CHILDREARING PRACTICES ASSOCIATED WITH PLAYFULNESS

AND TYPE A BEHAVIOR IN CHILDREN

by

Amy Jo Moore

Dissertation submitted to the Faculty of

the Virginia Polytechnic Institute and State University

in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

Family and Child Development

APPROVED:

_____
Cosby S. Rogers, Chair

_____   _____
James D. Moran, III   Mary Ann Hanna

_____   _____
Shirley C. Farrier   Howard Protinsky

February, 1985

Blacksburg, Virginia

CHILDREARING PRACTICES ASSOCIATED WITH PLAYFULNESS
AND TYPE A BEHAVIOR IN CHILDREN

by

AMY JO MOORE

(ABSTRACT)

The purpose of this study was to assess the relationships among childrearing practices, children's levels of playfulness and Type A behaviors. Parents of 83 children in grades kindergarten, two and four completed a Q-sort on childrearing behaviors. The children's teachers completed rating scales for playfulness and Type A behaviors.

Results indicated that there were no differences between males and females on playfulness or Type A behavior ratings. A difference was found between the three grades used in the study, with kindergarten children displaying the highest level of playfulness and second-graders displaying the lowest level of playfulness. In contrast, it was found that kindergarten children had the lowest rating of Type A behaviors while second-graders had the highest. Parenting styles were not found to differ according to the sex or grade level of the child.

When childrearing behaviors were examined, results indicated that playful children had parents who used rational guidance, expressed affect, and were open to experience. Children who were low in playfulness had parents who emphasized early training and used control. When playfulness was analyzed according to specific definitional criteria it was found that parents who encouraged independence had children who were high in their use of pretense and free from external

rules. Additionally, results showed that parents who used control and emphasized early training had children who were more literal in their play, more extrinsically motivated, and more bound to external rules. Similarly, parents who worried about their children had children who were more extrinsically motivated and bound by external rules. It was also found that parents who used negative affect had children who used literal rather than pretend behaviors in their play. The use of rational guidance in parenting was found to be positively related to children with Type A behaviors. It was found that children who were high in Type A behaviors displayed a high level of playfulness. Children high in Type A behaviors were found to be more actively involved in their play, use pretense more often than literal behaviors, and have a higher degree of involvement in the activity. A part of Type A behavior, impatience/aggression, was found to be high in children who were extrinsically motivated and more prone to play rather than explore.

There are several people who have influenced my life in a special way. Because of them I have been able to complete this phase of life and emerge from it still intact.

I owe a great deal to Hank, whose support and advice was so often timely. Our common belief in life outside of graduate school helped me through many devastating days and seemingly endless nights. I will always value your support. <u>Now</u>, can I borrow your resume?

A very heart-felt thank you goes to Dr. Robert A. Martin, whose surgical expertise softened the reality of life and allowed me to love LaPa an extra six months. Your gentle and genuine concern helped me through a time when life was hard. I will always remember those times and treasure them.

My big brother ⁻ ⸴ has been a consistent motivating force with his reoccurring question of "Are you finished yet?" He often single-handedly kept my humorous side alive by phoning in jokes after 11:00 p.m. (Houston time). Your love and support was always felt and is very appreciated.

My parents,   , deserve much of the credit for the completion of this degree, not just because they are my parents, but because they are two of my best friends. Their support has been consistent and unconditional, their advice always available yet never intrusive. I am certain now that they are two of my many blessings; God just disguised them as parents.

For LaPa

because we shared
an unconditional love

TABLE OF CONTENTS

TABLE OF CONTENTS
(continued)

LIST OF TABLES

CHAPTER I

Introduction

The socialization of children is a primary function of the family
unit. During the past decades numerous researchers have attempted to
document the dimensions of parental socialization techniques and their
consequences for children's behavioral development. This study was
designed to investigate the relationships between certain parental
socialization practices and two types of child behaviors: playfulness
and Type A behaviors. Additionally, the study sought to determine the
relationship between playfulness and Type A behaviors.

The scholarly literature on play, an evolving field of study, has
been focused on play as a means of facilitating development. Scholars
have also attempted to define play and to document its developmental
patterns (Rubin, Fein, & Vandenberg, 1983). Relatively little attention
has been given to the antecedents of play, one of which may be parenting
styles. Although very little attention has been given to parental
socialization and its relationship to play, related areas have been
studied. Such research includes work which showed children high on
fantasy predisposition to have parents who valued such imaginative
activity (Freyberg, 1973), and parents with whom they had close contact
(Marshall, 1961). Singer (1973) and Sroufe and Waters (1977) have
contended that securely attached children are more likely to explore
their environment, and therefore to play. It has also been suggested
that parents who interact with their children in games such as

peek-a-boo and make-believe foster the children's imaginative play
(Johnson, 1978; Lieberman, 1977).

The first purpose of this research was to study the relationship of
playfulness and child socialization behaviors, as measured by the Child-
rearing Practices Report (Block, 1965). Childrearing variables included
encouragement of independence, control, worry about child, enjoyment of
child, emphasis on early training, negative affect, emphasis on achieve-
ment, expression of affect, openness to experience, protectiveness,
supervision, and rational guidance.

The second purpose was to investigate socialization outcomes of
Type A behavior, a syndrome which has been found to be related to
coronary heart disease (CHD). It is characterized by competitive
achievement-striving, hostility, and aggression (Friedman & Rosenman,
1974). The relative absence of these characteristics denotes a Type B
behavior pattern. Matthews and Angulo (1980) documented the existence
of Type A behavior among children and developed the Matthews Youth Test
for Health (MYTH) to assess it. Although children seldom suffer from
CHD, evidence indicates that Type A behaviors are stable and may persist
into adulthood when they become a risk factor. Little is known about
the etiology of Type A behavior. Thus, any information on factors that
contribute to Type A behaviors would have implications for preventive
efforts. Speculations that parental behaviors may contribute to the
development of the Type A behavior pattern led Glass (1977) and Matthews
and colleagues (1977, 1979, 1980, 1981) to study the effect of the
behaviors of Type A and B mothers and strangers on Type A and B

children. Results indicated that Type A and B children were treated differently by the adults. Type A children were given fewer positive evaluations on task performance than were B children and Type A children were also more often urged to try harder, particularly by Type B mothers. Thus, it appears that an interactional pattern exists in which certain socialization techniques are related to Type A behavior in that they both reflect and affect Type A behaviors.

Although Type A studies have dealt with specific socialization practices (praise and pushing to achieve) in an experimental setting no study has focused on long term child-rearing practices. Therefore, the effects of long term childrearing practices on Type A behaviors were studied.

The third purpose of this study was to investigate the relationship between playfulness and Type A behaviors. This represents an attempt to draw parallels between two fields of study which have remained separate but which, by definition, may have a logical relationship. Some components of the Type A construct are antithetical to those used in defining play. For example, Type A behaviors are characterized by a sense of time urgency and an orientation toward goals. In contrast, playful behavior is often accompanied by a sense of time loss and is focused on means rather than goals.

Hypotheses[1]

It was hypothesized that the following subscales on the CRPR would be significantly positively correlated with Playfulness scores: (a)

encouragement of independence, (b) enjoyment of child, (c) expression of affect, (d) openness to experience, and (e) rational guidance. The following subscales will be negatively correlated with playfulness: (a) control, (b) worry about child, (c) emphasis on early training, (d) negative affect, (e) emphasis on achievement, (f) protectiveness, and (g) supervision.

Hypotheses$_2$

Certain CRPR subscales should be significantly correlated with Type A behavior ratings in children. The following were expected to be positively correlated: (a) emphasis on achievement, (b) inconsistency, and (c) suppression of aggression. The subscale on rational guidance was expected to be negatively correlated with Type A behavior as determined by scores on the MYTH (Matthews & Angulo, 1980).

Hypotheses$_3$

Subjects' scores on the MYTH scale for the measurement of Type A behavior were expected to be negatively correlated with playfulness as rated by teachers.

Rationale

One area of play research has focused on justifying play by establishing its values for the developing person. Indeed, a number of studies have provided evidence that play can enhance social and emotional growth (Marshall & Hahn, 1967) as well as cognitive

development (Sylva, 1977). Play seems to be especially related to language and creativity (Smilansky, 1968). However, Rogers and Sawyers (in preparation) pointed out that when play is justified solely as a means to successful outcomes, the value of play as an end is obscured. To justify play as a desirable end state requires the acceptance of play as valuable in its own right.

Given that play is valuable as an end, the conditions that facilitate its occurrence need to be identified. As with any behavioral outcome, both genetic, environmental and interactional impacts are possible. Although there is a possibility that a genetic predisposition toward a positive emotional state (possibly manifested in temperament) may serve to promote play, the focus of this study was on an environmental influence. To be specific, the environmental variable of parental childrearing style was investigated in terms of its relationship to play.

Several scholars have hypothesized that parenting styles probably do affect children's play behaviors. Drawing on social learning theory, some claim that modeling play (Johnson, 1978; Liberman, 1977) and providing playful contacts (Singer, 1977) will promote play. However, empirical work has generally failed to support those claims.

Rubin et al (1983) speculated that "the relationship between childrearing and play is influenced indirectly by systems that facilitate or restrict children's behaviors in general" (p. 729). For example, security of attachment enables the toddler to explore more freely (Matas, Arend, & Sroufe, 1978). Rubin et al (1983) put forth the

hypothesis that parents influence play by providing children with "responsive, sensitive, and secure bases that reduce stress and anxiety in unfamiliar settings" (p. 729). The proposed study extended that hypothesis to include parental behaviors that provide the conditions necessary for play.

Conditions that support play include: (a) physical security; (b) low anxiety; (c) freedom to take risks by having low-valence consequences attached to behaviors; (d) freedom to choose activities; (e) low pressure to achieve (process vs. goal orientation); (f) intrinsic valuation; and (g) understimulation rather than overstimulation. Such conditions generally exist when responsive or authoritative parenting is used. On the other hand, the authoritarian parent is likely to demand performance and achievement and to allow little control to come from the child. The child is not free to set the goals and the literal consequences for overstepping the bounds are severe. Thus, children of authoritarian parents should be externally motivated, respond to rigidly imposed rules, dominated by the environment, and passive rather than active. They may also need to focus on the outcome of their behaviors rather than to enjoy the process. These descriptors are antithetical to play.

Research from creativity and related areas points to an association between warm, responsive, authoritative parenting and creative behaviors of children (Baumrind, 1967, 1971). Although creativity and play are related and their definitions may share common components, the two are not synonomous. Since no studies have assessed parenting styles and

playfulness this study was conducted to address the need for information about childrearing behaviors associated with children's playfulness.

Parenting Styles and Type A Behavior

Since the Type A syndrome includes specific behaviors that have been linked to parenting, there may be particular styles associated with the total behavioral pattern of Type A. For example, aggression and hostility have been linked to punitive discipline (Feshbach, 1974; Patterson, 1982). Also, competitive achievement-striving has been linked to pressured demands for achievement (Glass, 1977; Matthews, 1977). Therefore, in children of authoritarian parents, Type A behaviors should be stronger than in children of non-authoritarian parents.

CHAPTER II

Review of Literature

Play

The area of play includes a variety of topics. A broad overview of areas pertinent to the present research is necessary. The areas to be reviewed include classic and modern theories of play as well as definitions of play.

Classic Theories of Play. Although the behaviors of play have only recently become widely researched, theories of play have been debated for quite some time. The earliest theories, now considered classical, can be grouped into four categories. The various categories explain the motivation of play as stemming from surplus energy, relaxation and recreation, practice, or recapitulation (Rubin, Fein, & Vandenberg, 1983).

The notion that play is the result of surplus energy was espoused by Fredrich von Schiller, an eighteenth-century theorist. He defined play as "The aimless expenditure of exuberant energy" (1954). He believed that animals and people are motivated by primary needs such as hunger and thirst. Once those needs are taken care of the resulting "superfluous energy" is manifested in play. Schiller thought play was symbolic and could be divided into material and aesthetic forms. The term "surplus energy" was actually coined by Spencer (1873), a British philosopher of the nineteenth-century. Spencer also believed there were

different forms of play, but expanded Schiller's original two to include four. The four are superfluous activity of the sensory-motor apparatus, artistic-aesthetic play, games, and mimicry. Overall, there is no empirical evidence to support the surplus energy model.

The idea that play is a form of recreation and relaxation is credited to Moritz Lazarus (1873), a nineteenth century German philosopher. He believed that play served a restorative function after hard work. His writings dealt mostly with adult play behaviors and how such behaviors allowed a person to recuperate by letting go of reality-based constraints. G.T.W. Patrick (1916) expanded Lazarus' theory to include children. Yet, he thought play was executed in the form of "racially old" activities. For adults, these included hunting and fishing. He believed that children were motivated to play by "race habits". He reasoned that humans were originally dependent on animals and that this was reflected in children's preoccupation with books, blocks, and toys that symbolized animals. Patrick's theory, although stemming from a recreation-relaxation framework, was drawn from instinct and recapitulation theories, both of which were widely accepted during his lifetime. There is no evidence to support the recreation and relaxation theory of play.

Groos (1898, 1901) purported that play served an adaptive function for the survival of the human race. He believed that childhood existed so that children could practice the adult behaviors which are vital to survival. Thus, he viewed play as a form of practice for later life. Groos believed that, the more complex the organism, the longer the

period of play which was needed. He described play as developing from experimental play to socionomic play. He also believed that children were more intrigued by the process of play rather than by the product. There is no evidence to support Groos' theory and it is often criticized for relying too heavily on instincts as a major force in development.

The fourth classical theory of play is the recapitulation theory of G. S. Hall (1920) who was a supporter of Darwinian thought. He proposed five stages through which he believed play developed. The first stage is considered the animal stage since climbing and swinging predominate. Second, is the savage stage where hunting, tag, and hide-and-seek occur. Third, children pass through the nomad stage of play which is signified by their desire to keep pets. Fourth, Hall included an agricultural/ patriarchal stage in which children's play involves dolls and digging in the sand. Finally, children's play passes through the tribal stage in which they participate in groups and have team activities. Hall viewed play as an intrinsic behavior which was being externally expressed and thought that its main purpose was to serve as a "carthartic role" in development. Again, there is no evidence to support Hall's theory and many critics claim that he did not deal with all types of play.

In summary, classic theories of play have been derived from models which focused on surplus energy, relaxation and recreation, practice, and recapitulation. However, no evidence has been provided to support any of these theories, partly owing to difficulties in operationalizing definitions.

Twentieth Century Theories of Play. There are two common features in the twentieth-century theories of play: play is viewed as an outlet for expression by the child, and play is thought to result partially from wish fulfillment. The theories of Freud, Piaget, and Vygotsky will be described.

Although Sigmund Freud never presented a comprehensive theory of play, he did refer to such behavior when discussing other developmental issues. He believed that wish fulfillment was lived out through play and that traumatic events became mastered through play. He cited the compulsion of repetition to explain why and how children repeat some types of play behavior. According to Freud, children experience traumatic events in which they feel out of control. In order to conquer this feeling they repeat the situation over and over. Thus, he explains why children often "play" the same scene numerous times.

Freud believed that play allowed the child to behave in ways which would otherwise be unacceptable. Therefore, he viewed play as being the opposite of reality (Freud, 1959). He also thought that the period of play which manifested wish fulfillment was actually very short. Once the child acquires the cognitive capacity for reasonableness, then play no longer directly acts to fulfill wishes. Instead, play takes on the form of more socially appropriate behaviors such as jokes and artistic activities. Neo-Freudian theorists have attempted to expand Freud's theory while still focusing on his two major concepts: wish fulfillment (Menninger, 1942, Peller, 1952, 1954) and mastery (Erikson, 1940, 1941, 1951).

A cognitive theorist, Jean Piaget believed that play serves mainly an expressive function. In keeping with his cognitive theory, he viewed play as the predominance of assimilation over accommodation. In other words, play is behavior in which the child experiences the world according to what he already knows. This is in contrast to the process of accommodation which occurs when the child alters his existing knowledge to fit reality.

The stages of play that Piaget outlined (practice, symbolic, games-with-rules) parallel his stages of cognitive development. During the sensori-motor stage of development the child enjoys practice play. This type of play is illustrated by behaviors which are repeated many times. Such behaviors are not performed for any specific result other than that of making the child feel in control. Although practice play is the product of learned behavior, the play behavior is different in that it has been removed from its initial function. Piaget views the initial learning process as adaptation through accommodation of existing schemas. The subsequent repetition of schemas is assimilation, or play.

The basic premise (predominance of assimilation) in the stage of symbolic play is the same as in practice play, but the child is dealing with symbols instead of acts which have a functional value. In this stage, the child practices separating signifiers and the things they signify. Symbolic play has two distinct features: such play is detached from the actual situation in which it originated, and such play is seen by the child as representing the original situation. Symbolic

play requires the cognitive abilities of the pre-operational child and is a dominant form of play during that period (ages two to seven).

