INFLUENCE OF PATERNAL PARTICIPATION UPON SYMBOLIC PLAY IN TODDLERS

By

SUPRA WIMBARTI

Sarjana

Gadjah Mada University

Yogyakarta, Indonesia

1985

Submitted to the Faculty of the
Graduate College of
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
July, 1990

INFLUENCE OF PATERNAL PARTICIPATION UPON SYMBOLIC PLAY IN TODDLERS

Thesis Approved:

Patricia A. Sally
Thesis Adviser

JoAnn M. Farver

Donna Coates

Norman N. Durham
Dean of the Graduate College

ACKNOWLEDGEMENTS

I want to express my deep gratitude to my adviser Dr. Patricia A. Self for her continued support and guidance throughout my study at Oklahoma State University, and especially in finishing this project. Her encouragement and expertise, and especially her humanness were of tremendous value to me.

I also want to express my appreciation to the other committee members: Dr. Donna Couchenour and Dr. JoAnn Farver for their challenge and encouragement.

I owe so much to my husband, mas Yoyok and my daughter Anya who let me go across the world to pursue my education in the United States. I deeply appreciate their unrecognized support.

Also, my gratitude goes to my parents-in law.

My roommate Rini Budiyanti, Riza Retnowulan, Jee Kim Wong, and Lorina Evans have made my study more colorful; millions of thanks go to them.

I also would like to give my appreciation to Wisnu Bhirawa Prono, for his patience in helping me, from collecting data through the finishing of this study.

Finally, I dedicate this work for my father, my mother, and my beloved sister Supra Wardhani, who raised me with respect and patience, who taught me to be honest, and who

gave me strength in my life.

TABLE OF CONTENTS

Page

LIST OF TABLES

Tables Page

Abstract

The development of symbolic play of the 18-month and the 24-month olds toddlers while playing with their fathers was assessed using Nicolich's (1981) scale. Level of symbolic play has been recognized as increases with age and maternal active involvement during the play. In this study active paternal involvement increased the level of symbolic play of the children. Whwn father was available to play with the child and actively involved in the play, a higher level of symbolic play was found.

CHAPTER I

INTRODUCTION

Studies of symbolic play have been inspired by the work of Piaget (1962). According to Piaget, play is a reproductive assimilation. Piaget divided play into 3 general forms: (1) sensorimotor practices; (2) pretense; and (3) games with rules. These forms appear in an ordered sequence during the first 6 or 7 years. Pretend play develops through a sequence of stages and phases into increasingly sophisticated forms. Piaget (1962) stated that activities performed during the sixth stage of sensorimotor period are the preparation for the symbolic play. True symbolic play is achieved if there is a substitution of an object into another.

Fenson and Ramsay (1980), Nicolich (1981), Piaget (1962), and Slade (1987) stated that the complexity of symbolic play increases with age.

In addition, according to Slade (1987) the partner of play has a big role in the development of symbolic play. Furthermore, motivation to symbolize or represent experience arises from the wish to share experiences with the play partner. The play partner's supportive presence or emotional availability provides the child with a sense of

security during the course of play.

During the last decade, multiple investigations on the parental role in early child development have been published. More and more research about parent-infant interactions has been done in the area of attachment behavior (Lamb, 1977; Chibucos and Kail, 1981; Easterbrooks, 1989); play (Frankel and Rollins, 1983; Power, 1985; Belsky, 1979; Bretherton, 1984; Howes, Unger, and Seidner, 1989); and parental involvement in teachıng their children (Clarke-Stewart, 1978; Pratt, Kerıg, Cowan, and Cowan, 1988). There have been many studies concerning the effects of mother-infant interaction (O'Connell and Bretherton, 1984; Slade, 1987); father-infant interaction (Grossman, Pollack, and Golding, 1988; Stevenson, Leavitt, Thompson, and Roach, 1988), and mother-infant and father-infant interaction (Lucariello, 1987; Levy-Shiff, Sharır, Mogilner, 1989). The traditional role of mothers is based on several assumptions regarding human development (Stevens and Mathews, 1978). Freudian theory emphasizes the importance of mother-infant relationships, especially during the first five years of life; and how these early experiences affect the child's later personality development. On the other hand, the role of fathers has been largely ignored until recently. Some commonly-accepted assumptions about the traditional father role are: Fathers are less important during infancy; they are not as nurturant as mothers; and, the father's primary role is "the bread winner" or the provider of financial support for the family

(Parsons and Bales, 1955). These investigators further stated that the father's role is "instrumental"; this means that fathers are oriented to the external world and are responsible for the social and economic position of the family. Mothers are viewed as having an "expressive" nature, in the sense that they create emotion and affection, as well as look after the children and do the house work.

Not until the 1970's did research on father-infant interaction mushroom; it has been an important research topic ever since. A number of recent books about fathers (Lynn, 1974; Stevens and Mathews, 1978; Lamb, 1980; Pedersen, 1980; Parke, 1981) suggests that fathers are no longer forgotten, but the role of fathers in child development deserves thorough study. Much of the research attempts to prove that fathers are as good as mothers in contributing to a child's development. One study of fathers demonstrated that fathers are just as affectionate, responsive, nurturant, and active as mothers (Parke and O'Leary, 1976).

The father's contribution is not only limited in the caring behaviors, but also in a more specific behavior: children's play. The recognition of the father's capability to stimulate children's play (Clarke-Stewart, 1980; Belsky, 1980) assumes that fathers can effectively guide their children to demonstrate a greater diversity of play. However, the role of fathers in toddlers' play has not been extensively studied. The purpose of the present study was to assess the nature of father-infant interaction

with symbolic play as the medium. This study differs from the previous investigations of symbolic play in young children in that this study involves fathers, rather than mothers as the play partner.

Initially the literature on development of symbolic play will be reviewed followed by a review of the literature on the father's role in the development of play. Subsequent to the review of the literature, several hypotheses for investigating are proposed. The methodology and results of the study will then be presented, followed by a discussion of these findings.

