ABSTRACT

MARITAL AGREEMENT ON CONCEPTIONS OF PARENTHOOD AND KNOWLEDGE OF PLAY AS PREDICTORS OF ATTITUDES TOWARD PLAY

By

Joan Hoffman Smith

Parental attitudes and knowledge about children's play have a major role in shaping the young child's physical and emotional environment; therefore, the need to investigate parental attitudes toward play and knowledge of how play contributes to the overall development of the child is a critical one. The information that has been collected on parental attitudes toward play has focused only on families in urban populations; therefore, in this study, the investigator focused on a rural population in the thumb area of Michigan.

The purpose of this study is to find out if marital agreement about knowledge of children's play concepts, developmental/traditional conceptions of childhood and parenthood, and child's play activities are predictive of marital agreement on attitudes toward play. Another purpose is to answer questions regarding the predictive value of the

independent variables - knowledge of children's play concepts, developmental/traditional conceptions of childhood and parenthood, child's play activities, and home play materials to the dependent variable, parental attitudes toward play. Another intent is to investigate the relationship of the attitudes of mothers and fathers toward play and levels of marital agreement to the sex of children, age of youngest child, age of oldest child, number of children, years married, location of residence, money spent on toys and social position.

Thirty-two couples from Pigeon, Michigan, and vicinity constituted the sample for this study. Selection criteria included intact families, presence in the home of children 5 years 11 months or younger, and agreement of husbands and wives to participate in the study.

Regression analysis results indicated marital agreement on child's play activities was a significant predictor of marital agreement on attitudes toward play. The independent variables of marital agreement on knowledge of play concepts and developmental/traditional conceptions of childhood and parenthood were not predictors of marital agreement on attitudes toward play. The amount of money spent on home play materials was a predictor of marital agreement on attitudes toward play. Results indicated that as the amount of money couples spent on home play materials increased the

likelihood that the couples would agree on their attitudes toward play decreased.

A general comparison between mothers' and fathers' attitudes toward play indicated that fathers' attitudes tended to be more predictable than mothers' attitudes. Regression analysis results indicated that fathers classified as developmental were more likely to report attitudes toward play that suggest flexibility, spontaneity, exploration and autonomy than were fathers classified as traditional. Fathers who lived on working farms had significantly less positive attitudes toward play than fathers who did not live on working farms.

Regression analysis results indicated that as the number of children increased, the fathers' attitudes toward play became less positive. The amount of money spent on home play materials was predictive of both mothers' and fathers' attitudes toward play. As the amount of money mothers and fathers spent on home play materials increased, the mothers' and fathers' attitudes toward play became less positive.

MARITAL AGREEMENT ON CONCEPTIONS OF PARENTHOOD AND KNOWLEDGE OF PLAY AS PREDICTORS OF ATTITUDES TOWARD PLAY

By

Joan Hoffman Smith

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Family and Child Sciences

1975

To Michael

who rejoices in the completion

of this study and whose encouragement and

understanding helped make it possible.

ACKNOWLEDGMENTS

This dissertation was carried out under the supervision of Dr. Eileen Earhart, chairman of the Department of Family and Child Sciences. Throughout my doctoral program, Dr. Earhart provided intellectual challenge and valuable guidance by demonstration as well as expectation. I am especially grateful for her constructive criticism and extensive support during the design and execution of this research. As a humanistic educator, she has served as a model of excellence and a supportive friend.

I wish to express my appreciation to Dr. Donald Melcer for his advice and direction. In addition, I am grateful to the other members of my committee, Dr. Beatrice Paolucci, Dr. Gershen Kaufman, and Dr. David Imig, who have given their encouragement and suggestions.

The completion of this study was facilitated by the flexibility and hospitality of Roberta Richmond, the Pigeon librarian.

The support of my professional collegue and friend, Alice Whiren, was a valuable source of encouragement from the inception of this study to its completion.

A special debt of gratitude belongs to Bobbie Erb and Mary Lou Bullock not only for their expert typing skills but also for their diligence and cheerfulness.

TABLE OF CONTENTS

LIST OF TABLES

TABLE PAGE

TABLE PAGE

CHAPTER I

INTRODUCTION

> We do not know when man begins to play. Play may start before birth, with the kicks and turns of the fetus; it certainly is present in the infant; and it continues throughout our lives.
>
> When play is suppressed, both the individual and society suffer. When play is encouraged, both benefit. The reasons for this are not clear, but somehow play is essential for man and many other social animals.
>
> Unlike most behavior, play has not been exhaustively studied. Scientists have difficulty taking it seriously. They argue about what play is. Some have narrow definitions; others would agree with Tom Sawyer that "work consists of whatever a body is 'obliged' to do...Play consists of whatever a body is not obliged to do" (Norbeck, 1971).

Statement of the Problem

A major function of the family system is the socialization of its members. Of the various socializing agents, the family system is the most influential in shaping the neonate into a socialized human being. Parental knowledge about the physical, emotional and intellectual needs of children is essential for the successful, optimal integration of

the young members into society. The ways in which the young child's basic physiological and psychological needs are or are not met, together with the parents' general attitudes, influence his overall life adjustment. Accumulation of data stressing the importance of the first three years of life for the development of the child and the concept of critical periods in early childhood make it imperative that attention be focused on the experiences and environments of children during their crucial formative years (Caldwell,1967; Watts,1973; White,1973). The primary learning environment of the majority of preschoolers is the nuclear family, and it is the atmosphere within this system that helps to shape their characters. The 1970 White House Conference on Children focused on the young child's need for interaction in its "Report to the President":

> A child learns, he becomes human, primarily through participation in a challenging activity with those he loves and admires. It is the example, challenge, and reinforcement provided by the people who care that enable a child to develop both his ability and his identity...It is in work and play with children, in games, in projects, in shared responsibilities with parents, adults, and older children that the child develops the skills, motives, and qualities of character that enable him to live a life that is gratifying both to himself and those around him....children need people in order to become human.... through exposure and interaction with adults and children...a child...learns the meaning of tolerance, cooperation, and compassion (pp. 241-242).

In the socialization of the individual, spontaneous play serves an important function in intellectual, social and emotional development. Play and games are intrinsic parts of normal development and are essential to the enjoyment of life. The most important contribution playfulness makes to life is to make it worth living (Herron & Sutton-Smith, 1971).

Traditionally in our work-oriented society, play has been viewed as an insignificant diversion comprising all the trivial things children do with little attention given to the importance of play in a child's development. Our homes and schools have been infiltrated by the work or success ethic inherited from Puritanism which discounts play. America's immense industrial complex was produced by a society which valued hard work and held the attitude that children's play was trivial and unimportant. Many parents continue to view play and learning as the antithesis of one another with the result being that they are primarily concerned with cognitive development. These parents are reassured by their child's knowledge of concrete facts and encourage rote learning of the alphabet and numbers (Curry and Arnaud, 1971).

Using play as a medium to enhance cognitive development is an unfamiliar concept for many parents, but one fully expounded upon by Frank and Theresa Caplan (1974). They take the position that it is because of man's playfulness rather than in spite of it that he has survived and surpassed

other creatures:

> ...the wheel, the sail, and the brick were probably invented in the course of play... Thus play has been man's most useful preoccupation. Man as an artist is infinitely more ancient than man as worker. Man has made his greatest progress when not grubbing for necessities, when nature was so bountiful that he had the leisure to play and the inclination to tinker. It is the child in man that is the source of his creativeness(p. xx).

Despite strong adherence to the doctrine that one must work rather than play to get ahead, there is a growing interest by persons concerned with the family system in the rewards of playfulness - imagination, flexibility, competence, joyousness. By facilitating play and fostering playfulness in the family environment, parents have a strong influence on the development of these characteristics. Whether they are cognizant of this role or not, parents continually function via their daily interactions with their children as models and teachers (Bloom, 1964); and parents directly influence their child's play skills development (Smilansky, 1968). Ellis (1973) noted that a reexamination of the tendency to regard play as acceptable and enjoyable only when there is nothing more important to do is taking place:

> The Puritan ethic that claims we live to work is beginning to be turned around so that we can agree that our political, judicial, and industrial systems exist to improve the quality of our lives; that we work to live. While hedonism is not in full flood, play and leisure are seen as the major resources for our achievement of individuality and they are beginning to receive the attention they have always desired. Thus, the play of adults and

> children will become an increasingly critical area of concern and study as time passes(p. xii).

Play is a powerful medium through which a child learns about himself and his environment. In play, the child explores, creates, imitates, controls and pretends in a world in which the conditions provide safety for risk-taking. Traditionally justified in terms of its tangential payoffs - play builds body control, provides a base for speech acquisition, and promotes the emotional and social functions, play is increasingly being recognized for the importance of its intrinsic function which involves the satisfaction resulting from responding uniquely to an experience (Herron and Sutton-Smith, 1971).

Scientific interest in the area of play over the last 40 years has been limited, and even less evidence exists to indicate interest in the area of parental knowledge and attitudes involving play. Parental attitudes and knowledge about play have a major role in shaping the young child's physical and emotional environment. These attitudes have a strong influence on the play modes a child uses. Young children seldom decide for themselves where, when, what, how or with whom they will play. Parents usually make these decisions for the child based upon their own values, beliefs and attitudes. In most cases, these decisions involve fundamental assumptions about child rearing in general and about sex roles and morals in particular; thereby, making the need to

investigate parental attitudes toward play and knowledge of how play contributes to the overall development of the child a critical one (Bishop and Chace, 1971).

If home play situations are to be provided which will allow children to develop their potential, an attitude toward play which promotes a playful atmosphere in the home becomes a prerequisite. To date the scientific literature about parental knowledge of play or parental attitudes toward play and the implications of these attitudes for the young child's development has been sparse. Most of the information that has been collected on parental attitudes toward play has focused on families in urban populations. Little attention has been given to the attitudes of rural families; therefore, in this study, the investigator chose to focus on a rural population in the thumb area of Michigan.

Despite the nationwide increase in total number of organized day care programs for preschoolers, the developmental environment for the majority of preschool rural children is the institution of the family. Most rural families have limited community resources for their young children because they reside too far away from the larger communities which offer a variety of programs. Within the home environment, parents generally attempt, as best they can, to provide their children with a variety of materials and experiences as a means of ensuring their optimal development during the first years of maximum receptivity. Parents rate the preschool

period during which the child is so responsive to additional attention as a difficult one with which to cope (Allen, 1973). As a result, parents encounter more disadvantages and problems with children from 2-5 years old than with children from 6-11 years old (Pohlman, 1967; Muralidharan, 1973).

Many rural families desire and need assistance with providing social and intellectual stimulation for their preschool children. Often these families do not meet the guidelines for Head Start, and very few programs exist which are geared to preschool children; consequently, they have few opportunities outside the home to experience a stimulating environment in which they can gain in social, emotional and intellectual skill development.

Before the optimum conditions which will encourage and develop play abilities in preschool children can be known, the attitudes and behaviors or rural husbands and wives must first be systematically researched. Most studies concerned with parental attitudes have neglected and ignored the father and focused only on the mother (Eron, et al., 1961). For too long the mother has been regarded as the only key person in a child's life. The consequence of this attitude in family research has been the disregard of the father as a socializing influence and as an informant. If the fathers' opinions were sought, this was usually obtained second-hand through the mothers' reports of how they perceived the fathers would respond. This method presents methodological biases and

generalization problems. In documenting the neglect of the father in research, Weiss (1970) reports:

> Checking the number of articles in Psychological Abstracts...in 1958 there were 20 entries for all categories concerning mothers, while fathers accounted for only 2 studies. For 1968 the corresponding entries were 144 and 29, respectively. While the number of studies involving fathers increased during the decade, it was still out of proportion to the... penchant for studying mothers(p. 6).

Information on the level of marital agreement about attitudes toward play, knowledge and conditions of play, and conceptions of parenthood is scarce, both as a result of little scientific investigation into these areas and the lack of data involving fathers.

Objectives

The purpose of this study is to find out if marital agreement about knowledge of children's play concepts, developmental/traditional conceptions of childhood and parenthood, and child's play activities are predictive of marital agreement on attitudes toward play. Another purpose is to answer questions regarding the predictive value of the independent variables - knowledge of children's play concepts, developmental/traditional conceptions of childhood and parenthood, child's play activities, and home play materials to the dependent variable, parental attitudes toward play. Another intent is to investigate the relationship of the attitudes of mothers and fathers toward play and levels of marital

agreement to the sex of children, age of youngest child, age of oldest child, number of children, years married, location of residence, money spent on toys and social position.

Answers to the following questions are sought:

1. Do knowledge about children's play, developmental conceptions of childhood and parenthood, and the number and categories of home play materials predict the attitudes of mothers and fathers toward play?

2. Does marital agreement on knowledge of children's play concepts, child's play activities, and developmental/traditional conceptions of childhood and parenthood predict agreement on parental attitudes toward play?

3. Is there a significant difference between maternal and paternal attitudes toward play?

4. Do any of the following characteristics predict the attitudes of mothers and fathers toward play: sex of children, age of youngest child, age of oldest child, number of children, years married, location of residence, money spent on toys, and social position determined from the Hollingshead Two Factor Index of Social Position (1957).

Assumptions

The following assumptions underlie this study:

1. Play is sufficiently important to warrant explaining and managing.

2. Parental attitudes are reflected in behavior via parental decisions about play activities, settings and

procedures.

3. Preschool years are critical to the optimal development of a child's language skills, intellectual abilities and conceptual skills.

4. The preschool child's parents are his most influential socializing agents. Through parent/child interactions and modeling, the young child learns general behavior patterns, attitudes and specific ways of relating to his environment.

5. The family is a system. As such, attitudes and behaviors of one member of the system affect attitudes and behaviors of other members. The family as a system is more than the sum of its parts.

Hypotheses

H_1 Developmental conceptions of childhood and parenthood predict the attitudes of mothers and fathers toward play.

H_2 Knowledge about children's play predicts the attitudes of mothers and fathers toward play.

H_3 The number of home play materials predicts the attitudes of mothers and fathers toward play.

H_4 The categories of home play materials predict the attitudes of mothers and fathers toward play.

H_5 The following characteristics do not predict the attitudes of mothers and fathers toward play: sex of children, age of youngest child, age of oldest child, number of children, years married, location of residence, money spent on toys, and social position determined from the Hollingshead Two

Factor Index of Social Position (1957).

H_6 Marital agreement on knowledge of play concepts predicts marital agreement on attitudes toward play.

H_7 Marital agreement on child's play activities predicts marital agreement on attitudes toward play.

H_8 Marital agreement on developmental/traditional conceptions of parenthood and childhood predicts marital agreement on attitudes toward play.

H_9 The following characteristics do not predict marital agreement on attitudes toward play: sex of children, age of youngest child, age of oldest child, number of children, years married, location of residence, money spent on toys, and social position.

H_{10} The following combination of variables predicts fathers' attitudes toward play: fathers' developmental conceptions of parenthood, fathers' knowledge of play, mothers' attitudes toward play, mothers' knowledge of play, and mothers' developmental conceptions of parenthood.

H_{11} The following combination of variables predicts mothers' attitudes toward play: fathers' knowledge of play, fathers' conceptions of parenthood, fathers' attitudes toward play, mothers' conceptions of parenthood, and mothers' knowledge of play.

H_{12} There is no significant difference between maternal and paternal attitudes toward play.

Theoretical Definitions of Terms

Play Ellis (1973) defines play as "...that behavior that is motivated by the need to elevate the level of arousal towards the optimal" (p. 110). Since the assumption that attitudes have a causal relationship with practiced behavior underlies this study, Spitler's and Neumann's definitions of play are also relevant. Spitler (1971) defines play as an attitude that pervades all activities which are performed as ends in themselves rather than for ulterior purposes. According to Neumann (1971), any behavior which is intrinsically motivated and which is governed by internal locus of control is play. Extrinsically motivated behaviors that are governed by external constraints are not play.

Attitude Shaw and Wright (1967) review various definitions of the term "attitude", but conclude that all of the existing definitions agree that attitudes are predispositions to respond to social objects. In interaction with situational and other dispositional variables, attitudes guide and direct the overt behavior of the individual. Attitudes are construed as varying in quality and intensity on a continuum from positive through neutral to negative.

Home Play Environment and Materials Bishop and Chace (1971) define the home play environment as those conditions of play provided by parents for children in their homes. Conditions of play include all home play materials such as toys (store-bought or home-made), books, records, equipment, and other

age-appropriate resources.

Developmental-Traditional Conceptions of Parenthood Hill (1970) defines a developmental conception of parenthood as one which places emphasis on the importance of growth, development and interaction of all family members throughout the life cycle. He defines the traditional conception as one which:

> ...emphasize(s) the conception of the child as obedient, respectful of adults, honest, polite, respectful of property, dependable - a "little adult"; the conception of the mother is that of a good housekeeper, cleanliness oriented and focused on habit training; the father is conceived as a breadwinner, disciplinarian, rule enforcer and source of gifts, whose job is "to bring home the bacon" and keep things peaceful(p. 46).

Marital Communication and Agreement Watzlawich (1967) defines communication as an interaction process based on information exchange. Harries (1972) states that communication consists of information exchange (matter-energy in a patterned flow) and shared experience. A state of agreement is reached when a couple holds the same or a similar attitude or opinion about a subject area.

Family Within the framework of General Systems Theory, family is defined as an ongoing interactional system, characterized by the properties of general systems: time as a variable, system/subsystem relations, wholeness, feedback and equifinality. The family system is enclosed in a common

space and shares some resources.

Operational Definitions

Attitudes Toward Play The scores husband and wives achieve separately on the Opinion Survey on Children's Play is the measure of parental attitudes toward play. This instrument was adapted from an attitude scale developed by Bishop and Chace (1971).

Knowledge of Children's Play The scores husbands and wives achieve separately on the Preschool Children's Play (Whiren, 1976) instrument operationally constitute their knowledge in this area. On this instrument, parents indicate the age at which they think children perform various tasks. They are also asked to agree or disagree with statements about preschool children's play behaviors.

Home Play Materials The Toy and Equipment Inventory is an adaptation of an inventory developed and used by Watts (1973) in her Harvard Preschool Project research. This inventory, completed by the mothers in this study, is a checklist of toys, equipment and other materials used by preschool children.

Conceptions of Childhood and Parenthood The Beliefs About Childhood and Parenthood scale was developed by Blood (1952) from the results of research conducted by Duvall (1946). The respondents are required to make a forced-choice selection from a mixed list of developmental and traditional children's roles, husband's roles and wive's roles. Scores husbands and

wives achieve separately on this instrument operationally define their individual positions on a developmental/ traditional continuum.

Marital Agreement on Attitudes Toward Play The degree of agreement between couples on their attitudes toward play was ascertained by computing weighted scores of agreement of their responses for each item on the attitude scale and summing them.

Marital Agreement on Knowledge of Preschool Children's Play, Conceptions of Childhood and Parenthood, and the Child's Play Activities Questionnaire Marital agreement on these variables was ascertained by computing, for each husband-wife pair, the number of agreeing responses for each item of the instruments and summing them. This procedure yields a marital agreement score for each couple which designates operationally their agreement on these variables.

Socioeconomic Class Status Using Hollingshead's (1957) social position index, the social position of each household was determined by utilizing two factors: occupation and education. Each of these two factors is scaled to a classification system devised by Hollingshead.

Conceptual Orientation

General Systems Theory (von Bertalanffy, 1968; Buckley, 1968) is the theoretical basis underlying this research. Within this orientation, development is a function of a

child's interaction with his human and non-human (physical) environment.

Systems theory emerged in response to the need to modify the tendency of single disciplines to isolate themselves and study narrowly defined phenomena. The systems viewpoint requires phenomena to be examined in terms of their wholeness and emphasizes the relationships between the parts that make up the whole. It provides a basis for looking at interdimensional phenomena; therefore, it follows that the multiple dimensions of play behaviors suggest the systems approach as a useful theory for investigating the complex area of play. Reilly (1974) summarized:

> ...traditional theory...fails to look at play in the ways play needs to be explored. For whatever explanation that is selected must, above all, grasp the nettle of explaining complexity because the essential nature of play is that it processes complexity. This aspect of this behavior must be confronted and not explained away by a process of simplification. Play, historical evidence clearly shows, is a phenomenon stretching across a knowledge spectrum which includes biology, psychology, sociology and anthropology. Because it is multidimensional it requires interdisciplinary explanation. This critical specification precludes a traditional theory and welcomes a systems theory approach as a form of explanation(p. 118).

Overview of the Study

In the following chapters, a detailed description of the design and findings of this study is presented. In Chapter II, an overview of the role of play in past theories

and current theory and research concerning play are reviewed. Relevant research pertaining to preschool environment and experiences, parental attitudes, play stages and child development is also presented. In Chapter III, the research design is described. Methods of sample selection, instrumentation, statistical techniques and data collection are specified. An analysis of the data is presented in Chapter IV. In Chapter V, conclusions are delineated, and the implications of this research and recommendations for future research are discussed.

CHAPTER II

REVIEW OF LITERATURE

In this chapter, literature pertinent to past and current play theories is reviewed. Studies concerned with the effects of early family environment on child development, the functions of play, play stages, and parental attitudes and influences are considered separately. The results of the studies reviewed are discussed in relation to the purposes of this research.

Effects of Early Family Environment on Child Development

The physiological and psychological growth that takes place in the preschool years is prodigious according to the research literature. Gesell (1940) estimates that the transformations occuring in the first five years of life surpass those of any other five year span.

Evidence of the potency of the early environment in shaping later cognitive, physical, social and emotional abilities has come largely from studies in two areas: (1) studies of the effects of environmental deprivation in childhood, and (2) studies of the development of twins and siblings separated in infancy from their parents and

subsequently reared apart (Newman, Freeman, & Holzinger, 1937; Freeberg & Payne, 1967). The assumption that cognitive, physical and social skills are developmental in nature and can be modified by environmental variations is validated by the research of Sears, Maccoby & Levin (1957), Bloom (1964), White, Kaban, Marmor, Shapiro (1972), and Watts, Barnett, & Halfar (1973).

Bloom (1964) re-examined the data of more than one thousand longitudinal studies conducted over a forty year period in his analysis of the stability and change in certain human characteristics from infancy to maturity. His investigation supported his hypothesis of differential growth rate for human intellectual ability, and he estimated that by the age of four years, half of a child's intelligence is developed. Bloom concluded that any given characteristic has greatest potential for qualitative and quantitative development during its most rapid period of growth. Accordingly, the rapid growth of selected characteristics in the preschool years in interaction with the environmental conditions affects a child's development.

