

The Pennsylvania State University

The Graduate School

College of Education

**PARENTS' PERCEPTIONS OF CHILD'S PLAY AND THE  
RELATION TO CHILDREN'S DEVELOPMENT OF SOCIAL  
COMPETENCE AND CREATIVITY**

A Dissertation in

Curriculum and Instruction

by

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Submitted in Partial Fulfillment  
of the Requirements  
for the Degree of

Doctor of Philosophy

December 2009

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*Abstract*

Different theories and perspectives of play have been discussed by researchers and educators. Generally speaking, play contributes to children's cognitive, socio-emotional, and motor development. Children spend time at home in the learning environment established by their parents. Thus, parents' perceptions of children's growing and learning affect both their interaction with and the environment they provide for their children. In early childhood education, play is an increasingly important factor; in the specific context of Taiwan, little is known about Taiwanese parents' perceptions of it. Therefore, the main purpose of this study was to gain an understanding of Taiwanese parents' perceptions of child's play and examine whether their perceptions are related to their children's social competence and creativity.

The study was conducted in Hsinchu, Taiwan. In order to ensure greater variability in parents' backgrounds, criterion-based sampling was used. Three kindergartens were recruited for the study: two were located in Hsinchu County, where parents generally had lower socioeconomic status, and one was located in Hsinchu City, where parents generally had higher socioeconomic status. A total sample of 142 parents with kindergarteners aged 4–7 and 10 kindergarten teachers participated in this study. Parent and teacher versions of the questionnaire were used. The data were analyzed using descriptive statistics, One-way Analysis of Variance

(ANOVA), and Pearson product-moment coefficient (PPMr). Research results were as follows:

- (1) Taiwanese parents valued play's effect on children's development and supported playing with their children.
- (2) Parents' perceptions of child's play differed by gender, highest education level, and total monthly household income, but there was no difference by parents' age and occupation.
- (3) There was no significant difference in parents' perceptions of child's play when examined by children's gender and age.
- (4) Parents' perceptions of child's play were positively related to children's development of social competence (rated by both parents and teachers) as well as creativity (rated only by parents). Three factors—parent's highest education level, spouse's highest education level, and total monthly household income—were found to affect children's development of social competence and creativity. When these three factors were controlled, a correlation still existed but the strength of the relationship was smaller.

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### *Acknowledgments*

I offer my sincere thanks to many people who helped me to accomplish the completion of my doctoral degree. First of all, I would like to express my gratitude to my advisor, Dr. Thomas D. Yawkey. He gave me the opportunity to be a graduate student at Penn State so that I could be proud to be a “Penn Stater”. He also provided me with lots of professional advice, taught me how to be a better researcher, and supported and encouraged me during the dissertation period.

I also offer my sincere appreciation to Dr. Edgar P. Yoder, who was always very kind and patient in answering my questions about research design and data analysis. He spent a lot of time working with me and always provided useful information and suggestions to help me complete my dissertation. Deep thanks also are extended to Dr. Robert L. Burgess and Dr. Daniel Hade, who gave me many professional ideas and stimulated my thinking in different ways so that I could improve the quality and content of my research study.

In addition, a special acknowledgment goes to the ten kindergarten teachers involved in my study and the principals of the three kindergartens who gave me the opportunity to conduct my study in their kindergartens.

Finally, I want to express my deepest gratitude to my parents. They always provide love, encouragement, support, and help to me. Without them, it would have been impossible for me to study abroad and accomplish my doctoral degree.

## Chapter 1

### *Introduction*

The purpose of this study was to gain an understanding of Taiwanese parents' perceptions of child's play, whether they value the contributions of play to children's development, and their behaviors in supporting their child's play. Examining the relationships between parents' perceptions of child's play and their children's development of social competence and creativity was another major objective of the study.

This chapter includes the following sections: (1) Statement of the Problem, (2) Purpose of the Study, (3) Research Questions, (4) Definition of Terms, (5) Significance of the Study, (6) Limitations of the Study, and (7) Summary of Chapter 1.

### *Statement of the Problem*

“Developing through play” has become an identified saying in early childhood education (Singer, Golinkoff, & Hirsh-Pasek, 2006). Tracing from the past to the present, many famous educators have already paid attention to the importance of child's play. For example, Froebel (1907) mentioned that, “play is the purest, most spiritual activity of man...It gives joy, freedom, contentment, inner and outer rest, peace with the world. Play is the highest phase of child development...” (p. 54–55). He developed a variety of “gifts” with which children could play and practice skills. Robert Owen and John Dewey also believed

that play was basic to childhood learning (Wolfe, 2002). Different theories and perspectives have been proposed to explain why children play and have pointed to the role of play in each child's development (Scarlett, 2005).

According to different theories and perspectives, play is at the core of children's growth and relates to children's physical and mental representations. However, not all parents have positive perceptions of child's play, and do not put the same emphasis on its value. Not all parents have the same attitudes about how children learn and the type of growing environment they should provide for their children. The purpose of this investigation was to gain an understanding of Taiwanese parents' perceptions of children's play, whether they value the contributions of play to children's development, and their behaviors in supporting their children's play.

Parents from different cultures have diverse perceptions of how children grow and learn (Chao, 1994; Ogbu, 1988). In western countries, especially in the northern United States, people see the child as an independent individual. They respect children, believe that they are capable of doing things, and provide them with the freedom to demonstrate their inherent characteristics as well as natural ability (Rudy, Grusec, & Wolfe, 1999). On the other hand, people from Eastern countries, such as China, Japan, and Korea, emphasize the importance of academic achievement. Parents pay significant attention to children's academic work and cognitive development

(Chao, 1994), rather than “waste” time in play. These differences in fundamental beliefs provide different perceptions of child’s play.

Play has been related to children’s cognitive, socio-emotional, and motor development (Frost, Wortham, & Reifel, 2005; Johnson, Christie, & Yawkey, 1999). It is the parents who establish the learning and play environment for their children. Parents’ perceptions of their child’s play and their identification of what is most important to young children’s learning influences parents’ behaviors and the ways parents structure and manage their children’s learning environment in the family context. Taking this a step further, this then influences children’s abilities and development on different dimensions.

In sum, it is important to understand parents’ perceptions of child’s play and how their perceptions may influence children’s development. Teachers and parents should work together to facilitate children’s development through play. Information about parents’ perceptions of play and how their perceptions are associated with children’s development helps educators, teachers, and school administrators educate parents and highlight the importance of child’s play in early childhood.

#### *Need for the Study*

Based on the statement of the problem, this study was conducted for three reasons: (1) although much research has been conducted on parents’ perceptions of

child's play in western and eastern countries, only a small proportion of studies use Taiwanese parents in a study sample — thus, it is necessary to gain an understanding of current Taiwanese parents' perceptions of child's play, (2) most research only describes or compares parents' perceptions of child's play without examining the relationship between this perception and children's development — thus, it is necessary to ascertain whether there is a relationship between how parents value child's play and their children's development, and (3) differences in demographic variables may influence parents' perceptions of child's play and children's development— thus, it is necessary to comprehend these differences.

#### *Purposes of the Study*

The main purpose of this study was to gain an understanding of Taiwanese parents' perceptions of child's play and determine whether their perceptions are related to their children's social competence and creativity. Other related goals include the following: (1) to investigate whether play matters to Taiwanese parents, (2) to examine how parents' demographic (e.g., gender, age, family income, education level, occupation, parenting style) affect their perceptions of child's play, (3) to determine the differences in children's gender and parents' perceptions of child's play, and (4) to explain/predict the relationship between parents' perceptions of child's play and their children's social competence and creativity.



### *Research Questions*

The overarching question for this study was: “What are parents’ perceptions of child’s play and the relation to their children’s social competence and creativity”? The sub-questions are as follows:

RQ1: What are Taiwanese parents’ perceptions of child’s play? To what extent, do

Taiwanese parents value the contribution of play to children’s development?

RQ2: Is there a difference in parents’ perceptions of child’s play when examined by parents’:

- (a) Gender
- (b) Age
- (c) Highest education level
- (d) Primary occupation
- (e) Total monthly household income
- (f) Parenting style

RQ3: Is there a difference between children’s gender and parents’ perceptions of child’s play?

RQ4: Is there a relationship between Taiwanese parents’ perception of child’s play and children’s social competence and creativity?

**Purposes:**

1. To investigate whether play matters to Taiwanese parents.
2. To examine how parents' demographic (e.g., gender, age, family income, education level, occupation, parenting style) affect their perceptions of child's play.
3. To determine the differences in children's gender and parents' perceptions of child's play.
4. To explain/predict the relationship between parents' perceptions of child's play and their children's social competence and creativity.

**Conceptual Frame Work:**

- Theories and contributions of play
  - Classical Theory
  - Modern Theory
- Parents' perceptions of how children learn and the ways they structure home environment.

**Research Questions:**

Overarching question: What are parents' perceptions of child's play and the relation to their children's social competence and creativity?

Sub-questions:

1. What are Taiwanese parents' perceptions of child's play? To what extent, do Taiwanese parents value the contribution of play to children's development?
2. Is there a difference in parents' perceptions of child's play when examined by parents' (a) gender, (b) age, (c) highest education level, (d) primary occupation, (e) total monthly household income and (f) parenting style?
3. Is there a difference between children's gender and parents' perceptions of child's play?
4. Is there a relationship between Taiwanese parents' perception of child's play and children's social competence and creativity?

*Figure 1.1. Introduction of the Research Study*

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### *Definition of Terms*

The following terms were used in this study: (1) Child's Play, (2) Social Competence, (3) Creativity, and (4) Parents. Each is defined below.

#### *Child's Play*

Child's play is defined in this study as traditional types of free-play in which children usually engage, including functional play (repetitive activity), constructive play (e.g., building with blocks), sociodramatic play, and games with rules. In terms of the goal or essence of play, play is separated into educational and recreational play (Johnson et al., 1999). The former is more under the control of adults— for example, the parents initiate and guide children to engage in free-play activities or projects. The latter occurs without adult influence, such as break time on the playground.

#### *Social Competence*

In this study, social competence refers to the ability to meet social goals, enter established play groups, initiate play, and give appropriate responses to peers (Howes & Matheson, 1992). Saracho and Spodek (1998) integrated different definitions and summarized socially competent children as those who “exhibit a positive demeanor around or toward others, have accurate social information processing abilities, and display social behaviors that lead them to be well liked by others” (p. 118).

### *Creativity*

According to Isenberg and Jalongo (2001), Guilford (1984), and Sternberg (1997), there are two dimensions of creativity—cognitive dimensions of creativity and affective dimensions of creativity. In this study, children with creativity were defined as those whose thinking process was fluent, flexible, original, and elaborative and whose feeling process was full of curiosity, risk-taking, and imagination and fantasy while playing.

### *Parents*

In this study, a parent was a father or mother or guardian who was related to or the guardian of a child aged 4–7 years who was enrolled in a kindergarten in Taiwan.

### *Significance of the Study*

The study of parents' perceptions of child's play and children's development of social competence and creativity was important because its findings: (1) may lead parents to place more emphasis on child's play, if parents' perceptions are related to children's development, (2) may provide teachers a better understanding of parents' perceptions of child's play and make efforts towards reformation—if the proportion of parents who ignore the importance of play is high, the educators or teachers may need to pay more attention to the parent education issues, and (3) may help teachers to keep their eyes on children's development, especially those whose parents are more likely

to depreciate the importance of child's play (e.g., parents with low SES, low educational level). These main points of significance are related to the benefits of children's development.

#### *Limitations of the Study*

This study had two limitations. They were: (1) the samples for this study were only composed of parents from three kindergartens selected purposefully—thus, the results cannot be generalized broadly to all populations in Taiwan, Asian or other non-Asian countries, and (2) the data source was narrow because they were collected only via questionnaires—future research can include actual observations of play situations and interviews with parents or teachers.

#### *Summary of Chapter 1*

Play is important to children's cognitive, socio-emotional, and motor development. Parents' perceptions of child's play and their beliefs about how children learn influence parents' behaviors and the ways parents structure and manage their children's learning environment at home. However, there is little research on current Taiwanese parents' perceptions of child's play and the ways in which parents' perceptions of play influence their children's development. Therefore, the main purpose of this study was to gain an understanding of Taiwanese parents' perceptions of child's play and determine whether their perceptions are related to their children's

social competence and creativity.

This study had several sub-questions. These include: (1) what are Taiwanese parents' perceptions of child's play, (2) is there a difference in parents' perceptions of child's play when examined by parents' background information, (3) is there a difference between children's gender and parents' perceptions of child's play, and (4) is there a relationship between Taiwanese parents' perception of child's play and children's social competence and creativity?

Study results may help parents gain an understanding of the importance of their perceptions to child's play and its impact on children's development. Further, they may also inform teachers of the need to pay greater attention to parent education as well as teacher-parent communication.

This study had two limitations: the sample size was too narrow and too small to generalize to a larger population, and the data were collected only via questionnaires. Future studies may include qualitative types of data, such as observations or interviews.

## Chapter 2

### *Review of Literature: Selected Research Studies*

The purpose of the current study was to understand Taiwanese parents' perceptions of child's play and to examine the relationships between parents' perceptions of child's play and children's development of social competence as well as creativity. Identifying and understanding parents' perceptions of child's play help educators provide support for parents and educate them if needed. In addition, another focus was the critical role of parents and the family context because parents' perceptions of child's play may influence the ways in which they establish a play environment for children, which subsequently affects children's social competence and creativity. The literature review is discussed in the following sections: (1) Selected Theories of Child's Play, (2) Play and Children's Social Competence, (3) Play and Children's Creativity, and (4) Parents' Perceptions of Child's Play and Their Influences on Parental Behaviors and Children's Playing Environment in Family Contexts. Each section is discussed detailed below.

#### *Selected Theories of Child's Play*

Generally speaking, theories of play are categorized into two groups. They are classical (nineteenth century ~ 1920) and modern theories (after 1920) (Johnson, Christie, & Yawkey, 1999; Hughes, 2009; Mellon, 1994; Saracho & Spodek, 1998).

### *Classical Theories*

Johnson et al. (1999) summarized several classical theories. Surplus-energy theory argues that each person's extra energy—that left over after meeting survival needs—must be expended. Otherwise, it becomes pressure. Play is a tool used to regulate and get rid of this surplus energy. Differing from surplus-energy theory, in recreation theory the purpose of play is to recover energy expended in work, especially hard work. This explains why children enjoy playing during break time after concentrating on a class for a while. Other classical theories include recapitulation theory, which regards play as a means to eliminate primitive instincts that are no longer needed in modern times, and practice theory, which supports the idea that play enables the practice and perfection of essential skills for future survival.

These four classical theories of play are all related to human energy, instincts, and evolution. Although classical theories have had some deficiencies, such as being too narrow in explaining why play exists and being limited to a segment of play behavior, they have established the foundation for later modern theories (Rubin, 1982). Except for explaining why children play in a broader context, modern theorists also have focused on the contributions of play to children's development.



### *Modern Theories*

There are three major groups of modern theories— psychodynamic, cognitive, and sociocultural theory. Freud and Erikson are representative promoters of psychodynamic theory. Freud (1966) claimed that play makes a critical contribution to children's emotional development by removing children's negative feelings and helping them to handle frustrations stemming from unpleasant experiences. Erikson (1950) focused on personality development and believed that play can reflect children's psychosocial development. Both of these psychologists stressed the critical contribution of play to children's inner development.

Cognitive theories include those of Piaget, Bruner, and Sutton-Smith. According to Piaget, assimilation and accommodation are two complementary processes that result in learning and cognitive development (Piaget, 1962). Children go through a series of different cognitive stages (sensorimotor, preoperational, concrete operational, and formal operations stage). At each stage, children engage in a certain type of play that matches their cognitive developmental level (Saracho & Spodek, 1995). For example, from 2–7 years old, children are at a preoperational stage and engage in symbolic play, rather than games with rules (which occurs after 12 years of age), which require more cognition. Piaget put significant emphasis on the role of play because it helps practice and consolidates newly acquired skills that are needed for

human life (Johnson et al., 1999). Therefore, play not only reflects children's cognitive developmental level but also facilitates their mental development (Hughes, 1999).

Both Bruner (1972) and Sutton-Smith (1986) focused on the role of play in providing flexibility and opportunity for children to explore fresh experiences and experiment with new behaviors without any pressure. Through play, not only is children's knowledge stretched but their patterns of behaviors are established as well.

Vygotsky (1978), a sociocultural theorist, paid attention to the influence of socioculture on children's development. How children interact with parents, teachers, and peers facilitates cognitive development. He viewed the zone of proximal development (ZPD) as the transitional state between "actual development" and "potential development". Play, as "*a self-help tool*" (Johnson et al., 1999, p. 10), may just act as a scaffold in the ZPD of children. Thus, through play, children master their behaviors (Bodrova & Leong, 1996), such as social skills, language use, cognitive thinking, and abstract thinking.

In sum, why children play and how play contributes to children's development have been discussed for a long time. Tracing from the past, a number of educators and philosophers (e.g., Freud, Piaget, and Vygotsky) have proposed different theories. Classical theories, including surplus-energy theory, recreation theory, recapitulation

theory and practice theory, paid much attention to human energy, instincts, and evolution. Modern theorists provided a more complete explanation and focused on the contributions of play to the child's development.

### *Play and Children's Social Competence*

This part includes five sections. They are presented in the following sections: (1) Importance of Social Competence, (2) Selected Perspectives on Social Competence, (3) Elements of Social Competence, (4) Social Competence in Different Cultural Contexts, and (5) Contributions of Play to Children's Social Competence.

#### *Importance of Social Competence*

When infants are born, parents take care of their daily needs, play with them, read story books to them, share different emotions with them, and so on. Gradually, infants build an association to their parents (or primary caregivers) and learn to respond to parents' behaviors in order to satisfy their expectations. This model of parent-child interaction becomes children's first experience with social interaction (Semrud-Clikeman, 2007). The home setting is an initial social environment. As they age, children begin to get in touch with a whole different social environment — the school.

The school environment is just like a small society in which school-age children are asked to get along, negotiate, and cooperate with other adults and peers. Recently,

researchers (e.g., Ladd, Birch, & Buhs, 1999) have put much emphasis on the positive and significant role of children's social and emotional development. Children with better social-emotional competence are more likely to develop positive attitudes about school, adjust to school, be ready for school, initiate and sustain new friendships, and succeed in academic performance (Ladd, Birch, & Buhs, 1999; Ladd, Kochenderfer, & Coleman, 1996; O'Neil, Welsh, Parke, Wang, & Strand, 1997; Shields, Dickstein, Seifer, Giusti, Magee, & Spritz, 2001). Cognitive ability is no longer the only predictor of children's school achievement or academic performance. New empirical research (e.g., Carlton & Winsler, 1999) supports the view that social-emotional competence is significant to young children's school readiness. Therefore, social competence is critical to children's future learning and living.

### *Selected Perspectives on Social Competence*

This section focuses on definitions of social competence. Its purpose is to provide background on the concept of social competence in general and what it means in terms of children.

Social competence is viewed as a reflection of social judgments, the relational skills in social situations, or the behaviors and thoughts that lead to successful social functioning (Wagenfeld, 2005). Raver and Zigler (1997) defined social competence as individuals feeling positive about themselves, fitting in well in the network, and

developing positive relationships with parents, peers, siblings, and teachers. Odom and McConnell (1992) viewed social competence as “the effective and appropriate use of social behavior in interactions” (p. 239). In other words, social competence requires the ability to adjust personal thoughts or behaviors in order to maintain appropriate social interactions.

For those seeking to understand social adjustment and social competence, Crick and Dodge (1994) proposed a social information-processing model. When processing social information and interactions, taking child’s play as an example, children have to encode internal and external cues, interpret the cues, clarify their goals, find possible responses to the situation or reconstruct new behaviors in response to social cues, make a decision to select the most positively evaluated response for the situation, and finally take action. Failure in any step may result in social problems with others. Crick and Dodge (1994) suggested that aggressive children have difficulty processing information and are more likely to use aggressive problem-solving strategies.

Social context should also be taken into consideration in developing healthy social interactions (Bronfenbrenner, 1989; Ford, 1992). According to Spitzberg (2003), context includes culture, time, relationship, situation, and function. Social skills or behaviors valued in one context may not be appropriate in another. For example, shy or inhibited behaviors may be regarded as positive social competence in Eastern

cultures but not in Western cultures (Chen, Rubin, & Li, 1995; Xu et al., 2005). Some language and actions used in peer interactions should not be used with seniors. The inability to adjust personal behaviors from context to context often results in social competence difficulties. Ford (1992) stated that being a socially competent person is necessary to achieving personal values and goals that are situationally relevant, and using appropriate ways to meet situational demands in order to achieve these goals. Corresponding with Ford's point-of-view, Wentzel (2005) stated that "social competence reflects this balance between the achievement of positive outcomes for the self and adherence to context-specific expectations for behavior" (p. 280). Thus, social competence may be achieved only if the actions or behaviors used by a person to accomplish personal goals are approved and accepted by others (Wentzel & Looney, 2006).

Since young children frequently engage in play, it is necessary for them to follow simple scripts when engaging in social interaction with peers (Edwards, Guzman, Brown, & Kumru, 2006). Thus, in terms of children, social competence refers to the ability to meet social goals, enter established play groups, initiate play, and give appropriate responses to peers (Howes & Matheson, 1992). In North American society, children who show responsible, independent, friendly, cooperative, purposeful, and self-controlled behaviors are believed to have high levels of social competence, while

children who act irresponsibly, timidly, hostilely, uncooperatively, and impulsively are not (Knopczyk & Rodes, 1996).

In sum, social competence refers to the ability to adjust personal behaviors and exhibit the type of appropriate social behaviors that enable an individual to maintain effective social interactions and positive relationships with others in certain social contexts. In terms of children, socially competent children are those who “exhibit a positive demeanor around or toward other, have accurate social information processing abilities, and display social behaviors that lead them to be well liked by others” (Saracho & Spodek, 1998, p. 118).

#### *Elements of Social Competence*

Social competence requires combining different skills at the same time. Raver and Zigler (1997) proposed three kinds of skills related to young children’s development of social competence: emotional regulation skills, social cognition skills, and communicative behaviors. Recently, Denham (2006) suggested some measurements to use in evaluating children’s social-emotional competence, including measures of children’s emotional expressiveness, understanding of emotion, regulation of emotion and behavior, social problem-solving, and social and relationship skills. In addition, Semrud-Clikeman (2007) described other elements of social competence, such as language skills, the ability to send and receive emotional

messages, perspective taking, and behavioral management.

According to Merrell (2003), there are two main constructs of social competence: (1) social skills, which refer to the behavioral skills used by an individual to respond to different social situations, and (2) social acceptance or rejection, which relates to social status with peers. The two constructs and related social abilities are described in more detail below.

### *Social Skills*

From joining peer groups, to developing and maintaining play plots, to establishing sustained friendships with playmates, all processes require social interaction skills. Children's social skills refer to children's prosocial behaviors when interacting with peers (Raver & Zigler, 1997). Initial research on children's prosocial behaviors focused on children's level of social participation, such as whether children engaged in interaction or played along or withdrew from peers (Parten, 1932). Recently, researchers have provided insights into children's use of actions, gestures, and language when getting together (Hartup, 1983; Howes, 1987), behaviors and conversations used to participate in peer groups (Putallaz & Gottman, 1981), as well as verbal and nonverbal exchanges among peers (Black & Logan, 1995). Other skills, including attending, listening, cooperating with others, and following directions, are also included in the examination of children's prosocial behaviors (Brigman, Lane,



Switzer, Lane, & Lawrence, 1999; Brigman & Webb, 2003). The psychological literature has linked poorer social skills with difficulties in peer relationships and school adjustment (Buhs & Ladd, 2001; Dekovic & Gerris, 1994; Keane & Calkins, 2004; Newcomb, Bukowski, & Pattee, 1993; Warden & Mackinnon, 2003).