CHAPTER II

LITERATURE AND RESEARCH REVIEW

Symbolic Play

Definition of symbolic play

Studies of symbolic play have been inspired by the work of Piaget (1962, 1976). The present study attempts to assess the effect of fathers involvement on infants' symbolic play, therefore, the review about symbolic play will be described in a more detail. Symbolic play is often called by different names, which have been used interchangeably. Fein (1975); Nicolich (1977, 1981); Fenson and Ramsay (1980); Rubin, Fein, and Vandenberg (1983); Nicolich and Fenson (1984); Lucariello (1987), used the term pretend-play to refer to symbolic play. Piaget (1976) used the term make-believe play and pretend-play in his categorization of symbolic play.

According to Piaget (1962), play is a reproductive assimilation. From his empirical observations, Piaget proposed several discrete strands of symbolic mastery: (1) The increasing independence of pretense from the immediate and tangible substance of things. Initially, the child uses objects to represent something else with the presence of the

signified; but eventually the child symbolizes the signified without the immediate presence of the signified. An example of this form was given by Piaget (1962) when his daughter pretended to sleep. Initially she pretended to sleep with a pillow, later she pretended to sleep using a cloth as a pillow with a pillow present at her sight. Finally she became able to pretend to sleep even without pillow in her sight. This is considered to be the true symbolic play. (2) The substitution of one object to another. An example of this type is when a child uses a stick as if it's a comb. (3) The addition of other agent in the symbolic play. Initially, the child acts as the agent and the recipient at the same time, but gradually the child adds other agent to the play. Person and object are substituteable (the child pretends to feed mother or doll, and eventually the child makes the doll feed itself). (4) The child is able to perform sociodramatic play. At this moment the child combines actions by using the agent and recipient to form complicated symbolic play. Example of this type of play is when the child performs symbolic play with a play partner. The child may pretend to be a doctor and her play partner to be a patient, the child his patient to lay down, then he takes a statescop from the doctor's kit toy, and begins to examine his patient.

Piaget (1962) also noted that pretend play is characterized by the child's tendency to substitute, usually arbitrarily, one object to another. Anything can stand for anything else. There are no rules that guide or determine

the substitution. However, Golomb (1979) proposed that the child clearly has rules in pretend play. The child selects another object which is suitable to the object being signified. For example, in a pretend play "going to pet shop", children aged 2 to 5 years will select the objects which are suitable to be used in the pet shop, e.g. stuffed animal-kitten, porcelain kitten, or stuffed animal-dog.

Fein (1975) analyzed the transformational aspects of pretending. She suggested that before the child pretends, the child must first develop a clear internal representation of the referent object. The child can pretend when the internal representatıon can be mapped onto the substitute object. In the early pretending, the substitute object must be physically similar to referent object, because the child needs an object that can be associated with the internal representation as the referent object. With the development of pretending skill, the physical similarity between the substitute object and the referent object becomes less important. For example, in the early pretending a child may play drinking from a cup with a cuplike cup (e.g. toy cup), but eventually he will be able to substitute the cup with an object which totally different (e.g. a shell).

Another description of symbolic play was given by Wolf and Gardner (1979). They defıned symbolic play as the child's ability to use objects, motion, or language to represent actual or imagined experience. After observing the child's early symbolic play, Wolf and Gardner (1979) noted the consistent patterns of preferences and

characteristic ways of organizing responses with ambiguous materials. They came up with two styles of child's symbolic play: children as patterners and children as dramatists. "Patterners" are interested in using objects, manipulating, naming, ordering and explorating the objects. For example, given a set of building block, patterners will most likely to explore the geometric pattern, balance, symmetricality, and the dynamic relationship of the blocks, and will group the objects according to color, or shape. Children as "dramatists", are interested in persons and feelings. They use the objects within an interpersonal relationship and sharing experience; e.g.what others do, how they think and feel, or how they can be contacted and affected. With the building blocks, the dramatists will give the big block a "mother" character and the small block a "baby" character.

Symbolic play is also defined as an activity when a child acts "as if" (Fein, 1981). Nicolich (1981) proposed some criteria commonly used to infer that a child is pretending: (1) inanimate objects are treated as animate (e.g., feeding a doll); (2) everyday activities are performed in the absence of the necessary materials (e.g., drinking from an empty cup); (3) the child performs action usually done by someone else (e.g., reading a book); (4) activities are not carried to their usual outcome (e.g., purse over arm, wave, but not go out); (5) one object is substituted for another (e.g., shell for a cup); and (6) affective and instrumental behaviors by the child signal the nonliteral quality of the activity. The child transforms

activities from their real objectives and objects from their real counterparts.

Development of symbolic play

Symbolic play development has been proposed by several authors. According to Piaget (1962, 1976) during the first and second stage of the sensorimotor period, there is no symbolic play. Instead, play takes form in the exercise of simple motor schemata performed for the pleasure of functioning. Examples of this kind of play are when the child makes a sound and then laughs, or sucks for the sake of sucking. At the third stage which is secondary circular reaction, the child assimilates for the sake of the activity itself, accompanied by the pleasure feeling. The difference between the first two stages and the third stage is that in the third stage, the assimilation is more advanced. The child does not only involve his own body, but also objects are manipulated deliberately. During the fourth stage, child behavior is ritualized, in the sense that the behavior is formed in sequence of aimless combinations with no attempt at accommodation. This ritualization is the preparation for symbolic games. The ritualization continues to the fifth stage, but the child combines the ritual behavior accompanied by the feeling of efficacy (usually pleasure feelings). Play at this stage becomes game for the child. During the sixth stage, ritual activity progresses in the direction of representation and takes the form of symbolic schemas.

Another play categorization which comes from Piaget tradition is that proposed by O'Connell and Bretherton (1984). These authors propose four categories of play: (1) exploration play, consists of all manipulative behaviors such as handling, throwing, banging, or mouthing objects or touching one toy to another; (2) combinatorial play, which includes putting things together such as putting shape blocks into the shape box or toys into the house, stacking objects on top of one another; (3) symbolic play, consists of all instances of pretense play or "acting as if" such as a block for a bed, making peg people walk or talk; (4) ambiguous, consists of all play behaviors in the ambiguous nature.

