Rote counting	3.42 (1.21)	3.71 (1.37)	-3.11**
Tangible rewards for appropriate behavior and/or performance	3.96 (1.20)	4.11 (1.13)	-1.43
Practicing handwriting on lines	2.28 (1.23)	2.67 (1.15)	-3.63***
Reciting the alphabet	2.17 (1.33)	2.37 (1.28)	-1.75

* $p < .05$
** $p < .01$
*** $p < .001$
**** $p < .0001$

Table 15. Comparison of differences between actual and desired practices of Korean public kindergarten teachers, giving means (M), standard deviations (SD), t-test values, and p-values

	Actual Practice	Desired Practice	t-test value
	M (SD)	M (SD)	
Appropriate Practice			
Building with blocks	4.35 (.88)	4.42 (.81)	-.83
Children selecting centers (home, book, math, science, writing, etc.)	4.67 (.74)	4.78 (.60)	-1.30
Children coordinating their own activities in centers	4.89 (.32)	5.00 (.00)	-2.35*
Participating in dramatic play	3.58 (1.14)	4.09 (.82)	-4.53****
Doing creative writing (combining symbols/invented spelling and drawing)	3.20 (1.25)	3.62 (1.11)	-4.31****
Playing with games and puzzles	4.51 (.92)	4.71 (.59)	-2.15*
Exploring animals, plants, and/or wheels and gears	3.47 (1.08)	4.09 (.90)	-4.85****
Cutting their own shapes from paper	4.22 (1.15)	4.42 (.84)	-2.45*
Creative movement	3.56 (.87)	4.00 (.74)	-3.95****
Singing and/or listening to music	4.22 (.90)	4.40 (.72)	-2.70**
Playing with manipulatives such as pegboards, puzzles, and/or legos	4.67 (.56)	4.82 (.39)	-2.85**
Specifically planned outdoor activities	3.38 (.91)	3.82 (.72)	-3.67***
Social reinforcement (verbal praise approval, attention) etc.) for appropriate behavior and/or performance	4.62 (.61)	4.64 (.68)	-.30
Drawing, painting, working with play dough, and other art media	4.22 (.82)	4.58 (.66)	-4.51****

Table 15. Continued

	Actual Practice	Desired Practice	t-test value
	M (SD)	M (SD)	
Math incorporated with other subject areas	3.98 (1.20)	4.18 (1.15)	-2.03*
Inappropriate Practices			
Copying from the chalkboard	1.78 (1.00)	1.82 (1.03)	-1.00
Large-group, teacher-directed instruction	4.02 (.81)	3.75 (.86)	3.32**
Coloring and/or cutting predrawn forms	2.07 (1.20)	2.00 (1.13)	.83
Using isolation (standing in the corner or outside of the room) to obtain child compliance	2.18 (1.07)	1.73 (.84)	3.67***
Games/activities directed by or made by teachers	3.29 (.90)	3.18 (.91)	1.40
Circling, underlining, and/or marking on items on worksheet	1.55 (.97)	1.53 (.94)	.33
Using flashcards with sight words and/or math facts	2.38 (1.13)	2.40 (1.20)	-.37
Competitive math activities to learn math facts	1.35 (.71)	1.42 (.72)	-1.35
Children reading in ability level groups	3.47 (1.22)	3.80 (1.18)	-3.32**
Rote counting	2.73 (1.27)	2.75 (1.38)	-.30
Tangible rewards for appropriate behavior and/or performance	3.55 (1.22)	3.55 (1.29)	.00
Practicing handwriting on lines	1.33 (.60)	1.42 (.72)	-1.43
Reciting the alphabet	1.29 (.73)	1.35 (.77)	-1.35

* $p < .05$
** $p < .01$
*** $p < .001$
**** $p < .0001$

Table 16. Comparison of differences between actual and desired practices of Korean private kindergarten teachers, giving means (M), standard deviations (SD), t-test values, and p-values