In the stage of play labeled "games-with-rules" the cognitive level of the children involved is reflected by the complexity of the rules. Children's ability to follow regulated or rule-governed expectations is evident in their social behavior. This level of thought is representative of the school-aged child and the concrete operational period of cognitive development.

Similar to the theories of Freud and Piaget, Vygotsky believed that play stemmed from the child's attempt to deal with real-life dilemmas. He viewed play as an invented world in which the child could exhibit the highest level of performance. Accordingly, play is viewed as an adaptive ability which comes from the individual. The play world is thus influenced by what the child knows about the real world. Vygotsky maintained that play continues because it offers the child a general way to control tension, as opposed to Freud's belief that play reoccurs because it reduces specific tensions. Therefore, Vygotsky proposed that play is preceded by aversive tensions related to unfulfilled desires and continued because of the pleasantness achieved from controlling those tensions (Vygotsky, 1967).

Except for Piaget, early twentieth century theorists focused on internal needs and their expression. These theories have proven difficult to study even though they have provided a basis for therapeutic intervention. In contrast, Piaget's stages have found support in numerous studies.

Recent Theories of Play. Theories of play have recently been structured according to social learning theory. Theorists in this category include Berlyne, Ellis, and Bateson.

Berlyne (1960, 1964, 1966, 1969) asserted that play can be explained through two types of exploration, specific and diverse. Specific exploration occurs when an organism gathers information about specific characteristics of the source of arousal in order to reduce the high level of arousal. Berlyne related this behavior to the orienting reflex which compels an organism to attend to novel stimuli. Diverse exploration occurs when the organism's level of arousal is below the desired threshold. The organism is then "bored" and consequently searches for stimuli. This type of exploration involves an attempt to produce stimulation rather than to decrease it. Berlyne viewed behaviors as attempts to alleviate unpleasant states, whether the state of arousal is too high or too low.

Ellis (1973) also believed there are optimal levels of arousal. However, he saw behavior as moving toward a positive state rather than away from a negative one. According to him, play is stimulus-seeking behavior.

Bateson (1955) viewed play in still another light. He described play as being the necessary precursor to normal functioning in the adult role. To Bateson, play helps children learn how to learn. He believed that cultural symbols are abstract and that play is necessary to teach children how to deal with such abstractness. For example, when playing various roles, children learn about the process of roles and how the

roles interact, not just about specific characteristics of a certain role. Communication is also a significant factor in this theory since Bateson proposed that it is a crucial element of society. He asserted that play contributes to the child's ability to understand and communicate with others.

In summary, recent theories of play have focused on the belief that playful behavior is a reaction to and facilitator of learning. The theories differ in regard to the motivation for play being either pleasant or aversive. Yet, the trend in recent theories has been to view play as a response to certain states of arousal.

Definitions of Play. Any attempt to study a construct is dependent upon a satisfactory definition of the concept and behaviors that comprise it. Play has been very difficult to define and has consequently frustrated many researchers. Scholars in the area of play attended a round table symposium in 1979 and spent most of their time trying to define play. No satisfactory definition was found.

After reviewing classic and recent literature on play, Rubin, Fein, and Vandenberg (1983) outlined three general ways to define play: as a disposition, as observable behavior, and in terms of a context. They concluded that "play is a behavioral disposition that occurs in describable and reproduceable behaviors" (p. 698). They reviewed six dispositional factors thought to be relevant in distinguishing play from non-play behaviors. The first of these is the idea that the behavior must be intrinsically motivated. The person must be acting from an

inner control and not because of external demands. Second, in play, attention is focused on the means rather than the ends. Thus, play revolves around the variety of ways one can behave as opposed to concentrating on a specific way to reach a goal (Bruner, 1972). Third, play behavior is guided by the organism rather than by the stimulus. In other words, the person focuses on what can be done with the object instead of on the properties of the object. This characteristic helps define play as separate from exploration, since the latter involves seeking information about the object. Fourth, play may be in the form of pretense. Thus, the actions or objects are dealt with "as if" they were the real thing (Aldis, 1975). This opens up possibilities for discovering new meanings and uses of situations and objects because the usual real-life consequences of failure are suspended. Fifth, play is characterized by freedom from externally imposed rules. This feature distinguishes play from those games which have regulations. There is some concern over this characteristic being included in the definition of play since some theorists assert that games are merely more mature forms of play (Piaget, 1962) and that sociodramatic play adheres to various rules which govern the characters' interaction (Garvey, 1977). Vandenberg (1981) proposed that it might be the degree of rule imposition which is the important factor. Last, play as a disposition is defined as requiring the person to be actively involved. Such a feature is meant to distinguish play from various states of passivity, boredom, and daydreaming. This characteristic makes it difficult to assess when the person is playing with ideas but possibly appearing

inactive (Rubin et al, 1983). Overall, these six characteristics help distinguish play as a disposition from other behaviors.

When dealing with play as an observable behavior it is beneficial to refer to Piaget (1962). He classified play according to three types: practice play, symbolic play, and games-with-rules. These categories parallel his stages of cognitive development with practice play appearing in the sensori-motor stage, symbolic play emerging during the pre-operational stage, and games-with-rules beginning during the concrete operational period. Piaget referred to practice play as being that activity which happens once a sensorimotor skill has been acquired. This type of play simply allows the infant to practice his new behavior. Symbolic play involves the manipulation of symbols in which the symbols represent objects or actions which have a functional value. Such play is expressed when the child separates the signifiers from the acts or objects they signify. Games involve that type of play which allows the child to practice the use of various rules in a competitive setting. Piaget defines all types of play as assimilation and believes play to be serving mainly an expressive function.

Other theorists have also defined play according to observable behaviors. Garvey (1977) distinguished play according to whether it involved language, motion, interaction, or social materials. Rubin, Maioni, and Hornung (1976) classified play in terms of its cognitive aspects and forms of social behavior.

Play, when defined by its context, is supported with the belief that the environment can cause play behavior to occur. This type of

definition is frequently seen in research studies which employ a certain context (playroom, playground, etc.) to elicit play behaviors. Usually these areas contain certain types of materials and are governed by the agreement that children can "play" here. Adult behavior is limited in its intrusiveness and the atmosphere is one in which the children feel safe and comfortable. Scheduling is also considered significant since bodily stress such as hunger or fatigue would limit playful behaviors.

The three types of definitions mentioned above are the most widely used categories to describe play. However, recent attempts to define play have added new dimensions to its' realm. Schwartzman (1979) defined play as a type of communication with cultural influences. Referring to this definition, Sutton-Smith (1979) contended that it is unlikely that "any great regularities" will ever be found in play. He further emphasized the diversity of play definitions by citing the participants at a conference on play. Sutton-Smith revealed six definitional categories that he believed described the researchers ideas. These included defining play as variable transformations, quick and light movement accompanied at times by laughter, creation and resolution of uncertainty, attitudes toward the possible, information consolidation, and flow.

Perhaps the newest and most novel of play definitions is the idea of flow offered by Csikszentmihayli (1979). He proposed that, with each activity, a person perceives certain skills and challenges indigenous of that situation. Flow occurs when the challenges and skills are well matched. Otherwise, the person is either anxious (not enough skill) or

bored (not enough challenge). If the challenges are set by the player, the activity is voluntary and thus playful. If the goal is set by an outside source (teacher, boss), then it may be flow, but not play. Play then is "...the experience of flow in a setting or frame of action in which the activity is perceived to be voluntary or autotelic; that is, the goal is in the activity itself, and unrelated to 'real-life' consequences" (Sutton-Smith, 1979, p. 268).

In general, there is no universal definition of play. It appears that each research situation dictates its own definition, further complicating the task of finding a global definition. The present study utilized the six criteria given by Rubin, Fein, and Vandenberg (1983) in discriminating play as a disposition. These included intrinsic motivation, process orientation, organism domination, active involvement, freedom from externally imposed rules, and a non-literal element. Further, the present study was aimed at delineating one possible source of influence on play, i.e. parental socialization styles.

Parenting Styles

The field of parenting spans an extensive area and includes a wide range of topics. The present research focused on examining parenting styles as they influence children's behavior, more specifically childrens' playfulness and Type A behaviors. For clarification of the present research, certain areas of the parenting literature will be reviewed. These include parent-child relationships as well as authoritarian, permissive, and authoritative parenting styles.

Parent-Child Relationships. The realm of parenting has been viewed from many different perspectives with one of the most widely researched being that of parenting styles. One of the first to study how parenting related to the development of children's personality was Baldwin (1948, 1949, 1955). He found that children's personalities could be predicted by the parental factors of democratic/autocratic and permissive/ controlling. He described democratic parents as those who tried to justify their positions and actions to their children as opposed to autocratic parents who simply gave the expectations for the child's behavior without any type of explanation.

Schaefer (1959) was perhaps the first researcher to study maternal behavior. He created a circumplex model with the orthogonal variables of warmth/hostility and control/autonomy. He contended that a mother's degree of acceptance or non-acceptance of her child, as well as the amount of control or autonomy she offered, could be plotted using these dimensions.

Becker (1964) used similar variables of warmth/hostility and restrictiveness/permissiveness. He associated the use of praise and reason with warmth variables and the use of physical punishment with hostility. Permissiveness, he asserted, is not the same as warmth. Becker cited the products of restrictive discipline as children who were well controlled and socially appropriate in their behavior, yet more fearful, dependent, and submissive. He suggested these children were not as intellectually inclined as other children and that they may have inhibited hostility. Children reared in a permissive environment were

found by Becker to be more outgoing, sociable, assertive, and to have greater intellectual strivings. These children were also thought to be less persistent and to have greater levels of aggressiveness.

Becker also studied calm detachment versus anxious emotional involvement. In these early studies he categorized discipline in two ways: power-assertive and love-oriented. He defined power-assertive discipline as the use of physical punishment, shouting, yelling, threats and commands. Becker claimed that the use of these techniques by parents would produce children who were aggressive, resistant to authority, more likely to react in external ways to transgressions, and more likely to engage in power-assertive behaviors with other children. In contrast, love-oriented parenting involved the use of praise, reasoning, signs of disapproval, and the conditional giving of affection. According to Becker's model, the parents who used warmth-oriented techniques would likely have children who would internalize their reactions to transgressions as well as accept self-responsibility.

Along similar lines Sears, Maccoby, and Levin (1957) studied responsible parenting and Baumrind (1967) examined the amount of parental control in various parenting styles. In 1971, Burger and Armentrout researched two dimensions previously unexplored: psychological control versus psychological autonomy-giving and firm control versus lax control. More recently, parenting styles have been studied using the characteristics of type of involvement. For example, involved versus autonomous parents were studied by Martin (1981).

Pulkkinen (1982) categorized parents on a child-centered/parent-centered dimension.

The work of Baumrind is perhaps the most widely cited in the field of parenting literature. Although her research continues to offer new insights into parenting her main contribution has been the categorization of parenting styles. She originally grouped them into the three distinct categories of authoritarian, permissive, and authoritative (Baumrind, 1967). These categories and research related to them will be described below.

Authoritarian Parenting. The authoritarian parent, according to Baumrind (1967), is one who is always in control. Rules are made solely by the parent without any discussion with the child. If the child does not follow the rules, the consequences are likely to be physical punishment, often severe. The independence of the child is not encouraged. In general, this type of parenting is one with a high level of demands from the parent and a low level of responsiveness to the child. More recently, Baumrind (1971) has referred to authoritarian parenting as that pattern which exposes the child to direct attempts to control him. Not only overt behaviors, but also attitudes, beliefs, and values are targeted for control.

In early studies Baumrind (1967) found that children reared within the authoritarian parenting context appeared to be more unhappy and socially withdrawn than their nursery school peers. They showed little independence and scored in the middle range on social responsibility.

Baumrind noted that the findings were stronger for boys than for girls, and that boys also showed greater rates of anger and defiance. Similarly, Baldwin (1955) found that children of authoritarian parents were obedient and tended not to offer resistance. In addition, these children were void of affection, spontaneity, curiosity, and originality.

The effect of authoritarian parenting on various aspects of childrens' development has been widely researched. In relation to this Baumrind and Black (1967) studied three clusters of behavior: social assertiveness, social responsibility, and cognitive competence. They found that parents who were high in demands were likely to have girls who were high in social assertiveness, boys who were more socially responsible, and both boys and girls who were higher in cognitive competence.

In the area of moral judgment, Hoffman (1970) reviewed the research and concluded that only half of the studies produced any trends in relationships. These studies found that the power-assertive techniques used by authoritarian parents correlated with low scores of conscience. It was also found that these children tended to have an external orientation to moral judgements.

Coopersmith (1967) researched the effects of the authoritarian style on children's self-concept. He found that high levels of authoritarianism were related to low self-concepts in boys. He concluded that the high amount of control by the parents implied that the child can not be trusted, therefore instilling in the child a sense of

incompetence. Loeb, Horst, and Horton (1980) found similar results as they studied the direct teaching style of authoritarian parenting. They defined this style as one in which the parents physically take over physically or give verbal orders. This style was opposite that of offering suggestions which allows the child some part in the decision-making. In their study of fourth- and fifth-grade children they found that children with directive parents had lower self-esteems than did children of non- directive parents. Similar to Coopersmith's explanation, Loeb et al. contended that directive parents interacted with their children in such a way as to communicate to them that they were not competent and could not perform an activity on their own.

Another aspect of research on authoritarian parenting focuses on aggression. Results indicate that parents who frequently use power-assertive techniques and are punitive in their actions have children who tend to display higher levels of aggression (Feshbach, 1974; Hoffman, 1960; Patterson, 1982). It has also been found that children who are punished for aggressive behavior tend to have higher levels of such behavior. Attempts have been made to determine the causal relationship between authoritarian parenting and aggression. Studies by Johannesson (1974) and by Lefkowitz, Eron, Walder, and Huesmann (1977) have shown no direct correlation between high levels of punishment in a child's formative years and later displays of aggression. Their studies also indicated that if punishment affects aggression, the effect is likely to be brief. Not surprisingly, they concluded that any existing

relationship between these two variables most likely reflects the ways in which parents respond to their child's aggressive behavior.

Patterson (1979, 1982) has studied parent-child interactions of normal children versus "out of control" children. Such children were identified by either their families, school authorities or the court system. His results indicated that family members, especially siblings, of aggressive children used more coercive behavior than did families of normal children. Patterson also found that the aggressive behavior was not an isolated incident, rather it was only a part of a total interaction within the family. It appeared that coercion occurred mutually and worked to prolong the aggressive behaviors. Similarly, it was found that coercive actions by "out of control" children were more likely to be answered with a type of counter-coercion (punishment). The parents of normal children were more likely to disregard the aggressive behavior but once they did respond it was done so in an effective way. Patterson claimed that when aggressive children are punished, the probability increases that they will continue to be aggressive. He also cited evidence which suggested that aggressive children are less likely to respond to social reinforcement than are normal children.

Overall, authoritarian parenting has been associated with children who are socially less competent than their peers, withdrawn, and lacking in initiative. These children also lack spontaniety and show a lesser degree of conscience. Their moral judgement orientation tends to be external. In addition, these children have lower self-concepts and the sense of an external locus of control. Thus, one could speculate that

authoritarian parenting would be associated with low levels of playfulness since many of the outcomes of this parenting style (external locus of control, lack of initiative, and lack of spontaneity) are the antithesis of descriptors of a playful disposition.

Permissive Parenting. In describing a permissive style of parenting Baumrind (1966) contended that such parents give little or no guidance to their children. The parents accept the child's impulses, desires, and actions without judgement. When decisions must be made, the parents discuss the issue with the child. Few demands for responsibility are made of the child and the child is allowed to regulate his own behavior. This type of parent does not value externally defined standards and does not induce the child to follow such standards. Overt power or punishment is not used by the parents although reason and manipulation are. These parents view their role as one of a resource for the child. They do not see themselves as responsible for the molding of their child's behavior. They believe that children should remain on their own to make decisions.

Although this point of view has been upheld by various child development experts perhaps its' most noted advocate has been A. S. Neill. In his writings, Neill claimed that the alternative to adult control of children should be self-regulation, free expression, and unrestrained behaviors (Neill, 1964). He believed that children should only act on behaviors which they had come to see as valid. Neill contended that society imposed regulations on the child which were

unnecessary. Such regulations, he claimed, inhibited the natural growth and personality of children.

Unfortunately, research into the possible effects of permissive child-rearing is scarce. Yarrow, Campbell, and Burton (1968) found that parents who were permissive toward aggressive behavior increased the likelihood that such behavior would continue. Baumrind (1967, 1971) found children of permissive parents to be immature in the sense of lacking impulse control and self-reliance. Results also showed that nursery school children of permissive parents lacked independence and social responsibility. These same children were followed up at ages eight or nine years and found to be low in both cognitive and social skills. Overall, permissive parenting has been found to produce children who are impulsive, aggressive, lacking in independence and in the ability to take responsibility. These traits are not mentioned as part of Rubin, Fein, and Vandenberg's (1983) definitional criteria of play. Thus, it would be difficult to predict the nature of the influence of permissive parenting on play.