Nicolich (1977, 1981) expanded Piaget's notion of symbolic play in a more thorough description. She studied the spontaneous symbolic play of five children monthly in the home setting over a year period. She divided symbolic play sequence into five levels, and each level includes a number of different types of activity. The sequence developments of the play are as follow:

Level 1: Presymbolic schemes.

This level is the transition from sensorimotor to symbolic functioning in play. At this level the child does not make any act to form symbolic play. When the child performs a conventional gesture in response of an object, the child demonstrates the understanding of the object. Examples of play during this period are drinking from an empty cup, and

picking a comb and making a brief combing action to child's hair. This level is parallel with Piaget's (1962) exercise play (stage 1 and 2 of the sensorimotor period).

Level 2: Autosymbolic schemes.

A child is considered to perform an autosymbolic play when he does symbolic actions towards himself; that is, it involves his body, and accompanied by a playful feeling. During this period, the child is already has the ability to pretend. Examples of the symbolic play are the child drinking from a toy cup or closing his eyes pretending to sleep.

Level 1 and level 2 are the characteristic of the 8-11 month age period.

Level 3: Single-scheme symbolic games.

The next level of symbolic play according to Nicolich is the single-scheme-symbolic games; this period is parallel with Piaget's first stage of symbolic play. In this period, the child becomes able to extend the play outside his own body and directs the play to other objects or people, or pretends the activities are performed by objects or people. Examples of this type of play include the child combing a doll's hair or mother's hair, or the child moving a toy truck with appropriate sound or pretending to read a book. This level usually occurs when the child is around 12 - 15 month-olds.

Level 4: Combinatorial symbolic games.

This level is achieved by a child when he is able to make

combinations in his pretense and involves schemes related to several actors and recipients, or if he can combine several actions related to one another in sequential fashion. This type of play involves actions such as feeding a doll, then his mother, or kissing a doll, putting the doll on toy bed and covering it with a blanket. Fenson and Ramsay's study (1980) indicated that this level develops in the period between 12 and 18 months.

Level 5: Planned single-scheme symbolic acts.
This level is the highest level. In this level the child indicates either verbally or nonverbally that he is going to perform symbolic play. For example, the child searches for a doll's shoes, when he finds them he says "shoes", puts them onto the doll's feet, and then says "bye-bye". At this level the child is able to make object substitutions. This is the most obvious and the most complex dimension for considering the maturity in symbolic play. This level usually emerges at the end of the second year.

The development of symbolic play sequence shows that the complexity of symbolic play is enhanced with age (Piaget, 1962; Fenson and Ramsay, 1980; Nicolich, 1981; and Slade, 1987).

Play partner involvement

In some research, partners of play and the interaction between the child and the partner during the play session have been found to affect the quality of play. O'Connell

and Bretherton (1984) found that 20-month-olds and 28-month-olds children perform greater repertoire of play activities when playing with their mothers. Parallel with this finding, Slade (1987) found that a mother's availability to play with the child and interact actively during the play session enhanced the level of child's symbolic play behaviors.

The effects of fathers in symbolic play have not been studied. Therefore, this study will be a replication of parent-child study in symbolic play with fathers as the play partners.

In the present study the Nicolich' sequence of symbolic play was used to examine the dyadic interaction between fathers and toddlers.

Father-Infant Interaction

In the past fathers often were assumed to be biologically and psychologically unprepared for parenting. This notion can no longer be accepted in light of the following research findings.

Father roles in caregiving

Although fathers usually are thought of as spending less time in caretaking as compared to mothers, this does not suggest they have a less important role. The total time spent with the infant may not the most important factor when looking at the impact of parental interaction. The quantity

is less important than the quality of interaction (Fein and Clarke-Stewart, 1973; Parke, 1981). A better predictor of effective parent-child interaction is how parents use their time with their children and not how many hours they spend with the infant, but rather, what they do when they are with the infant (Parke, 1981). In addition, Parke (1981) stated that infants seek their mothers usually for comfort in a stressful situation, and they seek for fathers for play.

Quality of interaction

In an analysis of father's role, Lamb (1975) argued that both mothers and fathers play crucial and qualitatively different roles in the socialization of the child. In a longitudinal study comparing the nature of mother-infant and father-infant interactions, it was found that the interactions differed qualitatively and consistently (Lamb, 1975, 1977; Chibucos and Kail, 1981). Mothers usually held the infant for caretaking purposes, while fathers held them to play. When analyzing the attachment behavior of the infants, Lamb (1977, 1980) demonstrated that infants were attached to both parents. In a stress-free situation there was no significant preferences either to the father or to the mother (Lamb, 1976). In the reunion situation, two year -old children tend to engage their fathers in play more than their mothers.

When comparing a group of preterm and fullterm children at 13 and 20 months, Easterbrooks (1989) showed that there was no evidence that birth status influenced infant's

attachment to either mother or father. The preterm infants, and their fullterm counterparts can perform secure attachment to their mothers and fathers.

Mother's and father's stimulation is characterized by reciprocity, which implies that the parent and the infant engage in a mutual dialogue. The parents approach the infant, they stimulate the child's attention, estimate the child behavior to keep them interested, and they reduce the stimulation if the infant gets bored or tired (Parke, 1981). In the father-infant and mother-infant interactions, different kinds of experiences are offered by both parents. Mothers most often engaged in caretaking functions, while the fathers most often engaged in playing with the infants. It implies that fathers are not simply the substitutes of the mothers, but they interact with their infants in unique ways and in qualitatively different approaches. The direct influence of fathers can be seen from the performance showed when they touch, talk, and tickle their infant.

The father's attention to the child's development is not limited to the particular age of the child. An issue that has received research attention is the degree of interaction between fathers and mothers to their newborn babies. From observation in the hospital room, Parke and O'Leary (1976) found fathers are equally active as mothers in social interactions with their newborns. Even though mothers spend more time in caretaking performance, fathers respond as appropriately and sensitively as mothers.

