The Medieval Kingdom Topology: Peer Relations in Kindergarten Children

Andrew Bennett

McGill University Department of Educational Psychology

> Montreal, Quebec September, 1990

A thesis Submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Arts

(c) Andrew Bennett

#### ABSTRACT

The focus of this research was to examine whether the Medieval Kingdom social role topology, as devised by Adcock and Segal (1983), could be applied with kindergarten children, and to assess the association between the social roles children assumed and seven non-behavioral variables. One hundred and seventy-three children from ten kindergarten classes in two schools participated in the study. Hypotheses that the Medieval Kingdom could be distilled from a sample of kindergarten children and that specific non-behavioral variables including cognitive ability, physical attractiveness, self-esteem, and chronological age were related to the assumption of leadership roles within the topology were confirmed. Children's gender, birth order, and number of siblings were not found to influence status within the social hierarchy. The findings suggest that the Medieval Kingdom is a potentially useful heuristic for understanding the peer relationships of kindergarten children.

i

#### RESUME

Cette étude a analysé si la typologie de rôle social creé par Adcock et Segal (1983), pourrait être adaptée aux enfants de l'école maternelle. De plus, elle évalue le lien entre les rôles sociaux adoptés par les enfants et sept variables noncomportementales. Cent soixante-treize enfants de 10 classes de maternelles provenant de deux écoles différentes ont participé à cette étude. Deux hypothèses ont été confirmeés. D'abord que la typologie "Medieval Kingdom" peut être retrouvée à l'intérieur d'un échantillon d'enfants de niveau maternelle et ensuite que les variables non-comportementales incluant l'habileté cognitive, l'attraction physique, l'estime personnelle, et l'âge chronologique, sont reliées à l'adoption des rôles du leadership tels que définis par la typologie ont été confirmées. Le sexe des enfants, l'ordre de naissance, et le nombre d'enfants dans la famille ne sembient pas influencer le statut des enfants dans la hierarchie sociale. Les résultats suggèrent que le "Medieval Kingdom" est un instrument heuristique utile pour comprendre les relations entre pairs, des enfants de niveau materne'le.

#### ACKNOWLEDGEMENTS

I would like to take this opportunity to thank those individuals who were instrumental in helping me to complete this document. Their kind assistance and support enabled me to successfully tackle a very challenging task.

To Dr. Jeffery Derevensky who, in his capacity as thesis supervisor, demonstrated patience and understanding beyond what could reasonably be expected. I am very fortunate to have had the chance to work with someone with such extensive knowledge of child development and skill as an editor. Thank you for being willing to take chance on an ex-jock and allowing some latitude in the manner with which the thesis could be completed.

To Monica Mendes-d'Abreu for her unwavering support and patience. Without your timely response to needs both emotional and practical this task would have been substantially more arduous. Additionally, your willingness to donate time and effort in assisting with the typing and translation of this document allowed me the freedom to concentrate on reading and writing.

To Carolyn Klein whose aid in a wide range of areas helped make the completion of this thesis possible. From lending me a computer and showing me how to use it, to always being willing to proof read and offer advice, you provided assistance that was indispensable and deeply appreciated. You are a compliment to the department.

To Laura Bennett who allowed me to use our family ties to obtain important assistance in the collection of data and in the typing of this document. To Doreen iii

Bennett without whose help in obtaining sites for this study I would have had to knock on many doors. To Peter Bennett for providing computer facilities and support both financial and emotional. To David Bennett for encouraging and pressuring me to complete this thesis. To Leo and Caroline Bennett for always providing a hearty meal when the cupboard was empty.

To Ken Cassidy and Tony Buccongello for allowing me to do my study at St. John Fisher and St. Paul's schools. To the vice-principal; Maria Baldassare; and teachers; Suzanne Pelletier, Anne Gagne, Joan Mickie, Collette Peel, Debbie Myles, and Suzanne Legare; for welcoming me into the schools and their classrooms. To all the children and their parents for their participation and kindness.