### *Social Acceptance or Rejection*

Having social cognition skills, including emotional knowledge of self and others, emotional understanding and perspective taking, helps young children to react appropriately to others, maintain an effective social status with peers, and enhance social relationships (Halberstadt, Demham, & Dunsmore, 2001). Before understanding and recognizing other's feelings and emotions, children have to gain certain knowledge of emotions first. In other words, children have to be able to identify the reactions others will display in certain feeling states or situations (Cassidy, Parke, Butkovsky, & Braungart, 1992). With emotion knowledge, children are able to send and receive emotional messages accurately (Halberstadt et al., 2001), understand and recognize facial expressions appropriately (Cassidy et al., 1992), as well as take another's perspective (Vaughn & Haager, 1994). When children are capable of conjecturing the emotional state of others by encoding their nonverbal cues (e.g., facial expression, movement, and gestures), they can give more mature and adaptive responses to others (Singh, Ellis, Winton, Singh, Leung, & Oswald, 1998). Joseph and

Tager-Flusberg (2004) found a relationship between social perceptual abilities (interpreting facial expressions, gestures, and voice prosody) and difficulties in social reciprocity, after controlling for language difficulties. In order to make appropriate judgments about the intention and nonverbal cues of the speaker, a fast processing of these social perceptual skills is critical in developing social competence (Semrud-Clikeman, 2007).

Being socially accepted or rejected by peers is also related to a person's emotion regulation skills. Emotion and behavior regulation are central aspects of social competence (Denham, 2006). Appropriate emotional functioning is intimately connected to the development of social competence (Semrud-Clikeman, 2007). Much research has shown that children's emotional reactivity may help children succeed with peers, have greater social competence, better social skills, and greater peer popularity (Dunn & Brown, 1994; Eisenberg et al., 1993, 1996, 1997; Fabes et al., 1999; Graziano, Reavis, Keane, & Calkins, 2007). In home settings, family members are more likely to tolerate or offer regulatory support for children's emotions (Morris, Silk, Steinberg, Myers, & Robinson, 2007), especially negative emotions. However, the school environment is like a small society in which school-age children are asked to regulate emotions while getting along, negotiating, cooperating with each other, and taking turns. Because most young children in preschool or kindergarten are not

good at self-control or negotiation, conflicts and frictions between peers are inevitable during play. To initiate and maintain ongoing play scenarios and develop friendships, emotion regulation skills are needed (Raver, Blackburn, Bancroft, & Torp, 1999).

People enjoy someone who is cheerful rather than someone who shows more negative emotions, such as sadness or anger (Hubbard & Coie, 1994). Stocker and Dunn (1990) found that children who exhibited moody or negative emotions were more likely to be rejected by peers. However, this does not mean that children cannot have negative emotions—they must know how to regulate and manage those negative emotions when they are aroused. The better children are at identifying negative emotions and regulating emotions, the less often inappropriate behaviors such as aggression will occur. Children's ability to identify and express emotions and emotional intentions is associated with their social competence (Cassidy et al., 1992; Gnepp & Hess, 1986).

#### *Social Competence in Different Cultural Contexts*

Children's peer relations and social competence differ across ethnicity and culture (Ladd, 2005). Rothbaum, Pott, Azuma, Miyake, and Weisz (2000) stated that “culture represents local values, traditions, and activities, none of which can be understood without considering the contexts in which they are embedded” (p. 1122). In terms of peer relations, within North America, the cultural diversity in children's

peer relations and friendships is represented between majority children (typically European American) and minority children (typically African American). According to Kovacs, Parker, and Hoffman (1996), African American children have more friendships and more opposite-sex friendships, compared to European American children. African Americans, due to their culture, may tend to develop larger peer networks or may reside in extended families that facilitate interpersonal ties. It was also found that children tend to form more ethnically diverse friendships and peer-interaction patterns in diverse schools than in schools characterized by more homogeneous ethnicity (Howes & Wu, 1990). Japanese adolescents regarded peers as less important than did United States adolescents (Rothbaum et al., 2000). Italian children were more welcome and even tended to enjoy debates with their friends more so than did Canadian children (Casiglia, Lo Coco, & Zappulla, 1998).

Children's social skills and the meaning or concept of social competence are somewhat the same in varied cultures, but still have few differences. For example, social competence in Sweden is defined as "children's adaptive functioning in their social environment" (Rydell, Hagekull, & Bohlin, 1997, p. 824), such as showing prosocial and social initiative behaviors. This definition was found to be similar to that for social competence in Chinese children (Chen, Li, Li, Li, & Liu, 2000). However, perceptions of peers' shy behaviors differed between North American and

Chinese children (Chen, Rubin, & Sun, 1992). Compared to North American children, Chinese children tended to perceive shy-sensitive behaviors positively, and the behavior was found to be related to other indicators of social competence, such as being accepted by peers. In addition, Chen, Rubin, and Li (1995) also proposed that children who exhibited shy or inhibited behaviors were more likely to be accepted by society and experience more successful adjustment outcomes in China than in Canada. This finding revealed that shy or socially inhibited behaviors correspond to the collectivist philosophy of the Eastern value system, which emphasizes the importance of social obligations to meet the needs, expectations, and anticipations of others in order to maintain harmony and an interdependent orientation (Xu, Farver, Chang, Yu, & Zhang, 2005).

Xu et al. (2005) conducted a study of Chinese children's coping strategies in stressful peer interactions. Children used six major coping strategies to respond to stressful peer situations: direct problem-solving, disengagement, aggressive, support-seeking, emotion-focused crying, and *ren* (refraining from arguing or confronting peers). The correlational analysis showed that children's social preference was positively related to direct problem-solving and support-seeking strategies, and negatively related to aggressive strategies. Among these strategies, *ren* was a distinguishable coping strategy that differed from North American children's ways of

coping as evidenced in prior studies. Children who used *ren* to cope with stressful situations tended to endure their personal feelings and behaviors. In other words, they yielded to others' ideas or desires in order to remove conflicts and ensure harmony. This behavior corresponds to Chinese philosophy and cultural values. In this study, the Chinese way of *ren* was positively related to peers' nominations of social preference. However, the Chinese strategy of *ren* is not necessarily found in Western countries and may not be highly regarded.

#### *Contributions of Play to Children's Social Competence*

Research (e.g., Howes, 1992; Singer & Singer, 2005) has shown that play contributes to the development of social competence. At the initiation of play, children use a variety of social strategies to gain entry into the play group (Fromberg, 2002). When children engage in social play, they should have certain levels of social skills, social knowledge, and social interaction with playmates. For example, children learn to develop play themes together, adapt their behaviors to the group flow, see things from others' points-of-view, cooperate with each other, regulate self-emotions, and understand the rules of play (Isenberg & Jalongo, 2001; Klugman & Smilansky, 1990). Children also need to find a balance to solve problems and negotiate with others when the play group has different ideas. Play activities help children build their self-confidence and empower their potential (Trawick-Smith, 1994).

Several studies (Connolly & Doyle, 1984; Flannery & Watson, 1993; Rubin & Hayvern, 1981) have found that social dramatic play is positively associated with peer acceptance and social skills. Rough-and-tumble play not only contributes to physical release but encourages friendships and improves pro-social behaviors as well (Scott & Panksepp, 2003). Howes and Matheson (1992) suggested that children's pretend play ability is a viable indicator of their social competence. Several years later, Farmer-Dougan and Kaszuba (1999) verified Howes and Matheson's finding that children who engaged in pretend play were more likely to be socially competent with peers and adults. Another study showed that young children who frequently engaged in social fantasy play were rated as more socially skilled than their peers, more popular playmates with their peers, and better at affective role-taking (Connolly & Doyle, 1984).

In sum, children's social competence is defined as having positive social interaction behaviors, having the ability to initiate and maintain effective social interaction with peers, being accepted by peers, and controlling personal emotions and behaviors to fit in different social situations. The main constructs and elements of social competence addressed above, including social interaction skills, social cognition skills, and emotion regulation skills, were used in this study to evaluate children's development of social competence while interacting or playing with peers.

Different ethnicities and cultures may have different definitions of social competence and show different socially adaptive behaviors in certain contexts. Positive relations have been found between play and social development. Research (Hartup, 1992; Kinsey, 2000; Parker & Asher, 1987; Rogoff, 1990) has suggested the positive influence of children's social competence development on later competence.

### *Play and Children's Creativity*

This part contains four sections. Each of them is presented in the following sections: (1) Selected Perspectives of Creativity, (2) Connections between Play and Creativity, (3) Relationships between Cognitive Process in Play (Divergent Thinking) and Creativity, and (4) Relationships between Affective Process in Play and Creativity.

#### *Selected Perspectives of Creativity*

This section addresses definitions of creativity offered by different researchers. Its goal is to explain in more detail the characteristics and elements of creativity.

Creativity is viewed by some researchers (e.g., Barnhart & Barnhart, 1983; Cornelius & Casler, 1991) as a set of common characteristics among individuals who act, think, and make things in a new way. Millar (2002) viewed creativity as “the energy that allows us to think a different thought and to express ourselves in a novel way” (p. 1). Schmidt (2006) stated that “highly creative people can be said to have



heightened reactions to their surroundings” (p. 27), and they have novel, unusual, and unconventional thinking or ideas that come from their imagination and visualization. Furthermore, creative people tend to put their thoughts into practice and engage in a particular activity that interests them deeply. Smith (2005) believed that “creativity should be defined by the novelty of its products, not by their usefulness, value, profitability, beauty, and so on. What is not useful now may become useful in a distant future” (p. 294). However, some novel ideas that are beyond traditional understanding of the matter may be regarded as craziness. Thus, creative ideas or behaviors may be queer, but they should relate to reality, or at least not be deviant or without relevance.

Because young children have limited knowledge, fewer experiences, and less expertise, creative behaviors between young children and adults are somewhat different (Keegan, 1996). However, there are still some shared characteristics between creative adults and children, such as thinking flexibly and logically, coping well with novelty, finding new associations between objects, being willing to take risks, being full of curiosity, being open to experiences; and valuing originality (Starko, 2001). Children’s creativity includes the ability to engage in divergent thinking (Goswami, 1999; Palladino, 1999; Craft, 2000), feel curious about things, make observations, ask questions, view new meaning in things, and find ways to solve problems (Goswami, 1999; Starko, 2001). According to Starko (2001), one strong indicator of both

children's and adults' creativity is asking "why" questions. Runco, Johnson, and Baer (1993) found that parents and teachers had some similar perceptions of creativity. Both agreed that children, who were adaptable, imaginative, adventurous, clever, inventive, curious, daring, and dreamy were regarded as creative.

Researchers (e.g., Schaefer, 1981; Schaefer & Edgerton, 1983) have already established great validity and reliability to support the usefulness of the Child Behavior Inventory (Schaefer & Edgerton, 1978) in examining young children's adaptive behaviors in the early childhood classroom. Items related to children's creativity include: "does interesting and original things", "uses materials in imaginative ways", "thinks up interesting things to do", "has lots of ideas for pretend activities", "shows curiosity about many things", and "shows strong interest in learning new things".

Generally speaking, creativity can be separated into two dimensions—cognitive and affective. Isenberg and Jalongo (2001) summarized the cognitive and affective dimensions of creativity (p. 7), as adapted from the ideas of Guilford (1984) and Sternberg (1997). In terms of the cognitive dimension of creativity, creativity is a thinking process that includes the following four characteristics (Isenberg and Jalongo, 2001):

*Fluency.* Creative people have the ability to generate a large quantity of relevant

responses or build up collections of related ideas by following a train of thought.

Their thinking process is organized and logical.

*Flexibility.* People who are creative tend to view the problem from a different perspective and approach things in alternative ways. Their thinking and viewpoints are not rigid or limited.

*Originality.* Because creative people's thinking is flexible, they usually produce unusual, novel, unique, or clever ideas, which facilitate the ability to combine known ideas into some new form or connect the seemingly unconnected.

*Elaboration.* Creative people's thinking is broad and comprehensive so that they can stretch, fill out, or expand on an idea, and add interesting details, which makes their thinking more elaborative.

In terms of an affective dimension of creativity, creativity is a feeling process that includes three selected characteristics that focus on emotional elements. They are:

*Curiosity.* Creative people are curious about new things and eager to follow their intuition to see what happens next. In order to explore different consequences, they play with ideas and attempt a variety of possibilities.

*Risk-Taking.* Because creative people have the courage to expose themselves to criticism or failure, they are confident about following a hunch and "invest" in a humble idea. They are also willing to express ideas to others without fear of rejection

by other people.

*Imagination and Fantasy.* People who are creative have the type of mind that easily forms rich and varied mental images (e.g., what if). They are able to put themselves in another place, time, or person's shoes so that they exhibit divergent thinking and behaviors.

Based on the conceptual definition of creativity, two important elements can be used to judge a product or response as creative: "(a) it is both a novel and appropriate, useful, correct or valuable response to the task at hand, and (b) the task is heuristic rather than algorithmic" (Amabile, 1996, p. 35). Novelty has been a broad conception of creativity, but novel ideas or products "must be appropriate, recognized as socially valuable in some way to some community" (Sawyer et al., 2003, p. 20). For example, if a novel idea is ridiculous and/or, queer, and cannot be accepted or understood by others, people may view this as nonsensical rather than creative.

In addition, whether the task is considered heuristic or algorithmic depends on the goal of the task (whether there is a clearly identified goal), the pathway to the solution (whether there is a readily identifiable path to solution), and the individual performer's knowledge of it (Amabile, 1996). For example, if a child is told to simply draw a castle with three roofs and five windows, this would not be a creative painting. Creativity has been limited by identification of the goal and a straightforward path to

the solution. If the goal is to draw a new building, and the child uses his imagination to devise a brand-new house with magic functions that has never been invented before, this will be a creative production because there is no clearly identified goal and there are unlimited solutions. However, the child needs to have basic knowledge of painting and of a house so that he is able to express his ideas fluently.

Runco (2007) stated that the expression of each human's talents and potential, such as creativity, depends a lot on both nature (biology and genes) and nurture (experience). Thus, each person's range of creative potential and creative behaviors differ from individual to individual. Creative expression changes throughout the lifespan (Runco, 1999). The shifts may due to changes in maturational processes, motivation, and environment. For example, with increasing age, children start to follow social expectations and imitate others' typical behaviors so that they tend to inhibit self-expression and creativity (Runco, 2007).

The inhibition of creative behavior was noted by Torrance (1968), who cited a fourth-grade slump in terms of children's original thinking around age 9. Other researchers (e.g., Smith & Carlsson, 1983, 1985, 1990; Torrance, 1968) also reported that creativity does not increased gradually over time and according to age, but has different peaks and slumps. Although the developmental trends in the creativity of humans are not consistent in different studies, most studies have shown that creative

ability is more likely to be found at an early age (Cropley, 2003; Gardner, 1982).

Integrating these different perspectives of creativity, researchers (e.g., Guilford, 1984; Isenberg & Jalongo, 2001) concluded that creative behavior is original; creative behavior is appropriate and relevant; creative behavior is fluent and results in many new, meaningful forms; and creative behavior is flexible and explores and uses nontraditional approaches to problem solving.

### *Connections between Play and Creativity*

It is interesting that children's play behaviors correspond to the characteristics of creative behaviors, whether in cognitive or affective dimensions of creativity. Here, connections between play and creativity are shown. For example, based on children's previous experiences with and understanding of the world, they are flexible about transforming objects, give those objects novel or alternative meanings that are relevant to the play context, and use them in a nontraditional way. In addition, children's curiosity leads them to engage in a variety of activities and games. They use imagination to create stories and play out their ideas. All of these behaviors reveal that in the play context, children are free to try novel behaviors, play with different ideas, and create their own fantasy world without worrying about making mistakes or failing to reach a goal. In other words, play involves both physical and mental activities. Jeffrey and Craft (2001) believed that play activities in early childhood

contribute significantly to the later development of creativity in adulthood. Thus, playing provides an ideal environment for supporting children's growth in creativity and imagination (Isenberg & Jalongo, 2001; Johnson et al., 1999).

Imagination and fantasy are valuable properties of creativity in early childhood (Isenberg & Jalongo, 2001). Children's creativity usually occurs during play activity. For example, dramatic play provides children with numerous opportunities to express imagination and fantasy. Mellou (1994) asserted that when engaged in dramatic play, children interact with the environment, transform the objects (pretend A is B), and use imagination (make-believe), which are the three conditions of creativity.

#### *Interact with the Environment*

Children gain awareness of the world through interactions with their environment. Their previous experiences become their play themes and ideas of dramatic play. Children replay many times the experience that impresses them in their imaginative world, modify it, add something new, and vary it in play with different objects. By creating new environments and re-living earlier experiences in their imagination, young children create activities and engage in creative learning (Mellou, 1994). Creative thoughts evolve, develop, sustain, and enhance through the quality and quantity of the interaction between children and objects (Trostle & Yawkey, 1983).

### *Transform the Objects*

Transformation, which involves shifting roles, animating inanimate things, and pretending one object is something else (Mellou, 1994), is used in dramatic play. Sutton-Smith (1972) viewed transformation as an imaginative activity in childhood. By substituting one object for another and through pretend activities, children become familiar with the different functions of things, learn to make novel associations between objects, try new behaviors, and experience novel situations. This process develops children's creativity and fosters the generation of more creative activities.

### *Use Imagination*

Young children's thoughts are not restrained by reality so they are capable of and free to imagine anything they want as well as to create fantasy in dramatic play. Free minds and unlimited thinking help children try new possibilities or create unique products—the expression of creativity.

Children create new environments and worlds by representing their previous experiences in play. They are free to use imagination and to transform objects, practice substitutions, and engage in representational thinking. All of these behaviors that occur during play are young children's expressions of creativity. Therefore, play, especially dramatic play, stimulates and fosters imagination and further creativity.



*Relationships between Cognitive Process in Play (Divergent Thinking) and Creativity*

Cognitive psychologist Piaget asserted that creative play is significant in the initial development of mature thought (Singer & Singer, 1990). Divergent thinking is one major cognitive process that is important in the development of creativity (Guilford, 1968; Russ, 2003). It has been defined as the ability to generate a number of ideas and associations to a problem (Guilford, 1968). It refers to making associations freely, scanning broadly, and thinking flexibly (Runco, 1991).

In order to find out whether play facilitates divergent thinking, researchers (e.g., Dansky & Silverman, 1973) have conducted experiments to examine this question. Dansky and Silverman, in their experimental study (1973), divided pre-school children into three groups. One group of children was allowed to play with conventional objects for 10 minutes, another was told to imitate an adult's actions with the objects. The third group of children only observed an adult's actions toward the objects. The finding showed that children who were allowed to play with the objects freely developed significantly more uses for the objects than the other two groups of children. Berretta and Privette (1990) measured children's creativity by comparing structured play experiences with flexible play experiences. The researchers found that the creative thinking scores of children who had flexible play experiences were higher than those of children who participated in structured play groups. Similar

research was also conducted to see whether children's creativity benefited from subsequent flexible activities. Howard-Hones, Taylor, and Sutton (2002) recruited children aged 6–7 years old and randomly assigned them to two groups. One group was allowed to engage in free-play with salt-dough, while the other group was instructed to complete a handwriting exercise (copy a text from the board). After conducting 25 minutes of the preceding task in each group, all children were asked to produce a collage of a creature within 35 minutes, using the materials provided. Ten judges rated the quality and level of creativity of children's art production. Results showed that the scores for creativity and color range were significantly higher in the free-play group than in the structured-writing group. The three studies (Berretta and Privette, 1990; Dansky & Silverman, 1973; Howard-Hones, Taylor, and Sutton, 2002) also showed that a more flexible preceding-play task can influence children's later creative and divergent thinking, compared with a highly structured task.

A growing body of research (e.g., Clark, Griffing, & Johnson, 1989; Johnson, 1976) has revealed a relationship between play and divergent thinking. Experimental studies (Dansky, 1980; Dansky & Silverman, 1973) also have shown that play facilitates pre-school children's divergent thinking. Dansky (1980) claimed that one possible reason for play's ability to foster divergent thinking is that the process of combining objects freely in play is similar to the character of divergent thinking.

Studies (Johnson et al., 1999; Singer & Singer, 1998; Spodek & Saracho, 1998) have supported the association between play and creativity because both involve children's ability to use symbols. The influential cognitive theorist Sutton-Smith (1967) proposed that symbolic transformations involved in make-believe play are one critical factor contributing to creativity. Many researchers (Fein, 1987; Russ, 1993; Singer & Singer, 1990) have supported his contention that the expression of creativity and the development of the creative process can be fostered through pretend-play. When children are engaging in play, especially pretend-play, they need a free cognitive set to create a new combination of objects and thoughts, and to transform and symbolize one thing as if it were something else (Dansky, 1980). This transforming process reflects divergent thinking and creativity. Dramatic play also facilitates creativity because children practice divergent thinking by playing different roles in different scenarios (Singer & Singer, 1990). In a longitudinal study, pre-school children's imaginative predisposition and expression in play were associated with later imagination and creativity (Shmukler, 1982–1983).

In longitudinal research, Russ, Robins, and Christiano (1999) investigated the predictive power of pretend-play in creativity. The ability to pretend-play among 31 first- and second-grade children was used to predict their ability to engage in divergent thinking after four years, when they became fifth and sixth graders. As

predicted, young children's pretend-play significantly predicted their divergent thinking and affect in fantasy over a four-year period.

*Relationships between Affective Process in Play and Creativity*

In addition to experiencing the cognitive process during play, children also express emotion and experience the affective state in play. The capacity to experience emotions is also important in creativity (Fein, 1987). Some researchers (e.g., Christie & Johnson, 1983; Leiberman, 1977) found a relationship between kindergartners' playfulness, which involves two affective components (spontaneity and joy), and divergent thinking. However, fewer studies have been conducted to examine the affective rather than the cognitive processes in play.

To measure the affect of children in pretend-play, Russ (1987, 1993) created the Affect in Play Scale (APS), which is appropriate for 6- to 10-year-old children. The play task utilizes two neutral-looking puppets—one boy and one girl—and small blocks. These were given to children, who were allowed to play with them freely for 5 minutes. There are 11 possible affect categories in the APS: happiness/pleasure; anxiety/fear; sadness/hurt; frustration/displeasure; nurturance/affection; aggression; oral; oral aggression; anal; sexual; competition. Children's total amount and types of affect displayed in play and quality of fantasy and imagination are recorded.

Studies (e.g., Seja & Russ, 1999) showed that affect in play was associated with

creativity, and used the APS as an assessment tool to demonstrate this. Seja and Russ (1999) used a pre-school version of the APS to examine play and creativity in young children, ranging in age from 4 to 5 years. They found that frequency and variety of affect were significantly associated with creativity measures. Studies (e.g., Russ & Grossman-McKee, 1990) were also conducted using older children. Russ and Grossman-McKee (1990) used 60 first- and second-grade children in samples and found a significant and positive relationship between the affective expression in play and divergent thinking. Later on, Russ and Peterson (1990) replicated the finding again by using 121 first- and second-grade children.