Father and mother differences in play styles

Lamb (1975) found that both fathers and mothers are active playmates for the infants. Even though mothers contribute to their infant development in a wide variety of ways, fathers specificaly make a contribution through play activities. Stevenson, Leavitt, Thompson, and Roach (1988) found that there were differences in the kinds of play the mothers and fathers performed when they were engaged in the infant play. It indicated that mothers engaged more in instructional type of play (naming or requesting naming of objects, colors, or numbers: e.g., child asks "what's this?" and mother answers "this is a plier"), and fathers engaged in functional play (shaking or rolling objects).

Some triadic relations between father-mother-and infant have been conducted to see the infant's response preference for mother or father. Infants are significantly more responsive to play initiated by mothers (Clarke-Stewart, 1978, 1980). Ten months later the same children showed more cooperative, interested, and joyful while playing with their mothers. Fathers appear more likely than mothers to engage their infant in physical play, while mothers engage in more object-mediated and conventional games (e.g. peek-a-boo) (Clarke-Stewart, 1978; Belsky, 1979; Lamb, 1980; and McDonald and Parke, 1984).

The more recent research finding does not seem to contribute the above differentiation. Power (1985) studied a group of children aged 7, 10, and 13 months, he found the

kinds of play of fathers and mothers were remarkably similar. Even though mothers spent a greater total time than fathers encouraging pretend behaviors, there were no mother-father difference in encouragement of visual exploration, relational and communicative play, and production of auditory and visual effects, or the simple manipulation of objects. Investigations on infants exploratory competence and relating this with parental influence (Belsky, 1980) support the notion that there are similarities between mothers and fathers. The parental behaviors consist of verbal behaviors such as vocalizing and verbal response rate; non verbal behavior such as stimulate, restrict, read/watch TV; play such as social, object-mediated, figures motion; and physical contact such as simple caretaking, positive affection, soothing and playing. Among these thirteen parental behaviors investigated, only two behaviors significantly differentiated between parents. Mothers provides more caretaking and stimulation to their infants. The other eleven paternal behaviors showed a relationship with the creativity index, with the finding that the more frequently fathers used verbal responses, the children demonstrated a high level of creativity, and fathers who spent a greater time involved in solitary activities such as watching TV or reading to themselves had children who had difficulty in staying in the experiment.

Despite the large number of studies and strong theoretical support for the conclusion that both fathers and mothers play a critical role in child development, there

have been few empirical studies of the relation between fathers and mothers involvement in symbolic play. A longitudinal study by O'Connell and Bretherton (1984), and recently by Slade (1987) on maternal involvement in symbolic play indicated that level of symbolic play and duration of play increased when mothers are available to play with the infants. The result also stressed the significance of active interaction during the play.

From this review it is apparent that qualitatively fathers and mothers have their own styles when they deal with their infants and toddlers. The studies indicated that infant attachment behaviors are not significantly different to mothers or to fathers. Infants seek their mothers for comfort and seek their fathers for play. In the play situation, mothers engaged more in instructive play and fathers engaged in functional play. When young children engaged in symbolic play with their mothers, they were able to reach a higher level of symbolic play and a longer duration of play. However, there were very few studies in father-child interaction in symbolic play. As such, the following study was proposed to examine the impact of the father, and his availability to the child, upon the level of symbolic play shown by 18-and 24-month old toddlers.

Hypotheses

As the literature review shows that level of symbolic play increases with age; partner's play availability and the active involvement; and that there were many studies of

symbolic play with mothers but not with fathers, therefore, this study attempts to investigate the symbolic play with fathers as play partners of the 18-and 24-month old toddlers. More specific, the following hypotheses will be addressed:

1. The level of symbolic play will be enhanced with age: the older the child, the higher the level of symbolic play.
2. The level of symbolic play will be enhanced with paternal involvement: when fathers are actively involved, higher levels of symbolic play are found than in non-active involvement.
3. The level of symbolic play will be higher if the fathers are available to play with the children.
4. The level of symbolic play will be higher with the interaction of age and father's involvement; when father is actively involved with the 18-month-old, a higher level of symbolic play will be found than if father is not involved in the play with the 24-month-old child.
5. The level of symbolic play is enhanced with the interaction of age and experimental condition: in the father available condition to the 18-month-old children, higher levels of symbolic play are found than in the father's engaged condition for the 24-months of age children.
6. The level of symbolic play will be higher with the interaction of age, father's involvement, and experimental condition.

CHAPTER III

METHODOLOGY

Subjects

Subjects of this study were 26 father-toddler pairs. The names of the parents were obtained from birth-announcements in the local newspaper. Fathers were contacted by phone to participate in this study. There were originally 30 father-toddler pairs who agreed to participate in the study. One pair was excluded in the coding because of technical difficulties; and three of the pairs were used for pilot work. The children in the sample were 18-month-olds (7 boys and 5 girls) and 24-month-olds (7 boys and 7 girls). The mean ages were 18.1 months and 24.3 months. An earlier studies of symbolic play (Johnson, 1976) did not show a significant difference between boys and girls, so sex differences were not assessed in this study.

Materials

Children were presented with a set of toys in each session of the experiment. The toys were a subset of those used by Nicolich (1977) in her experiment. The toys consisted of objects that are realistic in appearance and

can be used for household, doll, and vehicle play. A list of the toys is shown in Appendix A.

Procedure

The play sessions were conducted in the Oklahoma State University Child Development laboratory. Each father-infant dyad was observed for twenty minutes. After the pilot data confirmed the lack of random order of the experimental condition, it was decided that the order of the experiment would be the following: Father-available condition, followed by the father-engaged condition.

Upon arrival to the laboratory room, fathers and toddlers were given a few minutes to adjust to the environment. Meanwhile, fathers were told that the goal of this study was to learn about the toddler's play, what toys are used in play, and how toys were used.