To Melanie Barwick for her patience and proficiency in creating tables and for her all around support. To Kim Sines and Irene Rhemy for being reliable independent observers who were great with the children. To my friends who loaned their first names to my descriptions of the Medieval Kingdom. To Dr. Michael Hoover for the statistical expertise and constructive criticism. And finally, to Dr. Glen Cartwright and Dr. George Mager for their assistance in the submission of this thesis.

Thank you very much, I am fortunate to have such helpful, talented, and patient family and friends.

-

iv

# TABLE OF CONTENTS

	iii. Acknowledgements	i ii v vi
I.	INTRODUCTION	1
П.	REVIEW OF THE LITERATURE	5
	<ul> <li>ii. Theoretical perspectives</li> <li>iii. Psychoanalytic theory</li> <li>iv. Social Learning theory</li> <li>v. Social Interactional milestones</li> <li>vi. Infancy</li> <li>vii. Early childhood</li> <li>viii. Preschool and kindergarten</li> <li>ix. Later childhood</li> <li>x. Methodological limitations and concerns</li> </ul>	5 7 11 14 14 16 20 32 34 36
UI.	RATIONALE	46
IV.	METHOD	49
	ii. Delineation of topology	49 49 51 54
V.	RESULTS	57
		57 65
VI.	DISCUSSION	72
	REFERENCES	87
	APPENDIX	101

V

t

# LIST OF TABLES

Table 1:	Distribution of Social Roles by Gender	58
Table 2:	Intercorrelation Matrices	60
Table 3:	Mean Scores and Standard Deviations for Social Roles by Dependent Measures	61
Table 4:	Kruskal-Wallis Mean Ranks for Social Groups	63
Table 5:	Distribution of Social Roles by Birth Order	64

## Chapter I

- (eg 42)

## Introduction

The processes through which children are transformed from relatively helpless and demanding individuals into socially competent contributing members of society is a long and complex one. The majority of existing research has been concerned with how parental behavior supports children's learning to inhibit aggressive actions, while at the same time fostering the acquisition of positive social behavior including helpfulness and thoughtfulness to others, self-reliance, acceptance of responsibility, and the development of skills that will later support successful adult functioning.

In short, how children become socialized has been and remains a central question for psychologists and sociologists alike. Experts in these two domains seek to understand in what ways and to what extent an individual's development and adult character is influenced by the nature of his or her familial interaction (Hartup, 1983).

Over the last two decades it has become increasingly apparent, however, that parents are not the only important influence on the socialization of the child (Burleson, Applegate, Burke, Clark, Delia, & Kline, 1986; Grusec & Lytton, 1988). It is now widely accepted that the relationships individuals develop outside the family also have a powerful effect upon the development of social and cognitive skills (Burleson, 1986; Grusec & Lytton, 1988). Indeed, in most cultures, the significance of the peer relationship as a context for socialization is rivalled only by that of the family (Bronfenbrenner, 1979; Hartup, 1983).

Access to other children and opportunities to learn from them is an almost universal characteristic of development (Bandura, 1977; Bronfenbrenner, 1979). As children develop, their exposure to peers becomes more extensive and the socializing influence of this group becomes more pervasive (Grusec & Lytton, 1988). Peer relationships are distinguished by the developmental equivalence of the participants and the egalitarian nature of their interaction (Hartup, 1983). The challenges children face when socializing with an individual of their own age are different and greater than those encountered in interactions with adults or children of different ages. As a result, relationships between peers foster the development of general intellectual and social-cognitive abilities and physical skills (Grusec & Lytton, 1988; Kurdek & Krile, 1982; Rardin & Moan, 1971). The peer group is also indispensable to the development and rehearsal of sex-role adoption and courting behavior (Mannarino, 1978; Fagot, 1977), social perception, (Grusec & Lytton, 1988), dimensions of cooperative, prosocial, and competitive behavior (Zahn-Waxler, Iannotti, & Chapman, 1982), moral reasoning (Damon & Miller, 1982; Erikson, 1963; Kohlberg, 1969; Piaget, 1932; Sullivan, 1953), and expressions of aggression and dependency (Patterson, Littman, & Bricker, 1967). Similarly, the peer group supplies important confirmation and disconfirmation of selfjudgments of competence and self-esteem (Bandura, 1981). In this way children define their status in relation to others and learn both "follower" and "leader"

いたのないたないたないとないないであるのであるとないできたとうないというないたとうないであった

٠,

roles within the context of equality. This process is most important in the formation of their identities (Grusec & Lytton, 1988). Finally, peer relations appear to have long-term consequences. Poor peer acceptance is characteristic of children "at risk" for emotional and behavioral disturbances during adolescence and adulthood (e.g. Cowen, Peterson, Babegian, Izzo, & Trost, 1973; Roff, Sells, & Golden, 1972).