Authoritative Parenting. The authoritative parent attempts to guide the child through the use of a "rational, issue-oriented manner" (Baumrind, 1966, p. 891). This type of parent explains to the child the reason for decisions and invites the child to discuss the situation. It is important to this parent that the child be autonomously self-willed. Also seen as important is the child's ability to conform to situations which dictate such action. The authoritative parent governs with

firmness when there is a disagreement, yet is able to allow the child to
be free of restrictions. Such parents view the children as individuals
with ideas and values, and yet, as adults, place value in their own
viewpoints. These parents validate the child's capabilities and create
certain standards for behavior. They would use reason, power, and
shaping to deal with the child. They would also tend to use inductive
methods as opposed to coercive measures to control their children.
These parents will not base decisions on each child's personal
inclinations. Authoritative parents do not view themselves as being
without mistakes or as always being right. Consequently, this type of
parent values open communication with the child. Baumrind (1967) also
includes consistent discipline and high maturity demands as parts of
authoritative parenting.

Studies of children raised in an authoritative environment show
such children to be more competent and independent than their peers.
Preschool boys have been found to be more socially responsible and both
sexes of eight- and nine-year-olds have shown high social and
intellectual self-assertion (Baumrind, 1967, 1971). It has also been
asserted that firm control by the parents will not necessarily lead to
less competent children. Coopersmith (1967) found fifth- and
sixth-grade boys to be higher in self-esteem when coming from
authoritative homes. He also reported that the children found the
parents' decisions to be fair and reasonable. It has also been found
that children have higher self-esteems when parents are helpful in a
suggestive way rather than a direct one (Loeb, et al., 1980). Hoffman

(1970) found that children of authoritative parents behaved more
maturely and had an internal orientation in relation to moral judgments.
Authoritative parents are often characterized by low restrictiveness, a
dimension which has also been studied (Apolpnio, 1975; Qadri & Kaleem,
1971). These researchers report that parents with a low amount of
restrictiveness have children with a higher self-esteem. They suggest
this might be due to the children having some amount of control and
choice concerning their own behavior. The authoritative parent, by
definition, encourages the child to be self willed and Rubin, et al.
(1983) include intrinsic motivation as a criterion for play. Thus,
authoritative parenting should be associated with intrinsically
motivated behavior. Whether authoritative parenting is associated with
this or other aspects of play has not been studied. One purpose of this
study was to investigate associations between parenting styles and
playfulness in children.

Parental Influences on Children's Play

Parenting styles vary and affect children in different ways. This
research is concerned with the relationship between parenting styles and
children's playfulness. Much of the research in the area of parental
influences on children's play focuses on the anthropological nature of
games and is generally concerned with the cultural differences in
children's games rather than the differences of their play. The only
studies that have focused directly on parental influences as they effect

play behaviors have studied infants or toddlers and concentrated on attachment as a precursor to exploratory play.

Sroufe and Waters (1977) contended that the security of the child's attachment to the parent affects the child's exploratory behavior, thus influencing play. This particular area has received empirical support from Arend, Gove, and Sroufe, (1979) and from Lieberman (1977). Hutt (1970) has suggested that exploratory behavior may precede play and thus, any influence on exploration could be assumed to affect play. In fact, Singer (1973) asserted that any behavior which restricts or fosters children's actions may be influential in their play. In response to this, it has been claimed that children reared in an authoritative home are more likely than those reared in a nonauthoritative home to explore the environment when in the presence of a parent (Bakeman & Brown, 1980; Blehar, Lieberman, & Ainsworth, 1977).

Other research which contributes to our understanding in this area is that of areas closely akin to play such as creativity and its various components. For example, in a study on fantasy, Freyberg (1973) found that kindergarten children with high fantasy predispositions were more likely than children with low fantasy predispositions to have parents who valued imaginative activities. Marshall (1961) and Singer (1973) noted that elementary school age children with a predisposition to fantasy were more likely to have close parental contact than those children who were less predisposed to fantasy. Additionally, it has been postulated that parents who play with their children using such games as peek-a-boo and make-believe help to develop their children's

ability to play (Johnson, 1978; Lieberman, 1977). However, little empirical data are available concerning the effects of parents on their children's play behavior. Although the area of attachment has received some attention, the focus has been on exploration rather than on play as a disposition.

Although numerous studies of child-rearing practices have found several dimensions of parental behaviors such as warmth/hostility or restrictiveness/permissiveness to be related to certain outcomes in child behavior, they have not assessed the effect on playfulness. Some research has focused on fantasy, imaginativeness, and creativity. Although these traits may be related to play, they constitute only a portion of the domain of play. In addition to imaginativeness (non-literal behavior) play is said to be characterized as intrinsically motivated, process oriented, organism dominated, free of externally imposed rules, and as demanding active involvement. The proposed study would represent an attempt to contribute to our understanding of parental influence on play.

Type A Behavior Pattern

Although parents are thought to be influential in their children's play, another factor is the child's own personality. A potentially significant aspect of the child's personality is the degree of Type A behavior. Because Type A characteristics are thought to be somewhat opposite of those needed for a high degree of playfulness, it is important to review the literature on Type A behavior.

In 1974 Friedman and Rosenman described a behavior pattern which they found among their cardiac patients. The pattern was labeled Type A and defined as:

> "any action-emotion complex that can be observed in any person who is aggressively involved in a chronic, incessant struggle to achieve more and more in less and less time, and if required to do so, against the opposing efforts of other things or other persons"
>
> (p. 67)

Subsequent research with adults revealed that the major components of Type A behavior are extreme levels of aggression, easily aroused hostility, a sense of time urgency, and competitive achievement striving (Rosenman, 1978). The relative absence of these characteristics denotes a Type B behavior pattern.

Matthews (1982) asserted that Type A behavior is characterized by high levels of aggression in work and play, a need for an ever-quickening pace, and an annoyance with others who function at a slower rate. She also cited evidence which suggests Type A people focus on two or more activities at the same time and evaluate their worthiness in terms of the number of activities in which they are involved (Matthews, 1982). Other researchers have claimed that Type A people have a need to work close to their maximal productivity level even when there is no time constraint (Carver, Coleman & Glass, 1976).

It has been asserted (Matthews, 1982) that the Type A pattern is not a trait but a set of overt behaviors which certain individuals demonstrate in specific environments. Further, Type A is not a discrete typology but rather a range of behaviors extending from extreme Type A to extreme Type B.

Early research, focused on the correlation between coronary heart disease (CHD) and Type A behavior, showed twice the prevalence rate of Type A as Type B behavior in CHD patients (Friedman & Rosenman, 1974; Jenkins, Rosenman & Zyzanski, 1974). This led medical professionals to designate Type A behavior as a risk factor in CHD. Since that time research on Type A behavior in adults has steadily increased with a large portion of the studies focusing on specific elements of Type A (e.g., need to control, efforts to excel).

Although CHD is primarily an adult syndrome it is believed to originate at a much younger age. Consequently, attention has been given to young children and to behaviors which could possibly be classified as Type A. Matthews (1979) found that, when confronted with events they perceived as highly salient and uncontrollable, Type A boys and men responded with a greater effort to control than did Type B boys and men. Boys classified as Type A or B paralleled adult men of the same classification when each was confronted with loss of control. The findings also showed that boys and men of the same behavior type reacted similarly to the salience of a task.

Goal oriented behaviors are evident among Type A's. Matthews and Volkin (1981) found that, in fourth-grade children, Type A's solved more math problems than did Type B's within a five minute limit. Also illustrated was the tendency for sixth-grade Type A boys to hold a weight 50% longer than did Type B boys and to underreport their fatigue. These findings illustrate the behaviors of Type A's in which they put

forth more effort to excel than do Type B's when the task placed equal demands on both groups and the performance criterion was unspecified.

Matthews and Angulo (1980) studied Type A behavior in children from kindergarten, second, fourth, and sixth grade. They found that these children were aggressive toward a Bobo doll earlier in the experiment than were Type B children. Type A's also demonstrated a larger margin of victory than did Type B's when racing a female experimenter. The researchers concluded that Type A children were consistently more impatient than were Type B children.

Corrigan and Moskowitz (1983) found that Type A behavior in preschool children was related to measures of aggression and impatience, but not to measures of intelligence. Type A children also had a shorter reaction time to a visual discrimination task than did Type B children. This appeared true regardless of the time constraint or incentive offered.

The etiology of Type A behavior in children is of interest to various practitioners. Two studies have focused on parent-child inter-actions and their relationships to Type A behavior. Glass (1977) found that Type A boys were treated differently than Type B boys. Both Type A and B mothers were found to give fewer positive evaluations on task performance to Type A boys than to Type B boys. Type A boys were urged to try harder, especially by Type B mothers. The researchers concluded that because of the diverse effects of children's behavior on care-giver's actions it is impossible to attribute causality to parental behaviors. Matthews (1977) attempted to clarify this by conducting a

study which employed female strangers to interact with Type A and B
boys. Results indicated that Type A boys probably do not cause their
mothers to react to them with fewer positive evaluations since the
female strangers did not react to the boys in that manner. However, it
was found that Type A boys did elicit the urging behavior from Type B
mothers and strangers, thus giving them incentive to continue striving.
She hypothesized that the results of this type of adult-child
interaction is what accompanies the child into adulthood and perpetuates
the strive for achievement.

Overall, researchers have found Type A behavior to include a
variety of characteristics in an extreme form. The most widely cited
behaviors are the need to excel, efforts to control, hostility,
aggression, and impatience. These characteristics, found in Type A
adults, coincide with the behaviors observed in Type A children.

From the definitions found in the literature for Type A behavior
and playfulness it would appear that a high level of Type A
characteristics would coincide with a low level of playfulness.
However, such studies do not appear in the literature. The present
study was conducted to examine parenting styles that might be associated
with Type A behavior and to determine whether Type A behavior has any
relationship to non-playful traits in young children.

CHAPTER III

Methodology

Data Collection

Participants. Participants for the final study were recruited from
an elementary school in Southwestern Virginia. Initially, the superin-
tendent of the school district was contacted and asked for permission to
seek volunteer participants for the study (Appendix A). The principal
of an elementary school containing grades kindergarten through four was
then contacted and asked for permission to seek participation from the
teachers in those grades. A time was arranged to meet with the teachers
and a description of the project was sent to them in a letter (Appendix
B). A meeting was held with the teachers to provide further details on
the study. All teachers in the grade levels being studied agreed to
participate.

All children in the selected grades (kindergarten, two, and four)
received a letter and a consent form which they were asked to deliver to
their parents (Appendix C). Approximately two weeks later follow-up
letters were sent to parents who had not responded (Appendix D).
Parents of 231 children received invitations to participate; parents of
83 children completed the study.

The representation of boys and girls from each grade varied.
Kindergartners in the study included 14 boys and 15 girls; second-

graders included 16 boys and 13 girls. Fourth-graders in the study included 14 boys and 11 girls.

Those parents who agreed to participate were sent packets which included a cover letter (Appendix E), background information sheet (Appendix F), instructions for completing a child-rearing practices Q-Sort (Appendix G), Q-Sort cards (Appendix H), and the accompanying envelopes. The parents were requested to return the completed packet to their child's teacher within one week. At the end of that period telephone calls were made to parents who had not returned their packets and they were urged to do so.

The children whose parents returned their packets were rated by their respective teachers on Type A behaviors and playfulness. Type A behaviors were assessed by the Matthews Youth Test for Health (MYTH) (Appendix I) and playfulness was assessed by the Child Behaviors Inventory (CBI) (Appendix J). Both of these instruments will be described later. The teachers were given the instruments at separate times, with the MYTH being given to them in December and the CBI in January. All MYTH and CBI forms were completed by the teachers and returned within one week.

Background Information on Parents. The parents who participated in this study represented 83 children (44 males and 39 females). Parental background information was received from 76 mothers and 42 fathers.[1] A

---

[1]Ten other parents participated in the study but did not complete the background information sheet.

summary of parental characteristics (Table 1) shows them to be
predominately white, Protestant, married and with mothers who work half
time and fathers who work full time.

Background Information on Teachers. Nine teachers participated in
the study with three teachers representing each grade. All of the
teachers were female and white. Their years of teaching experience
ranged from 7 to 20 years (M=14; SD=4). The number of years teaching
their respective grades ranged from a half of a year to 20 years, with
the mean being 10 years (SD=6). More specifically, the kindergarten
teachers had a mean of 14 years (SD=5) of teaching experience with a
mean of 12 years (SD=7) of teaching kindergarten. The second-grade
teachers had a mean of 16 years (SD=1) of total teaching experience and
a mean of 9 years (SD=3) for teaching second grade. The fourth-grade
teachers had a mean of 14 years (SD=4) teaching experience and a mean of
8 years (SD=4) teaching in that grade. Only one teacher had less than
four years in her respective grade and that teacher had seven years of
teaching experience. Thus, all of the teachers who rated children had
several years experience from which to draw in rating behaviors of
individual children.

Instruments

The Child-rearing Practices Report. The Child-rearing Practices
Report (CRPR) is a self-descriptive instrument which identifies

Table 1

Parental Background Information

Characteristic	Percent[a]
Marital Status	
Married	72
Single	4
Divorced and single	7
Divorced and remarried	12
Widowed and single	1
Widowed and remarried	2
Separated	3
Race	
Caucasian	92
Black	7
Oriental	1
Other	1
Religion	
Protestant	65
Catholics	7
Other	15
No preference	12

[a] All percentages have been rounded off and will therefore add up to more than 100%

child-rearing attitudes and values (Block, 1965). This measure is comprised of 91 socially relevant items which are administered using a Q-sort technique. The format includes a forced-choice, seven-step distribution. The CRPR has both a first- and third-person form which can be used respectively by parents and children.

Initially, the item pool was constructed by Block (1965) from behavioral dimensions that were found to differentiate types of mothers with different child-rearing techniques. A behavioral checklist, as well as Q-sort items reflecting interpersonal or interactional behaviors, was used to enhance the item pool. Additionally, a review of the literature and input from various European professionals helped to ensure the thoroughness of the item pool. Items are phrased in the active voice with an emphasis on behavioral orientation. The CRPR has been administered to people from a variety of age groups, educational levels, socio-economic groups, and national origins.

Two test-retest studies provide evidence for reliability of the CRPR (Block, 1965). The first study used the first-person form and was carried out with 90 young people in a child psychology course. They were given the CRPR at the beginning of the course and again at it's completion, eight months later. Items had a mean correlation of .707 (range = .38 to .85; sigma = .10) from the two test periods. The second study utilized 66 Peace Corps volunteers. These participants were administered the third-person form of the CRPR at the beginning of their duty and three years later, at their duty's completion. The third-person form required them to assess their perceptions of their parent's

child-rearing orientations. The average cross-time correlations for females were .69 (description of mother) and .66 (description of father). For the males the resulting correlations were .61 (description of mother) and .64 (description of father). Results from these two studies suggest high reliability for both the first- and third-person forms of the CRPR.

Construct validity of the CRPR was assessed using three structured situations, each tapping a different dimension: achievement emphasis, modes and degree of control, and independence training (Block, 1965). Maternal behaviors were observed in order to clarify the correlation between self-report and actual behavior. From this, eight types of mothers were identified. Four years later, these same mothers were asked to complete the CRPR. Seventy-six of the original 112 participated in this phase of the study. Data indicate that there is psychological coherence between the observational and self-descriptive data, as well as behavioral relevance of the CRPR.

Child Behaviors Inventory. The Child Behavior Inventory (CBI) a 31-item questionnaire to assess playfulness in children, was developed specifically for use in this study. The instrument was designed to be used by teachers to rate children in their respective classrooms. The initial item pool for the instrument was created after a review of the literature revealed a dispositional definition of playfulness (Rubin et al, 1983). This definition included the following six criteria: (a) source of motivation (intrinsic vs. extrinsic), (b) goal orientation

(process/goal), (c) object/environment orientation (play vs. explora-
tion), (d) use of pretense, (e) freedom from external rules and (f)
degree of involvement (active vs. passive). All six criteria were
represented by items in the initial item pool. Sixteen scholars in the
area of play were asked to generate items which they felt would
represent the six criteria and therefore assess playfulness. The letter
and form they received can be seen in Appendix K. A total of five
scholars returned the completed form. The responses of these scholars
were compiled to form a second version of the CBI. This scale was then
sent to 16 other scholars in the area of play who were asked to rate
each item for it's ability to assess the criteria it was intended to
measure (Appendix L). The items were assessed on a continuum from 1
(Not At All Well) to 5 (Very Well). Eight scholars participated in
completing the forms. The content validity ratings obtained from these
scholars were tabulated and items which received a mean rating of two or
below were discarded. Also, several items were discarded because of
comments made by the evaluating scholars. The mean rating for each item
can be seen in Appendix M. The revised scale included 29 items which
assessed the six criteria of playfulness. Three items were added which
were believed to be indicators of overall construct validity. All items
were then randomly ordered and printed. The items which assess specific
definitional criteria are as follows: (a) source of motivation: 1, 5,
8, 10, 12, 16; (b) goal orientation: 3, 4, 11, 13, 14; (c) object/
environment orientation: 2, 6, 9, 23; (d) use of pretense: 17, 21, 26,
28, 29; (e) freedom from external rules: 7, 18, 24, 27; (f) degree of

involvement: 15, 19, 20, 30 (See Table 2). The final scale as used by the teachers had a total of 31 items (Appendix J).