Father-infant pairs were videotaped in two condition: For the first ten minutes the experimenter asked the father to play with the child as he usually did at home. This was considered as the available condition. The experimenter then left the room. For the remaining ten minutes, the experimenter returned to the room again and engaged the father in conversation. This was considered as the engaged (not available) condition. The father was instructed to respond appropriately to the child, and to encourage the child to attend and play with the toys. The experimenter terminated the session when another ten minutes elapsed. The total experiment lasted approximately 20

minutes.

The entire session was videotaped; ratings of levels of play and paternal involvement were made by the experimenter and a naive undergraduate student.

Measures

Level of play, was assessed using Nicolich's (1977, 1981) sequence of play. Level of symbolic play development are detailed in Appendix B. Criteria for defining the occurrence of each episode of the play were as follows: (1) The child picked up a toy and began to pretend play; (2) There was a shift of focus from exploratory or manipulative play with an object to a scorable symbolic play; (3) there was a stated intention to pretend followed by a successful search of objects for play. The episode ended when the child was again empty-handed. Five levels of increasingly complex play were distinguished: (1) Presymbolic schemes; (2) Autosymbolic schemes; (3) Single-scheme symbolic games; (4) Combinatorial symbolic games; and (5) Planned symbolic games. Each play occurrence was scored for each level and a mean score was derived by summing all the levels in a session and dividing them by the total number of symbolic play occurrences in the session.

Father's involvement: Three levels of paternal involvement were assigned for each episode (adapted from Nicolich and Fenson, 1984): (1) Active involvement: Father was either actively involved or encouraged play via explicit suggestions (e.g.: father suggested a particular symbolic

play activity with an object, or the child suggested that father pretend; father adopted and exchanged symbolic roles with the child; (2) Commentary: Father participated via verbal commentary only; (3) Non-involvement: no involvement at all by the fathers. If father is not involved in the play, he might sit on a coach or on the carpet, watch the child's play, or look at something else. Due to the limited number of fathers who use verbal commentary (1 out of 27 fathers), this type of involvement was dropped.

The father's involvement in each episode of symbolic play was scored. The father's involvement status was assigned from modal score obtained during the session.

CHAPTER IV

RESULTS

Two observers rated all measures to assure the reliability of the scoring. Interrater percentage agreements for the level of symbolic play were obtained as follows: the total number of episodes agreed by the two raters divided by the total episode occurence in a session x 100%. Interrater percentage agreements for the father's involvement was obtained as follows: total number of paternal involvement agreed by the two raters divided by all the occurences x 100%. Agreement on the level of symbolic play in the engaged condition was .91; in the available condition was .91; and agreement about the level of father's involvement was .82.

Data were analyzed for (a) age differences in the level of symbolic play, (b) the effects of father's involvement, (c) the effects of experimental condition, (d) the effects of experimental condition and father's involvement, and (e) the effects of age, experimental condition, and father's involvement on the child's level of symbolic play.

Three separate analyses of variance were conducted. First, a 2 (age) x 2 (father's involvement) analysis of variance assessed the effects of age and paternal

involvement on the level of symbolic play. Second, a 2 (age) x 2 (experimental condition) analysis of variance was conducted to see the effects of age and experimental condition on the level of symbolic play. Third, a 2 (age) x 2 (father's involvement) x 2 (experimental condition) analysis of variance assessed the effects of age, paternal involvement, and experimental condition upon the level of symbolic play.

Effects of age and father's involvement

In the first analysis, which examined the effects of age and paternal involvement on symbolic play, no significant differences by age (18 months and 24 months) ($F = .94$; $p > .05$) were found; nor was there a significant interaction of age and paternal involvement ($F = .50$; $p > .05$). However, there was a significant effect according to amount of the father's involvement ($F = 6.78$; $p < .05$). The mean level of symbolic play for toddlers with actively involved fathers was 2.66; for those with non-involved fathers, it was 2.26. This finding suggests that a higher level of symbolic play was achieved when father was actively involved in the play. Table I shows the results of the analysis of variance, and Table II shows the means for this analysis.

Insert Table I about here

Insert Table II about here

Effects of age and experimental condition

In the examination of the effects of experimental condition, no significant findings were found ($F = .64$; $p > .05$). There were also no significant findings in the interaction between age and experimental condition ($F = 1.10$; $p > .05$). The results are shown in Table III and IV.

Insert Table III about here

Insert Table IV about here

Effects of age, father's involvement and experimental condition

From this analysis, only the interaction between experimental condition and father's involvement that was found to be significant ($F = 7.96$; $p < 0.01$). Table V shows the results of the analysis of variance and Table VI and Table VII show the means for the interactions.

These data show that toddlers who have fathers that are actively involved with them when playing demonstrated lower levels of symbolic play when the fathers are engaged with the experimenter. However, the opposite effect occurs for

toddlers whose fathers do not play actively with them. Their level of symbolic play increases when their fathers are engaged with the experimenter.

Insert Table V about here

Insert Table VI about here

Insert Table VII about here

CHAPTER V

DISCUSSION

Effects of age on the level of symbolic play

Unexpectedly in this study, there were no differences in the level of symbolic play in the 18-month and 24-month old children. Previous research in a longitudinal study of symbolic play (O'Connell and Bretherton, 1984) of 20-month to 28-month old children showed a higher level of exploratory and combinatorial play when the age increased, and only in the 28-month old children the level of symbolic play increased when the mothers involved in the play. Slade (1987) in her longitudinal study of children from 20 to 28-month-olds found that level of symbolic play was enhanced when mothers were participating actively in the play.

In this study, symbolic play was defined into 5 levels. As the child grew older, he or she should be able to master higher level of symbolic play. In the present study, both the 18-month and the 24-month-olds children were able to achieve the highest level of symbolic play of Planned symbolic games, regardless of whether the father was available. This measure of symbolic play may not be sensitive enough to differentiate the levels of symbolic

play of the 18-month and the 24-month-olds children.