Recently, extensive examinations of the role of peer relationships have led to a number of innovative conceptualizations proposed for understanding the interactional process. Common to these studies is a theoretical foundation inspired by the postulates of psychoanalytic theory and shaped by Bandura's work on social learning theory. Borne out of this knowledge base is Sroufe's (1983) work on early social interaction; Howes' (1987) examination of the behavioral milestones in the development of social competence; the delineation of the behavioral precursors of sociometric status by a select group of developmental psychologists (Coie & Kupersmidt, 1983; Dodge, 1983; Dodge, Schlundt, Schocken, & Delugach, 1983; Putallaz, 1983; Rubin & Daniels-Beirness, 1983); and Adcock and Segal's (1983) seminal description of play styles and social status in the preschool environment. Cumulatively, this research provides a comprehensive, sequential analysis of the behaviors that represent social interactional milestones at different ages.

The work of Adcock and Segal (1983) is particularly noteworthy because it addresses the essential findings of Sroufe (1983), Howes (1987), Coie and

Kupersmidt (1983), Dodge (1983), Dodge et al. (1983), Putallaz (1983), and Rubin and Daniels-Beirness (1983) and incorporates them into one unique peer relations assessment paradigm. Adcock and Segal (1983) observed children between the ages of two and six and created a social status topology which considers both what individuals bring to social interaction (relationship history, behavioral skills and competencies, and personality) and how peers react to them (acceptance/rejection). In this way, it offers a more global and complete way of examining and understanding the interactions of preschool children. Adcock and Segal (1983) enhance the descriptive power of their social status hierarchy by metaphorically delineating it as a Medieval Kingdom. This analogy succinctly encompasses both the importance of leadership and the limited range of social roles in the preschool classroom; factors Adcock and Segal feit were crucial in understanding the social interactions of this age group.

The primary purpose of this study is to examine whether Adcock and Segal's (1983) social status topology can be distilled from a population of older children, and to assess the possible influence of non-behavioral attributes such as cognitive ability, self-esteem, physical attractiveness, chronological age, and birth order as they relate to the child's social status.

## Chapter II

## **Review of Literature**

There has been an exponential increase in research examining the role of peers in the social development of the individual over the last decade (e.g., Asher & Hymel, 1981; Coie, Dodge, & Coppotelli, 1982; Hartup, 1983; Rubin, 1983). In order to understand this surge it is necessary to consider the historical nature of the studies conducted over the past 15 years. The late 1960's saw the emergence and proliferation of research longitudinally assessing peer status variables. An important finding that emerged was that there was great variability in the extent to which children were accepted by their peers (e.g. Mednick & Schlusinger, 1969; Roff, 1969). This variation was seen as being especially meaningful because peer relationships were believed to contribute substantially to the development of social competence. Thus, it was anticipated that poorly accepted children would be more vulnerable to later life problems.

Kohlberg, Lacross, and Ricks (1972), Roff et al. (1972), and Cowen, et al. (1973) were the most prominent of the early researchers who illustrated what these subsequent adaptational difficulties might be. Using large samples, each demonstrated that the quality of peer relationships in childhood was a powerful predictor of subsequent adolescent and adult psychopathology (including alcoholism, juvenile delinquency, antisocial behavior, conduct disorders, neurosis, and schizophrenia). Based on these results, Cowen et al. (1973) concluded that young children successfully identified troubled peers at an early age and behaved differently toward them. This differential treatment set in motion a process of isolation and negative exchange which exacerbated early difficulties and increased the probability of later pervasive psychiatric problems.