The scale is scored by totaling scale values for all items, with negatively stated items (2, 3, 5, 7, 8, 10, and 18) being reverse coded. Only the 29 items designed to measure the six definitional criteria are included in the total CBI score. CBI scores could range from a possible 29 (low level of playfulness) to 145 (high level of playfulness).

Matthews Youth Test for Health. The Matthews Youth Test for Health (MYTH-Form O) is a 17-statement questionnaire designed to assess Type A behavior in children (Matthews & Angulo, 1980). This instrument is based on observations and is to be completed by the child's teacher. Three criteria were used to select the items included in the measure. The items needed to (a) reflect characteristics of Type A behavior (competitive achievement-striving, aggression, and impatience-hostility); (b) describe behavior readily observable in the classroom; and (c) be agreed upon by two independent raters as reflective of Type A behavior. These criteria produced 19 items which were used in the initial assessment of the measure.

In the development of the MYTH instrument, teachers of 485 elementary school children (kindergarten, second-, fourth-, and sixth-grade) were asked to evaluate how characteristic each item was of each child (Matthews & Angulo, 1980). Two ratings were taken two weeks apart. The ratings were confined to a five-point scale which ranged from 1 (extremely uncharacteristic) to 5 (extremely characteristic).

Table 2

Child Behavior Inventory Items

Subscale I   Source of Motivation: Intrinsic vs. Extrinsic

Item	Direction	Number on Scale
Always has ideas of things to do	+	1
Needs reinforcement to continue activites	-	5
Seeks approval frequently	-	8
Looks to others to tell him/her what to do	-	10
Works well on his/her own	+	12
Starts activities for his/her own enjoyment	+	16

Subscale II   Goal Orientation: Process vs. Product

Item	Direction	Number on Scale
Once goal is achieved, stops playing with the object/material	-	3
Explores different ways to accomplish the same end	+	4
Enjoys learning new skills	+	11
Enjoys doing things even when there's no purpose	+	13
Has fun doing things without worrying how well they turn out	+	14

Subscale III   Object/Environment Orientation: Play vs. Exploration

Item	Direction	Number on Scale
Uses props in typical rather than unusual ways	-	2
Invents new games	+	6
Uses things his/her own way	+	9
Rearranges situations to come up with novel ones	+	23

Subscale IV   Relation to Instrumental Behaviors: Pretense vs. Literal

Item	Direction	Number on Scale
Pretends a lot	+	17
Invents variations on stories such as different endings or new characters	+	21
Is imaginative	+	26
Finds unusual things to do with common objects	+	28
Identifies with many characters instead of playing the same role over again	+	29

Subscale V   External Rule Orientation: Relatively Free vs. Tightly Bound

Item	Direction	Number on Scale
Asks many questions about what to do	-	7
Uses toys/objects only in the way they were designed to be used	-	18
Once the child has been shown how to do something, he/she creates his/her own way	+	24
Uses toys/objects in unusual ways	+	27

Subscale VI   Degree of Involvement: Active vs. Passive

Item	Direction	Number on Scale
Gets so involved in activity that it is hard to get him/her to quit	+	15
Plays eagerly	+	19
Plays intently	+	20
Gets so involved in an activity that he/she forgets what is going on in the room	+	30

Additional Items Measuring Construct Validity

Item	Direction	Number on Scale
Displays exuberance much of the time	+	22
Has a sense of humor	+	25
Is a playful child	+	31

Two of the items were found to be not related to the total MYTH score and therefore were dropped. This left the 17 items currently constituting the MYTH. An overall MYTH score results from summing all of the items, with 5, 11, and 13 being reversed coded. MYTH scores can range from 17 (extreme Type B) to 85 (extreme Type A).

Certain psychometric properties of the MYTH were assessed by the developers of the instrument. They found that gender differences were consistent, with more boys than girls being rated as Type A. This finding coincides with adult studies with the same results. No consistent age differences were found. A factor structure of the items revealed two subscales: competitiveness (items 1, 2, 7, 9, 12, 14, 15, and 16) and impatience-aggression (items 3, 4, 5, 6, 8, 10, 11, 13, and 17). The correlation of the subscales was found to be $r(483) = .41$, $p < .001$. A measure of reliability over a three month period resulted in high correlations when separate analyses were done for children in each grade (r's = .73 to .86, p's $<$ .001). Cronbach's alpha was used to assess internal consistency. Results suggest that the MYTH is internally consistent. Recent research has found the MYTH to have construct validity when used with preschool-age children (Corrigan & Moskowitz, 1983) and to be stable across one year of time (Matthews & Avis, 1983).

CHAPTER IV

Results

The purpose of this study was to assess the relationships between childrearing practices reported by parents and their children's levels of playfulness and of Type A behaviors reported by teachers. The relationship between children's playfulness and Type A behaviors was also investigated. To study these relationships, parents of children in kindergarten, second, and fourth grades were asked to complete the Child-rearing Practices Report (CRPR) Q-Sort (Block, 1965). Teachers of the children completed the Child Behavior Inventory (CBI) designed to assess playfulness and the Matthews Youth Test for Health (MYTH) to measure Type A behaviors.

Child-rearing Practices Report. Significant intercorrelations among CRPR subscales ranged from $r = .18$, $p \leq .05$ to $r = .48$, $p \leq .001$ (Table 3). Both positive and negative correlations were found. The highest positive correlation was found between openness to experience and expression of affect, $r = .48$, $p \leq .001$. The highest negative correlation was found between control and openness to experience, $r = -.48$, $p \leq .001$. The total score for the CRPR was not used when analyzing CRPR intercorrelations since the subscales were measuring different concepts and therefore were not additive.

48

Table 3

Intercorrelations between CRPR Subscales

	Encouragement of Independence	Enjoyment of Child	Expression of Affect	Openness to Experience	Rational Guidance	Control	Worry About Child	Emphasis on Early Training	Negative Affect	Emphasis on Achievement	Protectiveness	Supervision	Suppression	Inconsistency
Encouragement of Independence														
Enjoyment of Child	.13													
Expression of Affect	.34***	.17												
Openness to Experience	.35***	.20*	.48***											
Rational Guidance	.27*	.15	.43**	.36***										
Control	-.40***	-.18	-.28**	-.48***	-.18									
Worry About Child	-.35***	.05	-.14	.09	-.16	-.02								
Emphasis on Early Training	-.36***	.02	.26**	.19***	.19*	.31***	.05							
Negative Affect	-.21*	.11	-.46***	.19*	-.20**	-.04	.18*	-.01						
Emphasis on Achievement	.01	-.11	-.26**	-.002	.08	-.14	-.31***	.04	-.10					
Protectiveness	.05	.07	.08	.15	-.15	.18**	.08	-.19*	.22**	.17				
Supervision	.07	.03	-.01	.10	-.14	.08	-.02	.15*	.06	.11	.12			
Suppression	-.10	.17	.10	.06	.16	.13	-.03	-.07	-.18	.22**	.01	-.02		
Inconsistency	-.19*	-.35***	.17	-.30***	-.36***	.19*	.26*	.08	-.30**	-.02	.01	.01	.26***	

* p .05
** p .01
*** p .001

Child Behavior Inventory. Mean CBI scores were 110.07 (SD=23.00), 95.45 (SD=13.01) and 100.92 (SD=13.28) for kindergarten, second grade and fourth grades respectively. A one-way ANOVA indicated a significant grade level effect, $F(2,80) = 5.32$, $p < .01$. A Tukey-HSD procedure indicated that the significance was due to the difference between kindergarten and second grade with kindergarten subjects having the highest playfulness scores and second graders the lowest. A t-test revealed that there were no significant differences between males and females on playfulness scores.

CBI Intercorrelations. Pearson correlation coefficients were computed to determine the relationships among each of the subscales of the CBI playfulness scale. Results (Table 4) indicated that all playfulness subscales were significantly ($p < .001$) intercorrelated with coefficients ranging from $r = .40$ to $r = .81$. When each subscale was correlated with the total CBI score the coefficients ranged from $r = .79$, $p < .001$ to $r = .81$, $p < .001$. That all intercorrelations were at least moderate seems to indicate that there may be a central underlying construct of playfulness which is being tapped by the instrument. High intercorrelations were achieved among some subscales which seem to be conceptually related (e.g. intrinsic/extrinsic motivational source and goal/process orientation). The moderate intercorrelations were between subscales that are not as closely related conceptually. For example, between intrinsic/extrinsic motivational source and play/exploration orientation the coefficient was $r = .47$, $p < .001$. Process/goal

Table 4

Intercorrelations Between CBI Subscales

	Intrinsic Motivation	Process Orientation	Play vs. Exploration	Use of Pretense	Freedom from External Rules	Degree of Involvement
Intrinsic Motivation	-					
Process Orientation	.70	-				
Play vs. Exploration	.47	.40	-			
Use of Pretense	.45	.46	.80	-		
Freedom from External Rules	.66	.54	.71	.63	-	
Degree of Involvement	.57	.68	.54	.58	.49	-
Total CBI	.81	.79	.79	.81	.79	.81

Note: All correlational coefficients in this table are significant beyond the $p < .001$ level.

orientation achieved a correlation coefficient of .40, $p < .001$ with play/exploration orientation. However, future research with a sufficient sample to execute factor analysis is needed before it can be determined whether playfulness is a unitary construct.

Matthews Youth Test for Health. The mean MYTH scores for kindergarten, second, and fourth grade respectively were 42.62 (SD=15.03), 51.34 (SD=11.10), 50.72 (SD=11.35). A one-way ANOVA indicated a significant grade level effect, $F (2,80)=4.19$, $p < .05$. A Tukey-HSD Procedure indicated that the significance was due to the difference between kindergarten and second grade scores, with second graders obtaining the highest MYTH scores, presumably reflecting the highest level of Type A behaviors. Results from a t-test indicated no significant differences between sexes in relation to Type A behaviors.

The two subscales for the MYTH (impatience/aggression and competitiveness) had a correlation coefficient of $r=.50$, $p < .001$. When correlated with the total MYTH score the coefficients were $r=.90$, $p < .001$ and $r=.83$, $p < .001$ for impatience/aggression and competition respectively.

Child-rearing Behaviors and Playfulness. It was hypothesized that certain subscales of the CRPR would be significantly positively correlated with total CBI scores. These specific CRPR subscales included: (a) encouragement of independence, (b) enjoyment of child, (c) expression of affect, (d) openness to experience, and (e) rational

guidance. It was hypothesized that the following subscales would be negatively correlated with playfulness: (a) control, (b) worry about child, (c) emphasis on early training, (d) negative affect, (e) emphasis on achievement, (f) protectiveness and (g) supervision.

Results indicated that five of the 12 hypothesized relationships were achieved. These included a significant positive relationship between total playfulness scores and expression of affect, r=.35, p <.001, openness to experience, r=.34, p .001 and rational guidance, r=.30, p <.01. Significant negative correlations between total playfulness scores and CRPR scales included control, r=-.24, p <.01 and emphasis on early training, r=-.21, p <.01. Despite the low number of significant correlations, all were in the direction predicted.

Correlations between CRPR and CBI subscale scores revealed several significant correlations (Table 5). The CRPR Subscale of expression of affect was positively and significantly correlated with all CBI subscales except process/goal orientation. Correlations ranged from r=.20, p <.05 to r=.41, p <.001. The CRPR subscale of openness to experience correlated significantly with all CBI subscale scores except degree of involvement with coefficients ranging from r=.26, p <.01 to r=.37, p <.001. Rational guidance correlated significantly with all CBI subscales scores and correlations ranged from r=.19, p <.05 to r=.30, p <.01. Other positive correlations which were significant were between the CRPR subscale of encouragement of independence and the CBI subscales of use of pretense and freedom from external rules. These correlations were r=.22, p <.05 and r=.26, p <.01 respectively.

Table 5

Correlations Between CRPR Subscales and CBI Subscales

	Intrinsic Motivation	Process Orientation	Play vs. Exploration	Use of Pretense	Freedom from External Rules	Degree of Involvement	Total CBI
Encouragement of Independence	.17	.06	.08	.22*	.26**	-.01	.15
Enjoyment of Child	.12	.05	.07	.12	.12	.07	.10
Expression of Affect	.31**	.12	.28**	.40***	.41***	.20*	.35***
Openness to Experience	.37***	.26**	.26**	.28**	.36*	.16	.34***
Rational Guidance	.19*	.25**	.23*	.28**	.21*	.27**	.30**
Control	-.31**	-.15	-.10	-.26**	-.26**	-.10	-.24**
Worry About Child	-.22*	-.16	-.09	-.04	-.23*	-.01	-.16
Emphasis on Early Training	-.19*	-.17	-.17	-.27*	-.24*	-.13	-.21**
Negative Affect	-.09	-.003	-.05	-.19*	-.15	.05	-.09
Emphasis on Achievement	.07	.04	.01	-.10	.04	-.17	-.03
Protectiveness	-.01	.02	-.03	-.04	.04	.03	-.01
Supervision	.02	-.05	.01	-.03	-.01	.03	.01
Suppression	.17	.10	.13	.13	.16	-.04	.13
Inconsistency	-.12	-.14	-.04	.04	-.07	-.01	-.07

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

Although only significant coefficients were reported in this section, these coefficients were moderately low.

Significant negative correlations between CRPR and CBI subscales were found (Table 5). Control had significant negative correlations with various CBI subscales ranging from r=-.26, p < .01 (use of pretense, freedom from external rules) to r=-.31, p < .01 (intrinsic motivation). The CRPR subscale of worry about child had correlations of r=-.22, p < .05 (intrinsic motivation) and r=-.23, p < .05 (freedom from external rules) while emphasis on early training had correlations ranging from r=-.19, p < .05 (intrinsic motivation) to r=-.27, p < .05 (use of pretense). Negative affect had one significant correlation which was a r=-.19, p < .05 (use of pretense) correlation with use of pretense.

Child-rearing Behaviors and Type A Behaviors. It was hypothesized that certain CRPR subscales would be significantly correlated with MYTH scores. The following were expected to be positively correlated with MYTH scores: (a) emphasis on achievement, (b) inconsistency, and (c) suppression of aggression. Results indicated that none of these were significantly correlated. It had been further hypothesized that rational guidance would be negatively related to Type A behaviors. Contrary to expectations, however, it was significantly positively correlated with total MYTH scores, r=.24, p < .01. An examination of Table 6 indicates that this was due mainly to the .29, p < .01 correlation of the MYTH subscale of competitiveness with rational guidance.

Playfulness and Type A Behaviors. It was hypothesized that scores
on the MYTH would be negatively correlated with total playfulness
scores. Contrary to expectations, total MYTH scores were significantly
positively correlated with the total CBI scores at the p < .01 level
with r=.31 (Table 7). The MYTH subscale of impatience/aggression
revealed two significant correlations: r=-.22, p < .05 with
intrinsic/extrinsic motivation and r=.23, p < .05 with play vs.
exploration. Total MYTH scores also had positive significant corre-
lations with play vs. exploration, r=.42, p < .001, use of pretense,
r=.32, p < .001, and degree of involvement, r=.36, p < .001.

Table 6

Correlations Between CRPR Subscales and MYTH Subscales

	Competition	Impatience/Aggression	Total MYTH
Encouragement of Independence	-.002	-.08	-.05
Enjoyment of Child	-.01	-.17	-.12
Expression of Affect	.16	.02	.10
Openness to Experience	.08	-.05	.01
Rational Guidance	.29*	.15	.24*
Control	-.06	.16	.07
Worry about Child	-.14	.004	-.07
Emphasis on Early Training	.02	.06	.05
Negative Affect	-.08	.07	.01
Emphasis on Achievement	.03	-.12	-.06
Protectiveness	-.16	-.05	-.11
Supervision	.07	-.08	-.02
Suppression	.15	-.11	.01
Inconsistency	-.08	.04	-.02

* p < .01

Table 7

Correlations Between CBI Subscales and MYTH Subscales

	Competition	Impatience/ Aggression	Total MYTH
Intrinsic Motivation	.36***	-.22*	.04
Process Orientation	.34***	-.17	.07
Play vs. Exploration	.53***	.23*	.42***
Use of Pretense	.46***	.14	.32***
Freedom from External Rules	.32**	-.03	.14
Degree of Involvement	.52***	.15	.36***
Total CBI	.56***	.04	.31**

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

CHAPTER V

Discussion

The present study was designed to assess the relationships among childrearing practices, children's levels of playfulness and Type A behaviors. Sex and grade level differences in playfulness and Type A behavior were also examined. Parents of 83 children in grades kindergarten, two and four completed a Q-sort on childrearing behaviors. The children's teachers completed rating scales for playfulness and Type A behaviors.