Piaget (1962) stated that true symbolic play is achieved if there is a separation of the signifier and signified object. This means that when performing a symbolic play the child is already able to use object substitution. Using object substitution, according to Nicolich (1981), indicates the maturity of symbolic play. In the present study, the example of object substitution was when a child used a tambourine as a plate, spooning a food from it, and said "here daddy". The significance of this substitution is that the child can generate the pretend scheme without the presence of the actual object (Nicolich, 1981).

Effects of father's involvement on the level of symbolic play

The analysis of the father's involvement suggested that the level of symbolic play was enhanced when the father was available to play with the child. The notion that the adult's active-involvement in the play increases the level of symbolic play corroborates with O'Connell and Bretherton's (1984) and Slade's (1987) reports. These investigators found that symbolic play was more sophisticated when children were playing with the mothers as compared to when they were playing alone. This supports the idea that both mothers and fathers are able to enhance the child's symbolic play.

When fathers were actively involved in the play, they

gave suggestions, or active directions to the child. This involvement clearly heightened the complexity of the symbolic play.

Effects of father's involvement and experimental condition on the level of symbolic play

The analysis of variance to measure the effects of age, father's involvement, and experimental condition showed that the interaction between the father's involvement and the experimental condition was significant. Since significant main effects were found for paternal involvement, but not in the age or experimental condition, results of the present study suggest that paternal involvement in symbolic play is the more important indicator of the increasing level of symbolic play than the experimental conditions alone or the age of the child.

For dyads in which the father was actively involved in the child's play, the level of symbolic play decreased when the child lost his/her play; i.e., when the father was engaged with the experimenter. For dyads in which the father tended not to be involved in their toddler's play, the level of symbolic play actually increased when the father was engaged by the experimenter. This may mirror what is actually happening at home for these dyads; that is, the child and the father may rarely play together and the level of symbolic play simply reflects that fact; e.g., the child plays regardless of father's involvement. In the play

sessions, father was actually "monitoring", or watching child's play, but maybe the measures used in this study did not pick it up. The father's behaviors in the laboratory setting may be the typical behaviors of his at home. He might sits on a coach or watches television while the child is playing. As such, the child does not expect father to play. Paternal attitude towards play may also affect the level of child's symbolic play, as well as the initiation.

Given the importance of the early social interaction of the father-toddler dyad and early development, future research might focus on a more detailed description of symbolic levels of infants from 15 to 36 months. The impact of the objects with which children play may also influence the types of play children engage in. In their study using standard toys and objects that required object transformation, Terrell and Schwartz (1988) found that children who play with the standard toys performed more representational play than symbolic play. Other variables that might have an impact on symbolic play, e.g., unfamiliar adults and children, or other types of father engagement, should be taken into account. Future research also might look at a wider age group (e.g. up to 36 month-olds); age might becomes a more important indicator of symbolic play in that range of age, because during this period, language development of the child occurs rapidly.

The measure used in this study may not be sensitive enough to differentiate the levels of symbolic play of the 18-month and 24-month-olds children. Thus, future studies

might use other measure such as that created by O'Connell and Bretherton (1984). These authors divided play into 4 categories: exploratory play, combinatorial play, symbolic play, and ambiguous play. This categorization of play might be more sensitive changes of child's play when the father participates in the play.

Future research might also code the initiation of symbolic play for each episode and include more paternal behaviors that might affect the level of symbolic play such as watching, giving suggestions, etc. Future studies might also observe fathers at home; then the researcher can compare the father's behaviors at home with the laboratory.

REFERENCES

Belsky, J. 1979. Mother-father-infant interaction: A naturalistic observational study. Developmental Psychology, 15, 601-607.

Belsky, J. 1980. A family analysis of parental influence on infant exploratory competence. In F.A. Pedersen, The father-infant relationship: Observational studies in the family setting. New York: Praeger.

Bretherton, I. 1984. Symbolic Play. Orlando: Academic Press.

Chibucos, T. R.; Kail, P. R. 1981. Longitudinal examination of father-infant interaction and infant-father attachment. Merrill-Palmer Quarterly, 27, 81-96.

Clarke-Stewart, K. A. 1978. And daddy makes three: The father's impact on mother and young child. Child Development, 49, 466-478.

Clarke-Stewart, K. A. 1980. The father's contribution to children's cognitive and social development in early childhood. In F.A. Pedersen, The father-infant relationship: Observational studies in the family setting. New York: Praeger.

Elder, J. L.; Pedersen, D. R. 1978. Preschool children's use of object in symbolic play. Child Development, 49, 500-504.

Easterbrooks, M. A. 1989. Quality of attachment to mother and to father: effects of perinatal risk status. Child Development, 60, 825-830.

Fein, G. G.; Clarke-Stewart, K. A. 1973. Daycare in context. New York: Wiley.

Fein, G. G. 1975. A transformational analysis of pretending. Developmental Psychology, 11, 291-296.

Fenson, L.; Ramsay, D. S. 1980. Decentration and integration of the child's play in the second year. Child Development, 51, 171-178.

Frankel, M.T.; Rollins, H.A. 1983. Does mother know best? Mothers and fathers interacting with preschool sons and daughter. Developmental Psychology, 19, 694-702.

Golomb, C. 1979. Pretense play: A cognitive perspective. In N.R. Smith and M.B. Franklin, Symbolic functioning in childhood. Hillsdale, NJ: Lawrence Erlbaum.

Grossman, F. K.; Pollack, W. S.; Golding, E. 1988. Fathers and children; Predicting the quality and quantity of fathering.Developmental Psychology, 24, 82-91.

Howes, C.; Unger, O.; Seidner, L. B. 1989. Social pretend play in toddlers: Parallels with social play and with solitary pretend. Child Development, 60, 77-84.

Johnson, J.E. 1976. Relations of divergent thinking and intelligence test scores with social and non social make-believe play of preschool children. Child Development, 47, 1200-1203.

Lamb, M.E. 1975. Fathers: Forgotten contribution to child development. Human Development, 18, 245-266.

Lamb, M. E. 1976. Interactions between two-year-olds and their mothers and fathers. Psychological Report, 38, 447-450.