	Actual Practice	Desired Practice	t-test value
	M (SD)	M (SD)	
Appropriate Practices			
Building with blocks	4.27 (1.06)	4.17 (.82)	1.00
Children selecting centers (home, book, math, science, writing, etc.)	4.24 (1.05)	4.43 (.96)	-1.75
Children coordinating their own activities in centers	4.50 (.90)	4.69 (.65)	-2.03*
Participating in dramatic play	2.84 (1.07)	3.59 (.90)	-6.65****
Doing creative writing (combining symbols/invented spelling and drawing)	2.91 (1.08)	3.43 (.88)	-3.49***
Playing with games and puzzles	3.96 (.94)	3.91 (.98)	.48
Exploring animals, plants, and/or wheels and gears	2.74 (1.18)	3.62 (.95)	-5.45****
Cutting their own shapes from paper	3.87 (1.08)	4.29 (.77)	-2.93**
Creative movement	3.12 (1.03)	3.50 (.84)	-2.98**
Singing and/or listening to music	4.26 (.78)	4.27 (.81)	-.21
Playing with manipulatives such as pegboards, puzzles, and/or legos	4.39 (.88)	4.37 (.74)	.16
Specifically planned outdoor activities	2.83 (1.13)	3.43 (.84)	-4.48****
Social reinforcement (verbal praise approval, attention) etc.) for appropriate behavior and/or performance	4.34 (.87)	4.38 (.91)	-.32
Drawing, painting, working with play dough, and other art media	3.72 (.99)	3.98 (.93)	-1.97

Table 16. Continued

	Actual Practice M (SD)	Desired Practice M (SD)	t-test value
Math incorporated with other subject areas	3.46 (1.01)	3.96 (.90)	-5.04****
Inappropriate Practices			
Copying from the chalkboard	2.53 (1.08)	2.60 (.93)	-.68
Large-group, teacher-directed instruction	4.07 (.86)	3.76 (.96)	2.81**
Coloring and/or cutting predrawn forms	2.86 (1.08)	2.74 (.93)	1.19
Using isolation (standing in the corner or outside of the room) to obtain child compliance	2.67 (1.11)	2.40 (.92)	2.66**
Games/activities directed by or made by teachers	3.29 (.70)	3.09 (.76)	2.45*
Circling, underlining, and/or marking on items on worksheet	2.52 (1.31)	2.40 (1.18)	1.10
Using flashcards with sight words and/or math facts	2.67 (1.18)	2.79 (1.18)	-1.36
Competitive math activities to learn math facts	2.07 (1.04)	1.95 (1.00)	1.26
Children reading in ability level groups	2.91 (1.14)	3.21 (1.10)	-2.89**
Rote counting	3.03 (.86)	3.10 (.95)	-.94
Tangible rewards for appropriate behavior and/or performance	3.53 (1.11)	3.60 (1.21)	-.85
Practicing handwriting on lines	2.34 (1.25)	2.31 (1.13)	.33
Reciting the alphabet	2.09 (1.26)	2.09 (1.17)	.00

* $p < .05$
** $p < .01$
*** $p < .001$
**** $p < .0001$

Table 17. Means (M), standard deviations (SD) and F value for child care center teachers (Group1) versus public kindergarten teachers (Group 2) and private kindergarten teachers (Group 3) on appropriate practices

		Group 1	Group 2	Group 3	F
		M (SD)	M (SD)	M (SD)	
Appropriate Practices					
Building with blocks	Act	4.37 (.92)	4.35 (.88)	4.27 (1.05)	.15
	Des	4.17 (.94)	4.42 (.81)	4.17 (.82)	1.37
Children selecting centers (home, book, math, science, writing etc.)	Act	3.96 (1.31)	4.67 (.74)	4.24 (1.05)	5.27**
	Des	4.24 (1.21)	4.78 (.60)	4.43 (.95)	3.79*
Children coordinating their own activities in centers	Act	4.48 (.88)	4.89 (.31)	4.50 (.90)	4.24*
	Des	4.55 (.79)	5.00 (.00)	4.68 (.65)	6.69***
Participating in dramatic play	Act	2.83 (1.46)	3.58 (1.13)	2.84 (1.07)	5.71**
	Des	3.52 (1.21)	4.09 (.82)	3.59 (.90)	4.69**
Doing creative writing (combining symbols/invented spelling and drawing)	Act	2.66 (1.00)	3.20 (1.25)	2.91 (1.08)	2.83
	Des	3.42 (.88)	3.62 (1.11)	3.43 (.88)	.66
Playing with games and puzzles	Act	3.68 (.88)	4.51 (.92)	3.96 (.93)	10.20****
	Des	3.90 (.73)	4.71 (.59)	3.91 (.98)	16.10****
Exploring animals, plants, and/or wheels and gears	Act	2.33 (.93)	3.46 (1.07)	2.74 (1.17)	13.95****
	Des	3.39 (.76)	4.09 (.90)	3.62 (.95)	8.02****
Cutting their own shapes from paper	Act	3.72 (1.17)	4.22 (1.14)	3.88 (1.07)	2.47
	Des	4.28 (.90)	4.42 (.83)	4.29 (.77)	.43