Sex and Grade Level Differences in Playfulness

Although results indicated no differences between males and females for playfulness, there was a significance found between grade levels. Kindergarteners had the highest playfulness scores whereas second-graders had the lowest. Conversely, kindergarteners displayed the least amount of Type A behaviors and second-graders exhibited the most. Fourth-graders scores were in the middle for both playfulness and Type A behaviors.

Initially these results appear contrary to what would be expected. The literature on play and related areas suggests that creative behaviors such as playfulness are gradually extinguished in children as they move through the educational system (Dudek, 1974). If this were the case, fourth-graders should have the lowest level of play behaviors. The fact that second-graders were lower in playfulness than both

58

kindergarteners and fourth-graders suggests that something occurs
between kindergarten and second grade to diminish playful behaviors, and
then something again occurs between second and fourth grade to
re-establish the display of playfulness. One explanation for this is
that kindergarten is less structured than other primary grades thus
allowing children to be more playful. As children move into first grade
more structure is applied to the classroom setting and behaviors such as
playfulness become unacceptable and therefore decrease. It can be
asserted that between second and fourth grades the children adjust to
the structure of school and learn to be playful within the limitations
imposed on them. Another explanation could be that the second-grade
teachers in this study tended to rate children as less playful. Also,
the environment created by these teachers could be leading to lowered
playfulness. In order to better assess this possibility future studies
should be conducted on teacher effects.

Sex and Grade Level Differences in Type A Behaviors

Although results indicated there were no sex differences in Type A
behaviors, there was a significant grade-level effect. Children in
kindergarten had the lowest Type A ratings whereas children in second
grade had the highest. It is interesting that for group means at each
age level, the playfulness means were inversely related to Type A means.
That is, of the three grade levels studied, kindergarteners were highest
in playfulness but lowest in Type A behaviors; second graders as a group
were least playful among the three grades but they were highest in Type

A behavior. However, this cannot be taken to mean that individuals who are more playful have lower Type A scores. In fact, Pearson correlations showed that children with high Type A scores also had high playfulness scores. This raises the question of whether teachers who tended to give high scores on play tended to give low scores on Type A behaviors.

Childrearing Practices and Children's Levels of Playfulness

It was hypothesized that children's levels of playfulness would be positively and significantly correlated with five areas of parenting. Although all five of the hypothesized relationships were positive, three (expression of affect, openness to experience, rational guidance) were significant and two (encouragement of independence, enjoyment of child) were not. Each subscale will be discussed separately.

1. The subscale of expression of affect was comprised of items which described a warm and expressive parent-child relationship. Such a relationship included physical affection and comforting as well as an easy going attitude. The warmth of the parent-child relationship may be indicative of attachment, a condition found by Sroufe and Waters (1977) to promote exploratory play among toddlers. Thus, parents who express affect seem to be more likely to have children with a higher level of playfulness.

2. Openness to experience included items which indicated that the parent valued time for the child to think, daydream, wonder, and to be curious about life. These elements are key components of the use of

pretense subscale of the playfulness instrument. Curiosity is playful in nature and wondering about life is a closely related concept. Thus it appears that parental valuation of this open and unhurried style of thinking results in the manifestation of playful behaviors in their children within the school settings.

3. Rational guidance on the childrearing instrument included items that were positive in that they emphasized using praise rather than punishment, reason rather than unexplained decisions, and communicating to the child that he/she is appreciated. These items reflect the parent's view of the child as an individual who can be reasoned with and should be appreciated. Such an opinion from the parents would allow the child some feeling that the environment is predictable in that decisions are explained. These behaviors are also indicative of authoritative childrearing in that warmth and reasoning are involved. Again, the warmth may be providing the security necessary for play to occur and appreciation of the child may remove the external pressure to achieve in order to gain acceptance. The use of rational guidance, coupled with praise could allow the child to gain competencies in a positive emotional environment.

4. Encouragement of independence was not significantly related to total playfulness scores although the correlation was in the positive direction as predicted. The failure to obtain significance in this area is puzzling. The items of this subscale all describe the opportunity for the child to be in control, to maximize his/her will and to exert an influence on the environment through the exercise of opinions.

Encouragement of independence was related to the playfulness subscales of use of pretense and freedom from external rules. Perhaps children who are encouraged to be independent will be more likely to go beyond the literal to the pretend. They may also be less likely to feel bound by external rules because they may be less conforming and perhaps less dependent on adult approval. It appears that such children may be able to be somewhat more playful, partly because they are encouraged to be independent. However, further work will need to be done to understand why other play subscales failed to be significantly related to independence.

5.   Parental enjoyment of the child was positively related to playfulness but the coefficient was not significant. The items in this subscale reflect the parents' satisfaction with time spent with their child and are similar in nature to the warmth variables associated with rational guidance. Apparently, the extent to which a parent enjoys his/her child has little relationship to the child's level of playfulness. In general, it seems that a playful child would be more enjoyable, therefore being associated with parents who would score high in this subscale. However, if the parent tended to be more rigid and controlling then he/she would more likely enjoy the non-playful child. Thus a match between parent preferences and the child's behavioral style would probably be a stronger factor in the degree of parental enjoyment of the child.

The following subscales were hypothesized to be negatively correlated with playfulness: control, worry about the child, emphasis on

early training, negative affect, emphasis on achievement, protectiveness, and supervision. Although all of the relationships were in the direction predicted only the subscales of control and emphasis on early training were significant.

1. Control by parents had been expected to be negatively related to playfulness since it characterizes external, rather than internal, control. Thus, intrinsic motivation and expression of self would be suppressed. Indeed, of the six playfulness subscales the strongest negative relationships to control were intrinsic motivation and use of non-literal behaviors. These are in agreement with the literature which suggests that children who are raised in a highly structured environment are less able to make decisions for themselves and are more likely to choose structure than non-structure when offered a choice (Baumrind, 1967; Becker, 1964).

2. Emphasis on early training was significantly negatively correlated with playfulness. Early training should be similar to control in its effects on playfulness. Indeed, the same two subscales (intrinsic motivation and use of non-literal behaviors), plus one additional subscale (freedom from external rules), were negatively correlated with early training. Apparently, early training reduced the children's sense of inner control while simultaneously indicating to them that external rules should be followed. Since pretending is a function of being able to break away from the norm and create an original response, children who are trained early may not be given the

chance to discover their potential for individual behaviors, thus stifling playful behaviors which could occur.

Although the childrearing areas of worry about the child and negative affect were not significant in their negative relationship to the total playfulness score, they were related to some of the subscales of playfulness.

1.   Parents who worried about their children had children who were less intrinsically motivated and less free from external rules. It is possible that parents who worry about their children are consequently more protective of them, therefore reducing the children's opportunities for exploratory and self-willed behavior. In an effort to ensure the safety of their child these parents may employ more rules and regulations. Thus, children of such parents would be more bound to external rules and less intrinsically motivated. It is also plausible that children who fail to follow rules cause parents to worry more about them.

2.   Negative affect in childrearing was associated with low use of pretense among the children. This relationship is better explained by examining the subscale items of negative affect. Parents who employed the use of negative affect often felt angry with their child, experienced a great deal of conflict with their child, and felt their child was a bit of a disappointment to them. With negative affect so described it becomes logical that such parents may communicate these negative feelings to their child. Subsequently, the child may not feel confident in his/her ability to act on behaviors which stem from

internal sources therefore reducing the possibility of play behaviors which are pretense in nature. It is also possible that these children are more literal in their behaviors in an attempt to please their parents and win their praise. These children may not feel comfortable or confident in acting on their own and thus depend on literal interpretations to guide their behavior. The psychological needs for trust and security seem to need to be met before one can transform reality and begin to pretend.

Childrearing Practices and Children's Levels of Type A Behaviors

It was predicted that parents who emphasized achievement, were inconsistent, and controlled their children's aggression would be more likely to have children who displayed a high level of Type A behaviors. These hypotheses were not supported.

1. Emphasizing achievement on the childrearing report was expected to be related to extreme levels of striving to achieve (a Type A component) among the children. However, the lack of a significant correlation makes it appear that such an emphasis is not critical in determining Type A behavior. The items in the achievement subscale assessed parents' approval of competitiveness and expectations for their children. Apparently, emphasizing competitiveness and having high expectations for a child does not significantly influence the child's level of Type A behaviors.

2. Inconsistency and suppression of aggression were not significantly related to the level of Type A behaviors in this sample of

children. Such results make it apparent that these two subscales do not tap dimensions which are vital to influencing Type A behaviors.

3. Rational guidance was expected to be negatively correlated with Type A behavior. However, it was positively related, i.e. parents who used rational guidance had children who were high in Type A behaviors. One of the components of rational guidance, making sure the child knows that whatever he/she tries is appreciated, may contribute to motivating the child to try to do more and therefore enable the child to accomplish more. This might contribute to Type A behaviors in these children. If parents who use rational guidance do indeed use praise with their children more often than punishment it may be that such children attempt more activities in order to receive more praise. However, the relationships of rational guidance to the subscales which comprise Type A (competitiveness, impatience and aggression) were weak. Therefore, it is not clear just how rational guidance is related to Type A behavior.

Type A Behaviors and Playfulness

It was hypothesized that children's levels of Type A behaviors would be negatively related to their levels of playfulness. This hypothesis was not supported. Results indicated a positive correlation of $r = .31$, p .01. This finding is best understood by examining the various components of Type A as they relate to the subscales of playfulness.

The overall level of Type A behaviors was positively related to high levels of environmental control, use of pretense, and degree of active involvement. These three components of playfulness highlight the aspects of play which allow the child to be in control. Children who are high in Type A behaviors may be more aggressive and therefore more in control of their environment. In fact, when the Type A subscale of impatience/aggression was examined in relation to environmental domination the correlation was positive and significant. Children who were high in impatience/aggression were also more likely to dominate the environment (play) rather than be dominated by the environment (exploration). Impatient and aggressive children seem to be more likely to take control of a situation rather than to remain passive. It appears that such children would be aggressive in trying to control their environment and their impatience would contribute to their aggressiveness. For this reason, it becomes reasonable that children high in impatience/aggression will be high in environmental control.

The positive and significant relationship between impatience/aggression and pretense seems to indicate that aggressive children will also be more likely to assert their own desires, therefore enabling them to break from literal behaviors and move toward pretense. Such children also appear more likely to be actively involved in activities since they display a high level of aggressiveness. Children who were high in impatience/aggression were also low in intrinsic motivation.

The components of Type A behavior, impatience/aggression and competitiveness, seem to be traits which require a certain level of assertiveness. Both imply that the child is decisive in his/her behavior. The various components of play emphasize the importance of having individualistic ideas and then acting on them. Being highly assertive and aggressive would therefore be an asset in demonstrating one's level of playfulness. Thus, it can be understood why children who are high in playfulness behaviors are also high in Type A behaviors.

Interrelationships Among Playfulness Subscales

All intercorrelations among the playfulness subscales were positive and significant. Such results indicate that the playfulness instrument is tapping similar behaviors with its various components. The most highly correlated subscales appeared to be conceptually related while modest correlations occurred between subscales which were not as closely related. One example of conceptually related subscales is intrinsic motivation and process orientation. The correlation between these two subscales was high, $r=.70$, $p < .001$. This correlation can be accounted for in that the subscale of intrinsic motivation taps the child's ability to initiate and complete activities on his/her own. Intrinsic motivation requires that the child have an inner source of gratification in relation to the activities as opposed to being externally rewarded for the activities. This concept is similar to being process, not goal, oriented. Process orientation allows the child to concentrate on the processes involved in an activity rather than on

the outcomes or goals. If it can be assumed that goals are a form of external and somewhat tangible rewards, then goals can be viewed as being external motivators. In light of this, children who have a need to be motivated externally would tend to be goal-oriented thus allowing for children with high intrinsic motivation to be more process-oriented than goal-oriented. The present research supports this hypothesis.

Another example of conceptually related subscales is use of pretense and play/exploration orientation. The correlation between these subscales was high. With the coefficient being r=.80, p < .001. Such a correlation is understandable when the subscales are examined. Object/environment orientation assesses the child's usual form of interaction with objects and classifies the behavior as being either dominated by the child or by the object. A child who scores high on this subscale is more likely to be dominating the object/environment and therefore more likely to be experiencing play. When a child is dominated by the environment or object then he/she is not considered in control and therefore is not experiencing play. When this occurs the child is thought to be exploring the object and dominated by the object's limitations. Similarly, the subscale of use of pretense classifies the child's behaviors as either literal or pretend. Literal behaviors are those in which the child uses objects as they were intended to be used whereas pretense occurs when the child invents novel uses for the objects. The high correlation between use of pretense and object/environment orientation highlights the similar concept both are evaluating. It is logical that children who dominate the situation will

be more likely to move from literal behaviors to create pretend ones. These children would not remain bound by the objects' limitations but would control the situation by creating and demonstrating pretense behaviors. Therefore, the high correlation between use of pretense and object/environment orientation is predictable.

Subscales which were moderately correlated did not seem to be extremely close in conceptual ideas. An example of this is the correlation between process orientation and object/environment orientation. Although this correlation was positive it would be considered moderate with $r=.40$, $p < .001$. This moderate correlation appears logical since the subscales are assessing conceptually different aspects of playfulness. Process orientation evaluates whether the person is process or goal-oriented while object/environment assesses which is the dominating force in a behavior, the person or the object/environment. Thus, these two subscales tap differing dimensions of playfulness and would not be expected to have a high correlation.

CHAPTER VI

Summary, Conclusions, and Recommendations

Summary

The purpose of this study was to assess the relationships among

childrearing practices, children's levels of playfulness and Type A

behaviors. A review of the literature revealed that parenting styles

differ and such differences are correlated with certain characteristics

among children. Parents of 83 children in grades kindergarten, two and

four completed a Q-sort on childrearing behaviors. The children's

teachers completed rating scales for playfulness and Type A behaviors.

Results indicated that there were no differences between males and

females on playfulness or Type A behavior ratings. A difference was

found between the three grades used in the study, with kindergarten

children displaying the highest level of playfulness and second-graders

displaying the lowest level of playfulness. In contrast, it was found

that kindergarten children had the lowest rating of Type A behaviors

while second-graders had the highest. Parenting styles were not found to

differ according to the sex or grade level of the child.

When childrearing behaviors were examined, results indicated that

playful children had parents who used rational guidance, expressed

affect, and were open to experience. Children who were low in play-

fulness had parents who emphasized early training and used control.

When playfulness was analyzed according to specific definitional

criteria it was found that parents who encouraged independence had children who were high in their use of pretense and free from external rules. Additionally, results showed that parents who used control and emphasized early training had children who were more literal in their play, more extrinsically motivated, and more bound to external rules. Similarly, parents who worried about their children had children who were more extrinsically motivated and bound by external rules. It was also found that parents who used negative affect had children who used literal rather than pretend behaviors in their play. The use of rational guidance in parenting was found to be positively related to children with Type A behaviors. It was found that children who were high in Type A behaviors displayed a high level of playfulness. Children high in Type A behaviors were found to be more actively involved in their play, use pretense more often than literal behaviors, and have a higher degree of involvement in the activity. A part of Type A behavior, impatience/aggression, was found to be high in children who were extrinsically motivated and more prone to play rather than explore.

Conclusions

The present study gives support to the hypothesis that childrearing practices are related to various child behaviors. More specifically, children's levels of playfulness are positively related to the parental techniques of expression of affect, openness to experience, and rational guidance. In contrast, children's playfulness is negatively influenced by parents who control and emphasize early training. Parents who use

rational guidance are more likely to have children who are high in Type A behaviors whereas children who are high in Type A behaviors are also more likely to be high in playfulness.

Recommendations for Future Research

1. Additional information is needed on the playfulness instrument (Child Behavior Inventory). Studies are now underway to evaluate inter-rater reliability and criterion validity.

2. The playfulness instrument needs to be assessed for usefulness with children in grades one and three. These grades were not included in the present study but need to be used in further development of the instrument.

3. The effect of fathers on children's level of playfulness and Type A behaviors needs to be assessed. These data have been collected and plans are underway for these analyses.

4. The playfulness instrument should be completed by observers other than teachers. Suggestions include having the child's playfulness rated by parents, afterschool caregivers, playground supervisors, and others who can observe the child in a "playful" setting.

5. Grade level differences in childrearing were not investigated in this study. However, plans are underway for analysis of that data.

6. The influence of teachers on children's playfulness and Type A behaviors should be studied. Such an investigation should allow comparisons to be made between influences of teachers and parents on various behaviors of children.

7. Three additional items were added to the Child Behavior Inventory
    to provide criteria not included among the six definitions of play.
    These included items on humor, positive emotion and an overall
    rating on playfulness. The relationship of these variables to
    playfulness (CBI) scores was not assessed as part of this study.
    However, future analyses are planned to investigate those
    relationships.