Lamb, M.E. 1977. Father-infant and mother-infant interaction in the first year of life. Child Development, 48, 167-181.

Lamb, M.E. 1980. The development of parent-infant attachment in the first two years of life. In F.A. Pedersen, The father-infant relationship: Observational studies in the family setting. New York: Praeger.

Levy-Shiff, R.; Sharir, H.; and Mogilner, M. B. 1989. Mother-and-father-preterm infant relationship in the hospital preterm nursery. Child Development, 60, 93-102.

Lucariello, J. 1987. Spinning fantasy: Themes structure and the knowledge base. Child Development, 58, 434-442.

Lynn, T.B. 1974. The Father: His Role in Child Development. Monterey: Brooks/Cole.

MacDonald, K.; Parke, R.D. 1984. Bridging the gap: Parent-child play interaction and peer interactive competence. Child Development, 55, 1265-1277.

Nicolich, L.M. 1977. Beyond sensorimotor intelligence: Assessment of symbolic maturity through analysis of pretend play. Merrill-Palmer Quarterly, 23, 89-99.

Nicolich, L.M. 1981. Towards symbolic functioning: Structure of early pretend games and potential parallels with language. Child Development, 52, 785-797.

Nicolich, L.M.; Fenson, L. 1984. Methodological issues in

studying pretend play. In T.D. Yawkey and A.D. Pellegrini, Child's play: Developmental and Applied. Hillsdale, NJ.: Erlbaum.

O'Connell, B.; Bretherton, I. 1984. Toddler's Play, Alone and with Mother: The Role of Maternal Guidance. In I. Bretherton, Symbolic Play. Orlando: Academic Press.

Parke, R.D.; O'Leary, S. 1976. Father-mother-infant interaction in the newborn period: Some findings, some observations, and some unsolved issues. In K. Riegel and J. Meacham, Developing Individual in Changing World, vol. II. Social and Environmental Issues. The Hague: Mouton.

Parke, R.D. 1981. Fathers. Cambridge: Harvard.

Parsons, T.; Bales, R.F. 1955. Family, Socialization, and Interaction Process. Glencoe, Ill.: Free Press.

Pedersen, F.A. 1980. The Father-Infant Relationship: Observational Studies in the Family Setting. New York: Praeger.

Piaget, J. 1962. Play, Dreams and Imitation in Childhood. New York: Norton.

Piaget, J. 1976. Symbolic Play. In J.S. Brunner; A. Jolly; K. Sylva, Play: Its Role in Development and Evolution. New York: Basic Book.

Power, T.G. 1985. Mother-and father-infant play: A developmental Analysis. Child Development, 56, 1514-1524.

Pratt, M. W.; Kerig, P.; Cowan, P. A.; and Cowan, C. P. 1988. Mothers and fathers teaching 3-year-olds; Authoritative

parenting and adult scaffolding of young children's learning. Developmental Psychology, 24, 832-839.

Rubin, K. H.; Fein, G. G.; and Vandenberg, B. 1983. Play. In E. M. Hetherington (Ed.). P. H. Mussen (Series Ed.), Handbook of child Psychology: vol. 4. Socialization, and social development. New York: Wiley.

Slade, A. 1987. A longitudinal study of maternal involvement and symbolic play during the toddler period. Child Development, 58, 367-375.

Stevens, J.H.; Mathews, M. 1978. Mother/Infant, Father/Child Relationships. Washington: National Association for the Education of Young Children.

Stevenson, M. B.; Leavitt, L. A.; Thompson, R. H.; and Roach, M. A. 1988. A social relations model analysis of parent and child play. Developmental Psychology, 24, 101-108.

Terrell, B. Y.; Schwartz, R. G. 1988. Object transformation in the play of language-impaired children. Journal of Speech and Hearing Disorders, 53, 459-466.

Wolf, D.; Gardner, H. 1979. Style and sequence in early symbolic play. In N.R. Smith and M.B. Franklin, Symbolic Functions in Childhood. Hillsdale, NJ.: Erlbaum.

APPENDIX

APPENDIX A

LIST OF TOYS

Blocks
Book (Mickey Mouse)
Brush - toy
Comb - toy
Cup - toy
Saucer - toy
Baby doll
Doll with clothes
Teddy bear
Tambourine
Dumping bottle
Iron - toy
Car - toy
Truck - toy
Mirror - toy
Mop - toy
Napkin
Necklace - toy
Bracelet - toy
Stacking ring
Ping pong ball
Purse - toy
Puzzles (5 pieces)
Scrubbrush
Slippers - pairs of women's size 6
Sponge
Sunglasses - toy
Teapot - toy
Teapot cover - toy
Teaspoon - toy
Telephone - toy
Toolbox - toy (hammer, screwdriver, wrench, saw, pliers)
Men - toy
Doctor's kit - toy
Broom - toy

APPENDIX B

DEVELOPMENT OF SYMBOLIC PLAY

Levels & criteria	Examples
1. Presymbolic scheme: The child shows understanding of object use or meaning by brief recognitory gestures No pretending. Properties of present object are the stimulus. Child appears serious rather than playful.	The child picks up a comb, touches it to his hair, drops it. The child picks up the telephone receiver, puts it into ritual conversation position,sets it aside. The child gives the mop a swish on the floor.
2. Autosymbolic scheme: The child pretends at self-related activities. Pretending. Symbolism is directly involved with the child's body. Child appears playful, seems aware of pretending.	The child stimulates drinking from a toy baby bottle The child eats from an empty spoon. The child closes her eyes, pretending to sleep.
3. Single-scheme symbolic games. Child extends symbolism beyond her own actions by: A. Including other actors or receivers of action, such as doll or mother. B. Pretending at activities of other people or objects such as dogs, trucks, trains, and so on.	 Child feeds mother or doll. Child grooms mother or doll. Child pretends to read a book. Childs pretends to moop floor. Child moves a block or toy car with appropriate sound of vehicle.
4. Combinatorial symbolic games. 4.1. Single-scheme combination: One pretend scheme is related to several actors or receivers of action.	 Child combs own, then mother's hair. Child drinks from the bottle, feeds doll from