Kolberg et al. (1972), Roff et al. (1972), Cowen et al. (1973) and others (e.g., Havinghurst, 1962; Roff, 1970; Roff, 1972; Sells, Roff, Cox, & Mayer, 1967; Watt, Stoloron, Lubensky, & McClelland, 1970; West & Farrington, 1973) provided the impetus for many current studies which have replicated and extended the evidence on the effects of poor peer relationships in childhood. For example, poor childhood peer status has been linked to poor adult social adjustment (Janes & Hesselbrock, 1978; Janes, Hesselbrock, Myers, & Penniman, 1979), juvenile delinquency (Roff & Wirt, 1984), loneliness and depression (Asher, Hymel, & Renshaw, 1984; Putallaz, White, & Shipman, 1985), schizophrenia (Grubb & Watt, 1979; John, Mednick, & Schlusinger, 1982), behavioral and somatic functioning difficulties (French & Waas, 1985), academic difficulties (Green, Forehand, Beck, & Vosk, 1980; Li, 1985), and poor school adaptation (Ledingham & Schwartzman, 1984),

Despite some cogent criticisms (East & Lerner, 1987; Kupersmidt & Coie, in press; Parker & Asher, 1987) of the methodologies employed by these seminal researchers, as well as many of their more recent counterparts, it has been clearly shown that the quality of an individual's relationship with peers during childhood has a direct bearing on adaption as an adult.

A second important result of the early research on peer relations was the recognition that limited positive peer relationships deprived children of the opportunity to learn normal adaptive modes of social conduct and social cognition. Still further, because academic pursuit takes place in a social context, poor peer relations could potentially be detrimental to school success. The prevailing belief was, as D.W. Johnson (1980) states, that:

Experiences with peers are not superficial luxuries to be enjoyed by some students and not by others. Student-student relationships are an absolute necessity for healthy cognitive social development and socialization (p. 125).

#### Theoretical Perspectives

#### Psychoanalytic Theory

A number of hypotheses were proposed to explain the importance of the peer relationship, many of which have provided essential insights into current study within the field. The main contribution of psychoanalytic theory to this body of knowledge was the impetus it provided to examine the early years of development. Sigmund Freud (1938), spurred by his discovery that patients inevitably dwelled on incidents from their early childhood, came to believe that those early childhood events, whether real or imagined, played a primary role in the development of the adult personality. Though starting the trend toward a more detailed analysis of childhood, Freud's belief that personality was set by the end of the fifth year of life limited the role of peer relations to that of a secondary variable. His work however, opened the door for others to build from his theories. In the domain of peer relations, Harry Stack Sullivan and Erik Erikson remain the most influential of those inspired by Freud's hypotheses.

Sullivan's viewpoint was that personality was "the relatively enduring pattern of recurrent interpersonal situations which characterize human life" (Sullivan, 1953; p. 111). He believed that individuals could not be studied in isolation from their interpersonal relationships. Sullivan contended that interpersonal relationships during childhood (ages six to 12), in part determined an individual's level of sociability, cooperativeness and competitiveness, and acceptance of authority. He also felt that the meaning of ostracism, disparagement, and group feeling developed as a direct result of interactions with peers, and subsequently proposed a stage-like sequence in the development of interpersonal relations.

Children were said to move from a stage (ages two to four/five years) dominated by a need for adult participation, to a stage (four to eight years) in which they had playmates but interacted with them in self-serving ways, and then to a third stage (8 to 11 years), the period of "chumships." In this third stage, children were described as being able for the first time to form an intense attachment, characterized by intimacy and reciprocity, to a same-sex friend. This give-and-take relationship, according to Sullivan (1953), taught children to identify others' thoughts and feelings, and to behave in ways that were truly prosocial.

Erikson (1963) also recognized the impact of friendship and intimate relations on human growth throughout the life cycle. He believed that childhood was particularly important because it marked an individual's "entrance to life" (Coon, 1983, p. 370). Erikson (1963) contended that during the fourth through eighth years of life children started to learn skills valued by individuals other than their families (i.e. peers, society) and that the success or failure of their acquisition had important consequences for psychological development. For example, a sense of acceptance and self-worth was often the result of praise from teachers and peers. However, when the child's actions were not well received, feelings of rejection and inferiority were the likely outcomes. Erikson (1963) was one of the first to contend that these peer responses were incorporated into a child's developing self-image and contributed to the formation of personality. This aspect of Erikson's theory remains one of the essential underlying rationales for sociometric assessment.