REFERENCES

Aldis, O. (1975). _Play fighting_. New York: Academic press.

Apolonio, F.J. (1975). Preadolescents' self-esteem, sharing behavior, and perceptions of parental behavior. Dissertation Abstracts, 35, 3406B.

Arend, R., Gove, F.L., & Sroufe, L.A. (1979). Continuity of individual adaptation from infancy to kindergarten: A predictive study of ego-resiliency and curiosity in preschoolers. _Child Development_, 50, 950-959.

Bakeman, R., & Brown, J.V. (1980). Early interaction: Consequences for social and mental development at three years. _Child Development_, 51, 437-447.

Baldwin, A.L. (1948). Socialization and the parent-child relationship. _Child Development_, 19, 127-136.

Baldwin, A.L. (1949). The effect of home environment on nursery school behavior. _Child Development_, 20, 49-62.

Baldwin, A.L. (1955). _Behavior and development in childhood_. New York: The Dreyden Press. ·

Bateson, G.A. (1955). A theory of play and fantasy. _Psychiatric Research Reports_, 2, 39-51.

Baumrind, D. (1966). Effects of authoritative parental control on child behavior. _Child Development_, 37, 887-907.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. _Genetic Psychology Monographs_, 75, 43-88.

Baumrind, D. (1971). Current patterns of parental authority. _Developmental Psychology Monograph_, 4, (1, Pt. 2).

Baumrind, D. & Black, A.E. (1967). Socialization practices associated with dimensions of competence in preschool boys and girls. _Child Development_, 38, 291-327.

Becker, W.C. (1964). Consequences of different kinds of parental discipline. In M.L. Hoffman & L.W. Hoffman (Eds.), _Review of child development research_, (vol. 1), New York: Russell Sage Foundation.

Berlyne, D.E. (1960). _Conflict, arousal, and curiosity_. New York: McGraw-Hill.

Berlyne, D.E. (1964). Emotional aspects of learning. Annual Review of Psychology, 15, 115-142.

Berlyne, D.E. (1966). Curiosity and exploration. Science, 153, 25-33.

Berlyne, D.E. (1969). Laughter, humor, and play. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology (vol. 3), Reading, Mass: Adison-Wesley.

Blehar, M.C., Lieberman, A.F., & Ainsworth, M.D.S. (1977). Early face-to-face interaction and its relation to later infant-mother attachment. Child Development, 48, 182-194.

Block, J.H. (1965). The child-rearing practices report (CRPR). Berkeley, Cal.: Institute of Human Development, University of California. In Mimeo.

Bruner, J.S. (1972). The nature and uses of immaturity. American Psychologist, 27, 687-708.

Burger, G.R., & Armentrout, J.A. (1971). A factor analysis of 5th and 6th graders' reports of parental child-rearing behavior. Development Psychology, 4, 483.

Carver, C.S., Coleman, A.E., & Glass, D.C. (1976). The coronary-prone behavior pattern and the suppression of fatigue on a treadmill test. Journal of Personality and Social Psychology, 33, 460-466.

Coopersmith, S. (1967). The antecedents of self-esteem. San Francisco: W.H. Freeman & Co.

Corrigan, S.A., & Moskowitz, D.S. (1983). Type A behavior in preschool children: Construct validation evidence for the MYTH. Child Development, 54, 1513-1521.

Csikszentmihayli, M. (1979). In B. Sutton-Smith (Ed.), Play and learning. New York: Gardner Press.

Dudek, S.Z. (1974). Creativity in young children - attitude or ability? Journal of Creative Behavior, 8, 282-292.

Ellis, M.J. (1973). Why people play. Englewood Cliffs, N.J.: Prentice-Hall.

Erikson, E.H. (1940). Studies in the interpretation of play: Clinical observations of play disruption in young children. Genetic Psychology Monographs, 22, 557-671.

Erikson, E.H. (1941). Further explorations in play construction: Three spacial variables in their relation to sex and anxiety. Psychology Bulletin, 38, 748.

Erikson, E.H. (1951). Sex differences in the play configurations of American pre-adolescents. American Journal of Orthopsychiatry, 21, 667-692.

Feshbach, N.D. (1974). The relationship of child-rearing factors to children's aggression, empathy and related positive and negative social behaviors. In J. Dewitt & W.W. Hartup (Eds.), Determinants and origins of aggressive behavior. The Hague: Mouton.

Freud, S. (1959). Creative writers and daydreaming. In J. Strackey (Ed.), The standard edition of the complete psychological works of Sigmund Freud. (vol. 9), London: Hogarth.

Freyberg, J. (1973). Increasing the imaginative play of urban disadvantaged kindergarten children through systematic training. In J.L. Singer (Ed.), The child's world of make-believe. New York: Academic Press.

Friedman, M., & Rosenman, R.H. (1974). Type A behavior and your heart. New York: Knopf.

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

Glass, D.C. (1977). Behavior patterns, stress, and coronary disease. Hillsdale, N.J.: Erlbaum.

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

Groos, K. (1901). The play of man. New York: Appleton.

Hall, G.S. (1920). Youth. New York: Appleton.

Hoffman, M.L. (1960). Power assertion by the parent and its impact on the child. Child Development. 31, 129-143.

Hoffman, M.L. (1970). Moral development. In P.H. Mussen (Ed.), Carmichael's manual of child psychology, (vol. 2). New York: Wiley.

Hutt, C. (1970). Specific and diverse exploration. In H. Reese & L. Lipsett (Eds.), Advances in child development and behavior. New York: Academic Press.

Jenkins, C.D., Rosenman, R.H., & Zyzanski, S.J. (1974). Prediction of clinical coronary heart disease by a test for the coronary-prone behavior pattern. New England Journal of Medicine, 290, 1271-1275.

Johannesson, I. (1974). Aggressive behavior among school chidlren related to maternal practices in early childhood. In J. deWitt & W.W. Hartup (Eds.), Determinants and origins of aggressive behavior. The Hague: Mouton.

Johnson, J.E. (1978). Mother-child interaction and imaginative behavior of preschool children. The Journal of Psychology, 100, 123-129.

Lazarus, M. (1873). Die reize des spiels. Berlin: Ferd, Dummlers Verlagsbuch-handlung.

Lefkowitz, M.M., Eron, L.D., Walder, L.O., & Huesmann, L.R. (1977). Growing up to be violent. New York: Pergamon.

Lieberman, J.N. (1977). Playfulness: Its relationship to imagination and creativity. New York: Academic Press.

Loeb, R.C., Horst, L. & Horton, P.J. (1980). Family interaction patterns associated with self-esteem in preadolescent girls and boys. Merrill-Palmer Quarterly, 26, 203-217.

Maccoby, E.E. & Martin, J.A. (1983). Socialization in the context of the family: Parent-child interaction. In P.H. Mussen (Ed.), Handbook of child psychology (vol. 4, 4th ed.), New York: John Wiley & Sons, pp. 1-101.

Marshall, H.R. (1961). Relations between home experiences and childrens' use of language in play interactions with peers. Psychological Monographs, 75 (5, Whole No. 509).

Marshall, H., & Hahn, S.C. (1967). Experimental modification of dramatic play. Journal of Personality and Social Psychology, 5, 119-122.

Martin, J.A. (1981). A longitudinal study of the consequences of early mother-infant interaction: A microanalytic approach. Monographs of the Society for Research in Child Development, 46, (3, serial no. 190).

Matas, L., Arend, R. A., & Sroufe, L. A. (1978). Continuity of adaptation in the second year: The relationship between quality of attachment and later competence. Child Development, 49, 547-546.

Matthews, K.A. (1977). Caregiver-child interactions and the Type A coronary-prone behavior pattern. Child Development, 48, 1752-1756.

Matthews, K.A. (1979). Efforts to control by children and adults with the Type A coronary-prone behavior pattern. Child Development, 50, 842-847.

Matthews, K.A. (1982). Psychological perspectives on the Type A behavior pattern. Psychological Bulletin, 91, 293-323.

Matthews, K.A., & Angulo, J. (1980). Measurement of the Type A behavior pattern in children: Assessment of children's competitiveness, impatience-anger, and aggression. Child Development, 51, 466-475.

Matthews, K.A., & Avis, N.E. (1983). Stability of overt Type A behaviors in children: Results from a one-year longitudinal study. Child Development, 54, 1507-1512.

Matthews, K.A., & Volkin, J.I. (1981). Efforts to excel and the Type A behavior pattern in children. Child Development, 52, 1283-1289.

Menninger, K. (1942). Love against hate. New York: Marcourt.

Neill, A.S. (1964). Summerhill. New York: Hart.

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

Patterson, G.R. (1979). A performance theory for coercive family interactions. In R.B. Cairns (Ed.), The analysis of social interactions: Methods, issues and illustrations. Hillsdale, N.J.: Erlbaum.

Patterson, G.R. (1982). Coercive family process. Eugene, Ore: Castalia Press.

Peller, L.E. (1952). Models of children's play. Mental Hygiene, 36, 66-83.

Peller, L.E. (1954). Libidinal phases, ego development and play. Psychoanalytic Study of the Child, 9, 178-198.

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

Pulkkinen, L. (1982). Self-control and continuity from childhood to adolescence. In P.B. Baltes & O. Brim (Eds.), Life-span development and behavior, (vol. 4), New York: Academic press.

Qadri, A.J. & Kaleem, G.A. (1971). Effect of parental attitudes on personality adjustment and self-esteem of children. Behaviorometric, 1, 19-24.

Rogers, C. S. & Sawyers, J. Play and Development, (in preparation).

Rosenman, R.H. (1978). The interview method of assessment of the coronary-prone behavior pattern. In T.M. Demroski, S.M. Weiss, J.L. Shields, S.G. Haynes, & M. Feinleib (Eds.), Coronary-prone behavior. New York: Springer-Verlag.

Rubin, K.H., Fein, G.G., & Vandenberg, B. (1983). Play. In P.H. Mussen (Ed.), Handbook of child psychology (vol. 4, 4th ed.), New York: John Wiley & Sons, pp. 693-774.

Rubin, K.H., Maioni, T.L., & Hornung, M. (1976). Free play behaviors in middle and lower class preschoolers: Parten and Piaget revisited. Child Development, 47, 414-419.

Schaefer, E.S. (1959). A circumplex model for maternal behavior. Journal of Abnormal and Social Psychology, 59, 226-235.

Schiller, F. (1954). On the aesthetic education of man. New Haven, Conn.: Yale University Press.

Schwartzman, H.B. (1979). The sociocultural context of play. In B. Sutton-Smith (Ed.), Play and learning, New York: Gardner Press.

Sears, R.R., Maccoby, E.E. & Levin, H. (1957). Patterns of childrearing. Evanston, Ill.: Row Peterson.

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

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

Spencer, H. (1873). Principles of psychology, (vol. 2, 3rd ed.). New York: Appleton.

Sroufe, L.A., & Waters, E. (1977). Attachment as an organizational construct. Child Development, 48, 1184-1199.

Sutton-Smith, B. (Ed.) (1979). Play and learning. New York: Gardner Press.

Sylva, K. (1977). Play on learning. In B. Tizard & D. Harvey (Eds.). Biology of play. London: Heinemann.

Vandenberg, B. (1981). Environmental and cognitive factors in social play. Journal of Experimental Psychology, 31, 169-175.

Vygotsky, L.S. (1967). Play and its role in the mental development of the child. Soviet Psychology, 12, 62-76.

Yarrow, M.R., Campbell, J.D. & Burton, R. (1968). Child-rearing, an inquiry into research and methods. San Francisco: Jossey-Bass.

APPENDIX A

Letter to Superintendent

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061 - 8299

DEPARTMENT OF FAMILY AND CHILD DEVELOPMENT (703) 961-4794 or 4795

September 26, 1984

Dr. Charles Franklin
Superintendent of Schools
Radford, VA 24141

Dear Dr. Franklin:

Parents are among the most influential teachers a child ever has. Yet, parents and teachers have many questions about school behaviors and child-rearing. The School Behaviors Project at Virginia Tech is examining this topic.

Parents who agree to participate will be asked to identify their child-rearing practices by sorting cards that list various behaviors. Each card will be put into a pile to tell how characteristic that behavior is of their own childrearing. Also, the teacher will be asked to rate how characteristic some school behaviors are of the child.

All information will be treated confidentially and can be identified only by a code number. When the project is over, we will share with the parents and staff the results of the total project.

We are seeking your permission to solicit cooperation from the staff and parents of Radford City Elementary Schools. We need a final sample of 15 boys, and 15 girls at each of three grade levels (kindergarten, second, and fourth-grade).

We appreciate you consideration of this request.

Sincerely yours,

Cosby S. Rogers, Ph.D.

Amy J. Moore

th

APPENDIX B

Letter to Teachers

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061 - 8299

DEPARTMENT OF FAMILY AND CHILD DEVELOPMENT (703) 961-4794 or 4795

October 10, 1985

McHarg School
Radford, VA 24141

Dear Mrs.

As a teacher, you are one of the most influential people in the
lives of children. You help to stimulate, encourage, and shape
their behavior during the school day. Yet, as you well know,
there are many unanswered questions concerning children's school
behaviors. The School Behaviors Project at Virginia Tech is inter-
ested in answering some of these questions.

We are inviting the kindergarten, 2nd- and 4th-grade teachers at
McHarg to participate by rating traits of children whose parents
agree for their children to be rated. This information will be
in the form of 36 items which you would rate as characteristic or
uncharacteristic of the child. We expect this to take only a few
minutes per child.

The School Behaviors Project is also interested in how the child-
rearing techniques of parents influence their children's school
behaviors. Thus, we will also be asking parents to complete a
questionnaire on child-rearing practices.

Superintendent Franklin and Mr. Pridgen have approved of this
project. However, your participation is strictly voluntary and
you should feel no administrative pressure to volunteer.

We will be available after school on Tuesday, October 16th, to
answer any questions you may have and to determine which teachers
wish to be included.

Sincerely yours,

Cosby S. Rogers
Project Director

Amy J. Moore
Project Coordinator

APPENDIX C

Initial Letter to Parents/Consent Form

86

COLLEGE OF HUMAN RESOURCES

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061 - 8299

DEPARTMENT OF FAMILY AND CHILD DEVELOPMENT (703) 961-1794 or 1795

October 22, 1984

Dear Parent(s):

Parents are among the most influential teachers a child ever
has. Yet, parents and teachers have many questions about school
behaviors and childrearing. The School Behaviors Project at
Virginia Tech is examining this topic. We invite you to participate.
This is a useful project and you are important to the success of
the study.

As a parent, you will be asked to identify your childrearing
practices by sorting cards that list various behaviors. Each
card is put into a pile to tell how characteristic that behavior
is of your own childrearing. This takes about half an hour. We
hope that both mothers and fathers will participate. Also, the
teacher will be asked to rate how characteristic some school
behaviors are of your child.

All information will be treated confidentially and can be
identified only by a code number. When the project is over, we
will share with you the results of the total project.

Superintendent Franklin and Principal Pridgen have approved of
this project. However, your participation is strictly voluntary.

Please complete the attached form and return it in the same
envelope to your child's teacher so that you may participate.
If you do not wish to participate, please check the last line
so that we will know not to send the cards to you. If you have
any questions, feel free to call us.

Thank you.

Sincerely yours,

Cosby S. Rogers
Project Director

Amy J. Moore
Project Coordinator

Virginia Polytechnic Institute and State University

Department of Family and Child Development

Consent Form

I have received an explanation of the study on childrearing and school behaviors. I agree to complete the questionnaire on childrearing. I give permission for my child's teacher to complete a questionnaire on his/her school behvaiors.

I understand that all information from the questionnaires will be held in strict confidence and will have no identifying information except numbers for purposes of coding. I understand that I may withdraw my permission at any time.

Parents' Name (please print) _____

Signature _____

Name of child _____

Address _____

_____

_____

Telephone Number _____

Who is willing to participate? Both mother and father _____

Mother only _____ Father only _____ (A separate set of cards will be sent to each parent.)

I do not wish to participate. _____

APPENDIX D

Follow-up Letter to Parents

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061 - 8299

DEPARTMENT OF FAMILY AND CHILD DEVELOPMENT (703) 961-4794 or 4795

Dear Parent(s):

Recently, we sent you a letter about the School Behaviors Project. Unfortunately, we have not heard from you. If you have any questions concerning the study please feel free to call us. It is important that we hear whether or not you choose to participate.

Please complete the attached form and return tomorrow to your child's teacher.

Thank you.

Sincerely yours,

Josey S. Rogers
Project Director

Amy J. Moore
Project Coordinator

APPENDIX E

Cover Letter to Packet

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061 · 8299

DEPARTMENT OF FAMILY AND CHILD DEVELOPMENT (703) 961-4794 or 4795

Dear Parent(s):

We are happy that you are able to participate in the School Behaviors Project. Enclosed are the directions for sorting the childrearing cards. Please read the instructions carefully. Also, please complete the attached form and return with the cards in their envelopes to your child's teacher.