	bottle.
	Child puts an empty cup to mother's mouth, then experimenter, and self.
4.2. Multi-scheme combination: Several schemes are related to one another in sequence.	Child holds phone to ear, dials.
	Child kisses doll, puts it to bed, puts spoon to its mouth.
	Child stirs in the pot, feeds doll, pours food in to dish.
5. Planned symbolic games: Child indicates verbally or nonverbally that pretend acts are planned before being executed.	Child finds the iron, sets it down, searches for the cloth, tossing aside several objects. When cloth is found, he irons it.
5.1. Planned single-scheme symbolic Acts. Transitional type: activities from level 2-3 that are planned. A. Symbolic identification of one object with another. B. Symbolic identification of the child's body with some other person or object.	Child picks up play screwdriver, says: "toothbrush" and makes the motions of toothbrushing.
5.2. Combinations with planned elements: these are constructed of activities from levels 2-5.1, but always include some planned element. They tend toward realistic scenes.	Child picks up the bottle says: "baby" then feeds the doll and covers it with a cloth.
	Child puts play foods in pot, stirs them then says "soup" or "mommy" before feeding the mother. He waits, then says "more"? offering the spoon to the mother.

Nicolich (1977).

APPENDIX C

RAW DATA

Subject	Sex	Age	Father's involvement	Symb-play Engaged	Symb-play Available
1	M	18 mo	Involved	2.27	2.71
2	M	18 mo	Involved	2.38	2.47
3	M	18 mo	Involved	2.91	2.55
4	M	18 mo	Involved	2.01	1.10
5	M	18 mo	Involved	3.31	2.43
6	F	18 mo	Involved	2.47	2.20
7	F	18 mo	Involved	2.42	2.32
8	M	18 mo	Non-involved	2.39	2.57
9	M	18 mo	Non-involved	2.38	2.19
10	F	18 mo	Non-involved	1.78	3.36
11	F	18 mo	Non-involved	2.33	2.40
12	F	18 mo	Non-involved	2.25	2.35
13	M	24 mo	Involved	3.25	2.17
14	M	24 mo	Involved	2.14	1.81
15	M	24 mo	Involved	3.54	2.26
16	M	24 mo	Involved	2.74	3.17
17	F	24 mo	Involved	2.75	2.30
18	F	24 mo	Involved	2.73	2.73
19	F	24 mo	Involved	2.29	2.07
20	F	24 mo	Involved	2.69	1.84
21	M	24 mo	Non-involved	2.13	3.40
22	M	24 mo	Non-involved	2.45	2.67
23	M	24 mo	Non-involved	2.62	1.85
24	F	24 mo	Non-involved	2.24	2.13
25	F	24 mo	Non-involved	1.92	1.86
26	F	24 mo	Non-involved	2.70	3.39

TABLES

TABLE I

MEANS AND STANDARD DEVIATION FOR FATHER'S INVOLVEMENT SCORES

Source	$\bar{x}$	SD
Involved	2.66	.43
Non involved	2.26	.26

TABLE II

ANALYSIS OF VARIANCE FOR AGE AND FATHER'S INVOLVEMENT

Source	df	F	p
Age	1	.94	>.05
Father's involvement	1	6.78	<.05
Age x father's inv.	1	.50	>.05

TABLE III

MEANS AND STANDARD DEVIATION FOR AGE AND EXPERIMENTAL CONDITION

Source	Available		Engaged	
	$\bar{x}$	SD	$\bar{x}$	SD
18 month	2.43	.38	2.45	.56
24 month	2.58	.46	2.33	.52

TABLE IV

ANALYSIS OF VARIANCE FOR AGE AND EXPERIMENTAL CONDITION

Source	df	F	p
Age	1	.00	>.05
Experimental cond.	1	.64	>.05
Age x Experimental condition	1	1.10	>.05

TABLE V

MEANS AND STANDARD DEVIATION FOR THE AGE, FATHER'S INVOLVEMENT AND EXPERIMENTAL CONDITION

	Available		Engaged	
Source	$\bar{x}$	SD	$\bar{x}$	SD
Active involvement				
18 month	2.54	.43	2.25	.53
24 mont	2.69	.45	2.29	.44
Non-involvement				
18 month	2.31	.29	2.71	.53
24 month	2.20	.27	2.46	.82

TABLE VI

ANALYSIS OF VARIANCE FOR AGE, FATHER'S INVOLVEMENT AND EXPERIMENTAL CONDITION

Source	df	F	p
Age	1	.01	>.05
Paternal involvement	1	.06	>.05
Condition	1	.70	>.05
Condition x Paternal inv.	1	7.96	<.01
Condition x Age	1	.30	>.05
Paternal involvement x Age	1	1.24	>.05
Condition x Paternal inv. x Age	1	.01	>.05

TABLE VII

MEANS FOR SYMBOLIC PLAY SCORES

BY FATHER'S INVOLVEMENT AND EXPERIMENTAL CONDITION

Source	Available	Engaged
Active involvement	2.66	2.27
Non involvement	2.26	2.63

VITA

Supra Wimbarti

Candidate for the Degree of

Master of Science

Thesis: INFLUENCE OF PATERNAL PARTICIPATION UPON SYMBOLIC PLAY IN TODDLERS

Major field: Family Relations and Child Development

Biographical:

Personal Data: Born in Yogyakarta, Indonesia, August 7, 1959, the eighth child of Soepomo and Soepeni.

Education: Graduated from SMA 3 Yogyakarta, Indonesia in 1977; received Sarjana Degree in Psychology from Gadjah Mada University, Yogyakarta, Indonesia, in November 1985; completed requirements for the Master of Science Degree at Oklahoma State University in July, 1990.

Professional Experience: Teaching Assistant, Department of Psychology, Gadjah Mada University, Indonesia, 1987-1988. Research Assistant, Department of Psychology Gadjah Mada University, Indonesia, 1987-1988.