Erikson was also one of the first theorists, along with Piaget, to stress the importance of human play, an activity which is presently considered to be a significant force in the development of problem solving, language, thinking, self-concept, and social adjustment (Rubin, Fein, & Vandenberg, 1983). According to Erikson (1977), children used play to devise and evaluate mental models of their place in their expanding worlds. He believed that the opportunity to practice

various behaviors in a setting that was free of pressure facilitated children's adaptation to the environment. This view of play is compatible with that of Piaget (1962), and has been supported by the recent studies of Howes (1987) and Connolly and Doyle (1984), who found strong relationships between the developmental appropriateness and quality of children's play, and their adaptation to the social environment.

Erikson (1977) further argued that play could not fulfill its purpose if it occurred in a solitary setting. In his view, the developing child could not achieve identity without the interplay between his or her self-image and the perceptions of significant others. Strong support for this notion is provided by Mueller and Lucas (1975) who propose that social knowledge and interaction skill emanate directly out of object play occurring in peer presence, and that young children's very awareness of peers as social beings emerges as a consequence of fortuitously mutual object play.

Erikson (1977) himself found that in spontaneous social dramatic play, preschoolers had their perceptions of social roles, time and space, and right and wrong affirmed and clarified by other children participating in the drama. Erikson's (1977) work on play constitutes an essential element in Adcock and Segal's (1983) and Howes' (1987) assessments of the behavioral antecedents of peer status.

A final contribution of Erikson to the study of peer relations is his work on the process he labelled "ritualization." Erikson (1977) believed that the first social interaction in an infant's life, which focuses on their needs being met by their caregiver, was crucial to development, because through child care rituals (touching, smiling, talking, etc.) a mutual mode of recognition and identity affirmation was developed. This ritual serves as the foundation for all subsequent rituals of mutual recognition and bonding, including peer relationships.

Erikson was not alone in placing great importance on the nature and quality of the child's first social interaction. Bowlby (1969; 1971; 1973), Ainsworth, Blehar, Waters, and Wall (1978), and Sroufe (1983) have speculated about the essentiality of the formation of affectional bonds between caregiver and child. Additionally, there is a large body of research demonstrating that the quality of attachment is predictive of a variety of social skills (e.g., Lieberman, 1977; Londeville & Main, 1981; Jacobsen & Wille, 1986; LaFreniere, 1983; LaFreniere & Sroufe, 1985; Waters, Wippman, & Sroufe, 1979).

Through their theories and research, Sullivan and Erikson stimulated a more concentrated focus on peer relationships in early childhood. In so doing they extended the influence of psychoanalytic theory and provided inspiration for modern proponents of the theory.

#### Social Learning Theory

The most important contribution of social learning theory to the study of peer relations lies with the research of Albert Bandura. Bandura (1977) believed that learning occurred in one of two ways; either directly through the contingencies of

reinforcement, or indirectly through the observation of appropriate models. In direct learning, the more rudimentary of the two, actions have positive or negative outcomes which determine whether the action is repeated. Bandura (1977) contended that by observing the results of their own actions, individuals developed hypotheses about which behaviors were appropriate in given settings, hypotheses that were subsequently confirmed or disconfirmed as they continued to guide action.

Bandura (1977), however, also recognized that this process could be inefficient and possibly hazardous, and came to believe that much of human behavior was acquired through the observation of either live or symbolic models. He acknowledged that a crucial model was, of course, the parent, from whom children learned an enormous amount. Yet, he also recognized that children could not acquire all the knowledge necessary for successful life adaptation by observing their parents alone. Bandura identified a number of other sources for observational learning, chief among which was the peer system.