In sum, play is related to creativity because when children interact with the environment, transform the objects, or use their imagination, they are expressing many types of creativity. Furthermore, while engaging in play activity, children exhibit fantasy and symbolic behaviors that involve so many cognitive and affective processes. Cognitive (divergent thinking) and affective process in play have essential roles in the development of creativity (Russ, 2004). There is evidence, both theoretically and empirically, that play is associated with creativity. Theoretically, two important elements in the creative act, cognitive and affective processes, are fostered by play. Empirically, studies (e.g., Seja & Russ, 1999; Singer & Singer, 1990) have revealed that play is related to the measurement of creativity.

*Parents' Perceptions of Child's Play and Their Influences on Parental Behaviors and  
Children's Playing Environment in Family Contexts*

Parents' perceptions of play influence their behaviors while interacting with their children and the learning environment they provide for their children. This part is presented in the following sections: (1) Cultural Differences in Parents' Perceptions of Play and Behaviors, and (2) Influences of Parental Perceptions on Children's Development.

*Cultural Differences in Parents' Perceptions of Play and Behaviors*

Ogbu (1988) suggested that culture plays a critical role in determining parents' rearing behaviors because unique developmental demands and desired competence toward children may vary across cultures. Adults' beliefs and what they think about play establish children's social environments (Rubin, Fein, & Vandenberg, 1983). Research (e.g., Farver & Wimbarti, 1995) has shown that parents' perceptions of children's play impact maternal play behaviors. For example, Indonesian mothers who viewed play as valuable in keeping children happy, occupied, and not fussy engaged in a higher proportion of cooperative social pretend play than did mothers who believed that play is significant in developing intelligence and social skills (Farver & Wimbarti, 1995).

In a comparison of children's play in North America and Mexico, it was found

that mothers in the United States who believe in the educational and cognitive benefits of play were more likely to participate in their children's play activities and to provide props than Mexican mothers, who viewed children's play as mere amusement (Farver & Howes, 1993). A similar pattern was found in other countries. American and Turkish mothers who acted as play partners encouraged child-focused play more frequently than did East Indian, Korean-American, and Guatemalan mothers, who regarded play as a children's activity or a way to escape boredom and amuse children (Farver, Kim, & Lee, 1995; Göncü, Mistry, & Mosier, 1991).

Parmar, Harkness, and Super (2004) interviewed Asian (including parents from China, Korea, Pakistan, Nepal, and India) and Euro-American parents about their attitudes toward play and learning, their initiation of practices at home, and the effects on children's behavior in preschool. All parents of target children (3 to 6 years old) were highly educated (mean years = 17, except Asian fathers = 18). Two questionnaires (education attitude and play beliefs) and a diary of their children's daily activities were completed by the parents. Results showed that the Euro-American parents placed greater importance on play, provided more funny toys, and facilitated children's play by playing with their children themselves than did Asian parents, who put more emphasis on the significance of getting a head start on academics, bought more typically educational toys, and facilitated cognitive

development by serving as teachers and academic coaches at home. Farver, Kim, and Lee (1995) also reported that Korean-American children engaged in more academic/educational play (72%) at home than did Anglo-American children (2%).

Chao's (1996, 2000) findings support Asian parents' cultural belief that a good education leads to success in life, while the United States middle-class generally believes that the role of play can facilitate children's cognitive and social development—significant competencies for later success in school and future life (Parmaret et al., 2004). It has become conventional for middle-class Americans to view play as critical to young children's development (Lightfoot & Valsiner, 1992). Therefore, Western parents are more likely to regard play as valuable in children's development than are Eastern parents.

Parents' perceptions of child's play affect their behaviors in establishing children's learning environment and quality of play in the home setting, such as how much time parents devote to playing with the child or how they provide props or toys for their children. Haight, Parke, and Black (1997) interviewed Caucasian parents about their beliefs about play, including their preferred activities with their child, the importance of parent-child activities (e.g., pretend play) in child development, and the significance of their own participation in their child's play. They found that parents' beliefs about play were positively associated with their participation in play. Mothers



who valued the developmental significance of pretend play and believed that joining in play was important were more likely to spend more time pretending during parent-child play.

Pan (1994) used a questionnaire to investigate Taiwanese mothers' attitudes toward children's play. Most of these mothers were from middle-class backgrounds. The questionnaire had two parts. In the first part, mothers were asked to rate their perceptions of play's contribution to children's cognitive, mental, physical, or social development. The second part explored how mothers arrange children's play, including how they promote play, the amount of time they arrange for children to play, and their roles in children's play. Results showed that play is no longer viewed as useless. Instead, mothers viewed play as contributing the most to children's cognitive development, followed by social domain, physical domain, and mental domain. Mothers in home settings often provided children with a variety of toys, let children play one to two hours per day, and arranged play situations for children, especially constructive play.

Different from Pan's quantitative studies, Liao (1994) conducted qualitative research to gain a deep understanding of four Taiwanese parents' participation in children's free-play time in a kindergarten classroom and their beliefs about play. The data sources include materials from interviews (group interview, informal interview,

and follow-up interview), field notes, and observations. The results showed two main roles played by the four parents: coplayer and director/instructor. In addition, parents' perceptions of child's play were related to the way they participated in children's free play. Parents who respect children's interests and encourage children to express their inherent characteristics are more likely to join in play with their children in an open-minded way. On the contrary, parents who strongly believe in the positive contributions of play to children's development are more likely to use more commanding sentences and attempt to enrich children's play. In terms of Chinese parents' perceptions of child's play, Sha (1998) found that although most parents from China still put emphasis on the importance of a good structured, academic environment for children, they also valued the contributions of play to children's development.

Play materials or toys facilitate children's play activities (Goldstein, 1994). Rather than examining parents' beliefs about play, Kim (2002) explored Korean mothers' perceptions of and behaviors in selecting toys for their preschool children. The author found that Korean mothers strongly agreed that toys facilitate children's interest in play, toys are educational materials in children's learning, and toys stimulate child development. When purchasing toys for their children, Korean mothers first considered the fun and creativity of the toys, and paid little attention to

learning culture and language. The more toys the parents bought for their children, the longer the parents played with children at home. Parents' valuing of toys influences children's play behaviors, play types, play episodes, and parents' behaviors relating to the purchase of toys. Since toys are linked to children's play, parents who provide diverse play materials for children are more likely to value the importance of play and encourage it.

### *Influences of Parental Perceptions on Children's Development*

A growing number of studies (e.g., Ladd, 1992) emphasized the ways in which parental beliefs and behaviors can foster children's development in different dimensions, such as social competence (Ladd, 1992). Rubin, Mills, and Rose-Krasnor (1989) established links between mothers' beliefs about social development (e.g., when and how social skills are developed by the child) and their preschool children's social problem-solving in the classroom. Mothers who valued social skills had children who were more prosocial, assertive, and successful in their social interactions.

Fogle and Mendez (2006) explored parents' play beliefs, focusing on mothers whose children were enrolled in Head Start centers. A total of 224 African American mothers of children ranging in age from 38 to 67 months completed the Penn Interactive Peer Play Scale (PIPPS) and Parent Play Beliefs Scales, which include two

reliable constructs: Play Support and Academic Focus. Results revealed that maternal rating of Play Support was positively related to ratings of children's interactive peer play. This finding verified the idea that parents' positive attitudes toward play are associated with children's social competence.

In sum, parents from different cultures have diverse perceptions of how children grow and learn. In western countries, especially in the northern United States, people see the child as an independent individual. They respect children, believe that they are capable of doing things, and provide them with the freedom to demonstrate their inherent characteristics as well as natural ability. On the other hand, people from eastern countries, such as China, Japan, and Korea, emphasize the importance of academic achievement. Parents paid significant attention to children's academic work and cognitive development, rather than to "wasted" time spent in playing. These differences in fundamental beliefs lead to different perceptions of child's play.

However, there has been some change in many Asian parents' perceptions of play nowadays. Researchers (e.g., Liao, 1994; Pan, 1994; Sha, 1998) found that play is no longer viewed as useless by Taiwanese and Mandarin Chinese parents. Despite the cultural differences in parents' perceptions of child's play, parents' perceptions of child's play and what is most important to young children's learning influence the ways parents structure and manage their children's learning environment.

Subsequently, children's abilities and developments of different dimensions depend on how their parents support them and the types of learning environments they provide.

### *Summary of Chapter 2*

This chapter was organized into four categories: (1) selected theories of child's play—understanding classic and modern theories of play is the first step in verifying the contributions of play to children's development, (2) play and children's social competence, (3) play and children's creativity, and (4) parents' perceptions of child's play and their influences on parental behaviors and children's playing environment in family contexts—parents perform the most significant roles in influencing children's development in the home setting.

Early learning occurs at home. Parents are the persons who arrange and establish their children's learning environments in the home. Parents' perceptions of the importance of child play influence their behaviors and attitudes toward their child. The more the adults value the importance of play, the more likely they are to provide time, space, and play materials for children or to participate in children's play activity. The more parents regard play as valuable, the more they encourage and facilitate effective play, and the more developmental benefits children may receive. Therefore, the main focus of this study was to identify and gain an understanding of Taiwanese

parents' perceptions of child's play and determine whether their perceptions are related to children's development of social competence and creativity. In the next chapter, the methods used in the study are outlined and described.

## Chapter 3

### *Methodology*

The purpose of the present study was to gain an understanding of Taiwanese parents' perceptions of child's play and examine whether their perceptions are related to children's social competence and creativity. In order to obtain data related to this purpose, a methodology was devised to answer the research question and subquestions. This chapter includes five sections: (1) Research Design, (2) Population and Sample, (3) Instrumentation, (4) Data Collection, (5) Treatment of Data, and (6) Summary of Chapter 3.

### *Research Design*

The purpose of the present study was to gain an understanding of Taiwanese parents' perceptions of child's play. Thus, a survey design that "provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (Creswell, 2003, p. 153) was utilized in this study. There were three reasons to utilize a survey as the preferred method of data collection: (1) it is an economical way to collect data from a large population—the rapid return of data saves time and money, (2) since the participants do not have to spend time meeting with the researcher face-to-face and their answers are anonymous, it is more convenient and comfortable for the participants to answer the questions and

express their perceptions honestly, and (3) the quantitative data gained from the survey are more convenient for the researcher to manage and allow for statistical analysis. Because the data were collected at one point in time, the survey in this study is cross-sectional (Creswell, 2003).

The survey instruments were a parent version and teacher version of questionnaires developed by the researcher of this study, based on related scales and assessment tools created by previous researchers (e.g., Fogle & Mendez, 2006; Kader, 2008; Merrell, 2002c). The parent version of the questionnaire had four major purposes: (1) to collect Taiwanese parents' personal background information; (2) to examine parents' perceptions of child's play; (3) to gain information about their children's development of social competence in home settings, and (4) to gain information about their children's development of creativity in home settings. The teacher version of the questionnaire had two purposes: to gain information about (1) children's development of social competence at school, and (2) children's development of creativity at school.

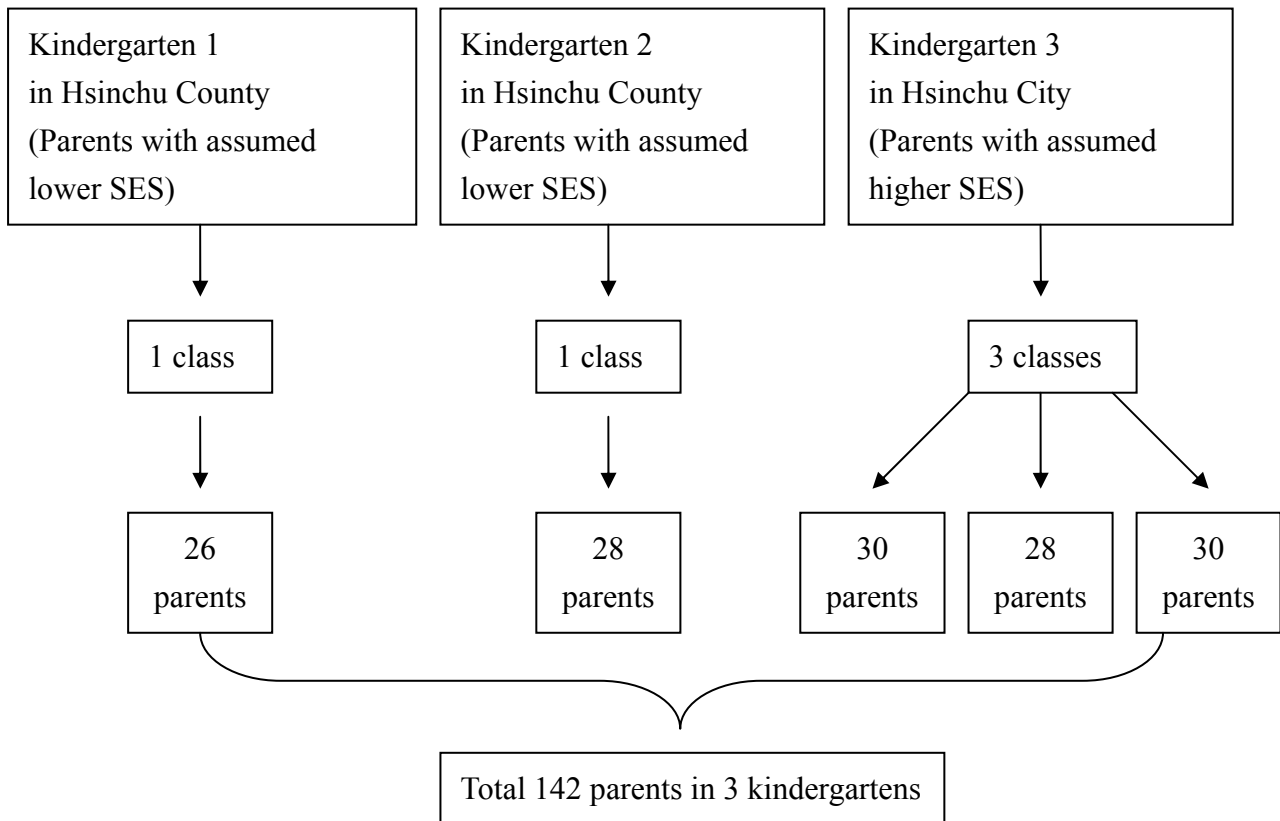
#### *Population and Sample*

The target population for this research was Taiwanese parents with children aged 4 to 7 years old enrolled in kindergarten in Taiwan. In order to potentially identify more variability in parents' background and enhance the generalizability of the



results, three kindergartens in different areas with different backgrounds were identified using criterion-based sampling. According to Patton (2002), “ The logic of criterion sampling is to review and study all cases that meet some predetermined criterion of importance” (p. 238). Of the three kindergartens, two were located in Hsinchu County, where parents generally have lower socioeconomic status; and one was located in Hsinchu City, where parents generally have higher socioeconomic status.

In order to obtain robust statistical results, a minimum number of 60 parents with higher SES and 60 parents with lower SES were expected (Isaac & Michael, 1995, p. 101). There was one class in each of the two kindergartens in Hsinchu County, and three classes in the kindergarten in Hsinchu City. Thus, the sample size in this study was 142 (see Figure 3.1).



*Figure 3.1.* Sample Selection and Size

In order to assess how parents' perceptions of child's play and children's home experiences may influence their behaviors at school, the 10 teachers in the 5 classes were also included in the study. They were asked to evaluate target children's social competence and creativity in school settings by filling out the teacher version of the questionnaires for each of 142 children. In other words, both parents and teachers evaluated each child's social competence and creativity.

### *Instrumentation*

The instruments for this study were the parent version and teacher version of questionnaires developed by the researcher. This section was divided into two phases: (1) instrument content, and (2) translation and content validity.

#### *Phase 1: Instrument Content*

There were two versions of questionnaires—parent version and teacher version. The parent version of the questionnaire included four major parts: (1) background information, (2) parents' perceptions of child's play, (3) evaluation of children's social competence, and (4) evaluation of children's creativity. The teacher version of the questionnaire included two major parts: (1) evaluation of children's social competence, and (2) evaluation of children's creativity. Each part of the questionnaires and the instruments used are described below.

#### *Questionnaire (Parent version) Part I: Parents' Background Information*

The purpose of collecting demographic information was to gain an understanding of parents' background information and for use in conducting statistical analysis for the research questions. This section included eleven questions: parent's gender, parent's age, parent's highest education level, parent's primary occupation, spouse's age, spouse's highest education level, spouse's primary occupation, total monthly household income, gender of the child, age of the child, and parenting style.

*Questionnaire (Parent version) Part II: Parents' Perceptions of Child's Play (PPCP)*

The section on "Parents' Perception of Child's Play (PPCP)" was used to understand whether parents value the importance of child's play and their behaviors related to play. In order to gather the multidimensional conceptualization of play perceptions, different aspects of parental perceptions of child's play and parental behaviors were found in the PPCP. PPCP consisted of 27 items, including developmental contributions toward play, items relating to parents' engagement in play, and parents' encouragement of play. The 27 items were separated into two groups: Positive Perceptions and Behaviors (16 items) and Negative Perceptions and Behaviors (11 items).

Rather than including the midpoint on the Likert-type response scale, PPCP ratings were recoded on a 4-point Likert-type response scale (1= "Strongly Disagree" to 4 = "Strongly Agree"). The purpose of using a 4-point Likert-type response was to minimize respondents' use of the "undecided" response. Eliminating the mid-point may improve the accuracy of the answer and help the researcher to understand respondents' perceptions (Garland, 1991).

*Questionnaire (Parent version) Part III & Questionnaire (Teacher version) Part I:*

*Evaluation of Children's Social Competence (HCSBS & SSBS-2)*

Merrell's (2002a) revised version of the "School Social Behavior Scales (SSBS-2)" was used by teachers or other school personnel to assess children's (K–12) social behaviors in the school setting. A total of 64 items were separated into Scale A and Scale B—32 positive social behaviors (adaptive and prosocial behavioral competencies) in Scale A, and 32 negative social behaviors (problematic behaviors) in Scale B. In Scale A, there were three subscales—Peer Relations (14 items), Self-Management/Compliance (10 items), and Academic Scales (8 items). In Scale B, there were also three subscales, including Hostile/Irritable behaviors (14 items), Antisocial/Aggressive behaviors (10 items), and Defiant/Disruptive behaviors (8 items) (Merrell, 2002b). Ratings were made originally on a 5-point Likert-type response scale based on the frequency with which behaviors occur (1= "Never" to 5="Frequently").

In addition to the teacher version of SSBS-2, Merrell (2002c) also designed "Home and Community Social Behavior Scales (HCSBS)" for parents to use in assessing children's social behaviors in home or community settings, rather than school settings. Basically, HCSBS included the same general rating format, a similar division of subscales (Peer Relations and Self-Management/Compliance for Social

Competence Scale; Defiant/Disruptive and Antisocial/Aggressive for Antisocial Behavior Scale), and items as SSBS-2. Many studies have indicated that both SSBS-2 and HCSBS have great validity and reliability (see Merrell, 2003).

In the current study, the participants were Taiwanese parents and teachers whose definition and perceptions of social competence may differ from those of Americans. In order to take ethnic and cultural differences into consideration, the researcher modified the original English version of SSBS-2 and HCSBS into Chinese versions. The five steps in this process are described below.

*Step 1:* The researcher obtained permission from the original author to modify SSBS-2 and HCSBS.

*Step 2:* The researcher selected items from SSBS-2 and HCSBS that correspond to the definition of social competence in the study. The items selected are displayed separately in Table 3.1 and Table 3.2 on the follow page.

Table 3.1

*Items of HCSBS Included in the Study*

Peer Relations
1. Cooperates with peers
2. Offers help to peers when needed
3. Participates effectively in family or group activities
4. Understands problems and needs of peers
5. Invites peers to participate in activities
6. Is accepting of peers
7. Will give-in or compromise with peers when appropriate
8. Interacts with a wide variety of peers
9. Is good at initiating or joining conversations with peers
10. Is sensitive to the feelings of other
11. Enters appropriately into ongoing activities with peers
12. Has good leadership skills
13. Is invited by peers to join in activities
14. Is looked up to or respected by other students
Self-Management/Compliance
1. Follows family and community rules
2. Controls temper when angry
3. Adjusts to different behavioral expectations across settings
Antisocial/Aggressive
1. Takes things that are not his/hers
2. Gets into fights
3. Teases and makes fun of others
4. Destroys or damages others' property
5. Will not share with others
6. Disregards feelings or needs of others
7. Swears or uses offensive language
8. Is physically aggressive
9. Argues or quarrels with peers
10. Disrupts ongoing activities
Defiant/Disruptive
1. Bothers and annoys other students
2. Has temper outbursts or tantrums

Table 3.2

*Items of SSBS-2 Included in the Study*

Peer Relations
1. Offers help to other students when needed
2. Participates effectively in group discussions and activities
3. Understands problems and needs of other students
4. Invites other students to participate in activities
5. Has good leadership skills
6. Interacts with a wide variety of peers
7. Is good at initiating or joining conversations with peers
8. Is sensitive to feelings of other students
9. Enters appropriately into ongoing activities with peers
10. Is invited by peers to join in activities
11. Is looked up to or respected by other students
Self-Management/Compliance
1. Cooperates with peers
2. Is accepting of other students
3. Will give-in or compromise with peers when appropriate
4. Follows school and classroom rules
5. Behaves appropriately at school
6. Controls temper when angry
7. Adjusts to different behavioral expectations across settings
Hostile/Irritable
1. Teases and makes fun of other students
2. Will not share with other students
3. Has temper outbursts or tantrums
4. Disregards feelings or needs of other students
5. Argues or quarrels with peers
Antisocial/Aggressive
1. Takes things that are not his/hers
2. Gets into fights
3. Swears or uses offensive language
4. Is physically aggressive
Defiant/Disruptive
1. Bothers and annoys other students
2. Disrupts ongoing activities



Step 3: The researcher translated all selected items into Chinese. One doctoral student who was fluent in both Chinese and English was asked to verify the accuracy of the translation.

*Step 4:* The researcher identified four Taiwanese parents (two fluent in English and two with limited English ability) and two Taiwanese kindergarten teachers (one fluent in English and the other with limited English ability) to verify the items regarded as providing information on Taiwanese children's social competence at home and in school settings. After reviewing these Taiwanese parents' and teachers' opinions, some items were excluded from the original version (see Table 3.3).

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Table 3.3

*Items of Social Competence Excluded from the Original Version*

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HCSBS	1. Has good leadership skills
	2. Is looked up to or respected by other students
	3. Disrupts ongoing activities
SSBS-2	1. Has good leadership skills
	2. Is looked up to or respected by others
	3. Behaves appropriately at school
	4. Disrupts ongoing activities

---

*Step 5:* After excluding those items, two Taiwanese faculty members in early childhood education programs, fluent in both Chinese and English, were asked to assess the content validity of the two instruments.

Finally, a Chinese version of the School Social Behavior Scales (SSBS-2) as well as the Home and Community Social Behavior Scale (HCSBS) were developed for the study. There were a total 26 items in HCSBS and 25 items in SSBS-2. A 4-point Likert-type response scale based on the frequency of behaviors (1= “Never” to 4 =” Frequently”) was used.

*Questionnaire (Parent version) Part IV & Questionnaire (Teacher version) Part*

*II: Evaluation of Children’s Creativity (CBS)*

According to Kader’s study (2008), of the 265 creative behaviors young children exhibit, twelve creative behaviors have been most recognized (100% recognition) by experts and teachers. Categories include imagination; using things differently; thinking in different ways; problem solving; questioning attitudes; curiosity; and creating new things. Because these creative behaviors have been identified by diverse groups of experts and teachers, and these creative behaviors coincide with the definitions and characteristics of creativity in the literature review, the researcher developed a creative behavior scale based on the 12 items after permission was given by the original author.