Although Bloom's feeling that he had underestimated the rapidity of the early development of certain characteristics was subsequently verified by the work of Burton White (1972), Bloom's focus on environmental influences placed new responsibilities on the early home environment. An attempt was

made in the present research to investigate the question raised by Bloom as to how children develop intellectual and social competence by investigating underlying parental attitudes toward the young child's play and parental knowledge of how play contributes to a child's overall development.

Burton White (1972) directed an observational study to research the experiences and environments of young children during their formative years. The goal of his project was to learn how to structure the experiences of the first six years of life to maximize optimal development of human competence (p. 7).

White and his Preschool Project staff systematically investigated the influence of experiences and environments on the development of competence in three to six year olds. Fifty-one preschool children were selected from an original sample of 400. Half of the sample group was judged to be of high competence (the "A" group); half was judged to be of low competence (the "C" group). From weekly observations of these children in their homes, White's staff compiled a list of distinguishing abilities which characterized competent preschool children. Although little difference in motor and sensory capacities was found between children of high and low competence, there were large differences in intellectual and social competence.

A major conclusion of White's work was that those qualities that distinguish outstanding six year olds were

already existent at age three. The observation of measurable differences in intellectual and social competence as early as the age of two and three lead White to conclude that the focus of future study should be the experiences and environments of one to three year olds.

White (1972) conducted a follow-up observational study of thirty-four children, ages one to three years, whom the staff predicted, on the basis of older siblings' histories, would develop either as A's or C's. From weekly observations of the children in their home environments, White concluded that A children were more socially competent than C children by twenty-four to twenty-seven months of age. Significant differences across groups in the nonsocial abilities of language and intelligence were evident at the early age of fifteen months.

White concluded that the ten to eighteen months age range was significant for the development of general competence because of three phenomena which emerge during this period: locomobility, language development, and negativistic behavior. The reaction of the primary caretaker, in most cases the mother, to the needs, curiosities and demands of the toddler appeared to be the critical factor that made the difference between a child developing as an A or as a C.

The A mother is described by White as a person who gains pleasure from interacting with her one to three year old, is a good listener, is imaginative, is aware that an infant and

a meticulous house are incompatible, is willing to allow her child to take risks, and provides many objects and diverse situations for her child's investigation.

The A mothers' interactions with their preschool children are based upon their values and attitudes. The need to further investigate the influence of parental attitudes on the play modes and play environments of children is confirmed by White's research.

White acknowledged that neglect of the fathers' attitudes and influences was a limitation of the study. Family researchers must attend to this major area of neglect and incorporate it into the initial research design and methodology as the present research attempts to do.

Watts (1973), a co-researcher on White's Preschool Project, attended to the whole family system by observing the effects on the child of all primary persons interacting with the child. Watts found that A children experienced significantly more interaction with other people than C children did. Another finding was that interactors with A children spent more time actively participating in intellectually valuable activities with them and spent more time overtly encouraging intellectual pursuits than the interactors with C children. In contrast, interactors with C children participated in and encouraged social-physical activities such as roughhousing and playfighting. Such findings further validate the conclusion that children's experiences do not

just happen haphazardly but are influenced and affected by human and physical surroundings.

Baumrind (1967) conducted a study with a sample of 32 children and their parents to discover if the child-rearing practices of parents whose children were assertive, self-reliant and self-controlled differed from the child-rearing practices of two other groups of parents: (1) parents whose children were withdrawn, discontented and distrustful, and (2) parents whose children had little self-control, self-reliance and who retreated from new experiences. Parental attitudes and behaviors were determined from home visits, observations and interviews. Baumrind found parents of the assertive, competent children to be communicative, loving, controlling and demanding. Parents of the unhappy group of children tended to be detached and relatively controlling, while parents of the least competent children were noncontrolling, nondemanding and relatively warm.

In a follow-up study of 103 children and their parents, Baumrind and Black (1967) correlated parental behaviors and attitudes with child behaviors. Their findings were consistent with the earlier study - the parents of the highly competent children were respectful of the child's independence but were firm about maintaining their own positions once they had been established.

A strong case has been made in the research literature for the potency of the child's human and physical environment

during the first years of life. The present research attempts to collect additional data on the attitudes and behaviors of mothers and fathers during the preschool period. Before examining the functions of a child's play in the early home setting, a broader base from which to view the area can be gained from a review of the various play theories. Many of the answers to the question "Why do people play?" found in these play theories continue to influence our present attitudes and behaviors toward play.

Theories Of Play

Because of the complexity and multi-dimensionality of the phenomenon of play, many theories of play have been postulated. Most of these theories have been advanced by the single disciplines of evolution, anthropology, psychology and sociology. Little integration of the various theories has been attempted. According to Ellis (1973), some of the theories define play in terms of its motive, some its content, while others define it in terms of its playfulness (p. 22).

The Greeks used the word SCHOLE to describe their play or leisure activities. Defined as "devoted to learning", schole included games, music, mathematics and other cultural activities of politics, debate, art, philosophy and athletic contests. Among the free Greek man, there was no resistance to leisure activities as there is in today's production-oriented society because the free Greek was bred to leisure in a society which rested on slave labor.

In the later Roman society, the word LICERE, meaning "to be lawful" defined leisure activities in which children and adults were permitted to engage. The view of play as relaxation from work was not set forth until the Middle Ages.

The American industrial age was based on the labor of the free man and thereby supported the separation of work and leisure. Since play was viewed as a nonproductive function, children were encouraged to spend their time doing chores or reading the Bible.

Our post-industrial society rests upon automation as opposed to either free or slave labor, and presently the age of the player seems to be the criterion which determines what label to put on playful activities. As Reilly (1974) observed, the word play is reserved for children; this shifts to recreation for adults and leisure for retired adults.

The many theories advanced to explain the phenomenon of play have been categorized differently by various theorists. Lowenfeld (1967) defines six categories of play theory: (1) play as bodily activity, (2) play as repetition of experiences, (3) play as the demonstration of fantasy, (4) play as realization of environment, (5) play as preparation for life, and (6) group games. Curry (1972) classifies them as Pre-Twentieth Century theories and Twentieth Century theories. Gilmore (1966) and Ellis (1973) categorize the theories into (1) classical, (2) recent and (3) contemporary.

Although referred to as theories, Spitler (1971) notes that many of the explanations focus on only one aspect of the role of play in human development (p. 44). Using Kerlinger's (1967) definition of a theory as a set of interrelated constructs, definitions, and propositions that present a systematic view of the phenomena by specifying relations among variables with the purpose of explaining or predicting, the existing theories can't be properly classified as such since they are really only explanatory ideas that do not fulfill the prerequisites of explaining and predicting events (p. 11).

A review of the major explanations of play as classified by Ellis (1973) will be presented because they have been accepted by people concerned with play and, therefore, influence our present attitudes and behaviors concerning play. Ellis delineates five classical theories, six recent theories, and two modern theories of play.

Classical Theories Of Play

Ellis (1973) delineates five classical theories of play which were advanced before the turn of the Century. Generally these theories did not take into account individual differences, and they came about as spinoffs of attempts to explain other aspects of behavior. The classical theories of play are concerned with the purposes play serves, and, according to Ellis, "it was sufficient that the organism was behaving

but not working" (p. 24).

Surplus Energy Theory The surplus energy theory of play is one of the oldest explanations of play activities. It was originally presented in the early 1800's by Friedrick von Schiller (1875), an 18th Century poet and philosopher, and it was elaborated upon by English philosopher Herbert Spencer (1855).

According to this theory, play is the result of the existence of surplus energy. The motive for play is the mandatory release of surplus energy which accumulates when the organism does not have to expend it on the work of survival. This theory postulates that the organism generates a finite level of energy that has to be expended. When survival needs are met efficiently, the excess energy which results leads to playful behaviors.

Another surplus energy view focuses on an organism's heightened tendency to respond after a period of deprivation. This theory holds that an organism will show an increased tendency to react to whatever stimulus is available after a period of quiescence.

This theory is not able to account for the fact that children and animals contiunue to play when they are exhausted, tired and sick. Another criticism of the surplus energy theory is that the decision as to whether or not energy is surplus depends upon the subjective interpretation of a behavior as playful or serious.

Instinct Theory McDougall (1923) is a major advocate of the theory that play is caused by an instinctive need to play. He supported the existence of surplus energy:

surplus energy ⟶ purposeless responses called forth by instincts.

By definition, instincts are innate, pre-existent tendencies to emit certain behaviors. Instinct theory ignores all potential environmental influences on behavior. Several instinctive theories of play evolved and held major positions in the early 1900's, but each was based upon a general circular reasoning pattern cited by Spitler (1971);

Question: Why do children play?
Answer: Because they have a play instinct.
Question: What is a play instinct?
Answer: It's the reason children play (p. 49).

Preparation Theory Karl Groos, a professor of philosophy at Basel, expressed his theory that play is instinctive behavior in which the organism engages as a means of preparing for later life. Groos first advanced this preparation or preexercise theory in The Play of Animals (1898) and The Play of Man (1901). This view is based upon the need of the young of a species to practice and perfect their instinctive hereditary skills through play so that when these skills are needed in adulthood, they will be developed. In summarizing his theory, Groos (1898) stated:

> ...in estimating the biological significance of play at its true worth, the thought was suggested that perhaps the very existence of youth is largely for the sake of play. Animals do not play

> because they are young but they have their youth because they must play (p. 76).

This view that animals instinctively train themselves in infancy for their adult roles can be refuted by the fact that, in most cases, there is no pre-existing knowledge about which responses will be needed in the future. Also the facts that children play at being younger and that adults play even when they are supposedly "prepared" tend to undermine this position.

Recapitulation Theory The theory that individual development (ontogeny) repeats that of the race (phylogeny) was the basis of G. Stanley Hall's (1916) recapitulation theory. An American professor of psychology and pedagogy at Clark University, Hall advocated the theory that a child relives in play the history of the race. Reflecting Darwin's conception of evolution, this view assumes that the skills and experiences of one generation can be inherited by the next generation.

According to Reilly (1974), recapitulation theory would associate water play with ancestral joy of the sea, climbing trees with the lives and activities of early monkeys, fishing and hunting of preteenagers with the survival hunting of early man (p. 63). The recapitulation theory was undermined by increasing knowledge about the functions of genes, heredity and experiences. Spitler (1971) refuted the recapitulation

theory:

> ... riding a bicycle, using a cash register, or gyroscope, or playing astronaut as modern children do, do not seem to fit the notion of a rehearsal of ancient experience of the human race. Rather, these play behaviors are related to what the child has encountered directly or vicariously in his environment and are dependent upon his level of neuromuscular development (p. 53).

Relaxation Theory The surplus energy theories were opposed by Moritz Lazarus' recreation theory in the late 1800's. It was based on the principle of restoration for the mind and body of exhausted powers through play. Lazarus held this view broadly and contended that any activity with characteristics contracting to those of a person's work was suitable for restoration.

Extending Lazarus' idea, G. T. W. Patrick (1916), a University of Iowa professor of philosophy, argued that an organism's need for relaxation leads to play. According to Patrick's relaxation theory, the purpose of play is recuperation from work. Play is defined by opposing it to work, thereby making an artificial dichotomization in which it is difficult to operate since some behaviors can be both work and play. The relaxation-recreation theories neglect to explain the enjoyment found in play that demands mental skill and problem solving. Also the relaxation theories do not account for children playing until they are exhausted.

The classical theories were developed and advocated during the era of the instinct. The emergence in the 1940's of the psychological learning theories emphasizing the psychology of need reduction led to the waning of the instinctive, classical theories. In summarizing the contributions of the classical theories as a whole, Ellis (1973) comments:

> To the extent that each theory either explained puzzling aspects of behavior, or removed any responsibility for thinking about or planning for play behavior, thereby rendering the holder of the theory conceptually more comfortable, so they have survived. To the extent the various play theories explain the enigma of play, and prove useful in letting those whose interest lie in planning for play to make better predictions, they can compete actively, and eventually supplant the less useful theories of play. However, this process can only take place if those basing their work on the tenants of a particular theory are critical of its assumptions on the one hand and its capacity to predict events in the real world on the other. The classical theories are not a very promising group of theories (p. 48).

Recent Theories Of Play

Ellis (1973) classified the following six recent theories of play: generalization, compensation, catharsis, psychoanalytic, developmental and learning theories. Concerned with the actual forms of play behavior, these theories were all developed after the turn of the 20th Century. Unlike the classical theories, the recent theories are concerned

with an individual's experiences rather than his inheritance. These six theories attempt to link antecedent events and subsequent behaviors.

Generalization Theory Task generalization theory suggests that the nature of a person's work is the determinant of his play activities. In other words, a person will select play activities that have characteristics similar to the satisfying activities found in their work. It rests on the assumption that individuals will choose work and play activities that satisfy their needs. According to Ellis (1973), an ignored alternative to this view would be that an individual selects a work environment that has characteristics similar to enjoyable leisure activities (p. 50).

The fact that many people find work experiences to be only mildly rewarding weakens this position. The fact that preschool children have no work per say and yet spend a great deal of time playing also undermines the generalization theory.

Compensation Theory Compatible with generalization theory is task compensation theory which holds the same view that the nature of a person's work determines his play activities. Compensation theory suggests that if a person's needs are not met by work experiences, leisure activities will be chosen to fulfill these unmet needs. For example, a worker constantly surrounded by other people may choose solitary

leisure activities. The assumption that an individual's needs can be defined and identified underlies the generalization and compensation theories. To be applicable, an individual's specific work and leisure activities would have to be analyzed in terms of his needs. As with the generalization theory, compensation theory does not account for the play of small children.

A ten month study by Hagedorn and Labowitz (1968) tested both a generalization and compensation hypothesis predicting workers' leisure-time participation in community groups. Predicting that different kinds of workers would participate in community groups in different capacities, the researchers found that the highest predictors of community participation were occupational leadership role and education. In testing the compensation hypothesis that those working in isolation would join and participate in more community groups, the researchers found this hypothesis was supported.

Another study undertaken by Witt and Bishop (1970) looked at the effects of immediate antecedent experiences on leisure activity choices. Junior college students were asked to describe what type of leisure activity they would want to engage in if they had certain experiences. The different experiences were based on the need for relaxation, catharsis, compensation, generalization and expenditure of surplus energy. Neither the concepts of compensation or task generalization were supported. Leisure activity choices chosen

after antecedent experiences suggesting catharsis, expenditure of surplus energy and the need for relaxation were supported.

The inconsistent findings of these two studies may be accounted for in the possible explanation that acute needs are not resolved by generalization and compensation while chronic needs that build over time are.

Cathartic Theories The cathartic theories of play are based on the principle that the release of built-up emotions will avoid certain dangers which might have resulted if the emotions further accumulated. During the time of Aristotle, the ancient tragedies served a cathartic function as it was believed that they purged the emotions of the audience. At that time, catharsis was a general term referring to all feelings and emotions, but it has since been used to refer to aggressive behavior.

The theorists who view play as cathartic behavior see play as an attempt to master frightening, overwhelming, or difficult to handle situations. Ellis (1973) identified a major weakness of this position to be the unjustified assumption that socially acceptable behavior can be substituted for an original socially unacceptable intention (p. 55).

Several studies testing the hypothesis that the expression of sanctioned aggression in a play situation would reduce the aggression in young children have concluded that

the cathartic theory was not valid. Kenny (1953) divided children into two groups based upon their aggressive responses to a story completion task. The children then played either in a setting with neutral toys or in a setting with toys designed to release aggression, i.e., guns, swords. A story completion posttest was administered to determine residual levels of aggression with the results being the opposite of what was predicted. The control group with the neutral toys showed diminished aggressiveness while the group with aggression-releasing toys remainded unchanged.

Another study conducted by Feshbach (1954) found that some boys who were not aggressive before play with aggression-releasing toys showed increased aggression in the classroom after the play. Both of these studies question the view that if aggression is expressed in socially approved ways the result will be a reduction in the amount of socially disapproved aggressive behavior. Ellis (1973) summarized the results of aggression research:

> The aggression research clearly questions whether substitute acts do reduce tension. It shows that anger must be present if the aggression is to reduce emotional and physiological tension. Further, the sanctioning of aggressive acts, be they verbal or a substitute, is likely to increase the level of aggression in children....Catharsis as a process has probably always been a speculative notion growing from the need to control violent and disorganizing emotions. It has been convenient to assume that a hydraulic model can be extended to provide a safety valve of substitute action (p. 57).

Psychoanalytic Theory The psychoanalytic theory was first introduced by Freud. Using data of clinically abnormal behavior and unpleasant experiences, Freud built a conceptualization about the unconscious sphere of behavior in normal development. His conceptual system was based on tension reduction and the pleasure principle. Freud's psychoanalytic theory was concerned with unpleasant experiences and how one comes to terms with or assimilates the unpleasantness of the residual negative effect. According to psychoanalytic theory, a child assimilates unpleasant emotions by repeating them in non-serious settings.

In Freudian theory, the ego balances the extreme demands of the id (the process which represents all primitive pressures of our inheritance upon our behavior) and the superego (the process which represents our conscience). During the process of ego development, mechanisms for balancing the id and superego are acquired partially during play. Freud viewed the majority of children's play behaviors as attempts to satisfy drives or resolve conflicts in the absence of a realistic opportunity to do so. Children frequently encounter unpleasant experiences that they cannot control. Consequently, Freud (1955) saw play as having an autotherapeutic effect:

> It is clear that in their play children repeat everything that has made a great impression on them in real life, and that in doing so they abreact the strength of the impression and...make themselves master of the situation. But on the other hand it is obvious that all their play is influenced by a wish that dominates

> them the whole time - the wish to be grown up and do what grown up people do. It also can be observed that the unpleasurable nature of an experience does not always unsuit it for play. If the doctor looks down a child's throat or carries out some small operation on him, we may be quite sure that these frightening experiences will be the subject of the next game; but we must not in that connection overlook the fact that there is a yield of pleasure from another source. As the child passes over from the passivity of the experience to the activity of the game, he hands on the disagreeable experience to one of his playmates and in this way revenges himself on a substitute (p. 16).

Erikson's (1963) work supported and contributed to Freud's psychoanalytic theory of play. Erikson saw child's play as the analogue of adult learning. According to Erikson, playfulness continues into adult life in the form of games and hobbies, and the dramatic play of childhood takes the form of adult day dreams. Erikson was instrumental in advancing the position that resolution of developmental conflicts at one stage influences the resolution of subsequent developmental conflicts.

There have been few attempts to test empirically the postulates of psychoanalytic theory, but its influences on attitudes and behaviors continue to be strong.

Developmental Theory The developmental theory of play, advanced by Jean Piaget (1962), views play as the inevitable result of a child's cognitive structure. Within this framework, all behavior, including play, depends on one's cognitive

structure. Children develop and move through identifiable, predictable stages of thinking, and their play is seen as a product of this cognitive process in which a child develops from an egocentric, phenomenalistic stage to the objective, rational phase of adulthood. Advancement from one stage to the next is the result of successfully experiencing the content of the preceding one.

According to Piaget, cognitive development is a form of adaptation which involves two processes: assimilation and accommodation. Assimilation involves a person abstracting and categorizing information from the outside world and fitting or bending that information into the existing schemata representing what the person already knows. In the process of accommodation, according to Spodek (1974), an individual changes or modifies existing schemata when they are not consistent with developing knowledge (p. 18). These two processes take place continually although at any one point in time, one process can predominate over the other. A child's cognitive structure increases in complexity through the interaction of these two processes.

According to developmental theory, play occurs when the process of assimilation, of bending reality to fit what one knows, predominates over accommodation. Since assimilation is an aspect of all behavior, every behavior has at least some play-like characteristics according to Herron and

Sutton-Smith (1971):

> One can't speak of play versus non-play in the Piagetian schema of things; behaviors are only less or more playful insofar as they do or do not make some attempt to cope with reality (p. 317).

Piaget classifies play activities into three broad groups to match them to developmental levels. The first category of practice or functional play, from birth to eighteen months, includes the young child's sensory-motor explorations in which any mastered abilities are performed over and over again. Symbolic play occurs when a child substitutes a symbolic object for the real thing. Symbolic play first appears around eighteen to twenty-four months and continues until seven or eight years of age. Games-with-rules comprise the third category of play and occur around eight years of age. Based on reality rather than fantasy, games-with-rules develop when the child develops a more objective, rational outlook of adulthood.

Accordingly, play increases in complexity as the result of the child's increased cognitive complexity. The underlying assumption is that play activities will remain stimulating only if the play is made complex by rules and competition. Eifermann (1971) conducted a large observational study on play with a sample of Israeli school children, and his results did not support the assumption. In observing the games and play patterns of small groups of children, Eifermann found that rule-governed competitive games increased in

popularity to a peak point at 4th grade. After that point, participation in these games dropped and participation in non-rule oriented activities increased.

A major limitation of Piaget's theory is the claim that an instinct produces the interaction of assimilation and accommodation. This claim of an instinctive mechanism is open to the criticisms and limitations of the early instinct theories. Sutton-Smith raised objections to Piaget's theory on the grounds that play remains important, playful and symbolic in adulthood and does not become more realistic as intelligence develops. Sutton-Smith's position is elaborated in the next section.

Learning Theory Play as learned behavior is based on the assumption that play can be explained in terms of stimulus-response sequences. Within this theory, all behaviors are motivated. Play behaviors are motivated by stimuli that call forth responses that are not critical for survival. Positive reinforcers increase the probability that a specific response will reoccur, while negative reinforcers decrease the likelihood of a response reoccuring. Individual differences and experiences are thereby taken into account.

According to learning theory, children are surrounded by a complex group of secondary reinforcers (parents, other adults, peers), who influence their behaviors. By a smile or threat, parents selectively reinforce certain of their

children's behaviors thus having extensive influence upon the children's day to day activities. Children will behave in ways that will maximize the probability of positive rewards and minimize the probability of punishment.

A limitation of this view is its inability to explain behaviors that do not seem to have payoffs. Stimulus-response theory says all behaviors are motivated, and this view can be upheld as long as a primary or secondary reinforcer can be identified. A problem arises in defining play as learned behavior because many playful acts appear to be unmotivated. Stimulus-response theory holds that playful behaviors which seem unmotivated are motivated, but the motive is hidden.