Other researchers (e.g., Hartup, 1983), have consistently supported Bandura's belief that the peer group is essential to observational learning and have also speculated about the various factors that influence children's learning from models. For example, it has been demonstrated that similarity to models in personal attributes (e.g. sex, age, skill level) can greatly affect observational learning and task performance (Schunk & Hanson, 1986). It has also been shown (Bandura, 1986) that children tend to believe that the more alike they are to

models, the greater the probability that similar behaviors will produce comparable results.

Another aspect of Bandura's (1977) theory focused on the process of selfregulation. It was his belief that a substantial proportion of human behavior was governed by self-generated consequences. He held that these self-regulatory mechanisms maintained behavior independent of external control. Once society's standards are adopted by the individual externally administered consequences become less necessary. According to Bandura (1977), these standards of achievement were originally established by modelling and through direct instruction. Parents typically, are the first to set these standards for the child, but with age, the child's peers establish a new set of normative behaviors. Children are increasingly required to reconcile their own rapidly developing sense of appropriate conduct, with those of both their parents and peers. Bandura (1977) believed that the modelling of self-control by others played a key role in the maintenance, as well as the origin, of the child's ability to self-regulate.

Bandura (1977; 1981; 1986) also focused on the concept of self-efficacy. He hypothesized that people developed beliefs about their own abilities, characteristics, and weaknesses, and these self-perceptions, guided their behavior by determining which actions they attempted to perform and how much effort they put into each performance. Bandura (1977; 1981) viewed self-perception as a framework against which information was judged. Beliefs about the self come from the individual's achievements, and the observation of what others are able to

accomplish. Bandura's (1986) view that peer comparison is an essential way in which children get feedback about their strengths and shortcomings has received extensive support (Brown & Inouye, 1978; Festinger, 1954; Schunk, 1985a; Schunk & Hanson, 1986; Zimmerman & Ringle, 1981).

Bandura's (1977; 1981; 1986) work cogently demonstrates why peer relationships are so important to development and learning. It also highlights the need for a deeper understanding of how the nature and quality of relationships among peers are controlled by this learning and are in part determinative of it. Coupled with Erikson's (1963; 1977) work, Bandura's research provided the impetus for a number of studies focusing on how social interactions affect the child's early development.

## Social Interactional Milestones

#### Infancy

( A

Like Erikson (1963; 1977), Bowlby (1969; 1973) and Ainsworth et al. (1978), Sroufe (1983) believed that the first social relationship between infant and caregiver, influenced all other interactions which occurred during development. Sroufe's rationale borrows from many theories and may be seen as "an integration of psychoanalytic, evolutionary, and organismic theory" (Sroufe, 1983 p.45). Sroufe's work on attachment (Sroufe, 1979; Sroufe, 1983; Sroufe & Fesson, 1986) has four key assumptions:

- 1) Individuals are biologically disposed to form intimate (attachment) relationships, and development takes place in the context of these relationships.
- 2) The earliest relationships are of special significance because they provide the context for the emergence of the self and because they represent prototypes for later relationships.
- 3) Early prototypes are carried forward through attitudes and expectations the child forms concerning the availability and likely responses of others and the outcome of their own efforts to cope with stress.
- 4) A prototype behavioral organization will be manifest in different, though coherent forms, in different circumstances and at different points in development. (Sroufe, 1983, p.56)

Sroufe (1983) viewed personality not as a collection of static traits or even behavioral dispositions, but as referring to the organization of attitudes, feelings, expectations, and behaviors of the individual across contexts. He held that this organization developed directly from child-caregiver interaction. Sroufe believed that the young child sought and explored new relationships within the framework of expectations for self and other that evolved from the attachment relationship. This is why he considered attachment to be so crucial to later social adaptation.

Sroufe's (1983) perspective clarifies why the set of expectations the insecurely attached individual develops will be both distinct, and in some way debilitating relative to those of the securely attached child. There are a number of studies which strongly support Sroufe's (1983) view that attachment is the essential first step in social development and that secure attachment promotes greater peer competence. For example, quality of the attachment relationship has been found to be predictive of problem solving ability (Matas, Arend, & Sroufe, 1978), quality of play (Rosenberg, 1985), sociability (Jacobsen, Tianen, Wille, & Aytch, 1987), social competence and ego resiliency (Arend, Grove, & Sroufe, 1979; Block & Block, 1979; La Freniere & Sroufe, 1985; Waters et al., 1979), hostility and antisocial behavior (Erickson, Egeland, & Sroufe, 1986; Rosenberg, 1985), and curiosity and confidence (Jacobson & Wille, 1986; Lieberman, 1977) in preschool and early school-aged children.