Please call one of us if you have any questions.

Sincerely yours,

Cosby S. Rogers
Project Director

Amy J. Moore
Project Coordinator

APPENDIX F

Background Information Sheet

BACKGROUND INFORMATION

What is your current marital status?   What is your race or ethnic group?

_____ (1) Married   _____ (1) White

_____ (2) Single   _____ (2) Black

_____ (3) Divorced and single   _____ (3) Oriental

_____ (4) Divorced and remarried   _____ (4) Other: Please Specify

_____ (5) Widowed and single

_____ (6) Widowed and remarried   _____

_____ (7) Separated

What is your religious preference?   _____

What is your age today?   _____

If you have been employed (or still are employed) what is your most common
occupation?   _____

How many hours per week do you work?   _____

What is your height?   _____

What is your weight?   _____

May we have permission to obtain your child's height and weight from school
health records?   _____ Yes   _____ No

APPENDIX G

Instructions for the
Child-rearing Practices Report

INSTRUCTIONS FOR THE CHILD-REARING CARDS

In trying to gain more understanding of young children, we would like to know what was important to you as a parent and what kinds of methods you used in raising your child — in particular, your child who is now in the elementary school. You are asked to indicate your opinions by sorting through a special set of cards that contain statements about bringing up children.

The WHITE cards are to be used by MOTHERS; the GREEN cards are to be used by FATHERS.

If your child was raised by only one parent, or if the other parent is not available, please take the appropriate set of cards (white or green) and complete the task yourself. If both parents are available, please do the task separately and do not discuss the card placements with your spouse. After you have each completed the task on your own, then you may find it interesting to discuss the sorts, but please don't change your sorts after this discussion. It is very important that we find out the real differences, as well as the similarities, between mothers and fathers in their child-rearing attitudes and behavior.

The Cards and Envelopes

Each set or deck contains 91 cards. Each card contains a sentence having to do with child-rearing. Some of these sentences will be true or descriptive of your attitudes and behavior in relation to your child. Some sentences will be untrue or undescriptive of your feelings and behavior toward this child. By sorting these cards according to the instructions below, you will be able to show how descriptive or undescriptive each of these sentences is for you.

Together with the cards you have recieved 7 envelopes, with the following labels:
7. These cards are most descriptive.
6. These cards are quite descriptive.
5. These cards are fairly descriptive.
4. These cards are neither descriptive nor undescriptive.
3. These cards are fairly undescriptive.
2. These cards are quite undescriptive.
1. These cards are most undescriptive.

Your task is to choose 13 cards that fit into each of these categories and to put them into their proper envelopes.

How to Sort the Cards (You may wish to check off each step as you complete it)

_____ 1. Mothers take the White cards and shuffle them a bit first.
Fathers take the Green cards and shuffle them a bit first.

_____ 2. Find a large cleared surface, like a kitchen table or desk, and spread out the envelopes in a row, going from 7 to 1 (Most Descriptive to Most Undescriptive):

    7   6   5   4   3   2   1

_____ 3. Now take the shuffled deck of cards, and read each sentence carefully. Then make three piles of cards: one pile containing cards that are generally true or descriptive of you; one pile that you're not certain about, and one pile of cards that are generally not true or descriptive.

It doesn't make any difference how many cards you put in each of the three piles at this time, since you'll probably have to do some switching around later. But you may find it helpful if each pile contains about the same number of cards.

Now your cards and envelopes look like this:

    7   6   5   4   3   2   1   (envelopes)

    "Descriptive"   "Not Sure"   "Undescriptive" (cards)
      Cards   Cards   Cards

96

_____ 4. Now, take the pile of descriptive cards and pick out the 13 cards that are <u>most descriptive</u> of your behavior with your child. Put these cards on top of envelope #7. Don't put them inside yet, because you might want to shift some of them later.

_____ 5. Next, from the cards that remain, pick out 13 cards that you think are <u>quite descriptive</u> of your behavior and put these on top of envelope #6. (If you run out of cards from your "descriptive" pile, you'll have to add some of the more descriptive cards from your "Not Sure" pile.)

_____ 6. Now, begin at the other end. Take the pile of "Undescriptive" cards and pick out the 13 cards that are <u>most undescriptive</u> of you. Put these on top of envelope #1.

_____ 7. Then pick out the 13 cards which are <u>quite undescriptive</u> and put them on envelope #2. (Again, you may have to "borrow" from your "Not Sure" pile to make the necessary 13 cards for envelope #2.)

_____ 8. You should now have <u>39</u> cards left over. These are now to be sorted into three new piles with 13 cards in each: 13 cards that are <u>fairly descriptive</u> of you (to be put on envelope #5); 13 cards that are <u>neither descriptive nor undescriptive</u> (to be put on envelope #4); and 13 cards that are <u>fairly undescriptive</u> (to be put on envelope #3.)

You may find it hard, as others have, to put the same number of cards in each pile but we must ask you to follow these directions exactly, even if you feel limited by them.

_____ 9. Now, as a last step, look over your sort to see if there are any changes you want to make. When the cards seem to belong where you have put them, double-check to be sure you have 13 cards in each pile. Then put each pile in the proper envelope and tuck in the flap. The small envelopes go into the large envelope for return to your child's teacher.

Thank you for your cooperation.

APPENDIX H

Child-rearing Practices Report

The Child-rearing Practices Report

1. I respect my child's opinion and encourage him to express them.

2. I encourage my child always to do his best.

3. I put the wishes of my mate before the wishes of my child.

4. I help my child when he is being teased by his friends.

5. I often feel angry with my child.

6. If my child gets into trouble, I expect him to handle the problem mostly by himself.

7. I punish my child by putting him off somewhere by himself for a while.

8. I watch closely what my child eats and when he eats.

9. I don't think young children of different sexes should be allowed to see each other naked.

10. I wish my spouse were more interested in our children.

11. I feel a child should be given comfort and understanding when he is scared or upset.

12. I try to keep my child away from children or families who have different ideas or values from our own.

13. I try to stop my child from playing rough games or doing things where he might get hurt.

14. I believe physical punishment to be the best way of disciplining.

15. I believe that a child should be seen and not heard.

16. I sometimes forget the promises I have made to my child.

17. I think it is good practice for a child to perform in front of others.

18. I express affection by hugging, kissing, and holding my child.

19. I find some of my greatest satisfactions in my child.

20. I prefer that my child not try things if there is a chance he will fail.

21. I encourage my child to wonder and think about life.

22. I usually take into account my child's preferences in making plans for the family.

23. I wish my child did not have to grow up so fast.

24. I feel a child should have time to think, daydream, and even loaf sometimes.

25. I find it difficult to punish my child.

26. I let my child make many decisions for himself.

27. I do not allow my child to say bad things about his teacher.

28. I worry about the bad and sad things that can happen to a child as he grows up.

29. I teach my child that in one way or another punishment will find him when he is bad.

30. I do not blame my child for whatever happens if others ask for trouble.

31. I do not allow my child to get angry with me.

32. I feel my child is a bit of a disappointment to me.

33. I expect a great deal of my child.

34. I am easy going and relaxed with my child.

35. I give up some of my own interests because of my child.

36. I tend to spoil my child.

37. I have never caught my child lying.

38. I talk it over and reason with my child when he misbehaves.

39. I trust my child to behave as he should, even when I am not with him.

40. I joke and play with my child.

41. I give my child a good many duties and family responsibilities.

42. My child and I have warm, intimate times together.

43. I have strict, well-established rules for my child.

44. I think one has to let a child take many chances as he grows up and tries new things.

45. I encourage my child to be curious, to explore and question things.

46. I sometimes talk about supernatural forces and beings in explaining things to my child.

47. I expect my child to be grateful and appreciate all the advantages he has.

48. I sometimes feel that I am too involved with my child.

49. I believe in toilet training a child as soon as possible.

50. I threaten punishment more often than I actually give it.

51. I believe in praising a child when he is good and think it gets better results than punishing him when he is bad.

52. I make sure my child knows that I appreciate what he tries or accomplishes.

53. I encourage my child to talk about his troubles.

54. I believe children should not have secrets from their parents.

55. I teach my child to keep control of his feelings at all times.

56. I try to keep my child from fighting.

57. I dread answering my child's questions about sex.

58. When I am angry with my child, I let him know it.

59. I think a child should be encouraged to do things better than others.

60. I punish my child by taking away a privilege he otherwise would have had.

61. I give my child extra privileges when he behaves well.

62. I enjoy having the house full of children.

63. I believe that too much affection and tenderness can harm or weaken a child.

85. I don't want my child to be looked upon as different from others.

86. I don't think children should be given sexual information before they can understand everything.

87. I believe it is very important for a child to play outside and get plenty of fresh air.

88. I get pleasure from seeing my child eating well and enjoying his food.

89. I don't allow my child to tease or play tricks on others.

90. I think it is wrong to insist that young boys and girls have different kinds of toys and play differents sorts of games.

91. I believe it is unwise to let children play a lot by themselves without supervision from grown-ups.

Child-rearing Practices Report Items Grouped by Subscales

Subscale I   Encouragement of Independence

Item	Number on Scale
I respect my child's opinions and encourage him to express them.	1
I usually take into account my child's preferences in making plans for the family.	22
I encourage my child to be independent of me.	75
If my child gets into trouble, I expect him to handle the problem mostly by himself.	6
I let my child make many decisions for himself.	26
I teach my child that he is responsible for what happens to him.	67
I give my child a good many duties and family responsibilities.	41

Subscale II   Control

Item	Number on Scale
I have strict, well-established rules for my child.	43
I believe children should not have secrets from their parents.	54
I believe that scolding and criticism makes my child improve.	64
I believe that a child should be seen and not heard.	15
I do not allow my child to say bad things about his teacher.	27
I believe physical punishment to be the best way of disciplining.	14
I teach my child to keep control of his feelings at all times.	55
I do not allow my child to question my decisions.	70
I do not allow my child to get angry with me.	31

Subscale III   Worry about Child

Item	Number on Scale
I worry about the bad and sad things that can happen to a child as he grows up.	28
I worry about the health of my child.	68

Subscale IV   Suppression of Aggression

Item	Number on Scale
I try to keep my child from fighting.	56
I don't allow my child to tease or play tricks on others.	89
I help my child when he is being teased by his friends.	4

Subscale V   Enjoyment of Child

Item	Number on Scale
I enjoy having the house full of chidlren.	62
I find some of my greatest satisfactions in my child.	19
I find it interesting and educational to be with my child for long periods.	77

Subscale VI   Emphasis on Early Training

Item	Number on Scale
I believe in toilet training a child as soon as possible.	49
I think a child should be weaned from the breast or bottle as soon as possible.	78
I think children must learn early not to cry.	82

Subscale VII   Negative Affect

Item	Number on Scale
I often feel angry with my child.	5
There is a good deal of conflict between my child and me.	69
I feel my child is a bit of a disappointment to me.	32

Subscale VIII   Emphasis on Achievement

Item	Number on Scale
I want my child to make a good impression on others.	74
I encourage my child always to do his best.	2
I think it is good practice for a child to perform in front of others.	17
I expect a great deal of my child.	33
I think a child should be encouraged to do things better than others.	59
I feel it is good for a child to play competitive games.	71

Subscale IX   Expression of Affect

Item	Number on Scale
When I am angry with my child, I let him know it.	58
I am easy going and relaxed with my child.	34
I joke and play with my child.	40
My child and I have warm, intimate times together.	42
I express affection by hugging, kissing, and holding my child.	18
I feel a child should be given comfort and understanding when he is scared or upset.	11

Subscale X   Openness to Experience

Item	Number on Scale
I feel a child should have time to think, daydream, and even loaf sometime.	24
I encourage my child to wonder and think about life.	21
I encourage my child to talk about his troubles.	53
I encourage my child to be curious, to explore and question things.	45

Subscale XI   Protectiveness

Item	Number on Scale
I prefer that my child not try things if there is a chance he will fail.	20
I try to keep my child away from children of families who have different ideas or values from our own.	12
I try to stop my child from playing rough games or doing things where he might get hurt.	13
I think one has to let a child take many chances as he grows up and tries new things.*	44

Subscale XII   Supervision

Item	Number on Scale
I make sure I know where my child is and what he is doing.	76
I believe it is unwise to let children play a lot by themselves without supervision from grownups.	91

Subscale XIII   Inconsistency

Item	Number on Scale
I sometimes forget the promises I have made to my child.	16
I threaten punishment more often than I actually give it.	50

Subscale XIV   Rational Guidance

Item	Number on Scale
I make sure my child knows that I appreciate what he tries or accomplishes.	52
I believe in praising a child when he is good and think it gets better results than punishing him when he is bad.	51
I talk it over and reason with my child when he misbehaves.	38

* Item is reflected.

APPENDIX I

Matthews Youth Test for Health

PLEASE RATE HOW CHARACTERISTIC EACH ITEM IS OF THIS CHILD AND CIRCLE THE
APPROPRIATE NUMBER. A "1" IS VERY UNCHARACTERISTIC AND A "5" IS VERY
CHARACTERISTIC.

		Very Uncharacteristic			Very Characteristic	
1.	When this child plays games, he/ she is competitive.	1	2	3	4	5
2.	This child works quickly and energetically rather than slowly and deliberately.	1	2	3	4	5
3.	When this child has to wait for others, he/she becomes impatient.	1	2	3	4	5
4.	This child does things in a hurry.	1	2	3	4	5
5.	It takes a lot to get this child angry at his/her peers.	1	2	3	4	5
6.	This child interrupts others.	1	2	3	4	5
7.	This child is a leader in various activities.	1	2	3	4	5
8.	This child gets irritated easily.	1	2	3	4	5
9.	He/she seems to perform better than usual when competing against others.	1	2	3	4	5
10.	This child likes to argue or debate.	1	2	3	4	5
11.	This child is patient when working with children slower than he/she is.	1	2	3	4	5
12.	When working or playing, he/she tries to do better than other children.	1	2	3	4	5
13.	This child can sit still long.	1	2	3	4	5
14.	It is important to this child to win, rather than to have fun in games or schoolwork.	1	2	3	4	5
15.	Other children look to this child for leadership.	1	2	3	4	5
16.	This child is competitive.	1	2	3	4	5
17.	This child tends to get into fights.	1	2	3	4	5

APPENDIX J

Child Behaviors Inventory

School Behaviors Inventory

Below are some statements describing some child behaviors. Please rate each item by circling a number on the continuum, with "1" being Very Uncharacteristic and "5" being Very Characteristic as they pertain to _____.

		Very Uncharacteristic				Very Characteristic
1.	Always has ideas of things to do.	1	2	3	4	5
2.	Uses props in typical rather than unusual ways.	1	2	3	4	5
3.	Once goal is achieved, stops playing with the object/material.	1	2	3	4	5
4.	Explores different ways to accomplish the same end.	1	2	3	4	5
5.	Needs reinforcement to continue activities.	1	2	3	4	5
6.	Invents new games.	1	2	3	4	5
7.	Asks many questions about what to do.	1	2	3	4	5
8.	Seeks approval frequently.	1	2	3	4	5
9.	Uses things his/her own way.	1	2	3	4	5
10.	Looks to others to tell him/her what to do.	1	2	3	4	5
11.	Enjoys learning new skills.	1	2	3	4	5
12.	Works well on his/her own.	1	2	3	4	5
13.	Enjoys doing things even when there's no purpose.	1	2	3	4	5
14.	Has fun doing things without worrying how well they turn out.	1	2	3	4	5
15.	Gets so involved in activity that it is hard to get him/her to quit.	1	2	3	4	5
16.	Starts activities for his/her own enjoyment.	1	2	3	4	5
17.	Pretends a lot.	1	2	3	4	5
18.	Uses toys/objects only in the way they were designed to be used.	1	2	3	4	5
19.	Plays eagerly.	1	2	3	4	5
20.	Plays intently.	1	2	3	4	5
21.	Invents variations on stories such as different endings or new characters.	1	2	3	4	5
22.	Displays exuberance much of the time.	1	2	3	4	5
23.	Rearrange situations to come up with novel ones.	1	2	3	4	5
24.	Once the child has been shown how to do something, he/she creates his/her own way.	1	2	3	4	5
25.	Has a sense of humor.	1	2	3	4	5
26.	Is imaginative.	1	2	3	4	5
27.	Uses toys/objects in unusual ways.	1	2	3	4	5
28.	Finds unusual things to do with common objects.	1	2	3	4	5
29.	Identifies with many characters instead of playing the same role over again.	1	2	3	4	5
30.	Gets so involved in an activity that he/she forgets what is going on in the room.	1	2	3	4	5
31.	Is a playful child.	1	2	3	4	5

APPENDIX K

Form to Generate Items
for Child Behaviors Inventory

SCHOLARS' SUGGESTIONS FOR PLAYFULNESS SCALE ITEMS

Subscale 1: Motivational Source: Is the child intrinsically or
extrinsically motivated?