Brian Sutton-Smith (1974) elaborated the concept of play as learned behavior to take into account processes of response generalization, compensation, and catharsis. Sutton-Smith advanced his conflict-enculturation hypothesis in which the motive for playing games is the interaction between an individual and the culture's child rearing practices. He hypothesized that cultural differences would result in different game preferences. Compensating for stresses created by cultural child rearing practices, children would play games which would not only relieve the stress but also aid the society's goal of enculturating the children.

Testing this conflict-enculturation hypothesis, Roberts and Sutton-Smith (1963) studied the differences in child

rearing practices and children's games in three societies. They found an association between a predominance of one type of game and a particular emphasis in child rearing. Child rearing patterns emphasizing responsibility had a predominance of games of luck. There was little room for individuality in the atmosphere of fatalism. Children did as they were told, and there was no feeling of control over one's life. Child rearing practices stressing achievement had an abundance of games of skill emphasizing performance. The child rearing patterns stressing obedience resulted in a predomination of games of strategy. In games of strategy, children force obedience on others, thereby reducing the aggressive feelings resulting from the child rearing attitudes which call for negative consequences if the child does not obey his parents.

Eifermann (1971) further tested the conflict-enculturation hypothesis in a comparison of urban and rural play activities in Arab and Israeli settings. She found competitiveness and emphasis on success to be predominant in urban settings. Socialization for adulthood in these settings, therefore, required situations where acculturation to competition could take place. In play activities with peers, children have the best chance of achieving success thereby giving support to her finding that urban children played in homogeneous age groups significantly more than rural children. In rural settings homogeneity of age play groups decreased by

the seventh grade perhaps because there is a smoother transition into adulthood in rural societies (p. 295).

Sutton-Smith defined four basic modes of knowing in which specific kinds of play emerge. Mode 1 involves exploration, analysis and examination of the environment. Testing, "I can do it" play, results in the ability to predict and learn from consequences and is the basis of mode 2 play. Mode 3 is "copying the world", imitative play. Mode 4 includes model construction in which the child synthesizes the various elements of his world. Neumann (1971) elaborates on the basic modes by noting that:

> Each (mode) represents a specific means of understanding the self and the environment, namely causal-analytic, prediction, correspondence, and coherence, respectively. These modes of knowing are established through play in early childhood and are developed throughout future years: they are a foundation for the understanding of experiences at more complex levels of development (p. 75).

Sutton-Smith defines play as playfulness. He views play as a behavior that continues throughout adulthood in contrast to those who believe it is only a childhood characteristic. Within this framework the emphasis of playful behavior is on novelty of response and approach.

As a category, the recent theories focused on the individual and his behavior in an attempt to explain why certain playful responses were emitted. The recent theories were concerned with individual play differences. The experiences

an individual had were seen as antecedent events affecting the emitted play behaviors.

Modern Theories

Within the last ten to fifteen years there has been a renewed interest in the scientific investigation of children's play. Arnaud (1974) identified four independent trends which stimulated the interest. The first influence is the work of ethologists which showed that the more complex a species' nervous system, the more playful are their young. A second factor is the disenchantment among educators with the cognitive curriculum designed to produce reading and number mastery in three and four year olds. Arnaud credits Piaget with indirectly influencing the renewed interest. From his work, Piaget found that children learn through interactions with their own environments, and that they interact with the environment differently at different ages. He concluded that these stages can be enriched but not forced or accelerated. Finally Arnaud attributed the waning of the puritan work ethic that frowns on playful activities as influencing new research on play.

In the early 1970's the Arsenal Family and Children's Center at the University of Pittsburgh responded to this growing awareness of the importance of play in human development by holding a conference on play. The issues and implications of this conference are discussed in full by Curry (1972).

The two modern theories of play presented explain play behaviors in terms of a drive to maintain optimal arousal. This drive leads to stimulus-seeking behaviors.

Arousal-Seeking Theory The arousal-seeking or stimulus-seeking theory (Ellis, 1973) explains that play is seen as motivated by the need for stimulation:

> The organism has a need for stimulus-seeking behavior that is only interrupted by the need to eliminate fatigue by sleep and to satisfy prepotent primary drives. The normal state of the organism reflects the state of its nervous system which is in a state of constant activity. The normal organism needs to be in constant receipt of the sensory input from the environment that satisfies its need for stimulation (p. 81).

The arousal-seeking theory was advanced by the results of research concerned with (1) vigilance of human operators, (2) manipulatory, exploratory behavior in animals and (3) effects of sensory and perceptual deprivation on man and animals (p. 85).

The focus of vigilence research is the attentiveness of the subject and his capacity for detecting changes in stimulus events over relatively long periods. Vigilance research was first conducted for the pragmatic reason of attempting to maintain the performance of human operators during sustained, boring vigils.

Frankman and Adams (1962) conducted a study on the vigilance of human operators. They instructed their subjects to

detect minute changes in radar and sonar signals during their regular jobs. They found a decrease in the operator's detection rates over a watch of several hours as the operators became progressively less alert. The operators' performance could be restored by a simple telephone call to ask if everything was all right. They did not find detection rates to diminish in highly complex settings as they did in the simple ones. They concluded that arousal is maintained by the introduction of novel, surprising or complex stimuli or some form of self-stimulation such as day-dreaming.

Another area of research providing insights into behaviors which do not seem to fit into the need-reduction motivation theories is that investigating manipulative and exploratory behaviors of primates. Harlow et al. (1950) noted that monkeys and rats behaved in ways which were not associated with extrinsic rewards. Monkeys spent considerable time manipulating toy-like gadgets which brought no rewards. Rats explored novel settings which were also independent of extrinsic rewards. Harlow postulated that some intrinsic reward must be involved in manipulative and exploratory behaviors. He concluded that these behaviors were motivated by a new drive - a drive for manipulation and exploration.

The third area of research lending support to arousal-seeking theory was concerned with the effects of sensory and perceptual deprivation on man and animals. In testing

the hypothesis that the natural state of the nervous system is one of constant activity, Hebb (1966) deprived his subjects of sensory input and observed the subsequent effects on physiological functioning, performance, attitude and behavior changes, and self-reports. Hebb concluded that the elimination of patterns in the stimuli lead to perceptual deprivation, and that the existence of stimuli themselves was not enough to reduce the deprivation effects.

Ellis (1973) is the major advocate of the arousal-seeking theory, and within this framework he defines play as "...that behavior that is motivated by the need to elevate the level of arousal towards the optimal" (p. 110). In other words, children play for the stimulation they receive. Behaviors which reduce the level of stimulation would be categorized as work although both types of activities are fundamental and necessary to the development of the organism and therefore should be included in the same category:

> Since both activities are necessary to the health of the organism, both could be considered work....When playful behaviors are accorded the status of necessary activities, then play becomes work and the meaning in this play/work dichotomy drops out.
>
> If play is stimulus-seeking behavior and if work is life-supporting behavior, many, many activities are both at the same time. Frequently, the life-supporting activities are sufficiently interesting to allow the worker to maintain his arousal level while earning the monetary rewards necessary for

> existence....We can insist on forcing (play) to become a conceptual opposite of work, or we can face the complexity of the problem. A behavior may have many motives that are not mutually exclusive and an adequate explanation must recognize this....Play and work lie on a continuum (p. 110).

Ellis was not the first to introduce the idea of play as stimulus-seeking. After observing mammals in exploratory activities, McDougall (1923) advanced the position that there was an instinct of curiosity, and that an organism's attending to an activity or object was based upon selective attention. Berlyne (1960) identified the same need for complex organisms to maintain optimal arousal by attending to novel or uncertain events, but he discovered an uncertainty in predicting the outcome to selective attention. He found that an increase in performance resulted from general arousal of an animal up to an optimal point. Further arousal reduced the animal's performance, led to disorganization, and caused him to behave in ways which reflected his efforts to diminish the arousal level.

Arousal-seeking theory holds that playful or nonutilitarian activities are maintained by the drive for novel stimuli, but another point of view, the competence/effectance theory, contends that these behaviors are maintained by the need to produce effects on the environment to demonstrate competence.

Competence/Effectance Theory White's (1959) theory of competence motivation was advanced to explain repetitious behaviors which continue after the novelty has long worn off. He says that repetitive, manipulative behaviors with objects that are not novel is an attempt to produce effects on the environment. According to White, these behaviors result from a competence/effectance motivation which has as its goal control or mastery of the environment.

Because of its complexity, play has yet to be operationalized in a way that satisfies all the disciplines concerned with the phenomenon; although an integration of the theories of arousal-seeking, learning and developmental offers potential:

> This integration uses interrelationships between the motive for play, the constraints placed on expression of playful responses by the environment, and the effects they work on the complexity of children to explain play behavior.... The arousal-seeking model explains the mechanism driving the individual into engagement with the environment in ways surplus to the need of immediate survival. The consequences of such behavior comes, via learning, to condition the content of the behavior so motivated. The accumulative effect of such learning interacts with the arousal-seeking motive to produce an upward spiral in the complexity of the interactions. Similarities in that developmental path have led to the separation of the continuous process of growth into developmental stages where growing individuals are seen to move through similar phases at approximately the same time (pp. 118-119).

The Functions Of Play

In the overall development of children, play serves multiple functions, and one playful activity may serve several functions simultaneously. In play children test ideas, abstract information and operate on this information in some way. At this point, agreement among researchers concerned with the functional significance of play ends.

According to Neumann (1971), the functions of play can generally be classified as emotional-social, cognitive or creative (p. 80). The psychoanalytic theorists saw the function of play as mastery in emotional-social development. According to Freud, play's function was the resolution of conflicts between the id and the superego resulting in a strong ego. Erikson broadened this by contending that social mastery was a function of play as well as emotional mastery.

Play as a cognitive function has been advanced by Piaget (1952) and Ellis (1973). According to this point of view, there is a specific relationship between play and cognitive development. Sutton-Smith (1970) and Almy (1967) are examples of those who advocate the position of play as a creative function which results in novel events and ideas. Several researchers have taken from, combined, and elaborated upon these one-channel views to develop their own list of play functions.

Sponseller (1974) identified three functions of play: skills-enchantment, problem-solving, and development of

self-concept. Sponseller elaborated upon the play/work continuum which formed the basis of Ellis' theoretical framework. The type of play engaged in determined the type of learning most likely to result. For example, free play which is characterized by little adult intervention and unstated goals results in discovery learning; while work disguised as play results in rote learning.

Sponseller's attention to the potentialities of spontaneous play is indicative of a revival of the recognition of the benefits of self-directed play. Almy (1967), Murphy (1972), Arnaud (1974), and Anker (1974) are among those that advocate spontaneous, meaningful interactions between children and their environment as a means of fostering autonomy, exploration, experimentation and social interactions. Anker (1974) notes:

> Children who are permitted to engage in activities of their own choice gain a sense of autonomy and effectiveness; become motivated to mastery; develop such attributes as self-direction, trust in themselves, self assurance, and a feeling of self worth. When a child sets himself a task it is, by and large, developmentally appropriate. As opposed to this, programmed curriculum superimposes a learning event without regard for the great variation in individual interest or readiness (pp. 203-204).

Lowenfeld (1967) saw play as an essential function of the passage from emotional immaturity to maturity. Primarily she saw play as an adaptive process in which the child continually strives to adapt to changing internal and external

environments. According to Lowenfeld, play serves four functions: (1) it is the means through which a child makes contact with his environment; (2) it is the bridge between the child's consciousness and his emotional experiences thereby fulfilling the needs that conversation, introspection and religion do for the adult; (3) it represents to the child the externalized expression of his emotions; and (4) it serves as relaxation, amusement and fun (p. 7).

Arnaud (1974) took an even broader view in her answer to the question "What functions does play serve?" She concluded that there are nine functions of play: play is an energizer of cognitive learning, helps children master anxiety, lessens egocentrism, leads to abstract symbolism, develops coordination skills, and encourages innovation, problem-solving, individuality and integration of experiences.

Sutton-Smith is another theorist who combines the cognitive and creative functions of play and broadly sees playfulness as serving to develop information and skills which form the basis of the development of greater adaptability.

Parental involvement in a child's play can facilitate and enrich the development of these functions. The importance of adult intervention is recognized by the work of Smilansky (1968), Arnold (1968), Ellis (1973), Caplan and Caplan (1974). In response to this recognition of the importance of parent-child playful interactions, numerous books

offering curriculum of playful behaviors have appeared on the market (Gordon, 1970; Painter, 1971; Aston, 1971).

The various functions of play which can be actively encouraged by parental involvement in the play process are well summarized by Frank and Theresa Caplan in The Power Of Play (1974):

> Play is a voluntary activity which permits freedom of action, diversion from routines, and an imaginary world to master.
> Play has unique power for building body control and interpersonal relations.
> Play provides a base for language learning and investigation.
> Play is the most dynamic childhood learning method (p. ix).

Play Stages And Child Development

> The growth of modern cities, the development of motor traffic with its speed and danger...have taken from childhood its birthright of space, safety and freedom of mind and body to explore and enjoy, within and without doors the ever new excitement of "finding out" and playing with what they find.
>
> With relics of bombed and devastated cities, homeless families and massed children housed in slum buildings, the opportunity for spontaneous play, with other children or alone, becomes more and more difficult to achieve. As this opportunity diminishes or even disappears the need that we should understand what play is and why it is vital to our children's lives becomes more and more urgent.
>
> At a time when every child had room to play, when toys were simple, and simply beloved; when there were trees to climb and seeds and plants and small living creatures to tend and love and watch as

> they grew, adults took little notice of children as children or of what they did and said. Apart from that of great and original minds, interest in play is relatively new. Realization of its central importance, both to child and adults, gathers only slowly as civilization becomes more and more standardized and opportunities for experiment and the experience of spontaneous play decrease (Lowenfeld, p. 3).

Since play is the primary activity of childhood, attention must be paid to the characteristics of the various ages of the preschool child and the effects these characteristics have on the type of play in which the child engages. Although the assumption that play stages are universal is widely held by many theorists including Piaget, Smilansky's (1968) cross-cultural work invalidated this assumption by discovering the variance in play sequences. When the stages and characteristics of preschool development are outlined, they must, therefore, be regarded within an unrigid structure.

Smilansky observed the child rearing practices of families from Middle Eastern, North African and European countries. Observing children from different socioeconomic backgrounds, she found measurable differences in their play behaviors. She found children of low socioeconomic status played little and did not participate in sociodramatic play. Little sequence in activities was observed with the low socioeconomic group - the consequence being that they continually engaged in the same repetitious activity or they jumped from one activity to another. In studying the ways the different

groups of children used toys in their play activities, Smilansky found that the higher socioeconomic child preferred the nonstructured toy to the structured one. On the other hand, the disadvantaged child seemed to need a structured toy before he could take on a role.

Although Smilansky was able to delineate four general stages of play development, she firmly concluded that some of these stages overlay while others continue into adulthood. The four stages were functional play, constructive play, dramatic or symbolic play, and games with rules.

From her observations of these play stages, Smilansky concluded, according to Curry and Arnaud (1971), that:

> There are developmental sequences of play which are probably biologically determined but which must be nurtured, patterned and elicited by the child's family and cultural milieu in order to function. This cultural patterning or modeling would account for the presence or absence of a certain developmental sequence of play (p. 53).

Several theorists have attempted to outline the developmental sequences of play through the early years (Gesell, 1940; Caldwell and Drachman, 1964; Aston, 1971; Zimmerman and Calovini, 1971; Knox, 1974; and Takata, 1974). A child development profile was compiled using all of the above authors with special emphasis on the profiles of Zimmerman and Calovini (pp. 646-653). A copy of the profile is included in Appendix J.

Parental Attitudes And Influences

The importance of parental involvement in a child's learning process has been widely emphasized by preschool educators who advance structured intervention programs during the preschool years. Unfortunately the message parents often receive is that their job is not to play with their child, but to teach him. They hear that unstructured, spontaneous play should be replaced with conscious efforts to teach their preschooler educational concepts in a more structured form. The emphasis on early academic objectives in preschool programs is not responsive to the needs and developmental level of the preschooler but rather to those of the adult. If emphasis were removed from the structured curriculum and placed on the parent-child interaction process, a healthier perspective would be achieved. This impact of parental attitudes and parental intervention in child's play has been documented in the last decade by several well designed research studies.

Smilansky (1968) stressed the role parents play in their child's development of sociodramatic play skills. In comparing the child-rearing practices and attitudes of one hundred twenty families of low, middle and high socioeconomic levels, she found variances in the parental role to influence and determine differences in the children's play behaviors. Certain parental influences, such as the general home atmosphere, affect play activities indirectly by

relating to the child's general emotional, social and intellectual development. Other areas of parental influence, such as the provision of home play materials and parental participation in play activities, were identitied as having direct influence on a child's developing sociodramatic skills.

Smilansky divided her sample of children into two groups: (1) the A's, children who demonstrated variety, complexity, symbolic use of objects and verbalization in their sociodramatic play, and (2) the D's, children who did not demonstrate these skills and whose play was characterized by repetitiveness and few sociodramatic skills. Smilansky compared the child-rearing attitudes and practices of the parents of the A and D children and found the A parents to be significantly different from the D parents in many areas. The A parents enjoy interacting and playing with their children, explain the reasons behind behaviors, break complex tasks down into more simple ones, have numerous toys, games and books in the home, and encourage their children's social relationships. D parents were more concerned with having a neat home and keeping the children quiet and clean. Force and withdrawal of love were often used by D parents as disciplinary methods.

Smilansky's research is indicative of an increasing body of literature dealing with the assessment of parental

attitudes and the relationship of these attitudes to child behaviors and development. Several other studies which provide a basis for future research in the areas of parent-child relationships, parental attitudes and child-rearing expectations have been reported.

Sears, Maccoby and Levin (1957) conducted one of the earliest investigations into maternal child-rearing patterns. The resultant maternal characteristic having greatest impact on a child's development was warmth. Discipline in the form of physical punishment was a socializing technique used often by lower socioeconomic mothers but rarely used by middle class ones. The idea that children develop more fully in an environment of warmth and democracy was further supported by the subsequent research of Walters and Stinnett (1971), Neumann (1971), and Baumrind (1966; 1967).

Credibility to the conclusion that lower socioeconomic level parents use more physical punishment and little reasoning was added by Rosen's (1964) research. The accumulation of data stressing the need for early cognitive intervention in poverty areas and the importance of parent-child interactions led Phyllis Levenstein (1970; 1971) to begin the Mother-Child Home Program in 1965. The goal of Levenstein's Program was to provide models of verbal interaction techniques for low-income mothers so they could themselves become agents of their two-year-olds intellectual development.

Trained women from both low and middle income levels acted as "toy demonstrators" whose purpose it was to visit the mother and two-year-old together in their home and show the mother, through play with the child, how the mother could increase interaction with her child. This was a demonstration rather than a didactic method and had the positive aspect of drawing the mothers into the play sessions. The toy demonstrator visited the home twice a week for 23 weeks for two school year terms. Play sessions were developed around toys and books brought by the demonstrator and left in the home as gifts for the child. Since 1965, the children enrolled in the Program have been tested in follow-up studies. In the posttest situations, the experimental group has made significantly higher cognitive gains than the control group.

The physical punishment and authoritarianism characteristic of the low socioeconomic level urban parents was found to also be characteristic of young rural parents lacking adequate income. DeLissovoy (1973) studied the expectations and child-rearing attitudes of forty-eight married high school couples over a three year period. From rural areas in central Pennsylvania, these couples ranged in age from fourteen to nineteen. Forty-six were pregnant at the time of the marriage. Forty-one wives and thirty-five husbands dropped out of school before graduation.

From his data, DeLissovoy found these young parents to be:

> ...an intolerant group - impatient, insensitive, irritable and prone to use physical punishment with their children. Only five mothers, for example, ... spontaneously cuddled or played with them for the sheer joy of it....There is little question that these young parents were undergoing severe frustrations. Their lack of knowledge and experience, their unrealistic expectations of child development, their general disappointment in their lives and their lack of economic resources served to raise their irritability and lower their threshold of tolerance (pp. 22-23).

In a test of knowledge of developmental norms, the mothers as a group estimated babies should sit alone without support at three months while fathers said babies should sit alone at one and one-half months. The norm in months for this area of development is seven months. Mothers estimated children should be toilet trained (both bladder and bowel) by six months; father estimated five and one-half months! The expectations these parents held for their children were so grossly inappropriate that frustration and its result - abuse, were inevitable.

DeLissovoy's research consistently supports the importance of parental attitudes in determining the experiences of the child in his day to day living and his development in general. Unfortunately the majority of research in the area of parental attitudes and parent-child relationships has only

reflected the mothers' points of view. An adequate research design for the investigation of the relationship between parental attitudes and behaviors and child behavior must reflect both maternal and paternal positions (Schaefer, 1961). The present research has responded to the omission by including fathers in the sample.

Mothers' And Fathers' Attitudes Despite the obvious neglect of fathers by behavioral scientists, the trend continues. LeMasters (1974) documented this glaring omission:

> Sears...in interviewing 379 "parents" did not find it necessary to include one father. Miller and Swanson had 582 mothers in their sample but no fathers. Blood and Wolfe talked with 909 mothers but excluded fathers from the sample. In a study of divorced parents, Goode located 425 mothers but did not attempt to locate any fathers....In a survey of family research, Ruano and his associates found that 444 papers published from 1963 through 1968 only eleven utilized data from husbands and/or fathers (p. 125).

The assumption that mothers can accurately report the feelings, attitudes and thoughts of fathers is invalidated by the research of McIntire, Nass and Battistone (1974), Eron, Banta, Walder and Laulicht (1961), Seeley (1956), Fanshel (1966), O'Brien (1970) and Mueller (1970). All of these investigators found that fathers gave significantly different opinions than the mothers in areas of child-rearing, the divorce process and the reconciliation process.