#### Early Childhood

Howes (1987) supported Sroufe's (1983) contention that attachment was the first social interactional milestone in the child's orderly, sequential progression toward social competence. She also agreed that early individual differences in the attainment of these milestones predicted later social competence. Howes (1987) believed that individual differences between children occurred in the relative proportion of the time they engaged in the behavioral cluster representing social competence for their age period.

According to Howes (1987), differences in the relative proportion of complementary play with peers represents individual differences in social competence in the early toddler period (13 to 24 months), differences in the relative proportion of cooperative social pretend play represents individual differences in the late toddler period (25 to 36 months), and differences in sociometric status represents individual differences in the preschool period (37 to 60 months).

-----

Howes (1987) employed a variety of techniques to gather information on 300 children between one and six years of age. Each child was observed in his or her day-care classroom and their attempts to engage in social interaction with peers were assessed. Peer group entry, complementary and reciprocal play, cooperative social pretend play, affect, social participation, and friendship were the focus of these observations. Additionally, teachers rated children's social functioning with peers and children three years or older completed sociometric assessments of their classmates.

Howes (1983; 1987) and others (e.g., Brownell, 1986; Mueller & Lucas, 1975) have argued that complementary and reciprocal interaction is an essential part of social exchange and that it is evidenced by the ability to alternate turns, to remain mutually involved in a dyad's activities, and to respond to a partner's social cues. Toddlers engage in different activities, such as run and chase, hide and seek, offer and receive, during the latter part of the second year. This allows them to become more adept at assuming complementary roles in interaction and ultimately enables them to exchange such roles reciprocally with a peer partner (Brownell, 1986; Howes, 1987). Complementary and reciprocal play represents the ability to assume the role of the other in action and therefore may mark the emergence of decentration (Bronson, 1985; Brownell, 1986; Piaget, 1954).

## In support of these assumptions, Howes (1987) demonstrated

complementary and reciprocal peer play to be positively associated with peer social competence (as measured by cooperativeness and ease of peer group entry, and teacher ratings of sociability) in the early toddler period. Further, the proportion of complementary and reciprocal peer play in the early toddler period was strongly related to the proportion of cooperative social pretend play in the late toddler period. In fact, this type of play was the only observable factor, aside from chronological age, to contribute significantly to the variance.

Howes (1987) contended that the communication of meaning; defined as the joint understanding of the theme of an interaction (Brenner & Mueller, 1982; Howes, 1987); represented social competence in the late toddler period. She held that the communication of meaning was evident in the context of social pretend play which followed from complementary and reciprocal peer play.

Howes (1987) believed that these two forms of play were structurally similar because in both, the different but complementary role of the partner was acknowledged, and the action of the partner reversed. In complementary and reciprocal peer play actions are reversed. In social pretend play, pretend roles (e.g. driver, passenger) are reversed (Doyle, 1988; Garvey, 1977; Rubin et al., 1983). During cooperative social pretend play, the communication of meaning is required to achieve role reversal. Children must understand that their partner is acting out a role. Children who are acquiring cooperative social pretend play build on the reversal structure, already established in complementary and reciprocal peer play, by adding newly acquired nonliteral, symbolic content to existing play structures (Howes, 1987).

Other research clearly reiterates the importance of social pretend play for successful adaptation. For example, this form of play has been linked to the development of perspective-taking and other cognitive skills (Burns & Brainerd, 1979; Connolly & Doyle, 1984; Fink, 1976; Saltz, Dixon, & Johnson, 1977), group cooperation and participation skills (Smith, Dalgleish, & Herzmark, 1981; Smith & Syddall, 1978), language skills, impulse control, and rule conceptualization (Bruner, 1972; 1973; Vygotsky, 1976), intellectual and psychosocial growth (Curry & Arnaud, 1984) and social acceptance and peer popularity (Connolly & Doyle, 1984; Flannery & Watson, 1987; Rubin & Maioni, 1975). Additionally, since social pretend play necessitates the exercise of such complex skills as role-taking, empathy, and cooperation, it has been consistently found to contribute to the development of social skill and overall social competence (Bruner, 1973; Connolly & Doyle, 1984; Connolly, Doyle, & Reznick, 1988; Doyle, 1988; Doyle & Connolly, in press; Garvey, 1977; Rubin & Maioni, 1975; Vygotsky, 1976).