Table 17. Continued

		Group 1	Group 2	Group 3	F
		M (SD)	M (SD)	M (SD)	
Creative movement	Act	3.38 (.94)	3.55 (.86)	3.12 (1.02)	2.75
	Des	3.92 (.69)	4.00 (.73)	3.50 (.84)	6.71***
Singing and/or listening to music	Act	4.31 (.74)	4.22 (.90)	4.26 (.78)	.16
	Des	4.33 (.64)	4.40 (.72)	4.27 (.81)	.36
Playing with manipulatives such as pegboards, puzzles, and/or legos	Act	4.37 (.99)	4.67 (.56)	4.39 (.87)	1.80
	Des	4.26 (.85)	4.82 (.39)	4.38 (.74)	8.50***
Specifically planned outdoor activities	Act	2.70 (1.23)	3.38 (.91)	2.82 (1.13)	5.01**
	Des	3.44 (.92)	3.82 (.72)	3.43 (.84)	3.39*
Social reinforcement (verbal praise approval, attention) for appropriate behavior and/or performance	Act	4.62 (.65)	4.62 (.61)	4.34 (.86)	2.71
	Des	4.70 (.63)	4.64 (.68)	4.38 (.91)	2.87
Drawing, painting, working with play dough, and other art media	Act	3.37 (.99)	4.42 (.82)	3.72 (.99)	9.96****
	Des	3.87 (.99)	4.58 (.66)	3.98 (.93)	8.90****
Math incorporated with other subject areas	Act	2.89 (1.07)	3.98 (1.09)	3.46 (1.01)	13.08****
	Des	3.57 (1.04)	4.18 (1.15)	3.96 (.90)	4.50*
Inappropriate Practices					
Copying from the chalkboard	Act	2.90 (.99)	1.78 (1.00)	2.53 (1.07)	15.16****
	Des	3.05 (1.05)	1.82 (1.03)	2.60 (.93)	18.73****
Large-group, teacher-directed instruction	Act	4.07 (1.04)	4.02 (.81)	4.07 (.86)	.04
	Des	3.85 (.92)	3.75 (.86)	3.76 (.96)	.19

Table 17. Continued

		Group 1	Group 2	Group 3	F
		M (SD)	M (SD)	M (SD)	
Coloring and/or cutting predrawn forms	Act	2.98 (1.03)	2.06 (1.19)	2.86 (1.08)	9.80****
	Des	3.00 (1.06)	2.00 (1.12)	2.74 (.92)	12.10****
Using isolation (standing in the corner or outside of the room) to obtain child compliance	Act	3.11 (1.46)	2.18 (1.07)	2.67 (1.11)	7.02***
	Des	1.56 (.21)	1.73 (.83)	2.39 (.92)	7.48***
Games/activities directed by or made by teachers	Act	3.38 (.85)	3.29 (.89)	3.29 (.70)	.26
	Des	3.30 (.88)	3.18 (.91)	3.08 (.75)	.86
Circling, underlining, and/or marking on items on worksheet	Act	2.72 (1.15)	1.55 (.96)	2.51 (1.31)	13.64****
	Des	2.92 (1.08)	1.53 (.94)	2.40 (1.18)	20.44****
Using flashcards with sight words and/or math facts	Act	2.70 (.98)	2.37 (1.13)	2.67 (1.17)	1.28
	Des	3.33 (1.00)	2.40 (1.94)	2.79 (1.18)	8.58****
Competitive math activities to learn math facts	Act	2.31 (1.35)	1.35 (.71)	2.06 (1.04)	10.13****
	Des	2.65 (1.45)	1.42 (.72)	1.95 (.99)	15.08****
Children reading in ability level groups	Act	2.78 (1.38)	3.47 (1.21)	2.91 (1.14)	4.09*
	Des	3.17 (1.13)	3.80 (1.18)	3.21 (1.10)	4.69**
Rote counting	Act	3.42 (1.20)	2.73 (1.26)	3.03 (.85)	4.86**
	Des	3.70 (1.37)	2.75 (1.38)	3.10 (.94)	7.57***
Tangible rewards for appropriate behavior and/or performance	Act	3.96 (1.19)	3.55 (1.21)	3.53 (1.11)	2.27
	Des	4.11 (1.13)	3.56 (1.29)	3.60 (1.21)	3.42*
Practicing handwriting on lines	Act	2.28 (1.23)	1.33 (.60)	2.34 (1.25)	12.80****