After considering the wording and appropriateness, two items were excluded from the original 12 items. Thus, the parent and teacher versions of the “Creative Behavior Scale (CBS)” were the same and consisted of 10 items (see Table 3.4). Ratings were

provided according to a 4-point response scale based on the frequency of the occurrence of the behaviors (1= “Never” to 4 = “Frequently”).

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Table 3.4

*Items in Creative Behavior Scale*

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1. Likes to devise new games
  2. Exhibit uncommon use of everyday items
  3. Interest in problem solving
  4. Loves experiencing adventure
  5. Devises new rules for common games
  6. Likes to ask why, how, or what if questions
  7. Shows unusual curiosity
  8. Likes to change a known story
  9. Has rich imagination
  10. Produces different designs or products
- 

*Phase 2: Translation and Content Validity*

*Step 1: Forward Translation*

First, the researcher translated all instruments (including PPCP, HCSBS, SSBS-2, and CBS) into Chinese. A Taiwanese graduate student at Penn State who was fluent in both English and Chinese was asked to verify the accuracy of translation. Table 3.5 shows the comparison between the original translation (researcher’s translation) of each instrument and the revised translation. Discrepancies between the researcher’s and the graduate student’s translations were discussed again. Points of agreement were selected for use. Basically, the differences between the original translation and revised translation had to do with Chinese sentence structure and wording, which were easier for the Taiwanese to read and understand. In this step, both the English and Chinese versions of the cover letter and informed consent form were also

reviewed by the doctoral student to verify the accuracy of the translation.

	Researcher's Original Translation	Revised Translation
P P C P	<p>1. 我寧可看我的孩子<b>從事課業上的學習</b> (例如: 數字與認字), 而不是遊戲。 I would rather see my child engage in academic learning (e.g., numbers and letters) than playing.</p> <p>2. 我不常和我的孩子遊戲, 因為我認為那<b>不是必須的</b>。 I do not play with my child very often because I think it is not necessary.</p> <p>3. 與其和我的孩子遊戲, 我比較想教導他/她課業上的<b>技能</b>(例如: 數字與認字)。 I would rather teach my child academic skills (e.g., numbers and letters) than playing with him/her.</p>	<p>1.我寧可看我的孩子<b>學習課業</b> (例如: 數字與認字), 而不是遊戲。 I would rather see my child engage in academic learning (e.g., numbers and letters) than playing.</p> <p>2.我不常和我的孩子遊戲, 因為我認為那是<b>不必要的</b>。 I do not play with my child very often because I think it is not necessary.</p> <p>3.與其和我的孩子遊戲, 我比較想教導他/她課業上的<b>知識技能</b>(例如: 數字與認字)。 I would rather teach my child academic skills (e.g., numbers and letters) than playing with him/her.</p>
C B S	<p>1. 喜愛<b>經歷</b>冒險 Loves experiencing adventures.</p> <p>2. 對於<b>一般</b>的遊戲能發明出新規則 Devises new rules for common games.</p> <p>3. 表現出<b>獨特</b>的好奇心 Shows unusual curiosity.</p> <p>4. 喜歡改編一個已經知道的故事 Likes to change a known story.</p>	<p>1. 喜愛冒險 Loves experiencing adventures.</p> <p>2. 對於<b>熟悉</b>的遊戲能發明出新規則 Devises new rules for common games.</p> <p>3. 表現出好奇心 Shows unusual curiosity.</p> <p>4. 喜歡改編已經知道的故事 Likes to change a known story.</p>

### *Step 2: Expert Panel*

After the researcher translated the four instruments (PPCP、SSBS-2、HCSBS、CBS) used in the study, a panel of experts was selected to ensure the content validity of each instrument (Trochim, 2005, p. 50–51). The expert panel reviewed the structure and content of the instruments to ensure the appropriateness, comprehensiveness, and accuracy of each measurement. The four panelists included:

- Dr. Thomas Yawkey, Professor of Curriculum and Instruction, The Pennsylvania State University, United States
- Dr. Wei-Mei Hue, Associate Professor of Early Childhood Education, National Taichung University, Taiwan
- Dr. Gina Pey Duo, Assistant Professor of Early Childhood Education, Cheng-Shiu University, Taiwan
- Dr. Min-Ju Tsai, Assistant Professor of Child Development and Family Studies, Tzu Chi University, Taiwan

Table 3.6 shows a comparison between the original items in PPCP and the revised items suggested by the expert panel.

	Original Items	Corrected Items
P P C P	1. Through play, my child is free to use imaginations and create fantasy. 2. I teach my child different ways of playing and create new games when we play together. 3. I would rather see my child engage in academic learning (e.g., numbers and letters) than playing. 4. I do not buy many toys for my child because I do not think playing is important for young children.	1. Through play, my child has more plentiful imaginations. 2. I encourage my child try different ways of playing when we play together. 3. I think my child engage in academic learning (e.g., numbers and letters) is important than playing. 4. I do not buy many toys for my child because I think that playing is only a waste of time and it's meaningless. (Add) I encourage my child create new games when we play together. (Add) Playing stimulates my child's creative thinking.

After the translation of instruments and discussion with the expert panel, the researcher finalized the parent and teacher versions of the questionnaire. In the parent version of the questionnaire, there were four parts: (1) background information, (2) parents' perceptions of child's play (PPCP), (3) evaluation of children's social competence (HCSBS), and (4) evaluation of children's creativity (CBS). The teacher version of the questionnaire included two major parts: (1) evaluation of children's social competence (SSBS-2), and (2) evaluation of children's creativity (CBS). One Taiwanese parent and one kindergarten teacher in Taiwan were selected to ensure that they understood the wording of the questionnaire. In order to make the sentences easier to read and understand, some of the wordings was changed and some examples were added after discussion. Table 3.7 shows a comparison between the original and the revised wording of the questionnaires. Then, the final versions of the questionnaires were produced.

Table 3.7

*Comparison of Wording in Questionnaires*

	Original Wording	Revised Wording
P P C P	1.我不常和我的孩子遊戲，因為我認為那是不必要的。 I do not play with my child very often because I think it is not necessary.	1.我不常和我的孩子遊戲，因為我認為那是不重要的。 I do not play with my child very often because I think it is not necessary.
	2.當我和我的孩子一起遊戲時，我教導他/她社交技能(例如：使用的語言、動作、和行爲；跟隨指示；或分享玩具)。 I teach my child social skills when we play together (e.g., use of language, actions, and behaviors; have positive affects; follow directions; share toys).	2.當我和我的孩子一起遊戲時，我會教導他社交技能(例如：要有禮貌、分享玩具、遵守遊戲規則...) I teach my child social skills when we play together (e.g., be polite, share toys, follow rules...).
	3.遊戲能增進我孩子思考能力的發展(例如：抽象思考和邏輯思考) Play can improve my child's development of thinking abilities (e.g., abstract thinking and logical thinking).	3.遊戲能夠幫助孩子發展思考能力。 Play can improve my child's development of thinking abilities.
	4.我不在乎我孩子的遊戲方式，所以我不會過多干涉。 I do not care how my child plays so that I do not intervene too much.	4.我不常留意我的孩子在做什麼遊戲。 I do not care what my child plays.
	5.在家中提供一個豐富的遊戲環境對於我的孩子而言是重要的。 Providing a rich playing environment at home is important for my child.	5.提供孩子一個豐富的遊戲環境是重要的。 Providing a rich playing environment is important.
	6.我重視遊戲對孩子的重要性，所以我提供不同種類的玩具給我的孩子玩。 I value the importance of child's play so that I provide different kinds of toys for my child to play with.	6.我覺得遊戲對孩子的成長發展很重要，所以我提供不同種類的玩具給我的孩子玩。 I value the importance of child's play so that I provide different kinds of toys for my child to play with.
H C S B S	1.同輩 Peers 2.有效的參與家庭活動或遊戲 Participates effectively in family or group activities 3.出現肢體上的侵犯 Is physically aggressive	1.朋友或玩伴 Friends or playmates 2.積極的參與家庭活動或遊戲 Participates effectively in family or group activities 3.出現肢體上的侵犯 (例如:打人、推人) Is physically aggressive (e.g., push or hit)

	<p>4.毀壞或損壞其它人的所有物 Destroys or damages others' property</p> <p>5.遵守家庭或社會的規範 Follows family and community rules</p> <p>6.在不同的情境中，能調整行爲以符合不同的期望 Adjusts to different behavioral expectations across settings</p> <p>7.取笑與嘲笑其它人 Teases and makes fun of others</p> <p>8.對於其他人的感覺很敏銳 Is sensitive to the feelings of others</p>	<p>4.毀損別人的東西 Destroys or damages others' property</p> <p>5.遵守家庭或團體的規範 Follows family and community rules</p> <p>6.在不同的情境中，能調整行爲以符合師長的期望 Adjusts to different behavioral expectations across settings</p> <p>7.嘲笑別人 Teases and makes fun of others</p> <p>8.對於別人的感覺很敏銳(例如能感受別人的感覺、能夠察言觀色) Is sensitive to the feelings of others (e.g., understand other's feelings or facial expressions)</p>
S S B S   2	<p>1 同輩 Peers</p> <p>2.出現肢體上的侵犯 Is physically aggressive</p> <p>3.對其它幼兒的感覺很敏銳 Is sensitive to feelings of other children</p> <p>4.在不同的情境中，能調整行爲以符合不同的期望 Adjusts to different behavioral expectations across settings</p>	<p>1.同學 Classmates</p> <p>2.出現肢體上的侵犯(例如:打人、推人) Is physically aggressive (e.g., push or hit)</p> <p>3.對其它幼兒的感覺很敏銳(例如能感受別人的感覺、能夠察言觀色) Is sensitive to feelings of other children (e.g., understand other's feelings or facial expressions)</p> <p>4.在不同的情境中，能調整行爲以符合師長的期望 Adjusts to different behavioral expectations across settings</p>
C B S	<p>1. 有興趣於解決問題 Interests in problem solving.</p> <p>2. 對於熟悉的遊戲能發明出新規則 Devises new rules for common games.</p>	<p>1. 喜歡想辦法解決問題 Interests in problem solving.</p> <p>2. 對於熟悉的遊戲能創造新的玩法或制定出新的遊戲規則 Devises new rules for common games.</p>



### *Data Collection*

To fit within the school year schedule in Taiwan, data were collected in the first several weeks of the spring semester (late February) 2009. Since it was the second half of the school year, teachers were not too busy, so they had adequate time to develop a basic understanding of children's behaviors in school. This was an appropriate time to collect data from both parents and teachers.

The researcher called the target kindergarten personnel and asked permission to conduct the survey. After obtaining permission, the researcher brought sufficient numbers of packets (both parent and teacher versions) to each kindergarten. There were ID numbers on each packet and questionnaire. The parent and teacher packets included: (1) a cover letter describing the purpose of this study, approximate finish time and return procedure, (2) an informed consent form that provided information on participants' rights and privacy (another consent form for parents which indicated that they would allow the teacher to fill out a questionnaire about their children), and (3) questionnaires. Teachers delivered the packet to each parent when parents came to pick up children after school. Parents were asked to put the questionnaire as well as the consent form into the envelope provided, seal it, and return it to the teachers within seven days. In order to ensure that each child was evaluated by both parents and teachers, teachers evaluated the children after the parents returned their packet. Whenever the parents returned the packet, teachers wrote the Identity Number (ID) of

that parent on the front cover of the teacher version of the questionnaire and evaluated the child's social competence and creativity at school.

The researcher reminded the teachers to ask parents to return their questionnaires within a few weeks. The researcher continued to contact the kindergarten about any additional questionnaires turned in before the researcher left Taiwan. Thus, the process of collecting data took about four weeks from start to finish.

#### *Treatment of Data*

The Statistical Packages for the Social Sciences (SPSS) (Nie, Bent, & Hull, 1970; Pallant, 2001) was used to analyze the data. First, the researcher coded the raw data according to the sequence of the ID number in each form of the questionnaire and entered the data into SPSS. Second, descriptive statistics, one-way Analysis of Variance (ANOVA), and Pearson product-moment coefficient (PPMr) were used to answer different research questions (see Table 3.8). The techniques used in the data analysis corresponded to each research question is addressed below:

- (a) For Research Question 1: Descriptive statistics (e.g., mean, standard deviations, percentage and frequencies) were used to compute the total scores of all items on the questionnaire for PPCP (Research Question 1) in order to describe Taiwanese parents' perceptions of child's play.

- (b) For Research Question 2: A One-Way ANOVA was used to determine whether a statistical difference was present in the dependent variable when there were two or more levels of an independent variable. An additional step known as a Post-Hoc Test was used to identify how the three means differed from each other.
- (c) For Research Question 3: A One-Way ANOVA was used to examine differences in parents' perceptions of child's play based on children's gender and to determine if those differences were statistically significant.
- (d) For Research Question 4: A Pearson product-moment coefficient (PPMr) was used to identify any relationship between parents' perceptions of child's play and children's social competence and creativity.

Research Questions	Variables	Scale of Measurement	Methods of Analysis
1. What are Taiwanese parents' perceptions of child's play? To what extent, do Taiwanese parents value the contribution of play to children's development?	Levels of parents' perceptions of child's play	Interval (Kerlinger & Lee, 2000, p. 712)	Description: - frequency - percentage - mean - standard deviation
2. Is there a difference in parents' perceptions of child's play when examined by parents': (a) Gender (b) Age (c) Highest education level (d) Primary occupation (e) Total monthly household income (f) Parenting style	<u>Independent variables:</u> - Parents' gender - Parents' age - Total monthly household income - Highest education level - Primary occupation - Parenting style <u>Dependent variable:</u> Levels of parents' perceptions of child's play.	Nominal Nominal Nominal Nominal Nominal Nominal Interval (Kerlinger & Lee, 2000, p. 712)	One-way ANOVA
3. Is there a difference in parents' perceptions of child's play between children's gender?	<u>Independent variables:</u> - Children's gender <u>Dependent variable:</u> Levels of parents' perceptions of child's play.	Nominal Interval (Kerlinger & Lee, 2000, p. 712)	One-way ANOVA
4. Is there a relationship between Taiwanese parents' perception of child's play and children's social competence and creativity?	<u>Independent variable:</u> -Levels of parents' perceptions of child's play <u>Dependent variable1:</u> - Children's social competence <u>Dependent variable2:</u> - Children's creativity	Interval (Kerlinger & Lee, 2000, p. 712) Interval (Kerlinger & Lee, 2000, p. 712) Interval (Kerlinger & Lee, 2000, p. 712)	Pearson Correlation

### *Summary of Chapter 3*

The purpose of the study was to gain an understanding of Taiwanese parents' perceptions of child's play. Three kindergartens were recruited for the study: two were located in Hsinchu County, where parents generally had lower socioeconomic status, and one was located in Hsinchu City, where parents generally had higher socioeconomic status. A total sample of 142 parents with kindergarteners aged 4–7 and 10 kindergarten teachers participated in this study.

A survey design with a parent version and a teacher version of the questionnaires was utilized. Parents were asked to provide their personal background information, parents' perceptions of child's play, and evaluation of their children's social competence as well as creativity. In teacher version of the questionnaire, teachers were asked to evaluate the child's social competence and creativity at school. Ratings were recoded on a 4-point Likert-type response scale.

Data were collected in the first several weeks of the spring semester (late February) 2009. Teachers delivered the questionnaires to each parent and filled in the teacher version of the questionnaire after the parents returned their packet.

The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. Descriptive statistics, one-way Analysis of Variance (ANOVA), and Pearson product-moment coefficient (PPMr) were used to answer different research questions.

## Chapter 4

### *Results*

The purpose of this study was to understand Taiwanese parents' perceptions of child's play and examine how parents' perceptions of child's play relate to their children's social competence and creativity both at home and at school. In this chapter, research findings are summarized in the following sections: (1) Profile of the Participants, (2) Reliability, (3) Analysis of Parents' Perceptions of Child's Play, (4) Analysis of the Differences in Parents' Perceptions of Child's Play When Examined by Parents' Background (e.g., gender, age, monthly household income, highest education level, occupation), (5) Analysis of the Differences between Child's Gender and Parents' Perceptions of Child's Play, and (6) Analysis of the Relationships between Parents' Perceptions of Child's Play and Children's Development of Social Competence and Creativity. The research questions were answered using descriptive statistics, One-Way ANOVA, and Pearson Correlation.

### *Profile of Participants*

The 142 Taiwanese parents in the present study were purposefully selected from three kindergartens. Purposefully selected means for parental selection were based on their income and educational level—some representations were from a higher socioeconomic level while others were from a lower socioeconomic level. Of the

three kindergartens, two were located in Hsinchu County, where parents were generally assumed to have lower socioeconomic status, and one was located in Hsinchu City, where parents were generally assumed to have higher socioeconomic status. Of the 142 parent participants, 112 completed and returned questionnaires. The return rate was 78.87%, which can be regarded as an appropriate response (Roberts, 2004).

In the parent version questionnaire, nine questions related to parents' background information, including: (1) parent's gender, (2) parent's age, (3) parent's highest education level, (4) parent's occupation, (5) spouse's age, (6) spouse's highest education level, (7) spouse's primary occupation, (8) total monthly household income, and (9) parenting style. Descriptive statistics (e.g., mean, standard deviations, percentage and frequencies) were used to create a profile of the participants. However, percentages for parent's age, parent's primary occupation, spouse's age, and spouse's primary occupation were less than 5% of total participants. Therefore, these levels were combined through recoding. In addition, "parenting style" was excluded from the following analysis because 92.8% parents' answers were centralized under "Authoritative", and the percentage for other parenting styles was lower than 5% of total participants (4.5% for "Authoritarian" and 2.7% for "Permissive"). Table 4.1 provides a profile of study participants.

In this study, 31.3% of parents were male and 68.8% were female. Over half (71.2%) of parents were ages 20–39, while 28.8% were ages 40 or above. Most of their spouses' ages also fell into the 20–39 range (61.8%).

In terms of parents' highest education level, 28.6% of parents had completed junior high or under/high school or vocational high school; followed by university (27.7%); junior college (23.2%); and graduate school (20.5%). More than half (61.2%) of their spouses had completed university and graduate school; 38.7% had completed junior college or less.

With regard to parent's occupation, 36% were housewives; followed by high-technology industry (20.7%); manufacturing (13.5%); business/self-employment (12.6%); teacher (9.0%); and government employee/other (8.1%). For spouses, 49.1% were employed by a high-technology industry; followed by housewives (15.2%); teacher/government employee/other (12.5%); manufacturing (11.6%) and business/agriculture/self-employment (11.6%).

In looking at total monthly household income, 31.8% had income of more than NT 100,000 (one US dollar in 2009 equaled 32.81 NT dollars); followed by NT 30,000–55,000 (21.8%); NT 55,000–75,000 (20.9%); NT 75,000–100,000 (15.5%); and less than NT 30,000 (10.0%).

In sum, the parent who filled out the questionnaire provided information on their



and their spouses' gender, age, education level, primary occupation, and monthly household income; that information is presented in this section. In the following sections, the results of the data analysis are addressed, according to each research question.

Table 4.1

*Profile of Participants*

Variables	n	Valid Percents
Parent's Gender		
Male	35	31.3
Female	77	68.8
Total	112	100.0
Parent's Age		
20-39	79	71.2
40 or above	32	28.8
Total	111	100.0
Parent's Highest Education Level		
Junior high or under + High school or vocational high school	32	28.6
Junior college	26	23.2
University	31	27.7
Graduate school	23	20.5
Total	112	100.0
Parent's Primary Occupation		
Teacher	10	9.0
Government Employment+ Other	9	8.1
High technology industry	23	20.7
Manufacturing	15	13.5
Business + self-employment	14	12.6
Housewives	40	36.0
Total	111	100.0

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Spouse's age		
20-39	68	61.8
40 or above	42	38.2
Total	110	100.0
Spouse's Education Level		
Junior high or under	11	9.9
High school or vocational high school	18	16.2
Junior college	14	12.6
University	32	28.8
Graduate school	36	32.4
Total	111	100.0
Spouse's Primary Occupation		
Teacher + Government Employment + Other	14	12.5
High technology industry	55	49.1
Manufacturing	13	11.6
Business + agriculture + self-employment	13	11.6
Housewives	17	15.2
Total	112	100.0
Total Monthly Household Income		
NT 30,000 or under	11	10.0
NT 30,000-55,000	24	21.8
NT 55,000-75,000	23	20.9
NT 75,000-100,000	17	15.5
NT 100,000 or above	35	31.8
Total	110	100.0

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### *Reliability*

According to Cohen, Manion, and Morrison (2007), “reliability in quantitative research is essentially a synonym for dependability, consistency and replicability over time, over instruments and over groups of respondents” (p. 146). Cronbach alpha was used to determine the reliability of the summed scores for the parent version and

teacher version of the questionnaires. The reliability value for the Parents' Perceptions of Child's Play Scale (PPCP) was .939; for the HCSBS and SSBS-2 scale was .883 and .937; and for parents' rating of children's creative behaviors (CBS) and teachers' rating of children's creative behaviors (CBS) was .887 and .947. The overall reliability coefficients on the parent version of the questionnaire (including PPCP, HCSBS, and CBS) and the teacher version of questionnaire (including SSBS-2 and CBS) was .949 and .920 (see Table 4.2). According to Nunally (1978), a Cronbach alpha of 0.70 or higher is regarded as acceptable reliability. Thus, the scores for the overall assessment scales were highly reliable in this study.

	n	Number of Items	Cronbach Alpha
PPCP	112	27	.939
HCSBS	112	26	.883
SSBS-2	112	25	.937
CBS (Parent)	112	10	.887
CBS (Teacher)	112	10	.947
Parent Version of Questionnaire	112	63	.949
Teacher Version of Questionnaire	112	35	.920

### *Parents' Perceptions of Child's Play*

Results from the data analysis for research question one are shown in this section.

Additional findings on academic learning are also provided.

#### *Research Question One*

The first research question was: "What are Taiwanese parents' perceptions of child's play? To what extent do Taiwanese parents value the contribution of play to children's development?" The questionnaire used to assess parents' perceptions of child's play included 27 items, separated into two groups: positive perceptions/behaviors and negative perceptions/behaviors. These items were related to parents' engagement in play, encouragement of play, and developmental contributions toward play. In order to examine parents' perceptions of child's play, a 4-point Likert-type response (1= "Strongly Disagree" to 4 = "Strongly Agree") was applied to each item.

Table 4.3 shows the mean and standard deviation for parents' perceptions of child's play. A higher mean score indicated more positive parental perceptions and behaviors. In looking at the total scores for parents' perceptions of child's play, the mean was 3.28 (SD=.36). In separating the scale into positive perceptions/behaviors and negative perceptions/behaviors, the mean was 3.37 (SD = .37) for positive perceptions/behaviors and 1.84 (SD = .40) for negative perceptions/behaviors.

Table 4.3  
*Mean and Standard Deviation for Parents' Perceptions/Behaviors of Child's Play*

Subscale	Mean	Standard Deviation
Total Score	3.28	.36
Positive Perceptions/Behaviors	3.37	.37
Negative Perceptions/Behaviors	1.84	.40

In addition, to see the distribution for parents' agreement about the contribution of child's play, the mean values for PPCP were grouped into three agreement groups by the researcher. The three agreement levels were operationally defined as: (a) 1.00–2.00 = low agreement; (b) 2.01–3.00 = moderate agreement; and (c) 3.01–4.00 = high agreement. Table 4.4 shows the frequency and percentage for parents' level of agreement on the importance of child's play.