McIntire, Nass and Battistone (1974) interviewed sixty-six randomly selected unmarried undergraduate male students at the University of Connecticut about their attitudes, beliefs and expectations about their role in early child parenting. One hundred eight female unmarried students were asked to answer the same questions as they thought unmarried males in general would respond. The responses were then compared. The results showed consistently that the women's perceptions of the men's beliefs and attitudes toward early child parenting differed from the men's actual responses. Out of a total of fourteen items, nine items showed differences that were statistically significant. All differences were in the direction of women attributing less interest and involvement in early child parenting to their male peers than the men expressed:

> For example, a difference clearly illustrating females' lack of awareness of males' expectations for parenting and spousal responsibility occurred on the item, "Besides being a provider, husbands should help their wives with the housework and child care." The men strongly agreed (85.7%) whereas only 26.0% of women perceived men as agreeing. Similarly, on the item, "A wife has a right to expect her husband to help feed and diaper-change the baby," 77.8% of the men agreed, while only 35.8% of the women perceived the men as agreeing (p. 107).

McIntire, Nass and Battistone conclude that women are imposing a double bind situation upon themselves which may hamper the parenting process and lead to poor marital

adjustment:

> If the misperception of men's sensitivity to and interest in parenthood is as pervasive as our data suggest, it indicates that women are placing themselves in a double bind of magnificent proportions. They incorrectly perceive males as wanting them to perform the traditional, stereotyped, child-reared, homemaker, subservient role. In so doing, they cut off to a great extent an important source for assistance and support in a critical and difficult family cycle stage (p. 110).

Another study concluding that mothers' and fathers' responses cannot be substituted for one another was directed by Eron et al. (1961). Sixty third grade children and their parents participated in this research which attempted to compare data obtained on child-rearing practices from mothers and fathers. Analysis of the data showed that mothers and fathers did not agree in reporting their perceptions of their own child's behavior. Mothers and fathers reacted to children differently; therefore, the observations of each must be taken into account to get a complete picture of parental socialization influences on child behavior (p. 465). Eron concluded that fathers gave more consistent results than mothers did.

Another study designed to discover if differences exist between mothers and fathers in their child-rearing behaviors and attitudes was conducted by Emmerich (1962). The purpose was to discover if variations in parent role behavior are associated with the parent's sex, child's sex, and child's age. Analysis of data indicated that parents

did not respond differentially toward daughters and sons on the nurturance-restriction or power dimensions of the parental role. Mothers were found to be more nurturant and less restrictive than fathers. Mothers exerted more power toward their daughters than sons, and fathers exerted more power toward sons than daughters.

Rothbart and Maccoby (1966) studied parents' differential reactions to a child's voice as a function of sex of parent and sex of child. After listening to a stimulus of a child's voice which was ambiguous with respect to sex, part of the sample of mothers and fathers was told the voice was a girl's, the other part that it was a boy's. Results indicated that fathers showed greater permissiveness toward girls than boys for dependency and aggression. Mothers showed greater permissiveness toward boys than girls.

Although these few studies designed to examine mother-father differences can be criticized from methodological standpoints (mailed questionnaire with inherent problems of self-report techniques and no guarantee of independent responses for spouses, and hypothetical as opposed to real-life situations), they provide a basis for future research on the impact of parental attitudes and behaviors on children's behaviors in general and on children's play activities in particular.

Concerned with parental attitudes and practices regarding conditions in the home for play, Bishop and Chace (1971)

hypothesized that parental differences along a concreteness-abstractness dimension of cognitive functioning would be related to parental attitudes toward play, the home play environment and the children's creativity.

One hundred nineteen parents whose three and four year old children were enrolled in the University of Illinois' nursery school program were the subjects. Parental conceptual systems were measured by the "This-I-Believe" technique in which both parents of each family worked simultaneously but independently with an investigator by writing open-ended replies to ten concept referents. From their responses, parents were placed on a continuum from concrete thinkers characterized by the use of rules and principles at one end to abstract, flexible thinkers on the other.

A questionnaire was developed and administered to parents to measure parental attitudes toward play. Another questionnaire elicited information on the conditions of the home play environments by asking for factual descriptions of the child's home play. The second questionnaire was given only to mothers. It was hypothesized that the home play environment would reflect the parental conceptual systems, and that this environment would influence the behavior of the children.

Analysis of data for fathers showed no significant results. On the other hand, the results for mothers supported the hypothesis that conceptually abstract mothers are

more likely to report attitudes of flexibility, exploration and novelty in the play environment. Children of conceptually abstract mothers who placed few constraints on their children's play showed greater evidence of creativity than did children of conceptually concrete mothers. These results were unrelated to parental differences in age, income, education or occupation.

Banks (1973) extended this work by looking at the interactive effects of conceptual development of parents and teachers on children's creativity and conditions of home play. He found that when parents manifest similar conceptual levels, they seem to enhance creative behavior in children more than when parents differ on their conceptual level.

After reviewing the literature related to preschool children's play, Bishop and Chace's study is the only one which specifically investigated the attitudes of mothers and fathers toward play and the home play environment; therefore, their ideas and suggestions for further research have served as a basis for the present research. Bishop and Chace indicated a need for additional research in the specifics of early play milieus, equipment and parental characteristics. Bishop and Chace were not entirely clear why their data for fathers showed no significant results and suggested the need to further investigate fathers' attitudes toward play.

The present research has attempted to respond to these recommendations by looking not only at mothers' and fathers' attitudes toward play but also at the level of agreement between mothers' and fathers' attitudes in relation to knowledge of play, conceptions of childhood and parenthood, and various demographic characteristics.

CHAPTER III

RESEARCH METHODS AND PROCEDURES

This research was conducted in Pigeon, Michigan. Pigeon is populated by approximately 1200 people and is located in Huron County. This area is predominately rural.

Under the auspices of a grant from the Michigan Agricultural Experiment Station, Dr. Eileen Earhart (1973) developed guidelines for the creation of preschool resource centers from which parents could borrow toys and books for their preschool children's use. In the tri-county Michigan area of Sanilac, Tuscola and Huron Counties, there are approximately 11,000 preschool children. Only 200 of these children are served by Head Start programs. Approximately 60% of the families in this tri-county area (about 17,500 families) have incomes considered "marginal existence" level.

One library in each of these three counties was chosen to receive preschool toys and books. The Pigeon Library was selected to receive the resource materials because it met the criteria for selection: interest of the librarian in adding toys and books for the preschool child, availability of adequate space, and involvement of the Library Board and the

Board of Commissioners.

With the goal of providing these rural preschool children with supplemental materials to foster their intellectual skill development, toys and books were placed in the Pigeon Library on May 1, 1974. The materials selected were chosen for infants, toddlers and preschool children up to and including five years of age. Durability, suitability for home use, and learning potential in all developmental areas were the criteria used in the selection of these resource materials.

Suggestions as to how each toy might be used in parent-child play were compiled. These suggestions were printed on 4 x 6 index cards, and the appropriate cards were given to the parents when their children checked materials out of the center for the two-week lending period. These cards were given to the parents to keep.

During the first months of operation before systematic research to investigate the center's effectiveness was underway, the librarian reported the following observations:

1. Many of the families borrowing toys were families who had not previously used the library facility.

2. Two-thirds to three-fourths of the toys were out on loan most of the time.

3. There was a need for duplicates of some of the most popular toys and books.

In addition to the direct benefits that could accrue from the resource centers for the child's skill and knowledge

development, the opportunity exists for several major side benefits. One of these is the opportunity for the center staff to refer parents with problems and concerns to other supportive services. A second is the chance for local community groups to assume responsibility for replacement of broken toys and addition of new toys. A third is the opportunity for parents to model some aspects of the center's environment and make changes in their home environment which would promote their children's playfulness and inquisitiveness.

With the first steps of planning, preparation and implementation completed, this study was conducted to investigate parental attitudes and behaviors concerning play, beliefs about childhood and parenthood, and home play materials. Identifying and understanding parental attitudes toward those behaviors which occupy the majority of a child's time is a step toward seeking ways of intervening and influencing the dominant forces which effect a child's development within an ecological framework.

The procedures involved in sample selection, measurement, data collection and analysis are described in the following sections.

Sample Selection

Thirty-two couples from Pigeon, Michigan, and vicinity constituted the sample for this study. These couples were identified through the library's card catalogue system which lists basic demographic information on patrons such as name,

address, children's names and ages. Twenty-eight of the couples in the study had preschool children who had borrowed materials from the Pigeon Library at least one time; five couples had preschool children who had never borrowed materials.

Eligibility for inclusion in this study was determined on the basis of the following criteria:

1. Both mother and father were living in the home with their child or children.

2. Complete data were available from both mother and father. Both had to be willing to take part in the study and complete all of the instruments independently.

3. There was at least one child in the home at the time of accessment between the ages of 1 month and 5 years 11 months.

The universal sample of parents with preschool age children recorded in the library's filing system consisted of 90 couples. Of these 90 couples, 15 had moved or were unknown, 26 had children who were preschool age at the time of initial registry but were now school age, 8 were single parent homes through divorce or death, and 9 couples were unwilling to participate. The remaining 32 couples composed the sample group.

Description of Sample

The subjects included in this study were assumed to be representative of the population of interest, i.e. rural,

Anglo-American families with preschool children. By design of the research, single parent families were excluded. Descriptions of other characteristics of the sample families are summarized as follows:

(1) The average age of the mothers was 28.2 years. The range for mothers' age was 21-41 years. The average age of the fathers was 31.0 years. The range for fathers' age was 21-51 years. The distribution of age ranges is shown in Table 3.1.

TABLE 3.1
Ages of Husbands and Wives

Age In Years	Number Of Wives	Number Of Husbands
20-25	9	4
26-30	14	14
31-35	5	8
36-40	1	2
41-45	1	1
46-50	0	1
51-55	0	1
Totals	30	31

(2) The average number of years married was 7.7 years with the range from 2-22 years. The distribution of ranges of years married is shown in Table 3.2.

(3) Twenty of the wives completed 9-12 years of

formal education. Ten wives completed 13-16 years of education. Two wives completed 17-20 years of education. One husband completed only 1-8 years of formal education. Eighteen husbands completed 9-12 years. Nine husbands completed 13-16 years, and three completed 17-20 years. One husband gave no response to this question. The distribution of educational levels of parents is shown on Table 3.3

TABLE 3.2

Number of Years Married

Number Of Years Married	Number Of Families	Percent Of Total
1-5	9	28%
6-10	18	56%
11-15	4	13%
16-20	0	0%
21-25	1	3%
Total	32	100%

TABLE 3.3

Educational Levels of Husbands and Wives

Years of Formal Education	Number Of Wives	Number Of Husbands
1-8	0	1
9-12	20	18
13-16	10	9
17-20	2	3
Totals	32	31

(4) The social position of the families in this sample was calculated by the Two Factor Index of Social Position developed by Hollingshead (1957). Social position scores can be divided into five groups and assigned a social class position from I to V, high to low, respectively. In terms of this Index which uses occupation and education as class criteria, none of the families can be considered to be in Class I. One family is in Class II, seven families in Class III, 22 families in Class IV, and two families in Class V. By far the largest percentage (69%) are found in Social Class IV. A breakdown of families found in each social class is shown in Table 3.4.

TABLE 3.4

Social Class of Families

Social Class	Range Of Computed Scores	Number Of Families	Percent Of Total
I	11-14	0	0%
II	15-27	1	3%
III	28-43	7	22%
IV	44-60	22	69%
V	61-70	2	6%
Totals		32	100%

(5) The average number of children in the families represented in this sample was 2.4 with the range from 1-6. The average number of preschool children ages birth through

five years in these families was 1.3 with the range from 1-2.

(6) The average age of the oldest child in these sampled families was 6.0 years with the range from 1-20 years. The average age of the youngest child was 2.5 years.

(7) The average amount of money spent by these families on home play materials per year was $96.00 with the range from $30.00 - $200.00. The distribution of money spent by the sample families is shown in Table 3.5.

TABLE 3.5

Money Spent on Home Play Materials

Amount of Money Spent	Number of Families	Percent of Families
$1-$50	4	13%
$50-$100	17	55%
$101-$150	4	13%
$151-$200	6	19%
Total	31	100%

Measurement

Five instruments were used in this research to collect data about parental attitudes toward play, knowledge of play, developmental/traditional conceptions of childhood and parenthood, children's home play activities, and play materials in the home environment.

Attitudes Toward Play The Opinion Survey on Children's Play, an adaptation of an instrument developed by Bishop and Chace (1971), was used to determine parental attitudes toward play. On this questionnaire, parental attitudes regarding various play situations, types of toys, rights of children in play, and the relations among parents and children in play were sought. A copy of the Opinion Survey on Children's Play is found in Appendix B.

Bishop and Chace's original instrument, Opinion Survey on Children's Home Activities, contained sixteen forced-choice items. The number of responses for the items ranged from two to six. Adaptation of Bishop and Chace's instrument for use in this study consisted of adding five new items to the existing sixteen for a total of twenty-one forced-choice items. Adaptation also included standardization of the number of responses for each item.

The responses were designed so that one alternative represented an attitude that was assumed to enhance playfulness while other alternatives represented varying degrees of inhibition of playfulness. Each of the twenty-one questions had four alternatives from which to choose. These alternative responses were weighted from 1 to 4 with a value of 4 being given the most positive response and 1 being given the least positive response. The weighted responses were added for a total attitude toward play score.

Content validity was established by Bishop and Chace (1971) for this instrument. Several of the items had a

specific theoretical basis and were based on previous author's suggestions as to what inhibits or enhances playfulness. The remaining items were based on Bishop and Chace's judgments as to what inhibits or enhances playfulness. There was no normative data available on Bishop and Chace's original instrument.

Knowledge of Play The Preschool Children's Play scale developed by Whiren (1975) was selected as a measure of knowledge of play concepts. On the Preschool Children's Play instrument, parental knowledge regarding developmentally appropriate play behaviors for preschool age children, basic play concepts, and ages when young children perform various activities was sought.

Eighty-three forced-choice items made up the instrument. Parents were asked to check the age level at which they thought children could perform various tasks. Parents were also asked to agree or disagree with statements about preschool children's play behaviors. Responses were scored as either correct or incorrect. The total number of correct responses defined a subject's knowledge of children's play.

Content validity was established for the Preschool Children's Play instrument by documenting each of the eighty-three items from the literature on play. For example, Whiren stated that for the item, "Children who are truly creative will act just like other children the same age in similar situations", the resource base is Anker (1974). A copy of the Preschool Children's Play instrument is found

in Appendix C.

Developmental/Traditional Conceptions of Childhood and Parenthood Parental positions along a developmental/tradition continuum were determined by Blood's (1952) Beliefs about Childhood and Parenthood instrument. The instrument was based upon Duvall's (1946) typologies of childhood and parenthood ideologies. Respondents were required to select fifteen statements with which they agreed out of a total of thirty items evenly divided between developmental and traditional statements. Ten characteristics describe the ideal father, ten the ideal mother, and ten the ideal child.

Although the instrument has been used widely (Hill, 1970), there was no normative data available; nevertheless, its use was judged valuable because of conciseness, clarity, and classification of parental conceptual systems. A copy of the Beliefs about Childhood and Parenthood instrument is found in Appendix D.

Children's Home Play Activities An adaptation of an instrument developed by Bishop and Chace (1971), Questionnaire about Child's Play, was selected as a measure of children's home play activities. In the Bishop and Chace research, the questionnaire consisted of twenty-one forced-choice items. The number of responses for the items ranged from two to five. Adaptation of the original instrument for use in this study consisted of using eleven of the original questions and adding four new ones for a total of fiteen forced-choice

items. Adaptation also included addition and deletion of some response alternatives. The number of responses for items on the adapted instrument ranged from two to four. An example of a question follows:

Where in the home is your child allowed to play?

a. anywhere at any time throughout the house
b. in his or her own room
c. anywhere throughout the house if he/she is within seeing or hearing distance
d. In certain rooms of the house and not in other rooms

Only the mothers were asked to complete this questionnaire in the Bishop and Chace research since it was assumed that the mothers could give the most reliable information because they were in the closest contact with the children. That assumption was not made in this research; therefore, both parents' responses were obtained. For each husband-wife pair, the number of agreeing responses for each of the fifteen items was computed and summed. This procedure yields a marital agreement score operationally defining marital agreement on children's play activities. A copy of the Questionnaire about Children's Play is found in Appendix E.

Home Play Materials The approximate number and types of resource play materials each family had at home were obtained through the Toy and Equipment Inventory. An adaptation of an instrument developed by Watts (1973), the inventory consisted of a checklist of toys, equipment, and other materials appropriate for use by preschool children.

Adaptation of the original inventory for use in this

study was minor. The original eight categories of resource materials were used. Two additional categories of books and records were added. The adapted inventory was set up in such a way as to distinguish ten resource categories: fine motor, didactic games, early dramatic play, later dramatic play, expressive, gross motor, equipment, scientific, books and records. Within each category, specific toys and materials were listed. Mothers were asked to check the materials their children owned and regularly used. They were also asked to indicate which were favorite toys. Deletion from the original inventory of the question asking how the materials were played with was made.

From the inventory, assessment was made of the approximate total number of resources the child had in the home environment. Only the mothers were asked to complete the factual checklist since the instrument was not used in any way to compare husband-wife responses.

Content validity was established for this inventory by Watts (1973). A panel of experts from the Department of Family and Child Sciences at Michigan State University in the field of child development reviewed the inventory after additions and deletions were made to ensure content validity. The panel consisted of the following: Dr. Eileen Earhart, Chairman; Alice Whiren, instructor; Jeanne Brown, child development specialist and instructor; Betty Garlick, instructor; and Elaine Williams, instructor and former coordinator of preschool

day care programs. A copy of the Toy and Equipment Inventory is found in Appendix F.

Marital Agreement on Attitudes Toward Play The degree of agreement between couples on their attitudes toward play was ascertained by computing weighted scores of agreement of their responses for each item on the attitude scale and summing them. Perfect response agreement between a husband and wife was given a score of 2. A one-step difference received a score of 1. A 2 or 3 step response difference received a score of 0. A perfect agreement score was calculated by summing the total number of perfect agreements (highest possible=21 since there are 21 items). In addition, the total number of perfect agreement plus one-step differences was calculated. This was calculated by summing the total number of perfect agreements plus the total number of one-step difference responses for each husband-wife pair.

Socioeconomic Class Status Using Hollingshead's (1957) Two Factor Index of Social Position, the social position of each household was determined by utilizing two factors: occupation and education. Each of these two factors was scaled to a classification system devised by Hollingshead. There are seven levels in the occupational scale with the first representing higher executives and the seventh representing unskilled employees. There are seven levels in the educational scale with the first representing graduate

professional training and the seventh position representing less than seven years of school.

The factors of occupation and education are combined by weighing the individual scores obtained from the scale positions and adding them. The weight for the occupational factor is 7; the weight for the education factor is 4. These weights were determined by multiple correlation techniques.

The social position score is the summation of the factor scores times the factor weights. The scores range on a continuum from 11 to 77. Hollingshead's categories for predicting the social position of a family are shown in TABLE 3.6.

TABLE 3.6

Hollingshead's Social Position Categories

Social Class	Range of Computed Scores
I	11-14
II	15-27
III	28-43
IV	44-60
V	61-77

Limitation of Instrumentation Some limitations of the instruments used are recognized by the researcher. Due to inadequate standardization of the measures, validity and reliability have not been firmly established. Another limitation of self-report measures is the disadvantage of

never being sure of the degree to which the subjects' responses reflect true attitudes and knowledge; however, these instruments offer previously unavailable techniques for beginning the overdue investigation into the area of parental attitudes and knowledge involving children's play. The instruments were, therefore, chosen and deemed worthwhile to use, but it is recognized and suggested that further validity and reliability checks be made on the measures.

Data Collection Procedures

Data collection was conducted as part of a session designed to share ideas for making toys and to get feedback from families about the toy lending program in the Pigeon Library. Before the dates and times of the sessions were selected, the Pigeon librarian was consulted to ensure that there were no schedule conflicts. Every effort was made to minimize the additional demands made on the librarian's time and energy. Four session times were selected with families having the choice to attend the one which was most convenient for them. The session dates and times were:

Friday, February 14, 1:00 p.m.

Friday, February 14, 7:00 p.m.

Saturday, February 15, 10:00 a.m.

Saturday, February 15, 1:00 p.m.

Since individual measures were to be obtained from both husband and wife, it was deemed advantageous to provide

supervised activities for all the children so that problems of babysitting would not keep some of the mothers or fathers home. Since two of the sessions fell on Valentine's Day, parties were planned around that theme. Story hour, films, games and refreshments were included for the children.

On January 28, 1975, a letter was sent to the 90 families. The letter explained the purpose of the requested meeting, gave details about inclusion of the children, and attached a check-off sheet for one of the four sessions. The check-off sheet was to be returned in an enclosed self-addressed, stamped envelope. A copy of the letter to the parents is found in Appendix G. Information about the names and ages of children who would be attending was sought on the check-off sheet so that programs and refreshments could be planned appropriately.

The Toy and Equipment Inventory was included with the letter. It was requested that the Inventory be completed and returned in the envelope with the check-off sheet. The purpose of including the Inventory and having it completed in the home was to ensure a more accurate and factual list of play materials than might have been obtained from recall.

During the week of February 10, 1975, telephone calls were made to the families who had not returned their check-off sheets by that time. A local homemaker referred by the county home extension agent was the telephone contact. The extension home economist visited the homemaker in her home, explained the purpose of the sessions, gave her a copy of the letter

the parents had received, and answered her questions about the project. The researcher communicated frequently with the homemaker by telephone to answer further questions and to ensure adequate understanding of the program.

A basic script provided by the researcher served as the homemaker's guidelines for her conversations with the families. She encouraged the families to attend, answered questions and tried to find out which session they might attend. A copy of the telephone script is found in Appendix H.

Final reminder postcards were mailed to the families so that they would receive them the day before the first session. This was a brief "Won't you remember to join us?" card (see Appendix I).

Three assistants in addition to the librarian supervised the children's party. Prior to the sessions, one of the assistants, a child development specialist and Michigan State University instructor, familiarized the other two assistants (child development graduate students) with techniques involved in planning and executing story hour and other activities for a multiaged group of children. These activities were conducted in a separate section of the library while the researcher met with the parents in another large meeting area.