Table 17. Continued

		Group 1	Group 2	Group 3	F
		M (SD)	M (SD)	M (SD)	
	Des	2.67 (1.15)	1.42 (.72)	2.31 (1.13)	18.44****
Reciting the alphabet	Act	2.17 (1.32)	1.28 (.72)	2.09 (1.26)	8.40****
	Des	2.37 (1.28)	1.36(.77)	2.08 (1.17)	10.63****

* p < .05
** p < .01
*** p < .001
**** p < .0001

Table 18. Duncan's multiple range test on child care center teachers versus public kindergarten (Kdg) teachers and private kindergarten (Kdg) teachers on actual practices

	Child Care Center vs. Public Kdg	Child Care Center vs. Private Kdg	Public Kdg vs Private Kdg
Appropriate Practices			
Children selecting centers (home, book, math, science, writing etc.)	*		*
Children coordinating their own activities in centers	*		*
Participating in dramatic play	*		*
Playing with games and puzzles	*		*
Exploring animals, plants, and/or wheels and gears	*	*	
Children reading in ability level groups	*		*
Specifically planned outdoor activities Social reinforcement (verbal praise approval, attention, etc.) for appropriate behavior and/or performance	*		*
Drawing, painting, working with play dough, and other art media	*		*
Math incorporated with other subject areas	*	*	
Inappropriate Practices			
Coloring and/or cutting predrawn forms	*		*
Using isolation (standing in the corner or outside of the room) to obtain child compliance	*		*
Circling, underlining, and/or marking on items on worksheet	*		*
Competitive math activities to learn math facts	*		*
Rote counting	*		

Table 18. Continued

	Child Care Center vs. Public Kdg	Child Care Center vs. Private Kdg	Public Kdg vs Private Kdg
Practicing handwriting on lines	*		*
Reciting the alphabet	*		*

* = Group difference

Table 19. Duncan's multiple range test on child care center teachers versus public kindergarten (Kdg) teachers and private kindergarten (Kdg) teachers on desired practices

	Child Care Center vs. Public Kdg	Child Care Center vs. Private Kdg	Public Kdg * vs Private Kdg
Appropriate Practices			
Children selecting centers (home, book, math, science writing etc.)	*		
Children coordinating their own activities in centers	*		*
Participating in dramatic play	*		*
Playing with games and puzzles	*		*
Exploring animals, plants, and/or wheels and gears	*		*
Creative movement		*	*
Children reading in ability level groups	*		*
Playing with manipulatives such as pegboards, puzzles, and/or legos	*		*
Specifically planned outdoor activities Social reinforcement (verbal praise approval, attention, etc.) for appropriate behavior and/or performance	*		*
Drawing, painting, working with play dough, and other art media	*		*
Math incorporated with other subject areas	*		
Inappropriate Practices			
Copying from the chalkboard	*	*	*
Coloring and/or cutting predrawn forms	*		*
Using isolation (standing in the corner or outside of the room) to obtain child compliance	*		*
Circling, underlining, and/or marking	*	*	*

Table 19. Continued

	Child Care Center vs. Public Kdg	Child Care Center vs. Private Kdg	Public Kdg vs Private Kdg
Circling, underlining, and/or marking on items on worksheet	*		
Using flashcards with sight words and/or math facts	*	*	
Competitive math activities to learn math facts	*	*	*
Rote counting	*	*	
Tangible rewards for appropriate behavior and/or performance	*	*	
Practicing handwriting on lines	*		*
Reciting the alphabet	*		*

* = Group difference

Table 20. Correlation between early childhood educators' beliefs and actual and desired practices using Somers'D