Example: Needs lots of reinforcement from others.

Your suggestions:

1. _____

2. _____

3. _____

Subscale 2: Goal Orientation: Is the child process or goal oriented?

Example: Gets frustrated when things don't work out right.

Your Suggestions:

1. _____

2. _____

3. _____

Subscale 3: Object/Environment Orientation: Does the child dominate
the play situation (play) or remain bound by environmental
stimuli? Is there more exploration or more play?

Your Suggestions:

1. _____

2. _____

3. _____

Subscale 4: Relation to instrumental behaviors: Are the child's
             activities literal or is there a tendency to transform
             reality through pretense?

Your Suggestions:

1. _____

2. _____

3. _____

Subscale 5: Rule Orientation: Is the child tightly bound to external
             rules?

Your Suggestions:

1. _____

2. _____

3. _____

Subscale 6: Degree of Involvement: Is the child actively engaged in
             activities?

Your Suggestions:

1. _____

2. _____

3. _____

Additional Comments:

I hereby give permission for my suggestions to be used for the
development of an initial item pool for a Playfulness Rating Scale.

_____
                                    Signature

Do you wish to remain anonymous if any reference to these items is
made in a publication or public presentation? Please check one.

_____   _____
        No   Yes

APPENDIX L

Form to Rate Items
for Child Behaviors Inventory

PLAYFULNESS SCALE: SCHOLARS' RATING OF CONTENT

VALIDITY

This scale is designed to allow you to assess the content validity of items for a playfulness rating scale. When completed, the Playfulness Scale could be used by teachers in kindergarden through fourth grade to rate playful behaviors of children in their classes.

The forms in this booklet show a copy of the scale as it will be presented to teachers. The teacher's response choices are to the right of each item. Do not complete that area.

To the left of each item is a space for you to rate how well that item measures the concept conveyed by the subscale in which it has been placed. For definitional criteria, see the Rubin, Fein and Vandenberg (1983) review on play. The direction of the item (positive or negative) has been denoted by a "+" or "-" in parentheses.

Please rate all of the items. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins or on the back. Your comments will be read and taken into account.

Thank you for your help.

SUBSCALE 1 MOTIVATIONAL SOURCE: IS THE CHILD INTRINSICALLY OR EXTRINSICALLY MOTIVATED?

Scholar's Responses: How well does each item measure the subscale concept?

	Not At All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers)

	Very Uncharac.				Very Charac.
1. Needs reinforcement to continue activities(-)	1	2	3	4	5
2. Looks to others to tell him/her what to do(-)	1	2	3	4	5
3. Works well on his/her own(+)	1	2	3	4	5
4. Always has ideas of things to do(+)	1	2	3	4	5
5. Seeks approval frequently(-)	1	2	3	4	5
6. Doesn't pursue activities for own enjoyment(-)	1	2	3	4	5
7. Plays alone(+)	1	2	3	4	5
8. Starts activities for own enjoyment(+)	1	2	3	4	5
9. Suggests ideas to others(+)	1	2	3	4	5

SUBSCALE 2 GOAL ORIENTATION: IS THE CHILD PROCESS OR GOAL ORIENTED?

	Scholar's Responses: How well does each item measure the subscale concept?					Items and Responses Scale (To be completed by teachers)					
	Not at All Well	Minimally Well	Moderately Well	Well	Very Well		Very Uncharac.			Very Charac.	
1.	1	2	3	4	5	1. Gets frustrated if things do not turn out right(-)	1	2	3	4	5
2.	1	2	3	4	5	2. It is concerned about how his/her art projects look(-)	1	2	3	4	5
3.	1	2	3	4	5	3. Gets upset if something doesn't work right(-)	1	2	3	4	5
4.	1	2	3	4	5	4. Has fun doing things without worrying how well they turn out(+)	1	2	3	4	5
5.	1	2	3	4	5	5. Out to win(-)	1	2	3	4	5
6.	1	2	3	4	5	6. Wants to do better than others(-)	1	2	3	4	5
7.	1	2	3	4	5	7. Competitive(-)	1	2	3	4	5
8.	1	2	3	4	5	8. Plays without worrying about who wins(+)	1	2	3	4	5
9.	1	2	3	4	5	9. Enjoys learning new skills(+)	1	2	3	4	5
10.	1	2	3	4	5	10. Makes good use of accidental results(+)	1	2	3	4	5
11.	1	2	3	4	5	11. Enjoys doing things even when there's no purpose(+)	1	2	3	4	5
12.	1	2	3	4	5	12. Changes goals when things don't work out the first time(+)	1	2	3	4	5
13.	1	2	3	4	5	13. Easily changes activities in response to environmental stimuli(+)	1	2	3	4	5
14.	1	2	3	4	5	14. Once goal is achieved, stops playing with the object/material(-)	1	2	3	4	5
15.	1	2	3	4	5	15. Explores different ways to accomplish the same end(+)	1	2	3	4	5
16.	1	2	3	4	5	16. Losing a game keeps the child from wanting to play again(-)	1	2	3	4	5

SUBSCALE 3 OBJECT/ENVIRONMENTAL ORIENTATION: DOES THE CHILD DOMINATE THE PLAY SITUATION (PLAY) OR REMAIN BOUND BY ENVIRONMENTAL STIMULI? IS THERE MORE EXPLORATION OR MORE PLAY?

Scholar's Responses: How well does each item measure the subscale concept?

	Not at All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers)

	Very Uncharac.				Very Charac.
1. Spends a lot of time trying to figure out how things work(-)	1	2	3	4	5
2. Uses things his/her own way(+)	1	2	3	4	5
3. Rearranges situations to come up with novel ones(+)	1	2	3	4	5
4. Rearranges props(+)	1	2	3	4	5
5. Comes up with new games(+)	1	2	3	4	5
6. Chooses familiar (rather than novel) situations(-)	1	2	3	4	5
7. Uses props in typical rather than unusual ways(-)	1	2	3	4	5
8. Plays well-known (rather than uncommon) games(-)	1	2	3	4	5
9. Relies on toys/objects for play(-)	1	2	3	4	5

SUBSCALE 4   RELATION TO INSTRUMENTAL BEHAVIORS: ARE THE CHILD'S ACTIVITIES LITERAL OR IS THERE A TENDENCY TO TRANSFORM REALITY THROUGH PRETENSE?

Scholar's Responses: How well does each item measure the subscale concept?

	Not at All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5
10.	1	2	3	4	5
11.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers)

Items	Very Uncharac.		Very Charac.		
1. Pretends a lot(+)	1	2	3	4	5
2. Is imaginative (+)	1	2	3	4	5
3. Identifies with many characters instead of playing same role over again(+)	1	2	3	4	5
4. Needs props in order to get involved(-)	1	2	3	4	5
5. Finds unusual things to do with common objects(+)	1	2	3	4	5
6. Makes up unusual names for things(+)	1	2	3	4	5
7. Invents variations on stories such as different endings or new characters (+)	1	2	3	4	5
8. Laughs when things are called "silly" names(+)	1	2	3	4	5
9. Filters out stimuli that are irrelevant to goals (+)	1	2	3	4	5
10. Frequently uses language like, "Pretend that..."(+)	1	2	3	4	5
11. Frequently says "What if...?"(+)	1	2	3	4	5

SUBSCALE 5 RULE ORIENTATION: IS THE CHILD TIGHTLY BOUND BY EXTERNAL RULES?

Scholar's Responses: How well does each item measure the subscale concept?

	Not at All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers)

Item		Very Uncharac.				Very Charac.
1.	Gets upset if others vary the usual form of an activity(-)	1	2	3	4	5
2.	Asks many questions about what to do(-)	1	2	3	4	5
3.	Asks many questions about how to do things(-)	1	2	3	4	5
4.	Uses toys/objects in the way they were designed to be used(-)	1	2	3	4	5
5.	Likes to do things his/her way(+)	1	2	3	4	5
6.	Once the child has been shown how to use something, he/she follows the directions carefully(-)	1	2	3	4	5
7.	Uses toys/objects in unusual ways(+)	1	2	3	4	5
8.	Once the child has been shown how to do something, he/she creates his/her own way(+)	1	2	3	4	5

SUBSCALE 6 DEGREE OF INVOLVEMENT: IS THE CHILD ACTIVELY ENGAGED IN ACTIVITIES?

Scholar's Responses: How well does each item measure the subscale concept?

	Not at All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5
10.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers)

Items	Very Uncharac.				Very Charac.
1. Gets so involved in activity it is hard to get him/her to quit(+)	1	2	3	4	5
2. Gets so involved in activity that he/she forgets what is going on in the room(+)	1	2	3	4	5
3. Seeks to continue own activities even when asked to stop(+)	1	2	3	4	5
4. Shows enjoyment of self-selected activities(+)	1	2	3	4	5
5. Persistent in finishing self-selected activities(+)	1	2	3	4	5
6. Plays eagerly(+)	1	2	3	4	5
7. Plays intently(+)	1	2	3	4	5
8. Is vigorous in play(+)	1	2	3	4	5
9. Pursues self-selected activities a long time before changing(+)	1	2	3	4	5
10. Is easily distracted from activities(-)	1	2	3	4	5

Is there anything else you would like to tell us about rating playfulness? If so, please use this space for that purpose.

Also, any comments you wish to make which you think may be helpful in future efforts to study playfulness will be appreciated, either here or in a separate letter.

Your contribution to this effort is greatly appreciated. If you would like a copy of the final scale, please check the space below. We will see that you receive a copy._____

APPENDIX M

Item Means for Child Behaviors Inventory

SUBSCALE 1 MOTIVATIONAL SOURCE: IS THE CHILD INTRINSICALLY OR EXTRINSICALLY MOTIVATED?

Scholar's Responses: How well does each item measure the subscale concept?

	Not At All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers).

	Very Uncharac.		Very Charac.			Means
1. Needs reinforcement to continue activities(-)	1	2	3	4	5	4.00
2. Looks to others to tell him/her what to do(-)	1	2	3	4	5	3.88
3. Works well on his/her own(+)	1	2	3	4	5	4.25
4. Always has ideas of things to do(+)	1	2	3	4	5	3.38
5. Seeks approval frequently(-)	1	2	3	4	5	3.25
6. Doesn't pursue activities for own enjoyment(-)	1	2	3	4	5	3.63
7. Plays alone(+)	1	2	3	4	5	2.38
8. Starts activities for own enjoyment(+)	1	2	3	4	5	3.88
9. Suggests ideas to others(+)	1	2	3	4	5	2.63

SUBSCALE 2 GOAL ORIENTATION: IS THE CHILD PROCESS OR GOAL ORIENTED?

Scholar's Responses: How well does each item measure the subscale concept?

	Not at All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5
10.	1	2	3	4	5
11.	1	2	3	4	5
12.	1	2	3	4	5
13.	1	2	3	4	5
14.	1	2	3	4	5
15.	1	2	3	4	5
16.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers)

Item	Very Uncharac.				Very Charac.	Means
1. Gets frustrated if things do not turn out right(-)	1	2	3	4	5	3.57
2. It is concerned about how his/her art projects look(-)	1	2	3	4	5	3.29
3. Gets upset if something doesn't work right(-)	1	2	3	4	5	2.71
4. Has fun doing things without worrying how well they turn out(+)	1	2	3	4	5	1.86
5. Out to win(-)	1	2	3	4	5	1.57
6. Wants to do better than others(-)	1	2	3	4	5	3.14
7. Competitive(-)	1	2	3	4	5	1.00
8. Plays without worrying about who wins(+)	1	2	3	4	5	3.71
9. Enjoys learning new skills(+)	1	2	3	4	5	4.14
10. Makes good use of accidental results(+)	1	2	3	4	5	3.86
11. Enjoys doing things even when there's no purpose(+)	1	2	3	4	5	3.86
12. Changes goals when things don't work out the first time(+)	1	2	3	4	5	3.57
13. Easily changes activities in response to environmental stimuli(+)	1	2	3	4	5	3.57
14. Once goal is achieved, stops playing with the object/material(-)	1	2	3	4	5	4.14
15. Explores different ways to accomplish the same end(+)	1	2	3	4	5	4.43
16. Losing a game keeps the child from wanting to play again(-)	1	2	3	4	5	3.43

127

SUBSCALE 3 OBJECT/ENVIRONMENTAL ORIENTATION: DOES THE CHILD DOMINATE THE PLAY SITUATION (PLAY) OR REMAIN BOUND BY ENVIRONMENTAL STIMULI? IS THERE MORE EXPLORATION OR MORE PLAY?

Scholar's Responses: How well does each item measure the subscale concept?

Item	Not at All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers)

Item	Very Uncharac.				Very Charac.	Means
1. Spends a lot of time trying to figure out how things work(−)	1	2	3	4	5	3.25
2. Uses things his/her own way(+)	1	2	3	4	5	4.13
3. Rearranges situations to come up with novel ones(+)	1	2	3	4	5	4.38
4. Rearranges props(+)	1	2	3	4	5	3.75
5. Comes up with new games(+)	1	2	3	4	5	4.38
6. Chooses familiar (rather than novel) situations(−)	1	2	3	4	5	2.63
7. Uses props in typical rather than unusual ways(−)	1	2	3	4	5	3.50
8. Plays well-known (rather than uncommon) games(−)	1	2	3	4	5	2.88
9. Relies on toys/objects for play(−)	1	2	3	4	5	2.63

SUBSCALE 4   RELATION TO INSTRUMENTAL BEHAVIORS: ARE THE CHILD'S ACTIVITIES LITERAL OR IS THERE A TENDENCY TO TRANSFORM REALITY THROUGH PRETENSE?

Scholar's Responses: How well does each item measure the subscale concept?

	Not at All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5
10.	1	2	3	4	5
11.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers)

	Very Uncharac.			Very Charac.		Means
1. Pretends a lot(+)	1	2	3	4	5	4.11
2. Is imaginative (+)	1	2	3	4	5	4.50
3. Identifies with many characters instead of playing same role over again(+)	1	2	3	4	5	3.50
4. Needs props in order to get involved(-)	1	2	3	4	5	2.25
5. Finds unusual things to do with common objects(+)	1	2	3	4	5	4.50
6. Makes up unusual names for things(+)	1	2	3	4	5	3.25
7. Invents variations on stories such as different endings or new characters(+)	1	2	3	4	5	4.13
8. Laughs when things are called "silly" names(+)	1	2	3	4	5	3.38
9. Filters out stimuli that are irrelevant to goals(+)	1	2	3	4	5	1.88
10. Frequently uses language like, "Pretend that..."(+)	1	2	3	4	5	4.00
11. Frequently says "What if...?"(+)	1	2	3	4	5	3.50

SUBSCALE 5   RULE ORIENTATION: IS THE CHILD TIGHTLY BOUND BY EXTERNAL RULES?

Scholar's Responses: How well does each item measure the subscale concept?

	Not at All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5

Items and Responses Scale (To be completed by teachers)

Items	Very Uncharac.				Very Charac.	Means
1. Gets upset if others vary the usual form of an activity(-)	1	2	3	4	5	4.13
2. Asks many questions about what to do(-)	1	2	3	4	5	3.38
3. Asks many questions about how to do things(-)	1	2	3	4	5	3.38
4. Uses toys/objects in the way they were designed to be used(-)	1	2	3	4	5	3.75
5. Likes to do things his/her way(+)	1	2	3	4	5	2.75
6. Once the child has been shown how to use something, he/she follows the directions carefully(-)	1	2	3	4	5	3.29
7. Uses toys/objects in unusual ways(+)	1	2	3	4	5	4.50
8. Once the child has been shown how to do something, he/she creates his/her own way(+)	1	2	3	4	5	4.25

130

SUBSCALE 6 DEGREE OF INVOLVEMENT: IS THE CHILD ACTIVELY ENGAGED IN ACTIVITIES?

Scholar's Responses: How well does each Item measure the subscale concept?

	Not at All Well	Minimally Well	Moderately Well	Well	Very Well
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5
10.	1	2	3	4	5

Items and Response Scale (To be completed by teachers)

Item	Very Uncharac.				Very Charac.	Means
1. Gets so involved in activity it is hard to get him/her to quit(+)	1	2	3	4	5	4.63
2. Gets so involved in activity that he/she forgets what is going on in the room(+)	1	2	3	4	5	4.38
3. Seeks to continue own activities even when asked to stop(+)	1	2	3	4	5	3.38
4. Shows enjoyment of self-selected activities(+)	1	2	3	4	5	4.14
5. Persistent in finishing self-selected activities(+)	1	2	3	4	5	4.14
6. Plays eagerly(+)	1	2	3	4	5	4.14
7. Plays intently(+)	1	2	3	4	5	3.75
8. Is vigorous in play(+)	1	2	3	4	5	3.13
9. Pursues self-selected activities a long time before changing(+)	1	2	3	4	5	3.50
10. Is easily distracted from activities(-)	1	2	3	4	5	3.50

The vita has been removed from
the scanned document