The battery of tests administered to the husbands and wives at each of these four sessions included a general

information sheet, the Opinion Survey on Children's Play, Preschool Children's Play, Beliefs about Childhood and Parenthood, and the Questionnaire about Child's Play Activities. Administered to the sample groups by the researcher, each of these measures was completed independently by the subjects. During the four sessions, data were collected on all but ten of the thirty-two sample couples. Data on these remaining ten couples were collected in their respective homes. A local homemaker, trained by the researcher, set up home appointments with these ten couples. During these appointments, the couples independently completed these measures in the presence of the administrator. The main purposes of the administrator were to answer questions and discourage collaboration since all of the instruments had self-explanatory directions.

All data were collected by the middle of March 1975.

Data Analysis

Research protocols were coded by research assistants from the Department of Family and Child Sciences at Michigan State University. One-fifth of the data items were randomly quality checked by the researcher to increase scoring accuracy. No errors were found.

In predictive research problems where there are one or two dependent variables and a large number of independent variables, the multiple regression-correlation procedure is used to assess the simultaneous effects of the independent

variables. The predictive value of the individual variables is first determined by computing their regression coefficients and significance levels; thus, the specific contribution each of the independent variables makes to the variance of the dependent variable is identified. Those variables which contribute significantly to the dependent variable are then submitted to the multiple regression equation. The multiple regression equation combines the predictive value of the several measures into a simple formula in order to make an improved prediction. In the multiple regression equation, each variable is weighted in terms of its importance in contributing to the desired prediction. This is the beta weight for each independent variable. The total amount of variance accounted for by all of the independent variables is represented in the statistic R^2.

Predicting Attitudes Toward Play The hypotheses that parental attitudes toward play were predicted from individual independent variables as well as from a combination of variables were tested by the following procedure.

Product moment correlation coefficients and significance levels were computed for the various independent variables. Multiple correlation coefficients were computed using the multiple regression equation. The multiple regression equation was established by submitting the most promising variables to a stepwise deletion procedure. Variables were deleted one at a time until all remaining variables

were significant contributors to the prediction equation at the .05 level; however, levels of .06-.08 are discussed as indicating potential relationships.

Predicting Husband-Wife Attitude Agreement Predicting agreement on attitudes toward play by various independent variables was tested by computing product moment correlation coefficients and submitting the promising variables to the multiple regression procedure. Variables were then deleted one at a time until all remaining variables were significant contributors to the prediction equation at the .05 level; however, levels of .06-.08 are discussed as indicating potential relationships.

Maternal and Paternal Attitudes A dependent sample t test was used to determine whether there was a significant difference between mothers' and fathers' attitudes toward play. The means and standard deviations were computed for each group on the attitude toward play variable. The dependent t test for difference between means was used because both sets of scores were obtained from individuals in the same family and thus were considered dependent. The .05 level of significance was accepted as the basis of rejecting or not rejecting the null hypothesis.

Location of Residence and Sex of Children The hypotheses that location of residence and sex of children were predictive of parental attitudes toward play were tested by the one way

analysis of variance procedure. One way analysis of variance, a statistical approach to compare more than two means, was used to determine if there was a difference among groups of parents according to location of residence or sex of children. An F-ratio was computed to determine if any groups differed significantly from any other groups. The .05 level of significance was accepted as the basis of rejecting or not rejecting the null hypothesis.

CHAPTER IV

ANALYSIS OF RESULTS

The data collected and analyzed by the procedures described in Chapter III are presented in this chapter. Each hypothesis is stated along with the presentation of data analysis.

Results of the hypotheses tested follow:

1. Null hypothesis: Developmental conceptions of childhood and parenthood do not predict the attitudes of mothers and fathers toward play.

Alternative hypothesis: Developmental conceptions of childhood and parenthood do predict the attitudes of mothers and fathers toward play.

The means and standard deviations for the independent variable, developmental conceptions of parenthood and childhood, were computed for mothers and fathers. The data are shown in Table 4.1.

TABLE 4.1

Means and Standard Deviations:

Developmental Conceptions of Parenthood

Variable	Mean	Standard Deviation
Mothers' developmental conceptions of childhood and parenthood	9.78	2.14
Fathers' developmental conceptions of childhood and parenthood	8.50	2.23

A regression analysis using the variable developmental conceptions of parenthood and childhood with the criterion attitudes toward play was computed for mother as a group and for fathers as a group. The decision rule was to reject H_o if the regression equation was significant at the .05 level.

A regression coefficient of .2536 was found for the mothers. This was not significant at the .05 level; therefore, the null hypothesis was not rejected.

For the fathers, a regression coefficient of .3642 was calculated. This was significant at the .05 level; therefore, the null hypothesis was rejected. The positive relationship which existed between developmental conceptions of parenthood and childhood as measured by the Beliefs about

Childhood and Parenthood scale and fathers' attitudes toward play as measured by the Opinion Survey on Children's Play indicated the independent variable, developmental conceptions of parenthood, was predictive of fathers' attitudes toward play in this study. The regression coefficients (R) and significance levels are recorded in Table 4.2. Also recorded in Table 4.2 are the coefficients of determination (R^2) which indicate the proportion of the total variance in the dependent variable which can be predicted from the independent variable.

2. Null hypothesis: Knowledge about children's play does not predict the attitudes of mothers and fathers toward play.

Alternative hypothesis: Knowledge about children's play does predict the attitudes of mothers and fathers toward play.

The means and standard deviations for the independent variable, knowledge about children's play, were computed for mothers as a group and fathers as a group. The data are shown in Table 4.3.

TABLE 4.2

Results of Regression Analyses

Predicting Parental Attitudes toward Play from

Developmental Conceptions of Parenthood and Childhood

	Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-Ratio	Probability
Mothers	.2536	.0643	.6198	.4316	2.0626	.1613
Fathers	.3642	.1326	.9416	.4396	4.5867	.0405*

Degrees of Freedom: 1 & 30
*Significant at .05 level

TABLE 4.3

Means and Standard Deviations:

Parental Knowledge about Children's Play

Variable	Mean	Standard Deviation
Mothers' knowledge about children's play	56.13	4.73
Fathers' knowledge about children's play	52.72	5.44

A regression analysis using the variable knowledge of children's play with the criterion attitudes toward play was computed for mothers as a group and fathers as a group. A regression coefficient of .1773 was found for the mothers. This was not significant at the .05 level; therefore, the null hypothesis was not rejected.

For the fathers, a regression coefficient of .3157 was significant at the .08 level. Since the decision rule was to reject the null hypothesis only if the significance level was .05, the null hypothesis was not rejected. The regression coefficients and significance levels are recorded in Table 4.4.

TABLE 4.4

Results of Regression Analyses

Predicting Parental Attitudes toward Play from

Knowledge about Children's Play

	Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
Mothers	.1773	.0315	.1957	.1983	.9742	.3316
Fathers	.3157	.0996	.3346	.1836	3.3203	.0785

Degrees of Freedom: 1 & 30

3. Null hypothesis: The number of home play materials does not predict the attitudes of mothers and fathers toward play.

Alternative hypothesis: The number of home play materials does predict the attitudes of mothers and fathers toward play.

The mean and standard deviation for the independent variable, number of toys, were computed for all of the families as a group. The data are shown in Table 4.5.

TABLE 4.5

Mean and Standard Deviation:

Number of Home Play Materials

Variable	Mean	Standard Deviation
Number of Home Play Materials	32.34	7.98

A regression analysis using the variable number of toys with the criterion attitudes toward play was computed for mothers as a group and fathers as a group. A regression coefficient of .2221 was found for the mothers. This was not significant at the .05 level; therefore, the null hypothesis was not rejected. The relationship between the

number of home play materials and mothers' attitudes toward play was in the negative direction.

For the fathers, a regression coefficient of .2545 was calculated. This was not significant at the .05 level; therefore, the null hypothesis was not rejected. The relationship between number of home play materials and fathers' attitudes toward play was in the negative direction. The results of the regression analysis are reported in Table 4.6.

4. Null hypothesis: The categories of home play materials do not predict the attitudes of mothers and fathers toward play.

Alternative hypothesis: The categories of home play materials do predict the attitudes of mothers and fathers toward play.

The means and standard deviations for the independent variables, toy categories, were computed for all of the families as a group. The data are shown in Table 4.7.

TABLE 4.6

Results of Regression Analysis

Predicting Parental Attitudes toward Play from

Number of Home Play Materials

	Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
Mothers	.2221	.0493	-.1453	.1164	1.5569	.2218
Fathers	.2545	.0648	-.1837	.1274	2.0772	.1599

Degrees of Freedom: 1 & 30

TABLE 4.7

Means and Standard Deviations:

Categories of Home Play Materials

Variable		Mean	Standard Deviation
Toy Category 1:	fine motor	4.5	1.78
Toy Category 2:	didactic games	1.1	.88
Toy Category 3:	Early dramatic play	5.9	.98
Toy Category 4:	Later dramatic play	4.3	1.75
Toy Category 5:	Expressive	6.6	2.28
Toy Category 6:	Gross Motor	3.7	1.00
Toy Category 7:	Equipment	4.0	1.75
Toy Category 8:	Scientific	.6	.87

The regression coefficients of each of the eight categories of toys with the criterion attitudes toward play were computed for mothers as a group and fathers as a group. For the mothers, all of the beta weights except category #7, equipment, were negative indicating the direction of relationships. Only toy category #5, expressive, was significant at the .05 level. The relationship which existed between the independent variable, expressive home play materials, as

measured by the Toy and Equipment Inventory and mothers' attitudes toward play as measured by the Opinion Survey on Children's Play indicated the category expressive toys was predictive of mothers' attitudes toward play. The relationship was in the negative direction.

For the fathers, all relationships were in the negative direction except for category #3, early dramatic play materials. Only category #2, didactic games, was signigicant at the .05 level. The relationship which existed between the independent variable, didactic games, as measured by the Toy and Equipment Inventory and the dependent variable, fathers' attitudes toward play as measured by the Opinion Survey on Children's Play indicated the category didactic games was predictive of fathers' attitudes toward play. The relationship was in the negative direction.

The multiple regression analysis of the eight toy categories as a group with the criterion attitudes toward play was computed for mothers and fathers. The multiple regression equation combines the predictive value of the eight independent variables into a formula in order to detect the combined contribution of the independent variables to the dependent variable.

For the mothers, the multiple regression coefficient between the combination of variables and the criterion attitudes toward play was .5160. Twenty-seven percent of

of the variation in maternal attitudes toward play was accounted for by the combined categories of home play materials. The analysis for overall regression showed an F-ratio of 1.0434 which is not significant at the .05 level. The results of the multiple and individual regression analyses for mothers are shown in Table 4.8.

For the fathers, the multiple regression coefficient was .6618. The overall regression equation showed an F-ratio of 2.2406 which, at the .06 level, approached significance as defined in this study. The results of the multiple and individual regression analyses for fathers are shown in Table 4.9.

5. Null hypothesis: The following characteristics do not predict the attitudes of mothers and fathers toward play: sex of children, location of residence, age of youngest child, age of oldest child, number of children, years married, money spent on toys, and social position.

Alternative hypothesis: The following characteristics do predict the attitudes of mothers and fathers toward play: sex of children, location of residence, age of youngest child, age of oldest child, number of children, years married, money spent on toys, and social position.

The means and standard deviations for the continuous independent variables were computed for all of the families as a group. The data are shown in Table 4.10.

TABLE 4.8

Results of the Multiple and Individual Regression Analyses Predicting Mothers' Attitudes toward Play from Categories of Home Play Materials

*Multiple R = .5160 R^2 = .2663 df = 8 & 23 F-ratio = 1.0434 Probability = .4339

Variable	Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
**Category 1	.2815	.0792	-.8265	.5144	2.5818	.1186
**Category 2	.2649	.0702	-1.5760	1.0473	2.2643	.1429
**Category 3	.0618	.0038	-.3305	.9752	.1149	.7371
**Category 4	.0950	.0090	-.2829	.5414	.2731	.6052
**Category 5	.3421	.1170	-.7818	.3921	3.9752	.0554
**Category 6	.0065	.0000	-.0340	.9498	.0013	.9717
**Category 7	.0536	.0029	.1599	.5438	.0865	.7708
**Category 8	.0384	.0015	-.2292	1.0889	.0443	.8347

*Results of stepwise regression analysis
**Results of individual regression analysis

TABLE 4.9

Results of the Multiple and Individual Regression Analyses Predicting Fathers' Attitudes Toward Play from Categories of Home Play Materials

*Multiple R = .6618 R^2 = .4380 df = 8 & 23 F-ratio = 2.2406 Probability = .0623

Variable	Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
**Category 1	.2078	.0432	-.6735	.5788	1.3537	.2539
**Category 2	.5693	.3241	-3.7382	.9857	14.3837	.0007
**Category 3	.0029	.0000	.0169	1.0785	.0002	.9876
**Category 4	.0858	.0074	-.2822	.5981	.2227	.6405
**Category 5	.2105	.0443	-.5310	.4503	1.3904	.2477
**Category 6	.0844	.0071	-.4845	1.0447	.2151	.6462
**Category 7	.1331	.0177	-.4383	.5958	.5412	.4677
**Category 8	.0760	.0058	-.5007	1.1994	.1743	.6794

*Results of stepwise regression analysis
**Results of individual regression analysis

TABLE 4.10

Means and Standard Deviations:

Demographic Characteristics

Variable	Mean	Standard Deviation
Age of youngest child	2.47	1.32
Age of oldest child	5.97	3.97
Number of children	2.38	1.26
Years married	7.72	3.91
Money spent on toys	93.00	54.43
Social position	5.97	3.97

An analysis of variance using the independent variable sex of children with the criterion attitudes toward play was computed for mothers and fathers. Results indicated there was no significant difference across the three sex groups, (all girls, all boys, mixed), for mothers' or fathers' attitudes toward play. Analysis of variance results are included in Table 4.11.

TABLE 4.11

Analysis of Variance:

Dependent Variable - Parental Attitudes toward Play

Independent Variable - Sex of Children

	Mean Square	F-ratio	Probability
Mothers	33.5889	1.2525	.3008
Fathers	23.4389	.6917	.5088

Degrees of Freedom: 2 & 29

An analysis of variance using the independent variable location of residence with the criterion attitudes toward play was computed for mothers and fathers. Four groups were identified for location of residence: (1) working farm, (2) rural area, nonfarm, (3) village under 1,000, and (4) town of 1000-5000. The means and standard deviations for the four location of residence groups were computed and are recorded in Table 4.12.

Results of the analysis of variance indicated there were no significant differences across the groups for mothers' attitudes. For fathers' attitudes, there was a significant difference across the four location groups. A post hoc analysis was done to find out which group was significantly different from the other groups. Post hoc analysis showed that the first group, working farm, was

significantly different from all the other groups. Results are recorded in Table 4.13.

TABLE 4.12

Means and Standard Deviations:

Location Groups

Groups	Means	Standard Deviations
(1) Working Farm	63.50	6.17
(2) Rural area, nonfarm	69.80	3.35
(3) Village under 1000	70.00	3.56
(4) Town of 1000-5000	68.22	4.94

TABLE 4.13

Analysis of Variance:

Dependent Variable - Mothers' Attitudes toward Play

Independent Variable - Location of Residence

	Mean Square	F-ratio	Probability
Mothers	6.7374	.2288	.8756
Fathers	85.2148	3.0833	.0435*

Degrees of Freedom: 3 & 28
*Significant at the .04 level

Regression coefficients for each of the remaining six variables (age of youngest child, age of oldest child, number of children, years married, money spent on toys, and social position) with the criterion attitudes toward play were computed for mothers as a group and fathers as a group.

For the mothers, all of the relationships were in the negative direction except for the variable social position. Only the variable money spent on toys was significant at the .005 level. A relationship existed between the amount of money spent on toys and mothers' attitudes toward play as measured by the Opinion Survey on Children's Play, indicating that money spent on toys is predictive of mothers' attitudes toward play in this study. The relationship between money spent on toys and mothers' attitudes toward play was in the negative direction.

For the fathers, all relationships were in the negative direction except for the variable age of youngest child. The variable number of children was significant at the .02 level. A relationship existed between the number of children and fathers' attitudes toward play as measured by the Opinion Survey on Children's Play, indicating that number of children was predictive of fathers' attitudes in this study. The relationship between number of children and fathers' attitudes toward play was in the negative direction.

The variable money spent on toys was significant for the fathers' at the .05 level. A relationship existed

between the amount of money spent on toys and fathers' attitudes toward play as measured by the Opinion Survey on Children's Play, indicating that money spent on toys was predictive of fathers' attitudes toward play in this study. The relationship between the amount of money spent on toys and fathers' attitudes toward play was in the negative direction.

The multiple regression analysis of the six demographic variables with the criterion attitudes toward play was computed for the mothers and fathers. The multiple regression equation combines the predictive value of the independent variables into a formula in order to detect the combined contribution of the independent variables to the dependent variable. The multiple regression coefficient between the combination of variables and mothers' attitudes toward play was .5206. The square of the multiple R was .27. The analysis of overall regression showed an F-ratio of 1.5493 which is not significant at the .05 level.

For the fathers, the multiple regression coefficient was .6420. The square of the multiple R was .41. The overall regression equation showed an F-ratio of 2.9213 which is significant at the .02 level. The results of the multiple and individual regression analyses for mothers and fathers are shown in Table 4.14.

TABLE 4.14

Results of Multiple and Individual Regression Analyses

Predicting Mothers' Attitudes toward Play from Demographic Characteristics

*Multiple R = .5206 R^2 = .2711 df = 6 & 25 F-ratio = 1.5493 Probability = .2035

Variable	Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
**Money spent on toys	.4901	.2402	-.0470	.0153	9.4848	.0045
**Social Position	.0740	.0055	.0397	.0977	.1653	.6873
**Age of youngest child	.1507	.0227	-.5964	.7141	.6975	.4103
**Number of children	.0330	.0011	-.1364	.7539	.0327	.8577
**Years married	.0990	.0098	-.1321	.2424	.2970	.5898
**Age of oldest child	.0890	.0079	-.1170	.2390	.2394	.6283

*Results of stepwise regression analysis
**Results of individual regression analyses
Degrees of Freedom for individual regression analyses: 1 & 30

TABLE 4.15

Results of Multiple and Individual Regression Analyses

Predicting Fathers' Attitudes Toward Play From Demographic Characteristics

*Multiple R = .6420 R^2 = .4122 df = 6 & 25 F-ratio = 2.9213 Probability = .0268

Variable	Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
**Money spent on toys	.3438	.1182	-.0364	.0182	4.0291	.0541
**Number of Children	.4053	.1643	-1.8485	.7612	5.8976	.0213
**Age of oldest child	.2119	.0449	-.3075	.2589	1.4110	.2443
**Years married	.1636	.0268	-.2411	.2653	.8255	.3709
**Age of youngest child	.0408	.0017	.1783	.7967	.0501	.8244
**Social Position	.2245	.0504	-.1330	.1054	1.5919	.2168

*Results of stepwise regression analysis
**Results of individual regression analyses
Degrees of freedom for individual regression analyses: 1 & 30

6. Null hypotheses: Marital agreement on knowledge about children's play does not predict marital agreement on attitudes toward play.

Alternative hypothesis: Marital agreement on knowledge about children's play does predict marital agreement on attitudes toward play.

The mean and standard deviation for the independent variable, marital agreement on knowledge about play, were computed for the thirty-two couples. The data are shown in Table 4.16.

TABLE 4.16

Mean and Standard Deviation:

Marital agreement on Knowledge about Children's Play

Variable	Mean	Standard Deviation
Marital agreement on Knowledge about children's Play	53.41	6.08

A regression analysis using the variable marital agreement on knowledge of play with the criterion marital agreement on attitudes toward play was computed for the thirty-two couples. The regression coefficient of .1782 was not significant at the .05 level; therefore, the null hypothesis was not rejected. The results of the regression analysis

are reported in Table 4.17.

TABLE 4.17

Results of Regression Analysis

Predicting Marital Agreement on Attitudes toward Play

from Marital Agreement on Knowledge about Play

Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
.1782	.0317	.0936	.0944	.9834	.3293

Degrees of Freedom: 1 & 30

7. Null hypothesis: Marital agreement on child's play activities does not predict marital agreement on attitudes toward play.

Alternative hypothesis: Marital agreement on child's play activities does predict marital agreement on attitudes toward play.

The mean and standard deviation for the independent variable, marital agreement on child's play activities, were computed for the thirty-two couples. The data are shown in Table 4.18.

TABLE 4.18

Mean and Standard Deviation:

Marital Agreement on Child's Play

Variable	Mean	Standard Deviation
Marital agreement on child's play	12.66	2.36

A regression analysis using the variable marital agreement on child's play with the criterion marital agreement on attitudes toward play was computed for the thirty-two couples. The regression coefficient of .3967 was significant at the .02 level; therefore, the null hypothesis was rejected. The relationship which existed between marital agreement on child's play as measured by the Questionnaire about Child's Play and marital agreement on attitudes toward play as measured by the Opinion Survey on Children's Play indicated the independent variable, marital agreement on child's play, was predictive of marital agreement on attitudes toward play in this study. The results of the regression analysis are reports in Table 4.19.

TABLE 4.19

Results of Regression Analysis

Predicting Marital Agreement on Attitudes toward Play

from Marital Agreement on Child's Play Activities

Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
.3967	.1574	.5365	.2267	5.6025	.0246*

Degrees of Freedom: 1 & 30
*Significant at the .02 level

8. Null hypothesis: Marital agreement on developmental/traditional conceptions of childhood and parenthood does not predict marital agreement on attitudes toward play.

Alternative hypothesis: Marital agreement on developmental/traditional conceptions of childhood and parenthood does predict marital agreement on attitudes toward play.

The mean and standard deviation for the independent variable, conceptions of childhood and parenthood, were computed for the thirty-two couples. The data are shown in Table 4.20.

TABLE 4.20

Mean and Standard Deviation:

Marital Agreement on Conceptions of Parenthood and Childhood

Variable	Mean	Standard Deviation
Marital agreement on conceptions of parenthood and childhood	18.72	4.01

A regression analysis using the variable marital agreement on conceptions of childhood and parenthood with the criterion marital agreement on attitudes toward play was computed for the thirty-two couples. The regression coefficient of .0838 was not significant at the .05 level; therefore, the null hypothesis was not rejected. The results of the regression analysis are reported in Table 4.21.