Category	Actual Practices value/ t-value	Desired Practices value/ t-value
Building with blocks	NS	-.31 (-2.01)
Copying from chalkboard	.46 (2.98)	NS
Children coordinating their own activities in centers	NS	-.31 (-2.07)
Using isolation (standing in the corner or outside of the room) to obtain child compliance	NS	.35 (2.33)
Rote counting	.30 (2.17)	.36 (2.39)
Reciting the alphabet	.35 (2.11)	.33 (2.01)

NS = no significance

Table 21. Correlation between child care center teachers' beliefs and actual practices using Somer's D

Category	value/ t-value
Copying from the chalkboard	.52 (2.06)
Exploring animals, plants, and/or wheels and gears	.51 (2.14)
Drawing, painting, working with play dough, and other art media	-.46 (-2.20)

Table 22. Correlation between private kindergarten teachers' beliefs and actual practices using Somer's D

Category	value/ t-value
Copying from the chalkboard	.47 (2.41)

Table 23. Correlation between child care center teachers' beliefs and desired practices using Somer's D

Category	value/ t-value
Copying from the chalkboard	.53 (2.17)

Table 24 Correlation between private kindergarten teachers' beliefs and desired practices using Somer's D

Category	value/ t-value
Children coordinating their own activities in centers	-.47 (-2.08)

APPENDIX B: PROGRAM INFORMATION SURVEY

PROGRAM INFORMATION SURVEY

The purpose of this study is to examine the teacher's perceptions of children's play. The data will be used only for research purposes. All information will be kept confidential. We believe you will find the questions very interesting; there are no right or wrong answers to the questions. Your participation in this study will be very helpful in providing valuable information.

Thank you very much for your time and cooperation in this study.

1. What type of program is this? Check one.

a) Child Care Center	a.m. only_____	p.m. only_____	full-day_____
b) Public Kindergarten	a.m. only_____	p.m. only_____	full-day_____
c) Private Kindergarten	a.m. only_____	p.m. only_____	full-day_____
d) Other Explain			

2. How many children are presently enrolled in your classroom?

Girls _____ Boys _____

3. What are the ages of children enrolled in your classroom? Complete for all ages that apply.

	number of children	
a) 3-year-old	boys _____	girls _____
b) 4-year-old	boys _____	girls _____
c) 5-year-old	boys _____	girls _____
d) 6-year-old	boys _____	girls _____

4. How many hours each day is the program available for the following ages of children? Complete for all ages of children enrolled in your program.

	Beginning time	Ending time	Days per week (circle)
3-year-old	_____	_____	M T W Th. F
4-year-old	_____	_____	M T W Th. F
5-year-old	_____	_____	M T W Th. F
6-year-old	_____	_____	M T W Th. F

5. Please indicate the amount time spent on the following activities for both a typical morning and a typical afternoon (if applicable).

	Morning	Afternoon
Self-selection/free play	_____	_____
Large group time/story time	_____	_____
Snack/meals	_____	_____
Sleeping/resting/quiet time	_____	_____
Small group time	_____	_____
Outdoor Play	_____	_____
Self-help/clean-up/transitions	_____	_____
Dismissal	_____	_____

6. What is the favorite classroom equipment/material for children in your program?

7. What is the total square meter of space available for children's learning activities and play excluding toileting, hallways, kitchen, storage areas? _____ Indoors? _____
Outdoors? _____

8. Number of adults directly working with children throughout the day.
_____Head teacher(s)
_____Assistant teacher(s)
_____Teacher aide(s)
_____Student teacher(s)

The following items refer to **information about you.** Make a check ( ) in front of the most appropriate response for each item.

9. Total years of kindergarten teaching experience including this year.
_____a) no experience
_____b) one year
_____c) 2-5 years
_____d) 6-10 years
_____ e) 11-20 years
_____ f) 20+ years

10. Total years of child care center teaching experience including this year.
_____a) no experience
_____b) one year
_____c) 2-5 years
_____d) 6-10 years
_____ e) 11-20 years
_____ f) 20+ years

11. Total years of teaching experience including experience this year.
_____a) no experience
_____b) one year
_____c) 2-5 years
_____d) 6-10 year
_____e) 11-20 years
_____f) 20+ years

12. The highest level of education completed and degree major.
_____a) High school
_____b) B.A/ B.S. _____ (major)
_____c) M.A/ M.S _____ (major)
_____d) Others _____ (major)

APPENDIX C: THE TEACHER QUESTIONNAIRE

Please respond to the following items, by circling the number that (A) most nearly represents how OFTEN kindergarten children DO PARTICIPATE (ACTUAL PRACTICE) in the following activities, on the average and (B) most nearly represents how OFTEN kindergarten children SHOULD PARTICIPATE (DESIRED PRACTICE) in the following activities, on the average. Circle one number in each column heading.