Table 4.4  
*Frequency and Percentage for Parents' Agreement on the Importance of Child's Play*

Agreement Level	Frequency	Percentage
Low Agreement	0	0
Moderate Agreement	30	26.8
High Agreement	82	73.2
Total	112	100.0

In this study, parents' agreement about the contribution of child's play to children's development fell into two categories: moderate agreement (26.8%) and high agreement (73.2%). Generally speaking, the results revealed that Taiwanese parents do value child's play in children's development, and exhibited positive behaviors in relation to play with their children.

#### *Additional Findings on Academic Learning*

Although most parents valued play in children's development, when answering the two questions related to children's academic learning, some parents indicated a preference for children's academic learning rather than play. Figure 4.1 and 4.2 shows percentages for parents' level of agreement on academic learning. For PPCP Item13, 33.9% ( $n = 38$ ) of parents agree/strongly agree that their child's engagement in academic learning is more important than playing. For PPCP Item18, 29.5% ( $n = 33$ ) of parents agree/strongly agree that they would rather teach their children academic skills (e.g., numbers and letters) than play with them.

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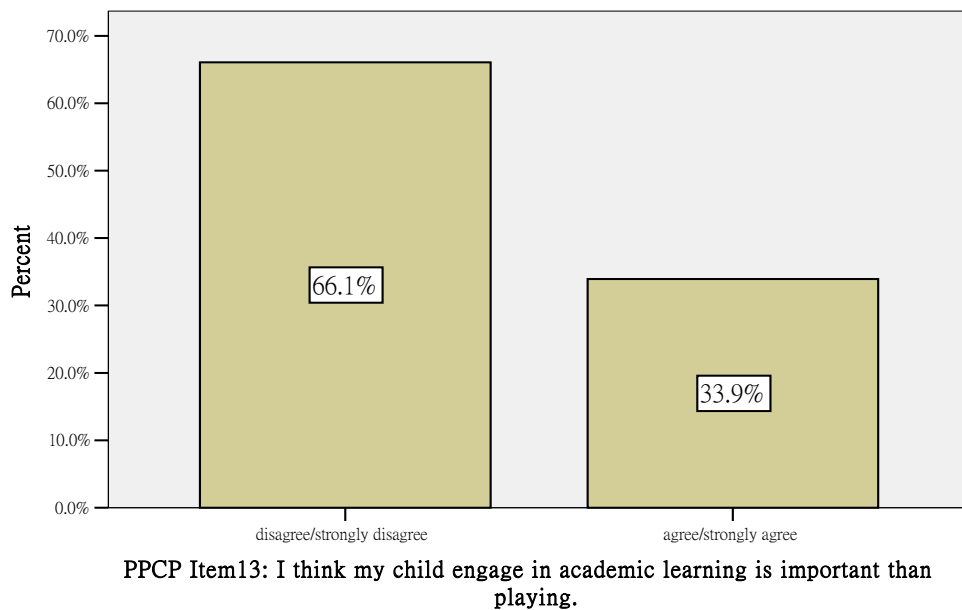


Figure 4.1. Percentage of Parents' Level of Agreement on PPCP Item13

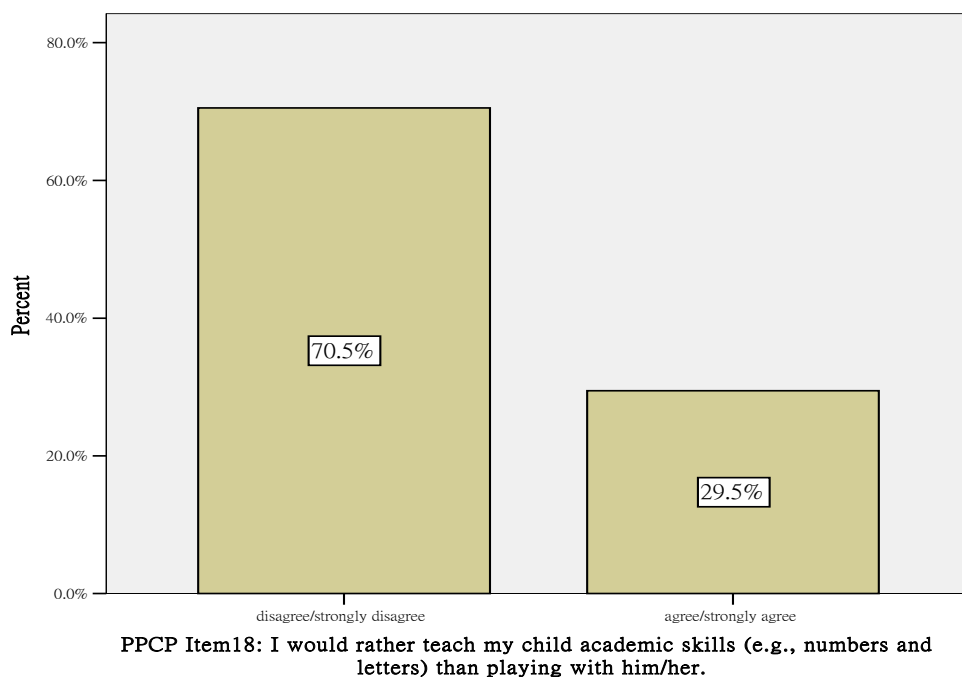


Figure 4.2. Percentage of Parents' Level of Agreement on PPCP Item18

In addition, in comparing the mean for each item relating to parents' negative perceptions of child's play, the range for most items was from 1.51 to 1.97. However, item 13 and item 18 had higher means: Mean = 2.25 for Item13 and Mean = 2.21 for Item18 (see Table 4.5). A higher mean score indicated more negative perceptions of play by parents. Results indicated that some parents still cared about children's academic learning and paid more attention to academic learning than playing.

Table 4.5  
*Mean and Standard Deviation for Each Item on Negative Perceptions of Child's Play*

Negative Items	Mean	Standard Deviation
Item3: Play does not help my child's ability to solve problems, (e.g., solve conflicts with peers, solve problems)	1.8	.655
Item5: I think play is just for fun, and it doesn't contribute too much to my child's learning and development.	1.67	.509
Item6: I do not buy many toys for my child because I think that playing is only a waste of time and it's meaningless.	1.82	.573
Item9: I think play is not important for young children.	1.51	.600
Item10: I do not like my child spent too much time playing or playing with other children.	1.88	.686
Item13: I think my child engage in academic learning (e.g., numbers and letters) is important than playing.	2.25	.717
Item14: I do not play with my child very often because I think it is not necessary.	1.77	.553
Item17: Play does not help my child's development of creativity.	1.63	.573
Item18: I would rather teach my child academic skills (e.g., numbers and letters) than playing with him/her.	2.21	.716
Item19: I do not care what my child plays.	1.97	.528
Item22: Play does not improve my child's social skills.	1.69	.554



*Analysis of Differences in Parents' Perceptions of Child's Play When Examined by  
Parents' Background*

The second research question was: "Is there a difference in parents' perceptions of child's play when examined by parents':

- (a) Gender
- (b) Age
- (c) Highest education level
- (d) Primary occupation
- (e) Total monthly household income
- (f) Parenting style"

A One-way ANOVA was used to determine whether a statistical difference was present in the dependent variable when there were two or more levels of an independent variable. Parents' personal background (gender, age, highest education level, primary occupation, and total household income) was treated as separate independent variables. Total mean scores for parents' perceptions of child's play were treated as the dependent variable. If the independent variable had three or more levels and there was a significance difference between the group means, an additional step called a Post-Hoc Test was used to identify how the means differed from each other significantly at the .05 level.

### *Parent's Gender*

In Table 4.6, the One-way ANOVA showed a significant difference in the mean for PPCP when examined by parent's gender ( $F= 4.46, p < .05$ ). Female parents (Mean = 3.33, SD = .35) had significantly higher means on PPCP than male parents (Mean = 3.18, SD = .35).

Table 4.6

*One-Way ANOVA Summary Results for Differences in Parent's Perceptions of Child's Play Examined by Parent's Gender*

Parent's Gender	n	Mean	Standard Deviation	Range		F	p	Partial Eta Squared
				Low	High			
Male	35	3.18	.35	2.44	3.96	4.46	.037	.039
Female	77	3.33	.35	2.22	3.96			
Total	112	3.28	.36	2.22	3.96			

### *Parent's Age*

Parent's age was categorized into two groups. In Table 4.7, the One-way ANOVA showed no significant difference in the mean for PPCP when examined by parent's age ( $F= .363, p > .05$ ).

Table 4.7

*One-Way ANOVA Summary Results for Differences in Parent's Perceptions of Child's Play Examined by Parent's Age*

Parent's Age	n	Mean	Standard Deviation	Range		F	p	Partial Eta Squared
				Low	High			
20-39	79	3.27	.36	2.22	3.96	.363	.548	.003
40 or above	32	3.32	.36	2.89	3.96			
Total	111	3.29	.36	2.22	3.96			

*Parent's Highest Education Level*

In Table 4.8, the One-way ANOVA showed a significant difference in the mean for PPCP when examined by parent's highest education level ( $F= 5.13$ ,  $p < .05$ ). In Table 4.9, the post-hoc test results revealed that parents with a graduate school-level education had significantly higher means (Mean = 3.38, SD = .36) on PPCP than parents with a high school or vocational high school/junior high or less level (Mean = 3.09, SD = .31). In addition, parents with a university-level education also had a significantly higher mean (Mean = 3.37, SD = .34) on PPCP than parents with a high school or vocational high school/junior high or less level (Mean = 3.09, SD = .31). There was no significance difference among other education levels.

Table 4.8

*One-Way ANOVA Summary Results for Differences in Parent's Perceptions of Child's Play Examined by Parent's Highest Education Level*

Education Level	n	Mean	Standard Deviation	Range		F	p	Partial Eta Squared
				Low	High			
Junior high or under/ High school or vocational high school	32	3.09	.31	2.22	3.67	5.13	.002	.125
Junior College	26	3.33	.35	2.70	3.89			
University	31	3.37	.34	2.85	3.96			
Graduate School	23	3.38	.36	2.78	3.96			
Total	112	3.28	.36	2.22	3.96			

Table 4.9  
*One-Way ANOVA with Post-hoc Tests for the Difference Among Education Level on Parents' Perceptions of Child's Play*

Education Level		Sig.
Junior high or under/ High school or vocational high school	Junior college	.068
	University	.013
	Graduate school	.020
Junior college	University	.972
	Graduate school	.957
University	Graduate school	1.000

*Parent's Primary Occupation*

Some groups for parent's primary occupation were combined. In Table 4.10, the One-way ANOVA showed no significant difference in the mean for PPCP when examined by parent's primary occupation ( $F = .170, p > .05$ ).

Table 4.10  
*One-Way ANOVA Summary Results for Differences in Parent's Perceptions of Child's Play Examined by Parent's Primary Occupation*

Primary Occupation	n	Mean	Standard Deviation	Range		F	p	Partial Eta Squared
				Low	High			
Teacher	10	3.33	.36	2.78	3.81	.170	.973	.008
High technology industry	23	3.30	.35	2.85	3.96			
Manufacturing	15	3.25	.26	2.85	3.70			
Business/ Self-employment	14	3.22	.41	2.70	3.96			
Housewives	40	3.29	.36	2.22	3.96			
Government employee/Other	9	3.25	.43	2.44	3.81			
Total	111	3.28	.35	2.22	3.96			

*Total Monthly Household Income*

In Table 4.11, the One-way ANOVA showed a significant difference in the mean for PPCP when examined by total monthly household income ( $F= 4.326, p < .05$ ). In Table 4.12 on the following page, the post-hoc test results revealed that parents with a total monthly household income of more than NT100,000 had higher mean scores on PPCP (Mean = 3.42, SD = .37) than parents with income of less than NT30,000 (Mean = 3.00, SD = .46). There was no significant difference among other total monthly household income groups.

Table 4.11

*One-Way ANOVA Summary Results for Differences in Parent's Perceptions of Child's Play Examined by Total Monthly Household Income*

Income Level	n	Mean	Standard Deviation	Range		F	p	Partial Eta Squared
				Low	High			
Less than NT 30,000	11	3.00	.46	2.22	3.89	4.326	.003	.141
NT30,000-55,000	24	3.19	.28	2.85	3.67			
NT55,000-75,000	23	3.25	.29	2.89	3.81			
NT75,000-100,000	17	3.38	.28	2.96	3.85			
More than NT100,000	35	3.42	.37	2.78	3.96			
Total	110	3.29	.35	2.22	3.96			

Table 4.12

*One-Way ANOVA with Post-hoc Tests for Differences in Total Monthly Household Income and Parents' Perceptions of Child's Play*

Income Level		Sig.
Less than NT30,000	NT30,000-55,000	.678
	NT55,000-75,000	.397
	NT75,000-100,000	.078
	More than NT100,000	.014
NT30,000–55,000	NT55,000-75,000	.981
	NT75,000-100,000	.496
	More than NT100,000	.151
NT55,000–75,000	NT75,000-100,000	.820
	More than NT100,000	.473
NT75,000–100,000	More than NT100,000	.998

In sum, the results for the One-way ANOVA indicated a difference between parents' perceptions of child's play and their background information. First, there was a significant difference in the means for PPCP when examined by parent's gender: females had significantly higher means than males. Second, there was a significant difference in the means for PPCP when examined by parent's highest education level: parents with a graduate school and university-level education had significantly higher means on PPCP than parents who had a high school or vocational high school/junior high or less education. Finally, there was a significant difference in the means for PPCP when examined by total monthly household income: parents with total monthly household income of more than NT100,000 had greater means on PPCP than parents with income of less than NT30,000.

## *Analysis of Differences between Child's Gender and*

### *Parents' Perceptions of Child's Play*

This section includes results of the data analysis for research question three. Additional findings on parents' perceptions of child's play when examined by children's age are also displayed.

#### *Research Question Three*

The third research question was: "Is there a difference in parents' perceptions of child's play when examined by children's gender?" A One-way ANOVA was used to compare the means for parents' perceptions of child's play when examined by children's gender, and to determine whether those differences are statistically significant. Total mean scores for parents' perceptions of child's play were treated as the dependent variable, and children's gender was treated as the independent variable. In Table 4.13 on the follow page, the One-way ANOVA showed no significant difference in the mean for PPCP when examined by children's gender ( $F = .016$ ,  $p > .05$ ).

Table 4.13

*One-Way ANOVA Summary Results for Differences in Parent's Perceptions of Child's Play Examined by Children's Gender*

Children's Gender	n	Mean	Standard Deviation	Range		F	p	Partial Eta Squared
				Low	High			
Boy	59	3.29	.33	2.78	3.96	.016	.900	.000
Girl	53	3.28	.39	2.22	3.96			
Total	112	3.28	.36	2.22	3.96			

*Additional Finding*

Here, children's age was treated as another independent variable. The One-way ANOVA in Table 4.14 showed no significant difference in the mean for PPCP when examined by children's age ( $F=.894, p > .05$ ).

Table 4.14

*One-Way ANOVA Summary Results for Differences in Parent's Perceptions of Child's Play Examined by Children's Age*

Children's Age	n	Mean	Standard Deviation	Range		F	p	Partial Eta Squared
				Low	High			
4-5	8	3.27	.37	2.89	3.89	.894	.412	.016
5-6	37	3.35	.39	2.70	3.96			
6-7	67	3.25	.34	2.22	3.96			
Total	112	3.28	.36	2.22	3.96			



*Analysis of Relationships between Parents' Perceptions of Child's Play and Children's Development of Social Competence and Creativity*

This section includes results of data analysis for research question four. Several additional findings were also displayed. They are: (1) Additional Findings on the Relationships between Children's Social Competence and Creativity, (2) Additional Findings on the Relationships between Parents' Background and Children's Development, and (3) Additional Findings on the Partial Correlations between Parents' Perception of Child's Play and Children's Social Competence and Creativity When Controlling for Parents' Background.

*Research Question Four*

The fourth research question was: "Is there a relationship between Taiwanese parents' perceptions of child's play and children's social competence and creativity?"

A Pearson product-moment coefficient (PPMr) was used to determine whether there was a relationship between parents' perceptions of child's play and children's development of social competence and creativity both at home and school. In this research question, the scores for PPCP (Parents' Perceptions of Child's Play), HCSBS (Home and Community Social Behavior Scale), SSBS (School Social Behavior Scale), and CBS (Creative Behavior Scale) were treated as four separate variables.

Table 4.15 shows bivariate correlations between the variables. Results revealed that the scores for PPCP were positively related to HCSBS ( $r = .565, p < .001$ ) and

parent ratings of CBS ( $r = .504, p < .001$ ). Salkind (2007) stated that a correlation coefficient value between .2 and .4 indicates a weak relationship; while correlations between .4–.6 indicate a moderate relationship. Thus, parents' perceptions of child's play demonstrated a moderate positive relationship with parent ratings of children's social competence and parent ratings of children's creativity.

Teachers' rating of children's social competence and creativity at school were also analyzed in this study. Results showed a significant positive relationship between PPCP and SSBS-2 ( $r = .253, p < .05$ ), but no significant relationship between PPCP and teacher ratings of CBS ( $r = .143, p > .05$ ).

Table 4.15

*Bivariate Correlations between PPCP and Assessment Scales*

Variable	Mean	Standard Deviation	PPCP	
			r	p
HCSBS	2.96	.31	.565	<.001
SSBS-2	3.08	.48	.253	.037
Parent ratings of CBS	2.68	.52	.504	<.001
Teacher ratings of CBS	2.44	.68	.143	.134

Note: PPCP with  $M = 3.28$  and  $SD = .36$

*Additional Findings on the Relationships between Children's Social Competence and Creativity*

In this study, both parents and teachers were asked to rate the children's social competence and creative behaviors. Table 4.16 shows the correlations between parents' and teachers' ratings of children's social competence and creativity. There

was a significant positive relationship between HCSBS and SSBS-2 ( $r = .318, p < .01$ ).

Parent ratings of CBS demonstrated a significant positive relationship with HCSBS ( $r = .465, p < .001$ ) and SSBS-2 ( $r = .200, p < .05$ ). However, teacher ratings of CBS revealed no significant relationship with any other scales.

Table 4.16

*Bivariate Correlations between Parent and Teacher Ratings of Children's Social Competence and Creativity*

Assessment Scales		Parent ratings of			Teacher ratings of
		CBS	HCSBS	SSBS-2	CBS
Parent ratings of CBS	Pearson Correlation	1			
	Sig. (2-tailed)				
	n	110			
HCSBS	Pearson Correlation	.465	1		
	Sig. (2-tailed)	.000			
	n	107	107		
SSBS-2	Pearson Correlation	.200	.318	1	
	Sig. (2-tailed)	.037	.001		
	n	109	106	111	
Teacher ratings of CBS	Pearson Correlation	.182	.123	.066	1
	Sig. (2-tailed)	.056	.208	.492	
	n	110	107	111	112

*Additional Findings on Relationships between Parents' Background and Children's Development*

In order to determine whether parents' background was related to children's development of social competence and creativity, point biserial correlation coefficient ( $r_{pt\ bis}$ ) was used. In this step, both the parents' (who filled out the questionnaire) and

their spouses' background factors were treated as independent variables; mean scores on the four assessment scales (HCSBS, SSBS-2, parent ratings of CBS, and teacher ratings of CBS) were treated as dependent variables.

Table 4.17 shows the bivariate correlations between parents' background and the four assessment scales. Generally speaking, three parents' background variables displayed significant positive relationships with children's development of social competence and creativity: (1) parents with university/graduate school-level education were more likely to have children with higher scores on parent ratings of CBS ( $r_{pt\ bis} = .207, p < .05$ ), HCSBS ( $r_{pt\ bis} = .210, p < .05$ ), and teacher ratings of CBS ( $r_{pt\ bis} = .197, p < .05$ ) than parents with junior high/high school or vocational high school/junior college-level education; (2) spouses with university/graduate school-level education were more likely to have children with higher scores on parent ratings of CBS ( $r_{pt\ bis} = .248, p < .01$ ), HCSBS ( $r_{pt\ bis} = .322, p < .01$ ), and teacher ratings of CBS ( $r_{pt\ bis} = .196, p < .05$ ) than spouses with junior high/high school or vocational high school/junior college-level education; and (3) parents with a total monthly household income of more than NT 75,000 were more likely to have children with higher scores on parent ratings of CBS ( $r_{pt\ bis} = .224, p < .05$ ), HCSBS ( $r_{pt\ bis} = .265, p < .01$ ), and teacher ratings of CBS ( $r_{pt\ bis} = .211, p < .05$ ) than parents with a total monthly household income of less than NT 75,000.

Table 4.17

*Bivariate Correlations between Parents' Background and Assessment Scales*

Parent's Background		Parent ratings of CBS	HCSBS	SSBS-2	Teacher ratings of CBS
Parent's Gender	Point biserial	.049	-.059	.014	.123
	Sig. (2-tailed)	.613	.543	.885	.197
	n	110	107	111	112
Parent's Age	Point biserial	-.010	.108	.036	.128
	Sig. (2-tailed)	.921	.271	.711	.181
	n	109	106	110	111
Parent's Highest Education Level	Point biserial	.207	.210	.081	.197
	Sig. (2-tailed)	.030	.030	.399	.037
	n	110	107	111	112
Parent's Primary Occupation	Point biserial	-.109	-.051	.095	-.071
	Sig. (2-tailed)	.257	.603	.323	.457
	n	109	106	110	111
Spouse's Age	Point biserial	-.239	-.016	-.116	.088
	Sig. (2-tailed)	.013	.875	.230	.361
	n	108	105	109	110
Spouse's Highest Educational Level	Point biserial	.248	.322	.146	.196
	Sig. (2-tailed)	.009	.001	.128	.039
	n	109	106	110	111
Spouse's Primary Occupation	Point biserial	-.163	-.133	-.042	-.137
	Sig. (2-tailed)	.089	.174	.658	.150
	n	110	107	111	112
Total Monthly Household Income	Point biserial	.224	.265	.149	.211
	Sig. (2-tailed)	.020	.006	.123	.027
	n	108	105	109	110

*Additional Findings on Partial Correlations between Parents' Perceptions of Child's Play and Children's Development*

The partial correlation coefficient is a technique used to “examine the relationship between two variables while holding one other or more variables constant” (Bryman & Cramer, 1990; p. 230). Since three of the parents' background information areas (parent's highest education level, spouse's highest education level, and total monthly household income) were significantly related to children's development of social competence and creativity, a partial correlation was used to examine the relationships between parents' perceptions of child's play and children's development of social competence and creativity. Here, the independent variable was the mean scores for PPCP; dependent variables were HCSBS, SSBS, and CBS; control variables were parent's highest education level, spouse's highest education level, and total monthly household income.

Table 4.18 shows the partial correlation between PPCP and the four assessment scales, when controlling for parent's highest education level, spouse's highest education level, and total monthly household income. Results showed a significant positive relationship between PPCP and HCSBS ( $r = .497, p < .001$ ), SSBS-2 ( $r = .251, p < .05$ ), and parent ratings of CBS ( $r = .492, p < .001$ ). In Table 4.19, the level of correlation only decreased slightly when adjusted for three of the parent's background variables.