TABLE 4.21

Results of Regression Analysis Predicting

Marital Agreement on Attitudes toward Play from

Marital Agreement on Conceptions of Parenthood

Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
.0838	.0070	.0668	.1451	.2123	.6484

Degrees of Freedom: 1 & 30

9. Null hypothesis: The following characteristics do not predict marital agreement on attitudes toward play: sex of children, location of residence, age of youngest child, age of oldest child, number of children, years married, money spent on toys, and social position.

Alternative hypothesis: The following characteristics do predict marital agreement on attitudes toward play: sex of children, location of residence, age of youngest child, age of oldest child, number of children, years married, money spent on toys, and social position.

The means and standard deviations for the independent variables were computed for mothers and fathers and are reported in Table 4.9.

An analysis of variance using the independent variable sex of children with the criterion marital agreement on attitudes toward play was computed. Results of the analysis of variance indicated an F-ratio of .4584 which is not significant at the .05 level; therefore, no difference exists across the sex groups for marital agreement on attitudes toward play. Results are included in Table 4.22.

An analysis of variance using the independent variable location of residence with the criterion marital agreement on attitudes toward play was computed. Results of the analysis indicated there was no significant difference between the four location groups for marital agreement on attitudes toward play. Results are included in Table 4.23.

TABLE 4.22

Analysis of Variance:

Dependent Variable - Marital Agreement on Attitudes toward Play

Independent Variable - Sex of Children

Mean Square	F-ratio	Probability
4.8556	.4584	.6368

Degrees of Freedom: 2 & 29

TABLE 4.23

Analysis of Variance:

Dependent Variable - Marital Agreement on Attitudes toward Play

Independent Variable - Location of residence

Mean Square	F-ratio	Probability
11.5819	1.1494	.3465

Degrees of Freedom: 3 & 28

Regression coefficients for the continuous variables (age of youngest child, age of oldest child, number of children, years married, money spent on toys, and social position) with the criterion marital agreement on attitudes toward play were computed.

Only the variable money spent on toys was significant at the .001 level. A relationship exists between the amount of money spent on toys and marital agreement on attitudes toward play as measured by the Opinion Survey on Children's Play. The relationship between money spent on toys and marital agreement on attitudes toward play was in the negative direction.

The multiple regression analysis of the demographic variables with the criterion marital agreement on attitudes toward play was computed. The multiple regression coefficient was .2702. The square of the multiple R was .07. The analysis of overall regression showed an F-ratio of .3282 which is not significant at the .05 level. The results of the multiple and individual regression analyses are shown in Table 4.24.

TABLE 4.24

Results of Multiple and Individual Regression Analyses

Predicting Marital Agreement on Attitudes toward Play from

Demographic Characteristics

*Multiple R = .2702 R^2 = .0730 df = 6 & 25 F-ratio = .3282 Probability = .9158

Variable	Regression Coefficient (Multiple R)	R^2	Beta	Standard Error of Beta	F-ratio	Probability
**Money spent on toys	.5769	.3328	-.0177	.0046	14.9660	.0006
**Number of Children	.0259	.0007	.0657	.4618	.0202	.8879
**Age of oldest child	.0834	.0069	.0671	.1465	.2099	.6502
**Years married	.1839	.0338	.1503	.1467	1.0503	.3137
**Age of youngest child	.0444	.0020	.1077	.4420	.0594	.8092
**Social position	.0700	.0049	-.0230	.0599	.1478	.7034

*Results of stepwise regression analysis
**Results of individual regression analyses
Degrees of freedom for individual regression analyses: 1 & 30

10. Null hypothesis: The following combination of variables does not predict fathers' attitudes toward play: fathers' developmental/traditional conceptions of childhood and parenthood, fathers' knowledge of play, mothers' attitudes toward play, mothers' knowledge of play, and mothers' developmental/traditional conceptions of childhood and parenthood.

Alternative hypothesis: The following combination of variables does predict fathers' attitudes toward play: fathers' developmental/traditional conceptions of childhood and parenthood, fathers' knowledge of play, mothers' attitudes toward play, mothers' knowledge of play, and mothers' developmental/traditional conceptions of childhood and parenthood.

A multiple regression analysis of the five independent variables with the criterion fathers' attitudes toward play was computed. The multiple regression equation combines the predictive value of the five independent variables into a formula in order to detect the combined contribution of the independent variables to the dependent variable.

The multiple regression coefficient between the combination of variables and the criterion fathers' attitudes toward play was .6462. The analysis of overall regression showed an F-ratio of 3.7282 which is significant at the .01 level. The results of the multiple regression analysis are shown in Table 4.25.

TABLE 4.25

Results of Multiple Regression Analysis

Predicting Fathers' Attitudes toward Play from

Combined Variables

Multiple R = .6462 R^2 = .4176 df = 5 & 26 F-ratio = 3.7282 Probability = .0112

Variable	F-ratio	Probability	Additive R^2
(1) Fathers' conceptions of parenthood & childhood	4.5867	.0405	13.2614
(2) Mothers' attitudes toward play	5.7102	.0236	14.2685
(3) Mothers' conceptions of parenthood & childhood	3.0982	.0893	7.2199
(4) Fathers' knowledge of play	1.9622	.1727	4.4207
(5) Mothers' knowledge of play	1.1545	.2925	2.5861

(Variables entered in a stepwise regression)

11. Null hypothesis: The following combination of variables does not predict mothers' attitudes toward play: fathers' knowledge of play, fathers' developmental/ traditional conceptions of childhood and parenthood, fathers' attitudes toward play, mothers' developmental/traditional conceptions of childhood and parenthood, and mothers' knowledge of play.

Alternative hypothesis: The following combination of variables does predict mothers' attitudes toward play: fathers' knowledge of play, fathers' developmental/ traditional conceptions of childhood and parenthood, fathers' attitudes toward play, mothers' developmental/ traditional conceptions of childhood and parenthood, and mothers' knowledge of play.

A multiple regression analysis of the five independent variables with the criterion mothers' attitudes toward play was computed. The multiple regression equation combines the predictive value of the five independent variables into a formula in order to detect the combined contribution of the independent variables to the dependent variable.

The multiple regression coefficient between the combination of variables and the criterion mothers' attitudes toward play was .4442. The analysis of overall regression showed an F-ratio of 1.2784 which is not significant at the .05 level. The results of the multiple regression analysis are shown in Table 4.26.

TABLE 4.26

Results of Multiple Regression Analysis

Predicting Mothers' Attitudes toward Play from

Combined Variables

Multiple R = .4442 R^2 = .1973 df = 5 & 26 F-ratio = 1.2784 Probability = .3032

Variable	F-ratio	Probability	Additive R^2
(1) Fathers' attitudes toward play	4.6840	.0386	13.5060
(2) Mothers' knowledge of play	.0333	.8565	.0992
(3) Mothers' conceptions of parenthood & childhood	.1943	.6628	.5955
(4) Fathers' knowledge of play	1.2870	.2666	3.9038
(5) Fathers' conceptions of parenthood & childhood	.2274	.4742	1.6282

(Variables entered in a stepwise regression)

be

en

mo

The

Mot
to

Fat
to

use

dat

t v

for

exi

12. Null hypothesis: There is no significant difference between maternal and paternal attitudes toward play.

Alternative hypothesis: There is a significant difference between maternal and paternal attitudes toward play.

The means and standard deviations were computed for mothers and fathers on the attitude toward play variable. The data are shown in Table 4.27.

Table 4.27

Mean and Standard Deviation:

Parental Attitudes toward Play

Variable	Mean	Standard Deviation
Mothers' attitudes toward play	67.81	5.22
Fathers' attitudes toward play	66.63	5.76

The dependent t test for difference between means was used because the data were considered dependent since the data were obtained from persons in the same family. The t value of 1.78 was not significant at the .05 level; therefore, the null hypothesis was not rejected. No difference existed between discrepancy score from 0.

Summary of Analyses

A summary of the formal hypotheses tested indicating the significance level and whether the hypothesis was rejected or not rejected follows:

Null Hypotheses Tested		Significance Level	Hypotheses Rejected or Not Rejected
1. Developmental conceptions of parenthood and childhood do not predict the attitudes of mothers and fathers toward play	H_{o1}	.16	Not Rejected
	H_{o2}	.04	Not Rejected
2. Knowledge about children's play does not predict the attitudes of mothers and fathers toward play	H_{o1}	.33	Not Rejected
	H_{o2}	.08	Not Rejected
3. The number of home play materials (toys) does not predict the attitudes of mothers and fathers toward play	H_{o1}	.22	Not Rejected
	H_{o2}	.16	Not Rejected
4. The eight categories of home play materials do not predict, either individually or in combination, the attitudes of mothers and fathers toward play. (a = mothers' results) (b = fathers' results)	H_{o1a}	.12	Not Rejected
	H_{o1b}	.25	Not Rejected
	H_{o2a}	.14	Not Rejected
	H_{o2b}	.001	Rejected
	H_{o3a}	.74	Not Rejected
	H_{o3b}	.99	Not Rejected
	H_{o4a}	.61	Not Rejected
	H_{o4b}	.64	Not Rejected

	H_{o5a}	.06	Not Rejected
	H_{o5b}	.25	Not Rejected
	H_{o6a}	.97	Not Rejected
	H_{o6b}	.65	Not Rejected
	H_{o7a}	.77	Not Rejected
	H_{o7b}	.47	Not Rejected
	H_{o8a}	.83	Not Rejected
Multiple Regressions: mothers	H_{o8b}	.68	Not Rejected
Multiple Regression: fathers	H_{o9a}	.43	Not Rejected

---

5. The attitudes of mothers and fathers cannot be predicted from the following characteristics: sex of children, residence, age of youngest child, age of oldest child, number of children, years married, money spent on toys, social position.	H_{o1a}	.30	Not Rejected
	H_{o1b}	.51	Not Rejected
	H_{o2a}	.88	Not Rejected
	H_{o2b}	.04	Rejected
	H_{o3a}	.41	Not Rejected
	H_{o3b}	.82	Not Rejected
(a = mothers' results)	H_{o4a}	.63	Not Rejected
(b = fathers' results)	H_{o4b}	.24	Not Rejected
	H_{o5a}	.86	Not Rejected
	H_{o5b}	.02	Not Rejected
	H_{o6a}	.59	Not Rejected
	H_{o6b}	.37	Not Rejected
	H_{o7a}	.005	Rejected
	H_{o7b}	.05	Rejected
	H_{o8a}	.69	Not Rejected
	H_{o8b}	.22	Not Rejected

Multiple Regression: mothers	H_{o9a}	.20	Not Rejected
Multiple Regression: fathers	H_{o9b}	.03	Rejected
6. Marital agreement on knowledge of play does not predict marital agreement on attitudes toward play.		.33	Not Rejected
7. Marital agreement on child's play activities does not predict marital agreement on attitudes toward play.		.02	Rejected
8. Marital agreement on conceptions of parenthood and childhood does not predict marital agreement on attitudes toward play.		.65	Not Rejected
9. Marital agreement on attitudes toward play cannot be predicted from each of the eight demographic characteristics.	H_{o1}	.64	Not Rejected
	H_{o2}	.35	Not Rejected
	H_{o3}	.001	Rejected
	H_{o4}	.89	Not Rejected
	H_{o5}	.65	Not Rejected
	H_{o6}	.31	Not Rejected
	H_{o7}	.81	Not Rejected
	H_{o8}	.70	Not Rejected

10. Predictions from a combination of variables do not predict fathers' attitudes toward play.	.01	Rejected
11. Predictions from a combination of variables do not predict mothers' attitudes toward play.	.30	Not Rejected
12. No significant difference exists between maternal and paternal attitudes toward play.	.29	Not Rejected

CHAPTER V

CONCLUSION

In this chapter, the results of the study are summarized and discussed. The limitations of the study, the implications of the findings and suggestions for future research are included.

Summary of Results

Investigation of the difference between maternal and paternal attitudes toward play indicated that there was no overall significant difference between the attitudes of mothers and fathers toward play. Marital agreement on child's play activities was a significant predictor of marital agreement on attitudes toward play. The independent variables of marital agreement on knowledge of play concepts and developmental/traditional conceptions of childhood and parenthood were not predictors of marital agreement on attitudes toward play. The amount of money spent on home play materials was a predictor of marital agreement on attitudes toward play. Results indicated that as the amount of money couples spent on home play materials increased the

likelihood that the couples would agree on their attitudes toward play decreased.

A number of individual variables reflected predictive value for the play attitudes of mothers as a group and fathers as a group. Developmental conceptions of childhood and parenthood were predictive of fathers' attitudes toward play. Location of residence was predictive of fathers' attitudes toward play. More specifically, fathers who lived on working farms differed significantly in their attitudes toward play from fathers who lived in rural, nonfarm areas. Working farm fathers had significantly less positive attitudes toward play than fathers in the other groups.

Knowledge about play concepts approached significance at the .08 level and was, therefore, in the direction of prediction of fathers' attitudes toward play. The number of children was predictive of fathers' attitudes toward play. Results indicated that as the number of children increased, the fathers' attitudes toward play became less positive. The amount of money spent on home play materials was predictive of both mothers' and fathers' attitudes toward play. As the amount of money mothers and fathers spent on home play materials increased, the mothers' and fathers' attitudes toward play became less positive.

Of the eight categories of home play materials, only the expressive category was predictive at the .06 significance level of mothers' attitudes toward play. As the

number of expressive materials in the home increased, mothers' attitudes toward play became less positive. The multiple regression equation predicted fathers' attitudes toward play from the combination of the eight categories of home play materials at the .06 significance level.

The multiple regression equation was successfully used to predict the attitudes of fathers toward play from the following combined variables: money spent on toys, number of children, age of oldest child, years married, age of youngest child, and social position.

The multiple regression equation was successfully used to predict the attitudes of fathers toward play from the combination of the following variables: fathers' conceptions of childhood and parenthood, mothers' attitudes toward play, mothers' conceptions of childhood and parenthood, fathers' knowledge of play, and mothers' knowledge of play.

Discussion

A general comparison between mothers' and fathers' attitudes toward play indicated that fathers' attitudes tended to be more predictable than mothers' attitudes. The results indicate that fathers classified as developmental by Blood's (1952) criteria were more likely to report attitudes toward play that suggest flexibility, spontaneity, exploration and autonomy than were fathers classified as

traditional. The researcher is not entirely clear why similar results were not found for mothers' developmental conceptions of childhood and parenthood. One explanation might be that the sample size was too small to detect significance. Another possibility might be that rural mothers have maintained traditional beliefs about the roles of family members. The deluge of recent mass media reports on women's liberation may reflect changes in the urban women's roles and expectations but not in the roles and expectations of rural women. Many of the rural women in this study lived on farms where the husbands worked in the fields all day. Division of labor along traditional lines is a viable and functional alternative in their family systems.

Results of the regression analysis predicting parental attitudes toward play from knowledge of children's play indicate that fathers who have a better knowledge of children's play concepts are more likely to report positive attitudes toward play (significant at the .08 level). Although this analysis was not significant at the .05 level, it is important to note this result since this is exploratory research in the area of fathers' attitudes and knowledge. Similar results were not found for mothers' knowledge of play again possibly due to small sample size.

The number of home play materials was not predictive for either mothers' or fathers' attitudes toward play. One

explanation might be that all of the families had a generous number of toys in the home. The relationship between number of toys and parental attitudes toward play was in the negative direction indicating that as the number of home play materials increases, the attitudes toward play become less positive. One explanation might be that parents buy toys for their children to substitute for actual time spent in parent-child interaction. Substitution of a new toy for parental attention is a pattern frequently observed in parent-child research.

The didactic games category was predictive of fathers' attitudes toward play. The relationship was in the negative direction indicating that as the number of didactic games in the home increases, the less positive the fathers' attitudes toward children's play become. A possible explanation may be that the purpose of didactic games is to teach children certain skills, and rural fathers who hold the view that play is an insignificant diversion believe that didactic games which teach skills are more worthwhile than free play activities.

The category of expressive play materials was predictive of mothers' attitudes toward play at the .06 significance level. The results indicate that as the number of expressive materials in the home increases the less positive the mothers' attitudes toward play become. One explanation

may be that one purpose of expressive, art materials is to promote creativity and spontaneity, and mothers may be buying expressive materials for their children to substitute for actual time spent in mother-child creative, spontaneous play interaction.

An analysis of variance showed that the attitudes of fathers who lived on working farms differed significantly from the attitudes of fathers who lived in nonfarm, rural areas, in villages with a population under 1000 and 5000. The fathers who lived on working farms had an average score on the attitude toward play scale of 63.50 which was significantly lower than the average scores of the other groups. One explanation may be that the fathers on working farms are less concerned that play is important and more concerned with each family member putting time and energies into his allocated chores. Successful functioning of a working farm often requires each member of the system, including the young ones, to assume responsibilities and carry them out consistently and conscienciously. The puritan work ethic may continue to be a strong influence in the rural, working farm families, thereby, creating a home atmosphere which does not promote playfulness.

The number of children in a family was predictive of fathers' attitudes toward play in this study. The relationship was in a negative direction indicating that as the number of children increases, fathers' attitudes toward play

become less positive. One explanation may be that with the addition of each new child fathers feel increased financial responsibilities and more demands for their time and attention. After working all day, there may be no energy left over for more than coping with the primary tasks of living. Less quantitative time exists for interaction with spouses which can lead to increased frustration and dysfunctional communication.

For both mothers and fathers, the amount of money spent on home play materials was predictive of attitudes toward play. The amount of money spent on toys was also predictive of marital agreement on attitudes toward play. The relationships were in the negative direction indicating that the more money parents spent on toys, the less positive were their attitudes toward children's play. One explanation might be that parents who do not hold an attitude toward play which promotes playfulness, flexibility, spontaneity and creativity may be spending more on home play materials to compensate for the lack of time spent in direct play interaction with their children.

One problem recognized in this study regarding the money spent on home play materials is that parents were asked to recall what they spent on play materials over a period of a year. The accuracy of the recall in the area of money spent on play materials over a twelve month period

is questionable. The parents reported spending an average of $96.00. It has been reported that the average amount of money spent on play materials for children under the age of fifteen in the United States was $76.00 in 1973. Inflation may be a factor which accounts for the discrepancy in parental reports on the amount of money spent on play materials during the intervening two years.

Parents who agreed on their preschool child's home play activities had similar attitudes toward play. The researcher is not entirely clear why similar results were not found for agreement on knowledge of play concepts and conceptions of childhood and parenthood. The small sample size might be one explanation. Another explanation might be that attitudes are not predicted by knowledge. Perhaps attitudes, or predispositions to behave, are based on variables other than or in addition to those investigated in this study.

Fathers' attitudes toward play were successfully predicted by combining fathers' conceptions of childhood and parenthood, mothers' attitudes toward play, mothers' conceptions of childhood and parenthood, fathers' knowledge of play, and mothers' knowledge of play. The variable mothers' attitudes toward play contributed significantly to the multiple regression equation indictating that the spouses' attitudes toward play, knowledge of play, and conceptions of childhood and parenthood may be predictive variables which could be further investigated.

No significant difference exists between the attitudes of the mothers and the attitudes of the fathers. This result is in contradiction to the results reported in Chapter II from previous research which concluded there were significant differences between the attitudes and opinions of mothers and fathers (McIntire, Nass, and Battistone, 1974; Eron, Banta, Walder, and Laulicht, 1961; Seeley, 1956; Fanshel, 1966; O'Brien, 1970; and Mueller, 1970). An explanation may be that the sample size was too small and too homogeneous to detect differences in this study.

Limitations

In interpreting the results of this study, the following limitations should be considered:

1. The subjects were not randomly selected from the general population. The sample size was small, and the subjects were relatively homogeneous.

2. The instruments were self-report measures. The degree to which the subjects' responses reflect true attitudes and knowledge is, therefore, uncertain.

3. Due to inadequate standardization of the measures used, validity and reliability have not been firmly established.

4. Observational measures of parental behaviors to validate the assumption that parental attitudes are reflected

in behavior via decisions about play activities, settings and procedures were not used.

5. Attitudes and knowledge of the parents were investigated; therefore, only one aspect of the parent-child relationship, a reciprocal process, was examined.

6. Variables other than those or in combination with those used in this study may be critical for consideration in the prediction of parental attitudes toward play.

7. Parental attitudes are subject to change and difficult to isolate and identify.

Implications

The primary importance of this study lies in the basis it provides for further research of fathers' attitudes and behaviors and for further investigation into the area of marital agreement and the resultant implications for the child's socialization within the family system.

Intervention programs designed to assist families in the development of effective interaction skills are surfacing throughout the States. Some are initiated through family and child scientists and educators, some through church leaders, some through the local YMCA's and YWCA's, and some through university extension programs. These programs often involve only one parent and focus on changing attitudes and behaviors through education. The results of this research which indicate that knowledge is not predictive

of attitudes for rural parents raises a basic question about the proposal that educating parents will lead to attitude changes and subsequent behavior changes. Further research in the area of educational, intervention approaches with a focus on behavior changes over time could help to clarify the proposition.

The results of this study suggest the importance of including the fathers in the research design since in this study it was the fathers' scores that were discriminating. Although the conclusions of this research can be applied only to rural, mid-western families on working farms and in towns with populations under 5000, it is important to add these results to those of previous research studies which represented only rural populations. Investigation of a sample representative of other populations or the total population is a next needed step.

Suggestions For Further Research

Based on the findings of this study, a number of areas for investigation in future research are suggested. The following recommendations should be considered:

1. The present study could be replicated with a larger, statistically representative sample of rural parents.

2. The present study could be replicated with a larger, statistically representative sample of the total population.

3. Further validity and reliability checks could be made on the measures used in this research.

4. An observational study conducted in the home environment focusing on the actual play behaviors of mothers and fathers in connection with their children's home play activities could be implemented.

5. Further research to discover if a spouse's knowledge of play concepts, developmental/traditional conceptions of childhood and parenthood are predictive of the other spouse's attitudes toward children's play is needed.

6. The reciprocal influences of the parents and child in play interactions could be investigated.

7. Further research to discover the optimum home conditions which will encourage play abilities in preschool children is needed.

8. Parental awareness of the degree of marital agreement on attitudes toward play could be investigated.

9. In behavioral terms, low marital agreement on play attitudes, knowledge of play concepts, and developmental/traditional conceptions of childhood and parenthood results in inconsistent messages for the child. Further research to discover how preschool children cope with the inconsistencies and how they act in play situations with each parent is needed.