1	2	3	4	5
Almost Never (less than monthly)	Rarely (monthly)	Sometimes (weekly)	Regularly (2-4/week)	Very Often (daily)

	Actual practice (Do participate)	Desired practice (Should participate)
1. building with blocks	1 2 3 4 5	1 2 3 4 5
2. copying from the chalkboard	1 2 3 4 5	1 2 3 4 5
3. children selecting centers (home, book, math, science, writing, etc.)	1 2 3 4 5	1 2 3 4 5
4. large group teacher directed instruction	1 2 3 4 5	1 2 3 4 5
5. children coordinating their own activities in centers	1 2 3 4 5	1 2 3 4 5
6. participating in dramatic play	1 2 3 4 5	1 2 3 4 5
7. doing creative writing (combining symbols/invented spelling and drawing)	1 2 3 4 5	1 2 3 4 5
8. playing with games and puzzles	1 2 3 4 5	1 2 3 4 5
9. exploring animals, plants, and/or wheels and gears	1 2 3 4 5	1 2 3 4 5
10. cutting their own shapes from paper	1 2 3 4 5	1 2 3 4 5
11. creative movement	1 2 3 4 5	1 2 3 4 5
12. coloring and/or cutting predrawn forms	1 2 3 4 5	1 2 3 4 5
13. singing and/or listening to music	1 2 3 4 5	1 2 3 4 5

1 Almost Never (less than monthly)	2 Rarely (monthly)	3 Sometimes (weekly)	4 Regularly (2-4/week)	5 Very Often (daily)

	Actual practice (Do participate)	Desired practice (Should participate)
14. children reading in ability level groups	1 2 3 4 5	1 2 3 4 5
15. playing with manipulative such as pegboards, puzzles, and/or legos	1 2 3 4 5	1 2 3 4 5
16. using isolation (standing in the corner or outside of the room) to obtain child compliance	1 2 3 4 5	1 2 3 4 5
17. games/activities directed by or made by teachers	1 2 3 4 5	1 2 3 4 5
18. specifically planned outdoor activities	1 2 3 4 5	1 2 3 4 5
19. circling, underlining, and/or marking on items on worksheets	1 2 3 4 5	1 2 3 4 5
20. using flashcards with sight words and/or math facts	1 2 3 4 5	1 2 3 4 5
21. competitive math activities to learn math facts	1 2 3 4 5	1 2 3 4 5
22. rote counting	1 2 3 4 5	1 2 3 4 5
23. social reinforcement (verbal praise approval, attention, etc.) for appropriate behavior and/or performance	1 2 3 4 5	1 2 3 4 5
24. tangible rewards for appropriate behavior and/or performance	1 2 3 4 5	1 2 3 4 5
25. drawing, painting, working with playdough, and other art media	1 2 3 4 5	1 2 3 4 5

1 Almost Never (less than monthly)	2 Rarely (monthly)	3 Sometimes (weekly)	4 Regularly (2-4/week)	5 Very Often (daily)

	Actual practice (Do participate)	Desired practice (Should participate)
26. practicing handwriting on lines	1 2 3 4 5	1 2 3 4 5
27. reciting the alphabet	1 2 3 4 5	1 2 3 4 5
28. match incorporated with other subject areas	1 2 3 4 5	1 2 3 4 5

29. Do you think which one is the most important for children to master in your nursery school or kindergarten?
_____a) Planning for children's needs and interests using nondirective teaching strategies such as child-initiated acknowledging, modeling and facilitating
_____b) Planning for children's needs and interests using directive teaching strategies such as teacher-directed demonstrating and directing
_____c) Planning for children's needs and interests using both nondirective and directive teaching

30. What do you do in your kindergarten to promote reading (literacy) skills?

31. What do you do to promote children's play ?