Table 4.18

*Partial Correlation between PPCP and Assessment Scales*

Control Variables		PPCP	
		r	p
Parent's highest education level	HCSBS	.497	.000
& spouse's highest educational level	SSBS-2	.251	.012
& total monthly household income	Parent ratings of CBS	.492	.000
	Teacher ratings of CBS	.013	.898

Table 4.19

*Comparison between Before and After Control of Parents' Background When Examining the Relationship between PPCP and Assessment Scales*

Variable	PPCP		PPCP	
	(Before Control)		(After Control)	
	r	p	r	p
HCSBS	.565	.000	.497	.000
SSBS-2	.253	.037	.251	.012
Parent ratings of CBS	.504	.000	.492	.000
Teacher ratings of CBS	.143	.134	.013	.898

### *Summary of Chapter 4*

In this chapter, findings for the four research questions and additional findings were presented. These findings were based on analyses involving descriptive statistics, One-way ANOVA, and Pearson Correlation. The results are summarized below.

First, Taiwanese parents agree that play contributes to children's cognitive and socio-emotional development. Parents also provided opportunities for their children to play and supported behaviors when playing with their children. However, with regard to academic learning, some parents would pay more attention to children's academic learning than to play.

Second, the results highlighted differences in parents' perceptions of child's play when examined by parents' gender, highest education level, and total monthly household income. With regard to parents' gender, mothers had significantly higher perceptions of child's play than fathers; for parents' highest education level, parents with university or graduate school-level education had significantly higher perceptions of child's play than parents with only a high school or vocational high school/junior high or less education; and with regard to total monthly household income, parents with total monthly household income of more than NT100,000 had higher perceptions of child's play than parents with income of less than NT30,000.

Third, when comparing parents' perceptions of child's play in terms of their



children's gender, the results showed no significant difference in parents' perceptions of child's play when examined by children's gender as well as children's age.

Finally, parents' perceptions of child's play were related to children's development of social competence (rated by both parents and teachers) as well as creativity (rated by parents). The more positive the parents' perceptions of child's play, the higher the level of positive social competence and creativity among their children. Even when controlling for three background areas—parent's highest education level, spouse's highest education level, and total monthly household income—as related to children's development of social competence and creativity, a correlation still existed but the strength of the relationship was a bit smaller. In addition, children's social competence was positively related to creativity.

## Chapter 5

### *Discussion, Conclusions, and Recommendations*

The purpose of this chapter is to review the research questions and discuss the implications of the data results. Recommendations for future study are also included.

In this chapter, discussions are organized as follows: (1) Overview of the Research Design, (2) Discussion, (3) Recommendations for Practice and Future Research, and (4) Summary of Chapter 5.

#### *Overview of the Research Design*

An overview of the research design for this study is provided in this section. This section includes: (1) Research Problem, (2) Research Questions, and (3) Research Procedures.

#### *Research Problem*

The critical role of child's play in children's development has been brought up and discussed by educators and researchers for many years. Play is not only for fun but also contributes to children's cognitive, socio-emotional, and motor development. Play has become one of the main tools used with children in fostering learning in early childhood. Researchers have examined parents' beliefs about or perceptions of child's play in different countries. Results of this study have shown that not all parents have positive perceptions about play. This is important, because how parents perceive

child's play influences children's development.

There is no current research on Taiwanese parents' perceptions of child's play. In addition, most research only describes or compares parents' perceptions of child's play without examining the relationship between play and development. Thus, the main purpose of this study was to identify current Taiwanese parents' perceptions of child's play and how these perceptions relate to children's development of social competence and creativity.

#### *Research Questions*

The principal research question for this study was: "What are parents' perceptions of child's play and the relation to their children's social competence and creativity"? The sub-questions were as follows:

RQ1: What are Taiwanese parents' perceptions of child's play? To what extent do

Taiwanese parents value the contribution of play to children's development?

RQ2: Is there a difference in parents' perceptions of child's play when examined by

parents':

(a) Gender

(b) Age

(c) Highest education level

(d) Primary occupation

(e) Total monthly household income

(f) Parenting Style

RQ3: Is there a difference between children's gender and parents' perceptions of child's play?

RQ4: Is there a relationship between Taiwanese parents' perception of child's play and children's social competence and creativity?

### *Research Procedures*

Two questionnaires were used in this study: a parent version and a teacher version. Both were developed by the researcher, and were based on related scales and assessment tools that had been designed by previous researchers. The parent version of the questionnaire included four major sections: (1) background information, (2) parents' perceptions of child's play (PPCP), (3) evaluation of children's social competence (HCSBS), and (4) evaluation of children's creativity (CBS). The teacher version of the questionnaire included two major sections: (1) evaluation of children's social competence (SSBS-2), and (2) evaluation of children's creativity (CBS).

The study was conducted in Hsinchu, Taiwan. The target population for this study was Taiwanese parents with children aged 4 to 7 years and enrolled in kindergarten in Taiwan. Teachers in the children's classrooms were also included. In order to create more variability among parents' backgrounds, three public

kindergartens in different areas with different backgrounds were identified using criterion-based sampling: two were located in Hsinchu County, where parents generally were of a lower socioeconomic status, and one was located in Hsinchu City, where parents generally were of a higher socioeconomic status.

The sample size in this study was 142 parents and 10 kindergarten teachers. Data were collected in spring 2009. The researcher called the target kindergartens and asked permission to conduct the survey. After obtaining permission, the researcher brought sufficient numbers of packets (both parent and teacher versions) to the three kindergartens. There were ID numbers on each packet and questionnaire. Teachers delivered the packet to each parent when parents came to pick up children after school. Parents were asked to put the questionnaire as well as the consent form back into the sealed packet and return it to the teachers within seven days. In order to ensure that each child was evaluated by both parents and teachers, teachers evaluated the children after the parents returned their packet. Whenever the parents returned the packet, teachers wrote the Identity Number (ID) of that parent on the front cover of the teacher version of the questionnaire and evaluated the child's social competence and creativity at school. The researcher kept contacting the kindergarten teachers and collected the questionnaires when they finished. The process of collecting data took about four weeks from start to finish. Of the 142 participants,

112 completed and returned questionnaires. The return rate was 78.87%.

The Statistical Packages for the Social Sciences (SPSS) was used to analyze the data. Different techniques, including descriptive statistics, one-way Analysis of Variance (ANOVA), and Pearson product-moment coefficient (PPMr), were used to answer each research question.

### *Discussion*

This section includes a discussion of the study results and the implications of those results for parents, teachers, and future researchers. The four research questions, additional findings, and practical relevance for each research question are presented below.

#### *Research Question One*

**What are Taiwanese parents' perceptions of child's play? To what extent do Taiwanese parents value the contribution of play to children's development?**

According to the data analysis, the mean for parents' perceptions of child's play was 3.28 (SD=.36), which indicated that most parents had positive perceptions of child's play. In order to have a clear understanding of the distribution of parents' agreement about the contribution of play to children's development, the mean value was grouped into three groups: (a) 1.00–2.00 = low agreement, (b) 2.01–3.00 = moderate agreement, and (c) 3.01–4.00 = high agreement. A total of 26.8% parents

fell between 2.01 and 3.00 (moderate agreement) and 73.2% of parents fell between 3.01 and 4.00 (high agreement). The results revealed again that Taiwanese parents, who were involved in this research and from different socioeconomic statuses, generally agreed that play does contribute to children's problem-solving skills, thinking abilities, imagination, creativity, and cognitive, socio-emotional, and language development. Play is no longer perceived useless or meaningless. Most parents also supported child's play by providing a playful environment at home, encouraging peer interaction, engaging in their children's play, and enhancing children's playing skills.

The result was similar to Pan's (1994) finding that middle-class Taiwanese mothers valued the significant role of play in children's development and supported their child's play. A Comparison of Pan's study to the current study reveals similarities: (1) a survey design with questionnaires was utilized, (2) Taiwanese parents were asked to rate their perceptions of play's contribution to children's cognitive, mental, and social development, (3) parents were asked about their own behavior related to child's play, and (4) the results showed that parents valued the importance of play to children's development. A significant difference is that Pan only recruited well-educated mothers, while the current study included both fathers and mothers from different socio-economic-statuses. In addition, the current study went a step

further to examine the relationships between parents' perceptions of child's play and children's social competence as well as creativity.

In Liao (1994) and Chang's (2007) study, Taiwanese parents were found to believe that playing is not merely for fun—children can learn something from it, especially when parents participate in children's play. Further, parents viewed play as an appropriate and pleasurable way for children to learn. Different from the current study, Liao (1994) conducted qualitative research. The data were collected from multiple sources (including materials from interviews, field notes, and observations). However, the sample size was only 4, which was too narrow to enable an understanding of Taiwanese parents' perceptions of child's play. In addition, because parents' behaviors were observed in the classroom and they were “expected” to play with their children, those behaviors in play may not reflect parents' typical behaviors in the home setting.

The current study is also similar to Sha's (1998) study, which examined parents' and teachers' perceptions of child's play in China. The participants were middle- or upper-middle class parents with children 5- to 6.5-years-old and pre-primary, first-grade, and second-grade teachers. Consistent with the current study, most Chinese parents and teachers perceived play as a valuable activity in child development, but most still believed a well-structured academic environment is



important for children. Looking at all of the previous studies and the current study, the results demonstrated that Taiwanese and Chinese parents do place importance on child's play and provide supportive behaviors.

In the current study, the first possible reasons for parents with higher or lower socioeconomic status both have positive perceptions about child's play may be that learning through playing has become a well-known concept in early childhood education. According to the empirically based principles of child development and learning provided by the National Association for the Education of Young Children (NAEYC), "Play is an important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their development" (NAEYC, 2008). The Taiwan Department of Education also regulates six domains of curricula, including health, play, music, work, language, and general sense, as the standard curricula in early childhood education (Zhu, 2004). Thus, it is widely accepted that kindergarten teachers provide a variety of activities or play activities that enable children to learn basic knowledge and experience the world through curricular design. It makes sense that learning through play has become more acceptable and valued by Taiwanese parents.

Second, Western parenting thought is receiving greater attention in Taiwan (Pan, 1994) and China. In China, the teaching philosophy and methods of kindergarten

programs have been undergoing changing from the teacher-oriented, traditional approach to a more playful and child-oriented way (Davin, 1991; Vaughan, 1993). Sha (1998) reported that most upper-middle class parents and teachers perceive play as a valuable activity in child development. Their attitudes toward child's play were slightly related to their perceptions of the implementation of play theory in school programs.

Third, although parents of higher social status were more likely to respect children's nature and encourage learning through play (Farver & Howes, 1993; Stipek, Milburn, & Daniels, 1992), those of lower social status were gradually changing their perspectives on child's play. Similarly, a survey of Guatemalan parents' perceptions of learning through play for kindergarteners, Cooney (2004) found that both parents with lower- and upper-income class perceived play to be beneficial to children's learning of new vocabulary, cooperation with others, understanding of concepts, expression of emotions, and the development of imagination, creativity, and motor skills. This current study demonstrated that Taiwanese parents of higher and lower socioeconomic status generally had positive perceptions of child's play.

#### *Additional Findings on Academic Learning*

In the section of the parent survey on parents' perceptions of child's play, parents were asked about their engagement in play, encouragement of play, and

developmental contributions toward play. In looking at the mean for the 11 items relating to negative perceptions of child's play, the range for most items was 1.51–1.97. However, two items related to children's academic learning displayed higher means (Mean = 2.25 for Item13; Mean = 2.21 for Item18). The results indicated that some parents did agree that academic learning is more important than playing. In other words, although most parents valued child's play in children's development, when it comes to academic learning, some parents still would rather see their children engaging in academic learning (numbers or letters) rather than playing.

Findings related to academic learning were consistent with other research documenting that Asian parents focus significantly on children's academic success. Research (Parmar, Harkness, & Super, 2004) with Euro-American parents and Asian parents has shown that Asian parents put a great deal of emphasis on children's early academic learning and believe that getting a head start on academics is better for children's futures. Likewise, Huntsinger, Jose, Liaw, and Ching (1997) found that Chinese American parents also placed more emphasis on children's academic achievement with more directive, structured, and formal ways of teaching than Euro-American parents.

In looking at other groups of parents, Fogle and Mendez (2006) found that low-income African American mothers generally endorsed the contribution of play to

children's development, but some also paid attention to children's academic learning. The researchers explained that those mothers had generally positive perceptions of child's play, but may believe that play is not the best way to learn academic skills. Farver, Kim, and Lee (1995) held the same point of view that although parents from different cultural backgrounds had educational goals for their children, their methods for achieving those goals were different.

According to Confucian tradition, the Chinese put a good deal of emphasis on education because people believe that studying and being well educated are important to future success (Chao, 2000; Ho, 1994; Huang, 1994). "Parents' expectations" are defined as parents' expectations toward children's behavioral performance and future achievement (Hou, 2002; Ke, 2003; Lin, 2001). Hsu (2008) combined different research findings to conclude that the meaning of parents' expectations included parents' expectations of children's highest education level and expectations of children's behavioral performance, academic grades, and future achievement. Thus, Taiwanese parents have high educational expectations for their children's cognitive learning and academic success (Wu, 1998). In this current research, it is not surprising that some parents still paid more attention to children's academic learning than to play, although most agreed that play contributes to children's learning and development.

*Practical Relevance for Research Question 1*

This section focuses on the practical relevance of research question one: What are Taiwanese parents' perceptions of child's play? To what extent do Taiwanese parents value the contribution of play to children's development? Two ideas are presented below:

First, since the results showed that most Taiwanese parents agreed strongly that play contributes to children's development and they supported play behaviors, researchers and experts in early childhood education should provide more educational resources for parents to use. For example, the publication of practical books or articles related to parent-child play may enhance parents' interactive skills with children and teach parents how to improve children's development as well as parent-child relationships. The publications should have contents that are easy to understand and have clear directions for parents to put into practice. Kindergarten teachers may provide a regularly updated reference list for parents so that parents have access to new information about education.

Second, some Taiwanese parents, especially those with lower social economic status, still put more emphasis on children's academic learning. In order to meet parents' expectations and needs, traditional ways of teaching and academically-oriented curricular design are commonly found in some kindergartens.

Therefore, kindergarten teachers should try to balance a play-based curriculum with structured instructional strategies. For example, teachers may design a playful curriculum and involve more play activities in teaching academic skills, rather than only engaging children in rigid paper-pencil work. Teachers may also encourage creative and divergent thinking when teaching academic skills, rather than memorizing and cramming.

In sum, in order to encourage and support parents' play-related behaviors with their children, the publication of practical books and articles are needed that relate to parent-child play and contain clear directions as well as contents. Besides, to overcome the conflict between parents' expectations of children's academic learning and the concept of learning through play, kindergarten teachers should find a way to balance play and academics. For example, teachers may become involved in more play activities and encourage creative thinking when teaching academic skills.

#### *Research Question Two*

**Is there a difference in parents' perceptions of child's play when examined by parents':**

**(a) Gender**

**(b) Age**

**(c) Highest education level**

**(d) Primary occupation**

**(e) Total monthly household income**

**(f) Parenting style**

The results showed differences in parents' perceptions of child' play when examined by parents' gender, highest education level, and total monthly household income, but no difference in age and occupation. "Parenting style" was excluded from the analysis because 92.8% of parents' answers were centralized in "Authoritative", and the percentage of other parenting style was less than 5% of total participants.

First, there was a significant difference in parents' perceptions of child's play when examined by parent's gender: mothers had more positive perceptions of child's play than fathers. The result was similar to Gleason's (2005) finding that mothers held more positive views of pretend play than did fathers. However, Haight et al. (1997) found no difference between mothers' and fathers' views about the developmental significance of toddlers' and early preschoolers' pretend play. Sha (1998) also reported that there were no gender differences in parents' attitudes toward children's play. One possible reason for the opposite outcome between the current study and other research may be that the questionnaires used in these studies were different. In Sha's study, six subscales related to play were included in the parent version of the questionnaire. Some questions relating to teaching methods in school programs were

not included in the current study. These differences in the contents of the questionnaires may affect findings about parents' perceptions of child's play when examined by parent's gender.

The gender differences in parental perceptions and participation in play revealed that the roles and behaviors of the father and the mother in the home may not be the same (Gentry, Suraj, & Jun, 2003; Hauser & Zaslow, 2000; Huang, 1996). Statistics have shown that fathers spend significantly less time than mothers in caring for children (Pleck, 1997). In general, mothers deal with their children's lives. Most fathers took it for granted that the mother was the main parent, in part because of the father's alternating role between work and home and because they are the principal economic provider (Das & Kemp, 1997; Sue, 1996). Thus, mothers may be more likely to value play and focus more on children's learning and development through play while fathers participated in child's play merely for enjoyment (Haight et al., 1997).

Second, for parents' highest education level, parents with a university or graduate school-level education had significantly higher positive perceptions of child's play than parents with only a high school or vocational high school/junior high or less education level. In addition to education level, the results also showed a significant difference between parents' perceptions of child's play and total monthly



household income: parents with a total monthly household income of more than NT100,000 had higher perceptions of child's play than parents with an income of less than NT30,000. One possible reason for the more positive perception among parents of higher education level and income may be that those parents' parenting philosophy and experiences have been influenced by western education philosophy so that they have a broader insight into children's learning (Pan, 1994). Therefore, learning is not adult-oriented or academic-based. Second, parents of a lower social status may still pay attention to children's academic learning in more traditional ways so that their perceptions of play are more conservative. Stipek, Milburn, Clements, and Daniels (1992) supported this explanation when they found that less-educated parents were more likely to regard didactic teaching methods as early educational goals than were parents at higher education levels.

There was no significant difference in parents' perceptions of child's play when examined by parent's age and occupation. The result was similar to Fogle and Mendez's (2006) finding that African American mothers' play beliefs were not related to their employment status.

#### *Practical Relevance for Research Question 2*

The goal of this section is to provide practical relevance for research question two: Is there a difference in parents' perceptions of child's play when examined by parents'

gender, age, highest education level, primary occupation, total monthly household income, and parenting style? Two related findings and suggestions are listed below:

First, results showed that parents with lower socio-economic status had significantly lower scores on perceptions of child's play. In order to enhance those parents' concept of play, teachers may wish to schedule some time for parent-teacher conferences or to talk to each parent face-to-face. Understanding parents' personal attitudes toward young children's learning and how children learn, and identifying the most important things to children's future life help teachers provide practical recommendations for parents.

Second, the government should provide more educational resources to low social-class families. For instance, the government may provide discount coupons to support and encourage parents to buy educational materials (e.g., books, educational toys) for children. In addition, the government may also establish a local educational center to provide parents with parenting consultation, supply diverse educational resources (e.g., toys, story books, educational medium), and offer speeches or workshops to parents. It is strongly recommended that fathers participate in child's learning and growing.

In sum, teachers should regularly schedule time to talk with each parent individually so that teachers may understand parents' thoughts about their child's

learning and provide support or recommendations when needed. In addition, the government should provide more educational welfare to families that are of a lower social class. For instance, offering them discount coupons and building a local educational center will be beneficial to them.

### *Research Question Three*

#### **Is there a difference between children's gender and parents' perceptions of child's play?**

Study results showed no differences in parents' perceptions of child's play between children's gender and children's age. Similarly, Fogle and Mendez's (2006) found the same results—African American mothers' play beliefs were unrelated to children's gender and age. In other words, parents' perceptions of child's play did not differ, no matter the gender and age of their children. One possible reason may be that play contributes to children's, both boys' and girls' development (Hughes, 1999; Saracho & Spodek, 1995; Tsao, 2002). In addition, parents in this study may not have answered questions based on their perceptions of child's and their child's gender. Their answers may have stemmed from their basic understanding of "child's" play.

However, this finding differs from previous research. In one study of parents' perceptions of child's pretend play, Gleason (2005) found that mothers of daughters hold more positive attitudes toward pretend play than mothers of sons. Kim (2002)

also pointed out that Korean mothers with boys were more likely to believe that toys were important to stimulating child's creativity than were mothers with girls. When examining parents' perceptions of child's play, Gleason (2005) specified the type of play (pretend play) and Kim (2002) only included mothers in the study. The current study involved both parents in the research and asked their perceptions of child's play in general. Therefore, different results between this study and others studies may be due to the different types of play and gender of participants.

#### *Practical Relevance for Research Question 3*

The purpose of this section is to provide practical relevance to research question three: Is there a difference between children's gender and parents' perceptions of child's play? The results showed that there was no difference in parents' perceptions of child's play when examined by child's gender and age. In other words, parents valued the contributions of child's play regardless of their child's gender and age. Therefore, the industry related to early childhood education needs to develop productions, such as educational toys or play materials, which are able to stimulate children's learning and development and which are designed for different genders and ages of children. In addition, a guide for parents that contains directions for its use and information on ways to interact with children and the developmental significance of this particular product for children's development is recommended.

*Research Question Four***Is there a relationship between Taiwanese parents' perception of child's play and children's social competence and creativity?**

The results showed that parents' perceptions of child's play do relate to parent's and teacher's ratings of children's social competence as well as parent's ratings of creativity, but do not relate to teacher's ratings of creativity. In other words, children whose parents had more positive perceptions of child's play were more likely to be considered socially competent and creative. The results were similar to those from Fogle and Mendez (2006), who reported that parents' positive perceptions of play and supported behaviors were positively related to parent's ratings of children's social competence in play. In addition, Farver, Kim, and Lee (1995) also reported that Anglo-American children enrolled in a play-oriented preschool and with mothers who valued the contribution of play to children's learning and development, were more socially skilled with peers than Korean-American children who were enrolled in an academic-oriented preschool whose mothers considered play to be for amusement, to relieve boredom, and to express curiosity. Less research has been conducted on the relationship between parents' perceptions of child's play and children's development of creativity. Therefore, the current findings represent a step forward in the relationship between the two variables.

It is not surprising that parents' perceptions of child's play are related to parents' rating of children's social competence and creativity. The reason is that parents' ideas about play impact their behaviors in playing with their children and how they establish children's learning environments in home settings (Farver & Howes, 1993; Farver, Kin, & Lee, 1995; Haight et al., 1997). As addressed previously in the literature review, play contributes to children's development in different domains (Hughes, 1999; Saracho & Spodek, 1995; Tsao, 2002). Therefore, the more positive and supportive the behaviors provided by parents during play, the more likely it is that children, during play, will develop social competence and creativity.

However, parents' perceptions of child's play only showed a weak relationship to teacher's rating of children's social competence, and no relationship to creativity. The result was similar to Fogle and Mendez's (2006) teacher reports of children's positive social behaviors being marginally correlated with parent's play beliefs ( $p < .06$ ). One possible reason may be that children display different behaviors from place to place (Pipe, 2003) so that their social behaviors may differ at home and at school. Children may show more social competence at school in order to meet teachers' expectation, or children may display poor social skills because they have to interact with a variety of peers. Besides, parents' personal bias and teachers' understanding of a child may also influence their ratings of children's social competence. Furthermore, teachers may be

more conservative in rating children's creativity or be less sensitive to children's creativity because of their higher expectations (Torrance, 1995). Thus, these possible explanations may affect different levels of relationships between parents' perceptions of child's play and children's social competence as rated by parents and teachers.

In addition, one possible implication of no relationship between parents' perceptions of child's play and teachers' ratings of children's creativity may be that children, especially those from families of a lower social class, have a better learning environment in the school setting than at home. The 10 kindergarten teachers involved in the current study were qualified kindergarten teachers and had an educational background and/or rich teaching experiences. For the two kindergartens in Hsinchu County, although teachers were involved in more academic-related activities due to parents' expectations, teachers also provided different props, materials, and play activities to use in children's playtime. This playful learning environment at school may influence the frequency with which children display creative behaviors at school. Thus, it is possible that there is no relationship between parents' perceptions of child's play and teachers' rating of children's creativity.