10. Longitudinal data concerning the actual amount of money parents spend on toys at different ages could be gathered.

11. Marital agreement on other issues central to family life (money management, extended family relations) could be studied in relation to parental attitudes about children's play.

APPENDICES

APPENDIX A

APPENDIX A

GENERAL INFORMATION

1. Name:_____ 2. Sex: M____F____

3. Age:____ 4. Address:_____

5. Telephone number:_____ 6. Years Married:_____

7. Draw a circle around the highest year of schooling completed;

1 2 3 4 5 6 7 8 Grade School 1 2 3 4 High School 1 2 3 4 College 1 2 3 4 Post Graduate

8. Number of children:_____

   a. Ages of boys:_____;_____;_____;_____;

   b. Ages of girls:_____;_____;_____;_____;

9. Husband's occupation_____

10. Wife's occupation_____

11. Wife's occupation before marriage_____

12. Do you live in an apartment_____, a house_____, other (specify)_____

13. Do you live on a working farm_____
    in a rural area, nonfarm_____
    in a village under 1,000_____
    in a town of 1,000 to 5,000_____

14. Does your child go to any organized programs outside of the home? Yes____ No____

15. Approximately how much money do you spend on toys a month? _____ a year?_____

16. When do you purchase toys for your child?_____

    _____

17. Do you feel you have enough room in your home for your family's everyday activities? Yes_____ No_____

18. Do you feel your child has enough room to play inside your home? Yes_____ No_____

19. Do you feel your child has enough room to play safely outside your home? Yes _____ No _____

20. What do you think the purpose of a child's play is?

_____

_____

21. How many times has your child borrowed toys from the library? _____

22. Do you and your child play together with the borrowed toys? Yes _____ No _____

23. Have you used the direction sheets for the toys? Yes _____ No _____

If no, why not?_____

If yes, have you found them helpful? Yes _____ No _____

If yes, in what ways?_____

24. How do you feel about having toys for your child to borrow from the library?_____

_____

_____

_____

APPENDIX B

APPENDIX B

OPINION SURVEY ON CHILDREN'S PLAY

Please give your opinion, as a parent, about each of the following statements about families with preschool children. Do this by circling the letter of the answer that comes closest to your own feeling. Please choose only the one opinion that best describes how you feel in each case about families with preschool children.

Remember, what is wanted is your opinion about each statement. Whether or not these statements are actually true of your household is not important here. As with other information you give us, your opinions will be held in the strictest confidence and will be used only for statistical summaries about all the parents that we interview. You as an individual parent will not be identified. Therefore, we hope that you will give your opinions as honestly as you can, without worrying about whether someone would think they are good or bad. None of the possible opinions in this questionnaire are necessarily "good" or "bad" nor "right" or "wrong". It is only how you feel that is important. Thank you for your cooperation.

Person answering questionnaire

a. Father
b. Mother

1. When should children be allowed to take their toys apart?

a. Only when the toy is inexpensive
b. Never
c. Only when the toy is meant to be taken apart
d. Whenever the child wants to

2. When should a child watch television?

a. When he needs something to keep him occupied
b. Whenever he wants to
c. When the parent approves of the program
d. Never

3. Children should obey the old rule, "to be seen and not heard."

a. Never
b. Always (Children should speak only when spoken to)
c. Whenever what is said by the child could be embarrassing or disrespectful
d. When adults are visiting together in the home and wish not to be interrupted.

4. Boys should be discouraged from playing with girls' toys and games.

   a. Only when the child is playing with other boys
   b. Only when the child seems to play with girls' toys to excess or more than he plays with boys' toys
   c. Always
   d. Never

5. Girls should be discouraged from playing with boys' toys and games.

   a. Only when the child is playing with other girls
   b. Only when the child seems to play with boys' toys and games to an excess or more than she plays with girls' toys and games
   c. Never
   d. Always

6. A child should share his or her toys with other children.

   a. When parents can supervise the sharing
   b. When the child's friends also share their toys
   c. Always, whether he wants to or not
   d. Whenever he wants to inside or outside of the home

7. Adults should play with their children.

   a. Whenever the parent has time to play with the child or just feels like it
   b. Except for some obvious exceptions, such as interfering with work, the parent should play whenever asked by the child
   c. Whenever the conditions of play and the time are equally convenient and agreeable to both the parent and the child
   d. Whenever the parent and child set aside a time to play when they can be assured of not being interrupted.

8. Parents should buy their child a new toy.

   a. Whenever the child has earned a toy through good deeds or behavior
   b. Mainly on special occasions such as Christmas or birthdays
   c. Whenever the parent feels in a mood to buy one
   d. Whenever the child expresses a sincere desire for a specific toy

9. Wrestling or "rough housing" should be done:

   a. Only outdoors
   b. Anywhere in the house or outside under parental supervision
   c. Only in designated areas in the house
   d. Whenever and wherever the child wants as long as it is done in moderation

10. Given a situation in which a child receives a new toy which he does not know how to use but seems to gain enjoyment by using in the wrong way, how should parents react to this?

   a. Show the child the correct way to use the toy
   b. Let the child play with the new toy any way he wants as long as he is having fun
   c. Put the toy away and bring it out at another time
   d. Make the child stop playing with it

11. Children should check with their parents before trading or giving away any of their play things.

   a. Completely agree
   b. Agree but with some exceptions or reservations
   c. Disagree, but with some exceptions or reservations
   d. Completely disagree

12. Children should be allowed to play anywhere they want in or around the house, as long as it does not endanger their safety or health.

   a. Completely agree
   b. Agree, but with some exceptions or reservations
   c. Disagree, but with some exceptions or reservations
   d. Completely disagree

13. Parents should welcome their children's chosen friends, whoever they are, in their home.

   a. Completely agree
   b. Agree, but with some exceptions or reservations
   c. Disagree, but with some exceptions or reservations
   d. Completely disagree

14. The things that children do in their play should mainly be things that teach them useful skills.

    a. Completely agree
    b. Agree, but with some exceptions or reservations
    c. Disagree, but with some exceptions or reservations
    d. Completely disagree

15. The main purpose of a child's play should be to have fun.

    a. Completely agree
    b. Agree, but with some exceptions or reservations
    c. Disagree, but with some exceptions or reservations
    d. Completely disagree

16. Boys should be discouraged from playing with dolls or other female toys.

    a. Completely agree
    b. Agree, but with some exceptions or reservations
    c. Disagree, but with some exceptions or reservations
    d. Completely disagree

17. Given a situation in which a preschool child has toys all over his or her room but does not seem interested in putting them away, how should parents react?

    a. Tell the child to put the toys away before he or she will be able to do something enjoyable (example: having a snack, watching television, reading a book before bedtime, etc.)
    b. Parents should pick up the toys and put them away.
    c. Parents should begin to pick up the toys and encourage the child to join in.
    d. Leave the toys where they are.

18. When should a child be allowed to play in water?

    a. Outside when he is dressed properly.
    b. Whenever he wants to.
    c. Only in the bathtub.
    d. When the child wants to, and you are able to be nearby.

19. When should a child be allowed to play with his or her brother's or sister's toys?

    a. Whenever the child wants to.
    b. Whenever the brother or sister lets him.
    c. Never
    d. Whenever the parents say it is alright.

20. How should parents react when they see their preschool child tearing a book?

    a. Spank the child
    b. Say nothing to the child and either repair or throw away the book
    c. Repair the book with the child's help and explain that books are for reading not tearing
    d. Scold the child and take the book away.

21. Where should children be allowed to play alone outside?

    a. only in the yard
    b. within certain areas in the neighborhood
    c. anyplace he wants to as long as he is home on time
    d. they should not play outside alone

APPENDIX C

APPENDIX C

PRESCHOOL CHILDREN'S PLAY

PART I - Please mark (x) the age at which you think children begin to do these activities.

The child begins:	Age in Mo. / Age in Yrs.	12-24 / 1-2	25-36 / 2-3	37-48 / 3-4	49-60 / 4-5	61-84 / 5-7
1. Pretending to eat or sleep while playing alone						
2. Building a house with blocks						
3. Hopping on one foot						
4. To be able to keep play going with another child the same age						
5. Including or excluding others from his play						
6. Carrying out a whole series of pretend events such as feeding baby, bathing baby and putting baby to bed						
7. Matching and sorting toys						
8. Asking many "why" questions						
9. Catching a large ball with arms outstretched						
10. Taking turns						
11. Playing house or store with another child the same age						
12. Acting out more than one part while playing alone						
13. Playing hide and seek						
14. Becoming an imaginary character						
15. Skipping						
16. Running smoothly & well						

PART II - Directions: Please mark (x) those statements about families and children ages 2-5 with which you agree or disagree.

	Agree	Disagree
17. Blocks and puppets are intended for play at specific age levels.		
18. Children often try to complete puzzles or build buildings which are too difficult for them.		
19. The use of the body is essential to children's learning and memory.		
20. If a toy is labeled educational, children who have it will learn the educational goals that are stated on the box.		
21. Playful people are more versatile and creative.		
22. The child learns to play just as he learns to dress himself.		
23. New toys should be played with by a parent to stimulate child interest.		
24. Children tend to copy their parents' imaginative behavior.		
25. Babies under a year old do not need a variety of toys.		
26. The child learns to give and take in playing games with his parents at about the same time give and take occurs in play with other children.		
27. Repeating new skills such as jumping is fun for the child.		
28. Children learn order and rules by playing games.		
29. Children usually react to danger sometime later by revising the situation and becoming the thing that frightens them.		
30. Adults encourage play with toys such as stoves and trucks because the adult world is too dangerous and too complex for the child.		
31. Children show what they think and feel about their family when they play house.		

Directions: Please mark (x) those statements about families and children ages 2-5 with which you agree or disagree.

	Agree	Disagree
32. Little children should throw small balls and catch big ones to develop skill.		
33. Stringing beads and reading have nothing in common.		
34. Many children spend most of their free time watching others.		
35. When 2 or more children play together, deciding what to play and how to play takes longer than the actual play time.		
36. Boys tend to be more agressive than girls in play.		
37. Imaginative play is a waste of time.		
38. Basic ideas of measurement are developed by playing with sand and water.		
39. Watching television helps children develop play skills.		
40. "I am a house cleaner" works better than "can I play?" when a child wants to join another child playing house.		
41. Children learn to do things well by doing them over and over again.		
42. Children try out play ideas by themselves before trying it out with other children.		
43. After the child masters a skill he combines it with other skills.		
44. Make-believe play does not help the child to solve ordinary family problems such as spilling food or milk at dinner.		
45. It's not too much to ask that children take care of their toys and play with them appropriately.		
46. Busy parents cannot teach the child a large number of ideas because they have other things to do like cleaning or cooking.		
47. Children who are truly creative will act just like other children the same age in similar situations.		

Directions: Please mark (x) those statements about families and children ages 2-5 with which you agree or disagree.

	Agree	Disagree
48. Children under 5 are too immature to help make cookies.		
49. The parent who organizes and uses as play materials whatever is on hand is teaching his child as much as the parent who buys many toys.		
50. Teasing is the same as play.		
51. Parents can help children overcome fears by pretending to be afraid in a safe and playful situation.		
52. Parents can help their children learn how to play with others by joining in the play.		
53. Parents should kneel or sit at the child's level while talking and playing with the child.		
54. Children learn to play house or store by themselves.		
55. One way to teach make believe is to act out playing with the doll.		
56. Children cannot learn to control themselves by playing together freely in a group.		
57. The number of toys available to the child does not affect his play behavior.		
58. New toys should be given to the child on Christmas and birthdays rather than throughout the year.		
59. Most children learn to play by watching others.		
60. Parents play with their children differently at different ages.		
61. The parent directs the play when playing blocks with the child.		
62. Children should be allowed to make mistakes in play.		
63. Children may resent continuous guidance beyond the initial steps.		

Directions: Please mark (x) those statements about families and children ages 2-5 with which you agree or disagree.

	Agree	Disagree
64. American children are as physically fit as European children.		
65. Comparing preschool children's drawings to older children's work will increase their effort.		
66. Children play more creatively when their efforts are appreciated.		
67. Once the child learns that he can depend on a regular playtime with a parent, he will make fewer demands for attention at other times.		
68. Parents should leave the decision of what to play up to the child.		
69. If parents do quiet relaxing activities, children will learn to enjoy quiet times too.		
70. In imitating his mother's work, a child feels himself included in her life.		
71. If a child becomes restless, a parent should simply tell him to "go play".		
72. Preschool children should be encouraged to draw pictures of real things, like houses or animals.		
73. Planning is not a part of children's play.		
74. Putting some toys away for awhile and bringing them out again later only confuses the child.		
75. It is easier for a child to show what he thinks through play than to explain it with words.		
76. Children should play after their chores are finished.		
77. Children develop the necessary skills of using their hands for writing in kindergarten.		

Directions: Please mark (x) those statements about families and children ages 2-5 with which you agree or disagree.

	Agree	Disagree
78. Skill in striking with a bat and throwing a ball occur at about the same time.		
79. Children to whom parents read can tell stories by themselves.		
80. Lotto games are inappropriate for young children.		
81. Puzzles provide practice in problem solving.		
82. The needs for props in dramatic play increases with the child's age.		
83. Toy chests for storage encourage the best use of toys.		
84. Preschool children are too young to use hammers, nails or saws.		

APPENDIX D

APPENDIX D

BELIEFS ABOUT CHILDHOOD AND PARENTHOOD

A number of statements are listed below about what fathers, mothers, and children ought to be today. Choose in each set the five you most agree with.

A. Choose and circle the appropriate numbers for the five most desirable characteristics of a father:

1. Seeks to understand his children.
2. Works hard to support his family.
3. Answers his children's questions frankly.
4. Joins his children in their play.
5. Develops habits of obedience in his children.
6. Encourages his children to grow up in their own ways.
7. Decides what is best for his children.
8. Disciplines his children.
9. Works with his family on household tasks.
10. Buys nice things for his children.

B. Choose and circle the appropriate numbers for the five most desirable characteristics of a mother:

1. Helps her children learn how to get along with others.
2. Has her children engage in character-building activities.
3. Keeps her children clean and well-dressed.
4. Stimulates her children's mental growth.
5. Understands her children's feelings.
6. Makes her children mind.
7. Is affectionate toward her children.
8. Trains her children to regular habits (eating, sleeping, etc.)
9. Promotes her children's emotional well being.
10. Is a good housekeeper.

C. Choose and circle the appropriate numbers for the five most desirable characteristics of a child:

1. Is courteous and respectful to adults.
2. Confides in his parents.
3. Likes to play with other children.
4. Respects property, takes care of his things.
5. Is curious, eager to learn.
6. Keeps clean and neat.
7. Enjoys growing up.
8. Does his chores and assignments thoroughly.
9. Is honest and truthful.
10. Is happy and contented.

APPENDIX E

APPENDIX E

QUESTIONNAIRE ABOUT CHILD'S PLAY

For the following questions, please circle the letter of the answer that best describes your preschool child's actual play situations or experiences. If you have more than one preschool child, please think of the child closest to 4 years of age when you answer these questions. One answer is not better than another, so we hope you will feel free to choose the one that best fits for your child.

1. Where in the home is your child allowed to play?

   a. anywhere at any time throughout the house
   b. in his or her own room
   c. anywhere throughout the house if he/she is within seeing or hearing distance
   d. in certain rooms of the house and not in other rooms

2. Under which one of the following conditions does your child get a new toy most often?

   a. as a reward for good behavior or doing a good deed
   b. on special occasions such as birthdays, Christmas, etc.
   c. on some regular basis (such as once a week, once a month, etc.)
   d. for no specific reason, just whenever the parents feel like buying one

3. What is your child's reaction to a new toy?

   a. Plays with the new toy along with other toys and, even when it is no longer new, will often dig it out to play with.
   b. Plays with the new toy constantly for a period of time, then leaves the toy, never to use it again.
   c. Likes to play with new toy for a while, then will often trade it for other children's toys.
   d. Quickly gets bored with a new toy.

4. When your child is in a situation where he/she does not have toys to play with does he/she

   a. sit quietly and watch other people or things?
   b. complain about nothing to do?
   c. use other materials (sticks, leaves, newspapers) to play with?
   d. use no other materials but play by pretending?

5. When given a chance to play with another child, what does your child usually do?

   a. plays alone with toys and ignores other child
   b. plays alone with toys but watches other child nearby
   c. plays alone with toys while talking to other child nearby
   d. plays with other child and shares toys and play space

6. Approximately how many hours a day does your child watch TV? _____

7. Is your child allowed to use any items which are used by parents in the home? (Examples: books adult cards or games, pots and pans, tape recorders, etc.)

   a. Yes
   b. No

8. How often does your child use things in play which are not store bought toys? (Examples: cardboard, rope, cans, boards, rocks, etc.)

   a. Hardly ever
   b. Occasionally
   c. Frequently

9. How often is any play object for your child's use made in the home? (Examples: wooden toys, stuffed animals, homemade play dough, etc.)

   a. Hardly ever
   b. Occasionally
   c. Frequently

10. Do you play with your child?

    a. Yes
    b. No

    If yes, how often?

    a. Several times during the day
    b. Once a day
    c. Once or several times a week

11. Does your spouse play with your child?

    a. Yes
    b. No

    If yes, how often?

    a. Several times during the day
    b. Once a day
    c. Once or several times a week

12. Do you read or tell stories or poems to your child?

    a. Yes
    b. No

    If yes, how often?

    a. Several times during the day
    b. Once a day
    c. Once or several times a week

13. Does your spouse read or tell stories or poems to your child?

    a. Yes
    b. No

    If yes, how often?

    a. Several times during the day
    b. Once a day
    c. Once or several times a week

14. How often does your child tell or repeat stories, poems, or rhymes?

    a. Hardly ever
    b. Occasionally
    c. Frequently

15. Does your child dance or sing along with any music he or she hears?

    a. Yes
    b. No

APPENDIX F

APPENDIX F

TOY & EQUIPMENT INVENTORY

The categories below list most of the types of toys which are produced for young children. Please check the appropriate blanks for the toys which your children now have in your home. This information will help us select toys for lending which your children do not already have.

TOYS	OWNED	REGULARLY USED	A FAVORITE TOY?
Category I			
1. Puzzles			
2. Tinker toys			
3. Blocks			
4. Lego, Lincoln Logs, other construction toys			
5. Beads for stringing			
6. Peg board			
7. Snapping, zipping, buttoning toys			
8. Nesting, stacking toys			
9. Pounding bench			
10. Flashlight			
11. Others:			
Category II			
1. Lotto			
2. Number games			
3. Alphabet, letter and word games			
4. Other games:			
Category III			
1. Cars, trucks			
2. Stuffed animals & toys			
3. Dolls			
4. Pull toy			
5. Music box			
6. Record player			
7. Toy musical instruments			
8. Toy clock, watch			
9. Other toys with moving parts:			

TOYS	OWNED	REGULARLY USED	A FAVORITE TOY?
Category IV			
1. Telephone			
2. Dress-up clothes, hats			
3. Puppets			
4. Doctor/nurse kit			
5. Filling station, barn toys with small figures			
6. Tea set			
7. Guns or shooting toys			
8. Other toys used as imaginative props: doll house, miniature people			
Category V			
1. Crayons			
2. Paints & brushes			
3. Clay, play dough			
4. Colored paper			
5. Coloring books			
6. Children's scissors			
7. Chalk			
8. Blackboard			
9. Easel			
10. Flannel board & felt cutouts			
11. Others:			
Category VI			
1. Pedal or push cart			
2. Wagon			
3. Skates			
4. Bicycle			
5. Balls			
6. Others:			
Category VII			
1. Play house			
2. Slide			
3. Sand box			
4. Rocking horse			
5. Child-size table			
6. Child-size chairs			
7. Swing or swing set			

TOYS	OWNED	REGULARLY USED	A FAVORITE TOY?

Category VIII

1. Magnifying glass
2. Magnet
3. Scales or balance

Books, approximate number _____
titles of a few favorites _____

Records, approximate number _____
titles of a few favorites _____

APPENDIX G

APPENDIX G

LETTER TO PARENTS

January 28, 1975

To the Parents of_____:

As you know, toys for lending to children from birth through five years of age have been placed in the Pigeon Library through the cooperation of the Human Development Commission in Caro and the Family & Child Sciences Department of Michigan State University. Because of the enthusiasm of your librarian, Roberta Richmond, and the Library Board members, and the community support for new materials and resources (so strongly reflected in your new library and community center), Pigeon was chosen as one of the locations to receive the largest number and widest variety of toys and materials.

Because the library is so well organized and because of your interest, the Pigeon toy lending program has become a model for the State of Michigan. The Family & Child Sciences Department has received many calls and letters from persons in other communities who are interested in starting a toy lending program like yours. Before we can help these communities and answer their questions, we need to get some important information from you about what you - the parents, and your children think about having toys to borrow in your library. We want to help other Michigan towns to do what Pigeon has done, and we need to know what suggestions and ideas you have as mothers and fathers of the preschoolers already using such a program.

Under the direction of Dr. Eileen Earhart, Chairman of the Family & Child Sciences Department, I would like to meet with both of you for about an hour for this purpose of getting your answers to some of our questions. All the information on the questionnaires you will be asked to fill out will be held in the strictest confidence. You as an individual parent will not be identified so your answers will be strictly anonymous. Your opinions will only be used for making changes in the library program and in summaries about how all the parents in your community feel.

I am also interested in meeting with you to share some ideas we have for toys you can easily make for your young children. Although children may enjoy borrowing toys, they of course need their own toys to keep at home. With the price of everything going up, you may be interested in some toys you and your family could make.

Our ideas and suggestions have been put together into a booklet, and we would like each of you to have one to take home. Even if you do not have the time or interest to make anything now, it may come in handy sometime in the future. We will have completed toys that we have made on hand for you to see and examine.

Since I hope you will be able to meet me at the library around Valentine's Day, I am planning a story hour and some fun activities plus refreshments for all the children of your family while we are meeting. These special activities will be for all of your children (not just the preschoolers) so I hope this will make it easier for both of you to come.

We know how difficult it often is for fathers to arrange their work so that they can take part in outside family activities, so we have tried to give you a large choice of times. Since it is the father and the mother who have the greatest effect on a young child, we need to know what both of you think.

Please return the attached sheet and the toy list (in the enclosed self-addressed, stamped envelope) by February 8 so that we can work with your librarian in planning the programs and refreshments. Thank you for your cooperation.