#### *Additional Findings*

In this study, parents were asked to evaluate their children's social competence and creativity. The results showed a moderate relationship between parent ratings of

children's creative behaviors and children's social competence. This finding differed from that in previous studies. Patrick, Yoon, and Murphy (1995) reported that kindergartners' creativity was not significantly associated with their social competence at school. Winner (1996) also felt that creative people may not be accepted by more conventional people, so that gifted children who are creative may tend to be isolated and teased because of their unusual thinking and behaviors. In this current study, the reason for the positive relationship between children's creative behaviors and social competence may be due to the items on the assessment scales used in the study. If children are creative and capable of devising new games, thinking different ways about play, and using imagination and transforming reality freely in their play, they are more likely to initiate or be invited by their peers to engage in activities. Lau and Li (1996) supported the explanation that children who showed leadership skills might produce novel and original ideas and thereby earn respect as well as become popular among peers. The literature on the relationship between children's creativity and social competence should be addressed more in future research.

The relationships between parents' background and children's development of social competence and creativity were examined in the current study. The results revealed that parent's highest education level, spouse's highest education level, and



total monthly household income were positively related to children's development of social competence and creativity. According to Teachman (1987), the two most common indexes for socioeconomic status (SES) were parents' education level and family household income. Much research has shown that parental SES is related to children's learning, development, and health status (e.g., Bandura, Barbaranelli, Capara, & Pastorelli, 1996; Hu, 2003; Pappas, Queen, Hadden, & Fisher, 1993). Wu (2002) also found a positive relationship between parental SES and children's performance of technological creativity. Liu (2007) concluded that the reason why parents' SES influences the result of children's education is that:

- (a) There is a positive relationship between SES and parents' attitudes toward education and children's intelligence quotient. Generally speaking, higher-SES parents have more positive attitudes about education and more motivation to encourage them toward academic success. Their children also have better heredity.
- (b) Different social levels have different cultural backgrounds that are influenced by language, experiences, attitudes, behaviors, thoughts, values, and skills. Generally speaking, the cultures in a higher-SES family are beneficial to children's school living and learning.
- (c) Higher-SES families have more discretionary funds to spend on educational resources so that children have more opportunity to be successful in their education.

In sum, numerous studies (e.g., Bronfenbrenner & Morris, 1997; Elder, 1996; Elder & Conger, 2000) have emphasized that how parents rear their children is impacted by families' socio-economic situations. Therefore, it is understandable that parent's highest education level, spouse's highest education level, and total monthly household income were positively related to children's development of social competence and creativity. This correlation reveals to educators the need to pay greater attention to children's learning and raises issues of how to improve children's development, especially for those children from certain family backgrounds.

Since these three parent background variables (parent's highest education level, spouse's highest education level, and total monthly household income) were related to children's social competence and creativity, they were controlled when examining the relationship between parents' perceptions of child's play and children's development. As expected, results showed a significant positive relationship between parents' perceptions of child's play and children's social competence and creativity, although the strength of the relationship was slightly smaller. This finding provided evidence that whether children experience positive outcomes for learning and development, parents' supportive behaviors and attitudes about how children learn play a critical role. Educators should take parents' perceptions of child's play into consideration. By communicating with parents, educators can design parent-education activities and

provide more updated concepts of early childhood education for parents.

*Practical Relevance for Research Question 4*

This section focuses on the practical relevance of research question four: Is there a relationship between Taiwanese parents' perceptions of child' play and children's social competence and creativity? Two suggestions are offered here.

First, the results showed that parents' perceptions of child's play and parental background (highest educational and income level) were positively related to children's social competence and creativity. School environment is critical to children's development and can make up for the deficiencies at home. Since play contributes to children's cognitive, socio-emotional, and motor development, playing activities and free play are indispensable at school. Kindergarten teachers should establish time each day for free play. Rather than regarding children's free play time as a period for rest, teachers should observe children's play and pay attention to their conditions. Through observation of child's play, teachers may ascertain each child's current developmental level and improve their development as needed.

Second, to improve the quality of early childhood education, kindergarten teachers should be trained well. Thus, the curricula in teacher training schools should include more courses related to child's play, such as the observation of child's play, design of play activities, developmental functions of toys, and methods to enhance

child's play.

In sum, kindergarten teachers should provide opportunities for children to engage in free play. It is also important for teachers to observe, support, and keep a record of each child's learning and development during play. In order to enhance teachers' abilities to support child's play, teacher training schools should provide more practical courses that improve teachers' professional knowledge and skills related to play.

#### *Recommendations for Practice and Future Research*

This section includes some recommendations for parents, teachers, government, and future researchers based on the study findings. The recommendations are provided as follows: (1) Recommendations for Parents, (2) Recommendations for Teachers, (3) Recommendations for Government, and (4) Recommendations for Future Research.

#### *Recommendations for Parents*

Parents are their children's first teachers and early learning occurs in the home. They help children develop personalities, creativities, and behaviors (Md-Yunus, 2007). Although the fact that the parents who participated in the study have positive perceptions of child's play in general, some parents still put much emphasis on children's academic and cognitive learning. The fact that this study occurred in a

Chinese context and was influenced by Chinese culture makes the finding about parents' expectations about academic performance all the clearer (Chao, 2000; Huang, 1994). Based on the results of this current study, some recommendations are provided for parents:

First, parents should not push children too hard to engage in strict learning or memorization at an early age. Numbers and letters are very abstract concepts. Piaget (1962) believed that young children have a limited ability to engage in abstract thinking when their cognitive development is not mature. In addition, according to a report, "children who take an early dislike of schoolwork or have doubts about their academic worth face disadvantages in all future learning" (White, 1997). Furthermore, being successful in school requires not only cognitive learning but also other abilities, such as social skills, emotional competence, and personality (e.g., Chen, 2001; Ladd, Birch, & Buhs, 1999; Shields et al., 2001 ). Parents should put more attention to help children develop those abilities, instead of only focusing on academic learning.

Second, parents can provide different functions of toys and play activities as well as establish a playful environment for children that allows them to explore new knowledge and experiences (Scarlett, 2005; Fromberg & Bergen, 2006). It is children's nature to play. Learning from play not only can increase children's learning motivation but also makes learning more enjoyable and longstanding.

Third, parents are strongly recommended to support and participate in children's play. Vygotsky (1978) proposed the concept of ZPD (Zone of Proximal Development), in which children perform better and achieve potential learning when interacting with adults or more capable peers (Daniels, 2005; Johnson et al., 1999; Vygotsky, 1978). Based on Vygotsky's perspective, parents can be the critical roles who provide scaffolds for children that enable the children to solve a problem or achieve a goal that they cannot reach without assistance (Daniels, 2001; Levykh, 2008). Furthermore, parent-child play not only enhances children's potential development but improves parent-child relationships as well (Macdonald, 1993).

#### *Recommendations for Teachers*

This study showed that parents with a lower education level and total monthly household income had less positive perceptions of children's play that consequently impacted children's social competence and creativity. According to these results, some recommendations are provided for teachers:

First, teachers should pay greater attention to children's learning and development in school, especially those children from low-SES families. Since children may not have rich home environments to stimulate their development, may not have plentiful opportunities to undergo diverse experiences, and may not have very supportive parents, teachers should try to make up these deficiencies at school

(Jacobson, 2002). For example, teachers may create a playful environment in the classroom and provide a variety of learning props or toys for children to manipulate; may encourage children to use creativity and explore new things in different ways; may play the role of scaffold and improve children's playing level according to each child's development level (Daniels, 2001; Levykh, 2008); may observe children's behaviors when interacting with other peers and provide help when needed; and may design different curricular domains to enlarge children's understanding of the world (Wortham, 2002).

Second, parent education needs to be acknowledged as an issue among educators. Teachers should actively provide parents with updated information and research in the field of early childhood education to enrich their insights and perceptions. For example, teachers may hold parent-teacher conferences each semester and give a speech or discussion about the significant role of play in children's learning and the positive outcomes of play in children's development. Close communication between teachers and parents may render parents more likely to trust educators and be willing to participate and support children's learning and development in an ideal way ("What does the research say", 1997).

### *Recommendations for Government*

As a result of indoctrination in the Confucian tradition, the Chinese place great emphasis on education. Taiwanese parents have high expectations for their children's cognitive learning and academic success (Chao, 2000; Ho, 1994; Wu, 1998). So that their children do not fall developmentally behind other children, parents engage their children in academic learning from an early age. Many kindergartens have strict and directed ways of teaching and paper-pencil work in their curricula. For all of these reasons, several recommendations are offered here to the government in Taiwan:

First, the government should strictly evaluate the preschool programs and kindergartens, especially those in private schools. The education qualities, ideas, teaching methods, teachers' quality, and environments in private schools may be uneven for a variety of reasons, including emphasis on money-making and profit over educational quality. The former may seriously damage children's physical and mental development. Thus, clear rules for opening schools for young children and strict assessment of their educational qualities are necessary.

Second, the government may consider making kindergarten a mandatory part of the education process. It will be easier to manage and maintain the overall quality of the learning environment effectively if the government places more value on the importance of early childhood education. Not only may parents change their



attitudes toward early childhood education, but children will learn effectively and grow safely as well.

#### *Recommendations for Future Research*

Based on the limitations in the study design, several recommendations for future research are provided. Each is discussed below.

First, to ensure involvement by sufficient numbers of both low- and high-SES Taiwanese parents in the study, the researcher used criterion-based sampling to recruit the participants. After considering funding source limitations and convenience, it was decided to involve 142 parents and 10 kindergarten teachers from 3 kindergartens in Hsinchu City and Hsinchu County only. Therefore, the results cannot be generalized to a larger population in Taiwan. However, the current research provided an understanding of Taiwanese parents' perceptions of child's play and how these perceptions relate to children's social competence and creativity. Further, parents from different social levels and backgrounds enhanced the variability of the research. Thus, future research may require a larger sample size and random sample to increase generalizability.

Second, the data were gained only from questionnaires. Parents' perceptions of child's play were obtained through questions designed by the researcher and their answers were restrained to four-point Likert-type scales. A deeper exploration of

parents' perceptions of child's play, such as their thoughts about learning from play, the circumstances under which they encourage children to play, or their images of child's play and reasons for adhering to certain ones, is needed to understand parents' points-of-view. Therefore, qualitative research and mixed-method research involving interview questions or observations should be conducted in the future.

Third, the study revealed that some parents still cared more about children's academic learning than play, even though these parents had positive perceptions of child's play. Because only two questions related to academic learning in the questionnaire, it is difficult to gain a deep understanding of whether parents put academic learning first. Thus, a measurement tool to use in assessing parents' perceptions of child's play should be enhanced by the inclusion of additional academic items or other subscales related to the child's learning.

Fourth, findings from the current study make a unique contribution to the literature on the relationships between parents' perceptions of child's play and children's development of social competence as well as creativity. Most studies only describe parents' perceptions of child's play without examining the association between parents' perceptions and child's development. Whether an association has been made between the parental beliefs of child's play and children's development in other populations in different countries remains a question for future study.

Finally, in order to strengthen the significance of play in the kindergarten or preschool curriculum, a longitudinal correlation study is needed to enable a comparison between play-based and traditional (strict and directed) learning environments, and children's future school performance, especially for children from lower-SES families.

#### *Summary of Chapter 5*

An overview of the research design and explanation for and discussion of the research findings are presented in chapter 5. First, in general, both higher- and lower-socioeconomic status parents not only value the contributions of play to children's development in different dimensions but also exhibited supportive behaviors toward child's play. Possible reasons for the results may be that Western parenting is receiving greater attention in Taiwan. Learning through play has become a well-known concept in early childhood education. However, some parents still pay a great deal more attention to children's academic learning than to play. One explanation for this phenomenon is that Asian people believe that studying and being well educated are important to future success

Second, in terms of parent's background, mothers had more positive perceptions of child's play than did fathers. One possible reason may be that mothers often deal with children's living and learning while fathers are the economic providers. Results

also showed that parents with higher education levels and higher total monthly household income were more likely to have positive perceptions of child's play than parents with lower education level and total monthly household income. One explanation was that the parenting philosophy and experiences of those parents of higher socio-economic status may have been influenced by western education philosophy so that they have a broader insight into children's learning. There was no significant difference in parents' perceptions of child's play when examined by parent's age and occupation, and children's gender.

Third, parents' perceptions of child's play do relate to parent's ratings of children's social competence as well as parent's ratings of creativity. The reason is that parents' ideas about play impact their behaviors in playing with their children and how they establish a learning environment for their children in the home settings. However, parents' perceptions of child's play only had a weak relationship with teacher's rating of children's social competence, and no relationship to creativity. One possible explanation is that children display different behaviors from place to place.

The results were the same even when controlling for the parents' background (parent's highest education level, spouse's highest education level, and total monthly household income), which were related to children's social competence and creativity, but the strength of the relationship was a little smaller.

Based on the study findings, recommendations were provided for parents, teachers, government, and future researchers. These recommendations were developed to benefit children's learning and to improve the quality of early childhood education.

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## Appendix A

ID # \_\_\_\_\_ Parents' Perceptions of Child's Play Questionnaire (English)

### Part I: Parents' Background Information

This section is related to your personal background information. Please mark a check (✓) in the box that is most accurate for you.

1. Your gender:  
 Male     Female
2. Your age:  
 20-29     30-39     40-49     50 or above
3. Your highest education level:  
 Junior high or under     High school or vocational high school  
 Junior college     University (Bachelor degree)  
 Graduate school (Master, Ph.D. or higher)
4. Your primary occupation:  
 Military, Police     Teacher     Government Employees  
 High Technology Industry     Manufacturing  
 Business     Agriculture  
 Self-employment     Housewife     Other \_\_\_\_\_
5. Your spouse's age:  
 20-29     30-39     40-49     50 or above
6. Your spouse's highest education level:  
 Junior high or under     High school or vocational high school  
 Junior college     University (Bachelor degree)  
 Graduate school (Master, Ph.D. or higher)
7. Your spouse's primary occupation:  
 Military, Police     Teacher     Government Employees  
 High Technology Industry     Manufacturing  
 Business     Agriculture  
 Self-employment     Housewife     Other \_\_\_\_\_
8. Your total monthly household income:  
 NT 30,000 or under     NT 30,000~55,000     NT 55,000~75,000  
 NT 75,000~100,000     NT 100,000 or above
9. The gender of your child who studies in this class:  
 Boy     Girl
10. The age of your child who studies in this class:  
 3~4 years old     4~5 years old     5~6 years old     6~7 years old

11. Your parenting style:

- Authoritarian (Pay attention to strict rules, demand obedience, discourage verbal interaction or communication with your child.)
- Authoritative (establish firm rules, but provide more support, warmth, guidance, involvement, and responsiveness to your child.)
- Permissive (do not set any limit or rule and seldom discipline your child.)
- Rejecting-neglecting (do not provide discipline or encouragement of your child’s development, rarely involved with your child.)

~ Please Move to Part II ~

Part II: Parents’ Perceptions of Child’s Play

The following items are related to your perceptions of child’s play and your behaviors related to child’s play. **Child’s play indicates some activities that children usually engage in, including constructive play (block play), social-dramatic play, pretend-play, and free-play.**

★Please mark a check (√) in the box according to the level of your agreement in terms of each item.

1= Strongly Disagree, 2=Disagree, 3=Agree, 4= Strongly Agree

Example: Playing helps my child practice language and communication abilities.

If you strongly agree that playing helps your child practice language and communication abilities, please mark a “√” on the box of number 4.

1	2	3	4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
Items	1	2	3	4
1. Play provides my child with opportunities to explore new experiences and learn new skills and abilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Playing helps my child practice language and communication skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Play does not help my child’s ability to solve problems (e.g., solve conflicts with peers, solve problems).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
	1	2	3	4
4. Through play, my child learn to express positive or negative emotions (e.g., happy or sad).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I think play is just for fun, and it doesn't contribute too much to my child's learning and development.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I do not buy many toys for my child because I think that playing is only a waste of time and it's meaningless.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I enjoy playing with my child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I support and provide opportunities for my child to play and interact with other children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I think play is not important for young children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I do not like my child spent too much time playing or playing with other children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Through play, my child has more plentiful imaginations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I teach my child social skills when we play together (e.g., be polite, share toys, follow rules...).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I think my child engage in academic learning (e.g., numbers and letters) is important than playing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I do not play with my child very often because I think it is not necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Play can improve my child's development of thinking abilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I encourage my child try different ways of playing when we play together.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly		Strongly	
	Disagree	Disagree	Agree	Agree
	1	2	3	4
17. Play does not help my child's development of creativity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I would rather teach my child academic skills (e.g., numbers and letters) than playing with him/her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I do not care what my child plays.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Providing a rich playing environment is important.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I value the importance of child's play so that I provide different kinds of toys for my child to play with.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Play does not improve my child's social skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. It is important for me to join my child's play.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Through play, my child learns how to interact with others and develops social skills (e.g., take turns; cooperate or negotiate with each other; make friends with others; have empathy).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I like to let my child learning from playing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I encourage my child create new games when we play together.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Playing stimulates my child's creative thinking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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~ Please Move to Part III ~



Part III: Evaluation of Your Child's Social Competence  
(Developed and approved by Merrell, 2002)

This section is to evaluate your child's social competence at home or other occasions when interacting with others (e.g., playing).

★Please mark a check (✓) in the box according to the frequency with which behaviors occur.

1= Never, 2=Sometimes, 3=Usually, 4= Always

Example: Cooperates with peers (friends or playmates)

If your child usually cooperates with peers at home or other occasions when interacting with others (e.g., playing), mark a "✓" on the box of number 3.

1    2    3    4  
        

Items	Never	Sometimes	Usually	Always
	1	2	3	4
My child...				
1. Cooperates with peers (friends or playmates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Offers help to peers (friends or playmates) when needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Controls temper when angry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Bothers and annoys others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Argues or quarrels with peers (friends or playmates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Participates effectively in family or group activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Understands problems and needs of peers (friends or playmates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Initiates peers (friends or playmates) to participate in activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is physically aggressive (e.g., push or hit)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Is accepting of peers (friends or playmates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My child...	Never	Sometimes	Usually	Always
	1	2	3	4
11. Disregards feelings or needs of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Destroys or damages others' property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Will give in or compromise with peers when appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Interacts with a wide variety of peers(friends or playmates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Is good at initiating or joining conversations with peers (friends or playmates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Is sensitive to the feelings of others (e.g., understand other's feelings or facial expressions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Gets into fights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Enters appropriately into ongoing activities with peers (friends or playmates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Swears or uses offensive language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Follows family and community rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Adjusts to different behavioral expectations across settings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Has temper outbursts or tantrums	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Will not share with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Teases and makes fun of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Is invited by peers (friends or playmates) to join in activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Takes things that are not his/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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~ Please Move to Part IV~

Part IV: Evaluation of Your Child’s Creativity (Approved by Kader, 2008)

This section is to evaluate your child’s creativity.  
 ★Please mark a check (√) in the box according to the frequency with which behaviors occur.  
 1= Never, 2=Sometimes, 3=Usually, 4= Always

Example: Likes to devise new games.  
 If your child sometimes likes to devise new games, mark a “√” in the box of number 2.

1    2    3    4  
        

	Never	Sometimes	Usually	Always
Items	1	2	3	4
My child...				
1. Likes to devise new games	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Exhibit uncommon using of everyday items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Interests in problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Loves experiencing adventures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Devises new rules for common games	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Likes to ask why, how, or what if questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Shows unusual curiosity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Likes to change a known story	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Has rich imagination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Produces different designs or products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your participation in this survey.  
 After you completed the questionnaire, please put this questionnaire back into the envelope and seal it.  
 Please return the envelope to the kindergarten teacher in 7 days.

## Appendix B

### Parents' Perceptions of Child's Play Questionnaire (Chinese Version)

ID # \_\_\_\_\_

#### 家長對幼兒遊戲看法問卷

##### 第一部分: 基本資料

此部分是關於您的個人背景資料，請您在適當的□中打√

1. 您的性別: 男 女
2. 您的年齡: 20~29 歲 30~39 歲 40~49 歲 50 歲以上
3. 您的最高教育程度: 國中(以下) 高中職 專科  
大學 研究所(含)以上
4. 您的職業: 軍警 老師 公務人員  
高科技產業 一般製造業 商業  
農業 自由業  
家管 其他\_\_\_\_\_
5. 您的配偶的年齡: 20~29 歲 30~39 歲 40~49 歲 50 歲以上
6. 您的配偶的最高教育程度: 國中(以下) 高中職 專科  
大學 研究所(含)以上
7. 您的配偶的職業: 軍警 老師 公務人員  
高科技產業 一般製造業 商業  
農業 自由業  
家管 其他\_\_\_\_\_
8. 您家庭每月的總收入(指孩子雙親之總收入)平均約為:  
30,000 元以下 30,000 元~55,000 元  
55,000 元~75,000 元 75,000 元~100,000 元  
100,000 元以上
9. 您在本班就讀的孩子性別為: 男 女
10. 您的孩子的年齡為: 3~4 歲 4~5 歲 5~6 歲 6~7 歲
11. 您對孩子的管教方式:  
專制權威 (注重嚴謹的規矩、要求服從、很少和孩子有互動或是溝通)  
開明權威 (建立堅定的規矩，但適時給予支持、溫暖、引導、參與)  
寬鬆放任 (較少設立任何限制或是規矩，並且很少懲戒、管教孩子)  
忽視冷漠 (不提供管教或促進孩子的發展，很少融入孩子的生活中)

請繼續填答第二部分



- |   | 非<br>常<br>不<br>同<br>意<br>1 | 不<br>同<br>意<br>2         | 同<br>意<br>3              | 非<br>常<br>同<br>意<br>4    |
|---|----------------------------|--------------------------|--------------------------|--------------------------|
| 9. 我認爲遊戲對幼兒不重要。   | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. 我不歡我的孩子花太多時間玩耍或是與其他孩子遊戲。                            | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. 透過遊戲，我的孩子能夠有更豐富的想像力。                                | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. 當我和我的孩子一起遊戲時，我會教導他社交技能<br>(例如: 要有禮貌、分享玩具、遵守遊戲規則...) | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. 我覺得孩子學習課業(例如: 算數或認字)比玩玩具、遊戲重要。                      | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. 我不常和我的孩子遊戲，因爲我認爲那是不重要的。                             | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. 遊戲能夠幫助孩子發展思考能力。                                     | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. 當我和我的孩子一起遊戲時，我鼓勵我的孩子嘗試不同的<br>遊戲方式。                  | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. 遊戲並不會幫助我孩子發展創造力。                                    | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. 與其和我的孩子遊戲，我比較想教導他課業上的知識技能<br>(例如: 算數與認字)。           | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. 我不常留意我的孩子在做什麼遊戲。                                    | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. 提供孩子一個豐富的遊戲環境是重要的。                                  | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. 我覺得遊戲對孩子的成長發展很重要，所以我提供不同種類<br>的玩具給我的孩子玩。            | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. 遊戲不會增進我孩子的社交技能。                                     | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. 和孩子一起遊戲對我而言是很重要的。                                   | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- |  | 非<br>常<br>不<br>同<br>意<br>1 | 不<br>同<br>意<br>2         | 同<br>意<br>3              | 非<br>常<br>同<br>意<br>4    |
|--|----------------------------|--------------------------|--------------------------|--------------------------|
| 24. 透過遊戲，我的孩子能夠學習如何和他人互動並且培養社交技能 (例如: 輪流的觀念、與他人合作或是協商、與他人交朋友、具有同理心)。 | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. 我喜歡讓我的孩子從遊戲中學習。  | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. 當我和孩子一起玩時，我會鼓勵我的孩子創造新的遊戲。  | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 27. 遊戲能夠激發孩子的創造思考能力。   | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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請繼續填答第三部分

第三部分: 評估您孩子的社會能力(量表由 Merrell, 2002 設計, 使用上得到原作之允許)

此部分是要評估您的孩子在家中或是一般場合中與他人互動(例如遊戲)時的社會能力。

★ 請根據孩子出現此行為的頻率(次數)在適當的框格中√

1= 從不, 2= 有時, 3= 經常, 4= 總是

範例: 與同儕(朋友或玩伴)合作

如果您的孩子在家中或是一般場合中與他人互動時(例如遊戲), 經常與同儕(朋友或玩伴)合作, 請在 3 號框格中打√

1    2    3    4  
        

項目	從	有	經	總
	不	時	常	是
	1	2	3	4
我的孩子...				
1. 與同儕(朋友或玩伴)合作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 需要時會幫助同儕(朋友或玩伴)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 生氣時能控制脾氣	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 打擾、惹惱其它人	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 與同儕(朋友或玩伴)爭吵	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. 積極的參與家庭活動或遊戲	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 了解同儕(朋友或玩伴)的問題與需求	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 邀請同儕(朋友或玩伴)參與活動	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 出現肢體上的侵犯 (例如:打人、推人)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 被同儕(朋友或玩伴)接納	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. 忽略其它人的感覺或是需求	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. 毀損別人的東西	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	從 不 1	有 時 2	經 常 3	總 是 4
13. 在適當的時候，願意對同儕讓步或是妥協	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. 與很多同儕(朋友或玩伴)互動	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. 善於開始或是加入同儕(朋友或玩伴)的談話中	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. 對於別人的感覺很敏銳 (例如能感受別人的感覺、能夠察言觀色)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. 陷入打架爭吵中	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. 適當的融入同儕(朋友或玩伴)正在進行的活動中	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. 咒罵或是使用冒犯性的言語(例如:說髒話、粗話)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. 遵守家庭或團體的規範	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. 在不同的情境中，能調整行為以符合師長的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. 情緒容易爆發或是發脾氣	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. 不願意與別人分享	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. 嘲笑別人	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. 被同儕(朋友或玩伴)邀請加入活動中	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. 隨意拿取別人的物品	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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請繼續填答最後部分

第四部分: 評估您孩子的創造力 (使用上得到 Kader, 2008 之允許)

此部分是要評估您的孩子的創造力。

★ 請根據孩子出現此行為的頻率(次數)在適當的框格中打√

1= 從不, 2= 有時, 3= 經常, 4= 總是

範例: 喜歡發明新遊戲

如果您的孩子有時會發明新遊戲, 請在 2 號框格中打√

1	2	3	4
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

項目	從	有	經	總
	不	時	常	是
	1	2	3	4
我的孩子...				
1. 喜歡發明新遊戲。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 能對日常生活中的物品想出不同的用法	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 喜歡想辦法解決問題。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 喜愛冒險。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 對於熟悉的遊戲能創造新的玩法或制定出新的遊戲規則。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. 喜歡問「為什麼...?」、「怎麼樣...?」、「如果...?」的問題。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 表現出好奇心。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 會改編已經知道的故事。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 擁有豐富的想像力。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 能創作出不同的設計或是作品。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

非常感謝您填寫此問卷。  
當您填寫完畢後, 請將問卷放回信封袋內並封好送回學校, 於7天內交回給幼稚園老師。

## Appendix C

### ID # \_\_\_\_\_ Questionnaire — Teacher Version (English)

#### Teachers' Evaluation of Children's Social Competence and Creativity at School Settings

Part I: Evaluation of The Child's Social Competence  
(Developed and approved by Merrell, 2002)

This section is to evaluate the child's social competence at school settings.