Sincerely,

Joan Hoffman Smith
Project Assistant

Name_____ Telephone No. _____

Address_____

Children attending:

Name_____ Age_____; Name_____ Age_____

Name_____ Age_____; Name_____ Age_____

Please check the day and time both Mother and Father will be able to come:

Friday, February 14, 1:00 p.m._____

Friday, February 14, 7:00 p.m._____

Saturday, February 15, 10:00 a.m._____

Saturday, February 15, 1:00 p.m._____

We would be willing to come, but the above dates are not convenient._____

If so, at what other times could you come?_____

APPENDIX H

APPENDIX H

TELEPHONE CONTACT

Hello, is this Mrs. (Mr.) _____?

My name is _____, and I'm calling for Joan Smith at Michigan State University. She has been working with Roberta Richmond, our Pigeon librarian, for the past year in getting the toy lending program together, and I'm calling to see if you received her letter about the meeting at the library for parents of all pre-schoolers in the area.

I'd like to encourage you and your husband (wife) to try to attend - it doesn't matter if your child hasn't borrowed any toys from the library yet. There's going to be a Valentine's party and story hour for all the children which will be fun for them, and this will give you a chance to look at some of the toys you can make at home for your children, get your booklet explaining how to make many of the toys, and give Mrs. Smith some information needed to keep the program growing.

Our community has been very strong in supporting programs to help our children so we're hoping we can count on you to come. I think you'll enjoy the experience and only about an hour of your time is involved. Would it be possible for you to give me an idea which of the four times would be the best for you and your husband (wife)?

Thank you for your time this morning (afternoon, evening); I know Mrs. Smith is looking forward to meeting you. Good-bye.

APPENDIX I

APPENDIX I

POSTCARD TO PARENTS

Michigan State University
Dept. of Family & Child Sciences
E. Lansing, Michigan 48823

The booklets and toys are ready, the refreshments made, and the children's party favors waiting -- all we need is your family! Won't you please join us at the Pigeon Library at one of the following times?

Friday, Feb. 14, 1:00 p.m. Saturday, Feb. 15, 10:00 a.m.

Friday, Feb. 14, 7:00 p.m. Saturday, Feb. 15, 1:00 p.m.

APPENDIX J

APPENDIX J

CHILD DEVELOPMENT PROFILE

0-1 Years

1 month - Sucks, listens to sounds, stares at light, briefly follows moving stimulus, lifts head slightly when prone, quieted when held and rocked.

2 months - Focuses and follows moving person, holds head erect when held in a sitting position, smiles, listens to musical sounds, bats at nearby objects.

3 months - Eyes follow moving objects, lifts head and chest when in prone position, grasps crudely, vigorously moves arms and legs.

4 months - Grasps things and then lets go (finger, pencil, etc.), laughs, kicks, rolls from side to side.

5 months - Sits with support, shakes, feels and bangs things, tries to reach objects, rolls over.

6-9 months - Recognizes familiar faces, cries if strangers pay attention to him/her, sits alone, uses fingers and thumb for grasping, throws and bangs toys together, creeps, says "Mama" and "Dada", pulls up into upright position.

10-12 months - Fills and empties containers, stands with support, takes steps when supported, crawls, drinks from a cup, imitates sounds, says a few new words.

1-2 Years

Characteristics:

Begins to walk and gain in body control; climbs on furniture.
Creeps up and down stairs; may begin to walk up stairs with help.
Still senses and absorbs his environment.
Enjoys pushing and pulling toys.
Stacks 2 or 3 blocks; also lines up blocks.
Pokes fingers into holes.
Turns pages; enjoys tearing papers.
Points to eyes, nose, ears, mouth.

(1-2 Years Cont'd.)

Recognizes pictures of cars, dogs, etc.
Waves bye bye; talks in jargon and uses gestures.
Is imitative.
Responds to music.
Holds a cup and eats with a spoon.
Enjoys self absorbed play; self engrossed; still exploring.
Is a nonconformist; negative-resistive to change.
Enjoys water and sand play.
Understands simple directions.
Begins to take apart; take some clothing off.

Senses and Absorbs Environment Through:

Exploration
Tasting
Smelling
Hearing
Moving
Seeing
Feeling

2-3 Years

Characteristics:

Runs and enjoys motor activities - rough and tumble play.
Jumps with a one foot lead.
"Marks time" on steps - two feet on each step.
Attaches meaning to previous sensory experiences.
Kicks and throws a ball.
Still pokes fingers in holes.
Turns pages with precision.
Turns doorknobs - rotation in wrist.
Builds tower of 6 or 7 blocks.
Scribbles - horizontally and vertically.
Holds cup and glass easily and eats with a spoon well.
Identifies pictures.
Senses "oneness."
Uses 3 to 4 word sentences.
Begins to enjoy Mother Goose rhymes.
Displays emotions - claps hands, squeals, laughs.
Says "No" - negativistic; exercises his powers.
Dawdles.
Establishes a sense of self.
Enjoys solitary play, following his own devices, as well as parallel play with other children.
Shows restraint with strangers.
Helps undress and dress.
Enjoys praise.

(2-3 Years Cont'd.)

Is intrigued with water.
Pinches, pushes, kicks, and bites.
Large muscle development.
Eye-hand coordination skills developed.
Developes listening skills.
Refined visual awareness.
Begins imaginative play.

3-4 Years

Characteristics:

Increases body image concepts.
Runs easily, jumps; tries anything.
Rides a tricycle.
Stands on one foot momentarily.
Dresses self fairly well; no trying ability.
Feeds self with spoon or fork.
Takes care of toilet needs with less thought.
Begins to perceive - attaches meaning to objectives (A prerequisite to formal learning).
Begins to do puzzles - 3 to 8 pieces.
Scribbles become circular.
Ideas are bigger than vocabulary.
Loves to play with sounds - giggles over nonsense sounds.
Begins to see differences in ways men and women act.
Is good company, interested in things outside of himself.
Begins group play; needs company.
Increases imaginative play.
Knows right from wrong.
Begins to acquire fears - dogs, etc.
Understands hazards.
Knows difference between boys and girls.
Refined gross motor development.
Refined fine motor development.
Refined form perception.
Refined language.
Enjoys imaginative play.

4-5 Years

Characteristics:

Runs, hops, climbs easily; rides tricycles well; nimble; stops, starts, turns corners; able to balance on one foot 2 to 5 seconds.
Likes boisterous, unhampered play; needs large muscle activity.

(4-5 Years Cont'd)

On the go - far ranging.
Holds pencil, crayons, paint brushes in adult manner; enjoys painting.
Usually knows primary colors.
Has imaginary playmates; likes pretend play - fireman, cowboy, etc.
Likes crayons, chalk, paint, sand, water, mud; enjoys their feel.
Dresses self well; laces shoes - no tying ability but can button.
Can usually count fingers - may count higher.
Acquires new fears; great development of imagination.
Talks incessantly - running coversations; runs topics into ground.
Asks endless questions - "Why?" and "How?"
Plays with other children - prefers his own sex; likes cooperative affairs.
Likes dramatic play - imitates adult life; likes hand puppets; acts out frustrations and angers.
Imitates.
Is able to leave mother and extend life into neighborhood.
Has some difficulty in separating fact from fancy; a great fabricator.
Can cut on a line, throw a ball overhand, etc.; does not stay in lines coloring.
Is boastful, dogmatic, bossy; feels his independence and asserts self.
Begins deductive thinking.
Often swears and uses silly words.
Has total confidence in his own ability to do anything.
Likes to be read to and enjoys nursery rhymes.
Begins conscience development; moralistic judgments beginning.
Begins to have sense of time - day, night, getting up, eating lunch, etc.
Defies parents at times, but quotes them as authorities.
Begins to conceptualize and generalize; perceives analogies.
Likes cozy places - secret places.
Shows love for parent of opposite sex.
Refined gross and fine motor activities.
Strengthened command of language.
Enjoys uninterrupted time.
Strengthened social awareness.
Conforms to acceptable behavior.

BIBLIOGRAPHY

BIBLIOGRAPHY

Allen, M. A. Relationship among parental perceptions of quality of education, needs of the child, and attainment expectations for the child. Unpublished Ph.D. dissertation. University of Wisconsin, 1973.

Almy, M. Spontaneous play: An avenue for intellectual development. Young Children, 1967, 22, 265-277.

Anker, D. Teaching children as they play. Young Children, 1974, 29, 203-213.

Arnaud, S. H. Some functions of play in the educative process. Childhood Education, 1974, 50, 72-78.

Arnold, A. Your child's play. New York: Simon and Schuster, 1968.

Aston, A. How to play with your baby. New York: The Learning Child, Inc., 1971.

Axline, V. M. Play therapy. Boston: Houghton-Mifflin, 1947.

Banks, M. D. Interactive effects of conceptual development of parents and teachers on enhancing creativity in children and conditions of home play. Unpublished Ph.D. dissertation. University of Illinois, 1973.

Barnes, K. E. Preschool play norms: A replication. Developmental Phychology, 1971, 5, 99-103.

Bates, J. E., and Bentler, P. M. Play activities of normal and effeminate boys. Developmental Psychology, 1973, 9, 20-27.

Baumrind, D. Child care practices anteceding three patterns of preschool behavior. Genetic Psychology Monographs, 1967, 75, 43-88.

_____. Effects of authoritative parental control on child behavior. Child Development, 1966, 37, 887-907.

Baumrind, D., and Black, A. Socialization practices associated with dimensions of compentence in preschool boys and girls. Child Development, 1967, 38, 291-327.

Beach, F. A. Current concepts of play in animals. American Naturalist, 1945, 79, 523-541.

Berlyne, D. E. Conflict, arousal and curiosity. New York: McGraw-Hill, 1960.

Bishop, D. W., and Chace, C. R. Parental conceptual systems, home play environment, and potential creativity in children. Journal of Experimental Child Psychology, 1971, 12, 318-338.

Blood, R. O. Consequences of and permissiveness for parents of young children. Marriage and Family Living, 1953, 15, 209-212.

_____. Developmental and traditional child-rearing philosophies and their family situational consequences. Unpublished Ph.D. dissertation. University of North Carolina, 1952.

_____. A situational approach to the study of permissiveness in child-rearing. American Sociological Review, 1953, 18, 84-87.

Bloom, B. S. Stability and change in human characteristics. New York: John Wiley and Sons, Inc., 1964.

Buckley, W. Modern systems research for the behavioral scientist. Chicago: Aldine Publishing Co., 1968.

Caldwell, B. M. What is the optimal learning environment for the young child? American Journal of Ortho-psychiatry, 1967, 37, 8-21.

Caldwell, B. M., and Drachman, R. H. Comparability of the three methods of assessing the developmental level of young infants. Pediatrics, 1964, 34, 51-57.

Caplan, F., and Caplan, T. The power of play. New York: Anchor Press, 1974.

Christensen, H. (Ed.) Handbook of marriage and the family. Chicago: Rand McNally and Co., 1964.

Connolly, K. Learning and the concept of critical periods in infancy. Developmental Medicine and Child Neurology, 1972, 14, 705-714.

Curry, N. E. Current issues in play: Theoretical and practical considerations. Unpublished Ph.D. dissertation. University of Pittsburgh, 1972.

Curry, N. E., and Arnaud, S. Play: The child strives toward self-realization. Washington, D.C.: Publication Dept., National Association for the Education of Young Children, 1971.

Dansky, J. L., and Silverman, I. W. Effects of play on associative fluency in preschool-aged children. Developmental Psychology, 1973, 9, 38-43.

DeLissovoy, Vladimir. Child care by adolescent parents. Children Today, July 1973, 22-25.

_____. High school marriages: A longitudinal study. Journal of Marriage and the Family, 1973, 35, 245-255.

Dennis, W. Infant development under conditions of restricted practice and of minimum social stimulation. Genetic Psychological Monographs, 1941, 23, 143-189.

Duvall, E. M. Conceptions of parenthood. The American Journal of Sociology, 1946, 52, 193-203.

Earhart, E. Development of guidelines for creating preschool resource centers. Michigan agricultural experiment station grant, 1973.

Eifermann, R. R. Social play in childhood. In Herron, R. and Sutton-Smith, B. (Eds.) Child's play. New York: Wiley and Sons, 1971, 270-297.

Ellis, M. J. Why people play. New Jersey: Prentice-Hall, Inc., 1973.

Emmerich, W. Variations in the parent role as a function of the parent's sex and the child's sex and age. Merrill-Palmer Quarterly, 1962, 8, 3-11.

Erikson, E. H. Childhood and Society. New York: W. W. Norton and Co., 1963.

Eron, L. D., Banta, T. J., Walder, L. O., and Laulicht, J. H. Comparison of data obtained from mothers and fathers on child-rearing practices and their relation to child aggression. Child Development, 1961, 32, 457-472.

Fanshel, D. Foster parenthood: A role analysis. Minneapolis: University of Minnesota Press, 1966.

Feitelson, D. The neglected factor: Play. Human Development, 1973, 16, 202-223.

Feshbach, S. The catharsis hypothesis and some consequences of interaction with aggressive and neutral play objects. Journal of Personality, 1954, 24, 449-462.

Frankmann, J. P., and Adams, J. A. Themes of vigilance. Psychological Bulletin, 1962, 59, 259-272.

Freeberg, N. E., and Payne, D. T. Parental influence on cognitive development in early childhood: A review. Child Development, 1967, 38, 65-87.

Freud, S. Beyond the pleasure principle. In Strachey, J. (Ed.) The Standard edition of the complete psychological works of Freud. London: Hogarth and the Institute of Psychoanalysis, 1955.

Gesell, A. The first five years of life: A guide to the study of the preschool child. New York: Harper and Brothers, 1940.

Gilmore, J. B. Play: A special behavior (1966). In Herron, R. and Sutton-Smith, B. Child's play. New York: John Wiley, 1971.

Glidewell, J. C. (Ed.) Parental attitudes and child behavior. Illinois: Charles C. Thomas, 1961.

Gordon, I. J. Baby learning through baby play. New York: St. Martin's, 1970.

Greenacre, P. Play in relation to creative imagination. Psycholanalytic Study of the Child, 1959, 14, 61-80.

Groos, K. The play of animals. New York: Appleton and Co., 1898.

_____. The play of man. New York: Appleton, 1901.

Hagedorn, R., and Labowitz, S. Participation in community associations by occupation: A test of three theories. American Sociological Review, 1968, 33, 272-283.

Hall, G. S. Adolesence. New York: Appleton and Co., 1916.

Harlow, H. F., Harlow, M. K., and Meyer, D. R. Learning motivated by a manipulation drive. Journal of Experimental Psychology, 1950, 40, 228-234.

Harries, N. The effect of a programmed course of instruction on the development of information-processing competence and decision-making styles. Unpublished Ph.D. dissertation. Michigan State University, 1972.

Hawkins, R. P. Universal parenthood training: A laboratory approach to teaching child-rearing skills to every parent. Educational Technology, 1971, 11, 28-31.

Hebb, D. O. The organization of behavior. New York: Wiley and Sons, 1966.

Herber, R., Garber, H., Harrington, S., Hoffman, C., and Falender, C. Rehabilitation of families at risk for mental retardation. Rehabilitation Research and Training Center in Mental Retardation. University of Wisconsin, Dec. 1972.

Hereford, C. F. Changing parental attitudes through group discussion. Austin: University of Texas Press, 1963.

Herron, R., and Sutton-Smith, C. Child's play. New York: John Wiley and Sons, Inc., 1971.

Hill, R. Family development in three generations. Mass.: Schenkman Publishing Co., 1970.

Hollingshead, A. B. The two factor index of social position. Conn.: Yale University Press, 1957.

Honzik, M. P. Environmental correlates of mental growth: Prediction from the family setting at 21 months. Child Development, 1967, 38, 337-364.

Hurley, J., Hohn, R. Shifts in child-rearing attitudes linked with parenthood and occupation. Developmental Psychology, 1971, 4, 324-328.

Kenny, D. T. An experimental test of the catharsis theory of aggression. Dissertation Abstracts, 1953, 13, 441.

Kerlinger, F. N. Foundations of behavioral research. New York: Holt, Rinehart and Winston, 1967.

Knox, S. H. A play scale. In Reilly, M. (Ed.) Play as exploratory learning. California: Sage Publications, 1974, 247-266.

LeMasters, E. E. Parents in modern america. Illinois: The Dorsey Press, 1974.

Levenstein, P. Cognitive growth in preschoolers through verbal interaction with mothers. American Journal of Orthopsychiatry, 1970, 40, 426-432.

_____. Symposium on parent-centered education: Mother-child home program. Childhood Education, Dec. 1971, 130-134.

Lowenfeld, M. Play in childhood. New York: John Wiley and Sons, Inc., 1967.

McDougall, W. Outline of psychology. New York: Scribner's and Sons, 1923.

McIntire, W., Nass, G., and Battistone, D. Female misperception of male parenting attitudes and expectancies. Youth and Society, 1974, 6, 104-112.

Messer, S., and Lewis, M. Social class and sex differences in the attachment and play behavior of the year old infant. Research Bulletin of ETS, Feb. 1970.

Mueller, J. Reconciliation or resignation: A case study. Family Coordinator, 1970, 35, 345-352.

Muralidharan, B. R. Age trends in behavior problems of children. In Shanmugam, T. (Ed.) Researches in personality and social problems. India: University of Madras, 1973.

Murphy, L. B. Infants' play and cognitive development. In Piers, M. (Ed.) Play and Development. New York: W. W. Norton and Co., 1972, 119-126.

Neumann, E. The elements of play. Unpublished Ph.D. dissertation. University of Illinois, 1971.

Newman, H., Freeman, F., and Holzinger, K. Twins: A study of heredity and environment. Chicago: University of Chicago Press, 1937.

Norbeck, E. Man at play. Natural History Journal of American Museum of Natural History, Dec. 1971, 80.

O'Brien, J. The decision to divorce. Unpublished Ph.D. dissertation. University of Wisconsin, 1970.

Painter, G. B. Teach your baby. New York: Simon and Schuster, 1971.

Patrick, G. T. W. The psychology of relaxation. Boston: Houghton-Mifflin, 1916.

Piaget, J. The origins of intelligence in children. New York: International Universities Press, 1952.

_____. Play, dreams and imitation in childhood. New York: W. W. Norton and Co., 1962.

_____. Response to Brian Sutton-Smith. Psychological Review. 1966, 73, 111-112.

Piers, M. W. (Ed.) Play and development. New York: W. W. Norton and Co., 1972.

Pohlman, E. Mothers' perceptions of relative advantages and disadvantages of children at different ages and of various characteristics. Perceptual and Motor Skills, 1967, 24, 1311-1314.

Reilly, M. (Ed.) Play as exploratory learning. California: Sage Publications, 1974.

Roberts, J., Sutton-Smith, B., and Kendon, A. Strategy in games and folktales. Journal of Social Psychology, 1963, 61, 185-199.

Rosen, B. C. Social class and the child's perception of the parent. Child Development, 1964, 35, 1147-1153.

Rothbart, M., and Maccoby, E. Parents' differential reactions to sons and daughters. Journal of Personality and Social Psychology, 1966, 4, 237-243.

Schaefer, E. Converging conceptual models for maternal behavior and for child behavior. In Glidewell, J. (Ed.) Parental Attitudes and Child Behavior. Illinois: Charles C. Thomas, 1961.

Schiller, F. Essays, aesthetical and philosophical. London: George Bell, 1875.

Sears, R., Maccoby, E., and Levin, H. Patterns of child rearing. Illinois: Row, Peterson, 1957.

Seeley, J. R. Crestwood Heights. New York: Basic Books, 1956.

Shaw, M., and Wright, J. Scales for the measurement of attitudes. New York: McGraw-Hill, 1967.

Singer, J. L. The child's world of make-believe. New York: Academic Press, 1973.

Smilansky, S. The effects of sociodramatic play on disadvantaged preschool children. New York: John Wiley and Sons, Inc., 1968.

Spencer, H. Principles of psychology. London: Longman, 1855.

Spitler, J. Changing views of play in the education of young children. Unpublished Ph.D. dissertation. Columbia University, 1971.

Spodek, B. The problem of play: Educational or recreational. In Sponseller, D. (Ed.) Play as a learning medium. D.C.: National Association for the Education of Young Children, 1974, 7-27.

Sponseller, D. (Ed.) Play as a learning medium. D.C.: National Association for the Education of Young Children, 1974.

Sutton-Smith, B. Piaget on play: A critique. Psychological Review, 1966, 73, 104-110.

_____. The role of play in cognitive development. Young Children, 1967, 22, 361-370.

Sutton-Smith, B., and Sutton-Smith, S. How to play with your children (and when not to). New York: Hawthorne Book, Inc., 1974.

Takata, N. Play as a prescription. In Reilly, M. (Ed.) Play as exploratory learning. California: Sage Publishing, 1974, 209-246.

von Bertalanfly, L. General system theory. New York: George Braziller, 1968.

Walters, J., and Stinnett, N. Parent-child relationships: A decade review of research. Journal of Marriage and the Family, 1971, 33, 70-111.

Watts, J., Barnett, I., Halfar, C. Environment, experience and development in early childhood. Harvard preschool project final report. Cambridge: Laboratory of Human Development, January 1973.

Watzlawick, P. Pragmatics of human communication. New York: W. W. Norton and Co., 1967.

Weiss, J. Fathers, the missing link: Some methodological implications for environmental research. Division Generator, 1970, 2, 6-9.

Whiren, A. The effects of parent education on parental knowledge about and attitudes towards children's play. Unpublished Ph.D. dissertation. Michigan State University. To be completed 1976.

White, R. W. Motivation reconsidered: The concept of competence. Psychological Review, 1959, 66, 297-333.

White, B., Kaban, B., Marmor, J., and Shapiro, B. Child-rearing practices and the development of competence. Harvard preschool project final report. Cambridge: Laboratory of Human Development, September 1972.

_____. Experience and environment: Major influences on the development of the young child: 1. New Jersey: Prentice-Hall, 1973.

Witt, P. A., and Bishop, D. W. Situational antecedents to leisure behavior. Journal of Leisure Research, 1970, 2, 64-77.

Zimmerman, L., and Calovini, G. Toys as learning materials for preschool children. Exceptional Children, 1971, 37, 642-654.