★ Please mark a "√" in the box according to the frequency with which behaviors occur.

1= Never, 2=Sometimes, 3=Usually, 4= Always

Example: Cooperates with other children

If the child usually cooperates with other children at school settings, mark a "√" in the box of number 3.

1    2    3    4  
        

Items	Never	Sometimes	Usually	Always
	1	2	3	4
The child...				
1. Offers help to other children when needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Participates effectively in group discussions and activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Understands problems and needs of other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Will not share with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Swears or uses offensive language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Invites other children to participate in activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Argue or quarrels with peers (classmates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Interacts with a wide variety of peers (classmates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is physically aggressive (e.g., push or hit)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Items	Never	Sometimes	Usually	Always
	1	2	3	4
The child...				
10. Takes things that are not his/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is good at initiating or joining conversations with peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Is sensitive to feelings of other children (e.g., understand other's feelings or facial expressions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Enters appropriately into ongoing activities with peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Follows school and classroom rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cooperates with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Gets into fights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Disregards feelings or needs of other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Bothers and annoys other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Has temper outbursts or tantrums	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Is accepting of other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Adjusts to different behavioral expectations across settings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Controls temper when angry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Will give-in or compromise with peers when appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Is invited by peer to join in activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Teases and makes fun of other students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

~ Please Move to Part II ~

## Part II: Creative Behavior Scale (Approved by Kader, 2008)

Direction: This section is to evaluate the child's creativity at school settings.

★ Please mark a "√" in the box according to the frequency with which behaviors occur.

1= Never, 2=Sometimes, 3=Usually, 4= Always

Example:

Likes to devise new games.

If the child sometimes likes to devise new games, mark a "√" in the box of number 3.

1	2	3	4
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Never	Sometimes	Usually	Always
Items	1	2	3	4
The child...				
1. Likes to devise new games.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Exhibit uncommon using of everyday items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Interests in problem solving.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Loves experiencing adventures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Devises new rules for common games.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Likes to ask why, how, or what if questions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Shows unusual curiosity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Likes to change a known story.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Has rich imagination.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Produces different designs or products.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your participation in this survey.

After you completed the questionnaire, please put this questionnaire back into the envelope and seal it.

Please put the questionnaire along with other questionnaires.

The researcher will pick them up in person later.

Thank you!

## Appendix D

### Questionnaire — Teacher Version (Chinese)

ID # \_\_\_\_\_ 教師評估孩子在學校中的社會能力與創造力之問卷

第一部分: 評估此孩子的社會能力

(量表由 Merrell, 2002 設計, 使用上得到原作之允許)

此部分是要評估此孩子在學校中的社會能力。

★ 請根據孩子出現此行為的頻率(次數)在適當的框格中√

1= 從不, 2= 有時, 3= 經常, 4= 總是

範例: 與其它幼兒合作

如果此孩子經常在學校中與其他幼兒合作, 請在 3 號框格中打√

1	2	3	4
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

項目	從	有	經	總
	不	時	常	是
	1	2	3	4
這個孩子...				
1. 需要時, 會幫忙其它幼兒	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 積極的參與小組活動或遊戲	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 了解其它幼兒的問題與需求	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 不願意與其它幼兒分享	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 咒罵或是使用冒犯性的言語	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. 邀請其它幼兒參與活動或遊戲	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 與同儕(同學)爭吵	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 與很多同儕(同學)互動	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 出現肢體上的侵犯(例如:打人、推人)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

項目	從 不 1	有 時 2	經 常 3	總 是 4
這個孩子...				
10. 隨意拿取他人的物品	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. 善於開始或是加入同儕(同學)的談話	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. 對其它幼兒的感覺很敏銳 (例如能感受別人的感覺、能夠察言觀色)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. 適當的融入同儕(同學)正在進行的活動中	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. 遵守學校和教室規則	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. 與其它幼兒合作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. 陷入打架爭吵中	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. 忽略其它幼兒的感覺或是需求	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. 打擾、惹惱其它幼兒	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. 情緒容易爆發或是發脾氣	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. 被其它幼兒接受	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. 在不同的情境中，能調整行為以符合師長的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. 當生氣時能控制脾氣	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. 在適當的時候，願意對同儕(同學)讓步或是妥協	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. 被其它同儕(同學)邀請加入活動中	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. 取笑與嘲笑其它幼兒	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

請繼續填答第二部分

第二部分: 評估此孩子的創造力(使用上得到 Kader, 2008 之允許)

此部分是要評估此孩子在學校中的創造力。

★ 請根據孩子出現此行為的頻率(次數)在適當的框格中√

1= 從不, 2= 有時, 3= 經常, 4= 總是

範例: 喜歡發明新遊戲

如果此孩子有時喜歡在學校中發明新遊戲, 請在 2 號框格中打√

1	2	3	4
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		從 不	有 時	經 常	總 是
項目		1	2	3	4
這個孩子...					
1. 喜歡發明新遊戲。		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 能對日常生活中的物品想出不同的用法		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 喜歡解決問題。		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 喜愛冒險。		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 對於熟悉的遊戲能創造新的玩法或制定出新的 遊戲規則。		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. 喜歡問「為什麼...?」、「怎麼樣...?」、 「如果...?」的問題。		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 表現出好奇心。		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 會改編已經知道的故事。		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 擁有豐富的想像力。		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 能創作出不同的設計或是作品。		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

非常感謝您填寫此問卷。

當您填寫完畢後, 請將問卷放回信封袋內並彌封。

請統一存放於某處, 之後研究者會親自前往索取。

謝謝!



**Appendix E**  
**Cover Letter for Parents (English Version)**

A Letter for Parents

Dear Parents,

I am a graduate student in the department of Curriculum and Instruction at Pennsylvania State University in the United States, and I am working on my doctoral dissertation study now. The purpose of the research is to understand current Taiwanese parents' perceptions of child's play and see if their perceptions are related to children's development of social competence and creativity.

The questionnaire is divided into four parts. The first part is background information. The second part is your perception of child's play. The third part is the evaluation of your child's social competence. The fourth part is the evaluation of your child's creativity. The four parts are answered by placing check marks by the items that best reflect your perceptions. You do not need to provide any descriptive answer. In addition, there is no right or wrong answers in this questionnaire. You only need to answer the questions based on your own perception and judgment.

Your participation is completely voluntarily. You can stop at anytime, and you can reject answering any question that you do not want to answer. I would like to ask for your assistance to help me finish the questionnaire by taking 15 minutes. The questionnaire is conducted for the research only, and your response to this questionnaire will remain confidential.

Please seal your complete questionnaire in the enclosed envelope and return that envelope to the teacher in 7 days. Thanks for your help again.

If you have any question, please feel free to contact with me by using the following information:

Telephone:

Email: [piyohom@yahoo.com.tw](mailto:piyohom@yahoo.com.tw)

Sincerely yours,

Yen-Chun Lin

Pennsylvania State University

Curriculum and Instruction

Ph.D. Candidate

December, 2008

**Appendix F**  
**Cover Letter for Parents (Chinese Version)**

給家長的一封信

親愛的家長，您好：

我是美國賓州州立大學課程與教育博士班的研究生，目前正在進行我的論文研究。這個研究的主要目的是想了解現今台灣父母親對於幼兒遊戲的看法，而該看法是否與幼兒的社會能力發展與創造力發展有關聯。

這份問卷分為四大部分，第一部分為背景資料，第二部分為您對幼兒遊戲的看法，第三部分為您對孩子社會能力的評估，第四部份為您對孩子創造力的評估。此四部份皆根據您個人的觀點採用勾選方式填答，不需包含任何敘述性的答覆。另外，此問卷沒有正確或錯誤答案，只需依照您個人的想法填寫即可。

此問卷是採用自願式，您可以在任何時間停筆，也可以拒絕任何您不想回答的問題。誠心希望您能撥出大約 15 分鐘的時間，協助完成。此問卷僅供學術研究之用，不會對外公開，也不做個別探討，過程中完全保密。

請您在填寫完問卷後，將問卷放回信封袋中彌封，於7天之內交回給班級老師。感謝您的合作與幫忙。

如有任何問題，歡迎使用以下方式與我連絡：

電話：

Email: [piyohom@yahoo.com.tw](mailto:piyohom@yahoo.com.tw)

敬祝您全家

平安 健康 快樂

美國賓州州立大學 (Pennsylvania State University)

課程與教育學系 (Curriculum and Instruction)

博士研究生 林彥君 敬上

2008 年 12 月

## **Appendix G**

### **Cover Letter for Teachers (English Version)**

#### A Letter for Teachers

Dear Teachers,

I am a graduate student in the department of Curriculum and Instruction at Pennsylvania State University in the United State, and I am working on my doctoral dissertation study now. The purpose of the research is to understand current Taiwanese parents' perceptions of child's play and see if their perceptions are related to children's development of social competence and creativity.

The questionnaire is divided into two parts. The first part is your evaluation of the child's social competence at school. The second part is your evaluation of the child's creativity at school. The two parts are answered by placing check marks by the items that best reflect your perceptions. You do not need to provide any descriptive answer. In addition, there is no right or wrong answers in this questionnaire. You only need to answer the questions based on your own perception and judgment.

Your participation is completely voluntarily. You can stop at anytime, and you can reject answering any question that you do not want to answer. I would like to ask for your assistance to help me finish the questionnaire by taking 10 minutes. The questionnaire is conducted for the research only, and your response to this questionnaire will remain confidential.

Please seal your complete questionnaire in the enclosed envelope, and the researcher will go to collect all the questionnaires. Thanks for your help again.

If you have any question, please feel free to contact with me by using the following information:

Telephone:

Email: [piyohom@yahoo.com.tw](mailto:piyohom@yahoo.com.tw)

Sincerely yours,  
Yen-Chun Lin

Pennsylvania State University  
Curriculum and Instruction  
Ph.D. Candidate  
December, 2008

## Appendix H Cover Letter for Teacher (Chinese Version)

### 給老師的一封信

親愛的老師，您好：

我是美國賓州州立大學課程與教育博士班的研究生，目前正在進行我的論文研究。這個研究的主要目的是想了解現今台灣父母親對於幼兒遊戲的看法，而該看法是否與幼兒的社會能力發展與創造力發展有關聯。

這份問卷分為兩大部分，第一部分為您對該孩子於學校中社會能力的評估，第二部份為您對該孩子於學校中創造力的評估。此二部份皆根據您個人的觀點採用勾選方式填答，不需包含任何敘述性的答覆。另外，此問卷沒有正確或錯誤答案，只需依照您個人的想法填寫即可。

此問卷是採用自願式，您可以在任何時間停筆，也可以拒絕任何您不想回答的問題。誠心希望您能撥出大約 10 分鐘的時間，協助完成。此問卷僅供學術研究之用，不會對外公開，也不做個別探討，過程中完全保密。

請您在填寫完問卷後，將問卷放回信封袋中彌封，本人會親自前往索取。感謝您的合作與幫忙。

如有任何問題，歡迎使用以下方式與我連絡：

電話：

Email: [piyohom@yahoo.com.tw](mailto:piyohom@yahoo.com.tw)

敬祝您全家

平安 健康 快樂

美國賓州州立大學 (Pennsylvania State University)

課程與教育學系 (Curriculum and Instruction)

博士研究生：林彥君 敬上

2008 年 12 月

**Appendix I**  
**Informed Consent Form for Parents (English Version)**

Title of Project: Parents' Perceptions of Child's Play and the Relation to Children's Social  
Competence and Creativity

Descriptions:

1. The purpose of the research is to gain an understanding of Taiwanese parents' perceptions of child's play and to see if their perceptions are related to children's development of social competence and creativity.
2. If you agree to participate in the study, you will be asked to fill out four parts of questions. The first part is background information. The second part is your perception of child's play. The third part is the evaluation of your child's social competence. The fourth part is the evaluation of your child's creativity.
3. It will take about 15 minutes to complete the questionnaire.
4. After you return the questionnaire, kindergarten teachers will also be asked to fill out the questionnaires about your children's social competence and creativity.
5. Your answer and personal information will remain confidential and will be used for this research only. The data will be secured at personal computer in a safe password file and stored in a locked drawer. The original data will be destroyed after three years (2011) in order to protect your identity.
6. Your decision in this research is voluntarily. You can stop at any time. You do not have to answer any questions that you do not want to answer.
7. You must be 18 years of age or older to participate in this study.
8. If you agree to take part in this research study and the information outlined above, please sign your name and indicate the date below. You will be given a copy of this form for your records.

Participant Signature \_\_\_\_\_ Date \_\_\_\_\_

Person Obtaining Consent \_\_\_\_\_ Date \_\_\_\_\_

If you have any questions or concern, please contact with the following persons:

Principal Investigator:

Yen-Chun Lin

Pennsylvania State University

Address:

531 Marjorie Mae Street

State College, PA, 16803

Email: [piyohom@yahoo.com.tw](mailto:piyohom@yahoo.com.tw)

Thesis Advisor:

Dr. Thomas D. Yawkey

204 Chambers Building

University Park, PA, 16802

Email: [tdy1@psu.edu](mailto:tdy1@psu.edu)

**Appendix J**  
**Informed Consent Form for Parents (Chinese Version)**

**家長同意書**

研究標題：父母對於幼兒遊戲的看法，以及該看法與幼兒社會能力、創造力發展之關聯說明：

1. 此份問卷的主要目的為了解現今台灣父母親對於幼兒遊戲的看法，而該看法是否與幼兒的社會能力發展與創造力發展有關聯。
2. 如果您同意填寫此份問卷，請您填寫四大部分。第一部分為背景資料，第二部分為您對幼兒遊戲的看法，第三部分為您對孩子社會能力的評估，第四部份為您對孩子創造力的評估。
3. 這份問卷大約花費 15 分鐘填寫。
4. 當您交回問卷後，幼稚園班級老師將會填寫關於您孩子的社會能力與創造力的問卷。
5. 您的答案及個人相關資料將不會對外公開，僅供此學術研究使用。此外，您填好的問卷將妥善保存於研究者個人的鎖碼電腦與上鎖抽屜中。所有資料將於 3 年後(2011 年)銷毀，以確保個人隱私。
6. 您可以自由決定是否參加這個研究。您可以在任何時候終止參與，也可以拒絕回答任何您不想填答的問題。
7. 您必須年滿 18 歲以上才能參與本研究。
8. 如果您同意參與此研究以及認同以上的項目，請在下面簽名並指名日期。請交回一份同意書，並自行保留另一份以作為紀錄。

參與者簽名\_\_\_\_\_

日期\_\_\_\_\_

取得同意者簽名\_\_\_\_\_

日期\_\_\_\_\_

如果您有任何疑問，請與下方人員聯絡：

研究者：林彥君

美國賓州州立大學

美國地址：

531 Marjorie Mae Street

State College, PA, 16803

聯絡電話：

論文指導教授：Dr. Thomas D. Yawkey

204 Chambers Building

University Park, PA, 16802

Email: [tdy1@psu.edu](mailto:tdy1@psu.edu)

Email: [piyohom@yahoo.com.tw](mailto:piyohom@yahoo.com.tw)

## **Appendix K**

### **Informed Consent Form for Teachers (English Version)**

Title of Project: Parents' Perceptions of Child's Play and the Relation to Children's Social  
Competence and Creativity

Descriptions:

1. The purpose of the research is to gain an understanding of Taiwanese parents' perceptions of child's play and to see if their perceptions are related to children's development of social competence and creativity.
2. If you agree to participate in the research, you will be asked to fill out two parts of questions. The first part is your evaluation of the child's social competence. The second part is your evaluation of the child's creativity
3. It will take about 10 minutes to complete the questionnaire.
4. Your answer and personal information will remain confidential and will be used for this research only. The data will be secured at personal computer in a safe password file and stored in a locked drawer. The original data will be destroyed after three years (2011) in order to protect your identity.
5. Your decision in this research is voluntarily. You can stop at any time. You do not have to answer any questions that you do not want to answer.
6. In order to thank for your participate and help, you will receive a 1000 NTD (around \$30 USD) gift card.
7. You must by 18 years of age or older to participate in this study.
8. **Completion and return the survey is considered you implied consent to participate in this study. Please keep this form for your records.**
9. After you completed the questionnaire, please put this questionnaire back into the envelope and seal it. The researcher with pick them up in person.

If you have any questions or concern, please contact with the following persons:

Principal Investigator:

Yen-Chun Lin

Pennsylvania State University

Address:

531 Marjorie Mae Street

State College, PA, 16803

Telephone:

Thesis Advisor:

Dr. Thomas D. Yawkey

204 Chambers Building

University Park, PA, 16802

Email: [tdy1@psu.edu](mailto:tdy1@psu.edu)

Email: [piyohom@yahoo.com.tw](mailto:piyohom@yahoo.com.tw)

## Appendix L

### Informed Consent Form for Teachers (Chinese Version)

#### 老師同意書

研究標題： 父母對於幼兒遊戲的看法，以及該看法與幼兒社會能力、創造力發展之關聯

說明：

1. 此份問卷的主要目的為了解現今台灣父母親對於幼兒遊戲的看法，而該看法是否與幼兒的社會能力發展與創造力發展有關聯。
2. 如果您同意填寫此份問卷，請您填寫兩大部分。第一部分為您對該孩子社會能力的評估，第二部份為您對該孩子創造力的評估。
3. 這份問卷大約花費 10 分鐘填寫。
4. 您的答案及個人相關資料將不會對外公開，僅供此學術研究使用。此外，您填好的問卷將妥善保存於研究者個人的鎖碼電腦與上鎖抽屜中。所有資料將於 3 年後(2011 年)銷毀，以確保個人隱私。
5. 您可以自由決定是否參加這個研究。您可以在任何時候終止參與，也可以拒絕回答任何您不想填答的問題。
6. 為了感謝您的參與及幫忙，您將會得到台幣 1000 元的禮券。
7. 您必須年滿 18 歲以上才能參與本研究。

#### **8. 若您同意參加本研究，請自行保留此份同意書。**

9. 填寫完問卷後請放入信封袋內彌封保存，研究者會親自前往索取。

如果您有任何疑問，請與下方人員聯絡：

研究者：

林彥君 (Yen-Chun Lin)  
賓州州立大學 (Pennsylvania State University)  
課程與教育學系 (Curriculum and Instruction)  
美國地址：

531 Marjorie Mae Street  
State College, PA, 16803

聯絡電話：

論文指導教授：

Dr. Thomas D. Yawkey  
204 Chambers Building  
University Park, PA, 16802  
Email: [tdy1@psu.edu](mailto:tdy1@psu.edu)

Email: [piyohom@yahoo.com.tw](mailto:piyohom@yahoo.com.tw)



**VITA**  
**Yen-Chun Lin**

**EDUCATION**

Doctor of Philosophy in Curriculum and Instruction 2009  
The Pennsylvania State University, University Park, PA, USA

Bachelor of Education in Early Childhood Education 2005  
National Taichung University, Taichung, Taiwan

**TEACHING EXPERIENCE**

Sep., 2008 ~ Sep., 2009	Volunteer	Bennett Family Center at PSU
Sep., 2008 ~ Oct., 2009	Teacher	Chinese Class for Taiwanese children
Sep., 2008 ~ Dec., 2008	Volunteer	Young Scholars Charter School, State College, Pennsylvania
Aug., 2005 ~ June, 2006	Student Teacher	Department of Kindergarten, National Experimental High School Hsinchu, Taiwan
July, 2004	Student Teacher	Canadian-American Language School Hsinchu, Taiwan

**PROFESSIONAL PUBLICATION AND PRESENTATION**

Lin Y. -C. & Huang, S. -C. (2008, October). *Chinese hot: the experiences of teaching Chinese in the U.S. Paper presented at Mid-Western Educational Researcher Conference, Columbus, OH, USA.*

Lin Y. -C. (in press). Improving parent-child relationships through block play. Manuscript accepted for publication in *Education*.

**HONORS AND CERTIFICATION**

2006	Certificated as an early childhood education teacher in Taiwan
2006	Certificated as an elementary school teacher in Taiwan
2005	Honorary member of The Phi Tau Phi Scholastic Honor Society of The Republic of China