Howes (1987) also demonstrated that the proportion of social pretend play a child engaged in was positively associated with his/her social competence (as measured by teacher ratings of sociability, peer sociometric ratings, ease of peer group entry, and overall peer play skills) in the late toddler period. In fact, children classified as rejected by their peers had by far, the lowest proportions of social pretend play of any group. Lastly, Howes research suggests that

cooperative social pretend play in the late toddler period is highly predictive of sociometric status in preschool.

Howes' (1983; 1987) work is exceptional because it identifies and verifies behaviors that are essential to social competence among very young children. Her research, with this particular age group, which is both comprehensive and groundbreaking, is an important contribution to the knowledge of peer relationships. It also provides an excellent framework from which to assess the work of Adcock and Segal (1983).

#### Preschool and kindergarten

The next developmental milestone in the child's quest for social competence appears to be the ability to acquire social knowledge of the peer group (Howes, 1987). Once children are able to use symbolic behaviors in peer interaction, their range of potential playmates increases dramatically. Children who can communicate meaning in social interaction are no longer dependent on the routines and idiosyncratic communication patterns they developed with familiar peers. They can name a game or specify the design of play (i.e. You're the cop and I'm the robber). This enables three to four year olds to play with a wider range of playmates than a toddler (Howes, 1983; Lederberg, Rosenblatt, Vandell, & Chapin, 1987). When children play with peers, they acquire knowledge of the characteristic behaviors of others, different play styles, and behaviors that are necessary for successful social interaction (Howes, 1987). Sociometric interviews, assessing individual differences in social competence with peers, are one means of measuring a child's social knowledge of the peer group (Hartup, 1983; Howes, 1987; Hymel, 1983). In order to reliably complete a sociometric interview, a child must be aware of group membership, have knowledge of behavioral characteristics of individual group members, and have the ability to make stable personal judgments about these characteristics.

It has been widely and reliably demonstrated that, from the preschool period on, children are capable of completing sociometric ratings (e.g., Bukowski & Newcomb, 1985; Coie, Dodge, & Coppotelli, 1982; Coie & Dodge, 1983; Hartup, 1983; Hymel, 1982; Rogosch & Newcomb, 1989). They are also able to adequately generate descriptions of the characteristic and typical play behaviors of their peers (e.g., Coie et al., 1982; Coie & Dodge, 1983; Bukowski & Newcomb, 1984; Rogosch & Newcomb, 1989).

This does not, however, provide a complete assessment of a child's social knowledge of the peer group. More important to their development of social competence is the child's own knowledge and demonstration of the behaviors necessary for effective social interaction. Thus, it is not sufficient that children are able to identify when others behave inappropriately, they must also be able to learn and demonstrate the behaviors requisite for successful social interaction themselves.

Howes specified that one such behavior during preschool may be the ability to successfully enter peer groups. This skill was shown to be associated with a

child's level of social competence (Howes, 1987). Other research has more directly assessed the role of this and other behaviors in the determination of preschool and kindergarten children's social competence.

In speculating about the behaviors that may be related to a child's social competence, it is essential to be cognizant of the issue of cause and effect (Dodge, 1983). For example, if low status children are observed to be more aggressive than high status children (Dodge, Coie, & Brakke, 1982), the most obvious conclusion is that these behavioral tendencies may have originally contributed to the status differences. Yet, it is also possible that these same children were acting out of the frustration and self-consciousness that comes from already having attained a low-status and that the status may have resulted from other causes, such as physical unattractiveness (Kleck, Richardson, & Ronald, 1974).

Research seems to clearly indicate that there are real differences between the behaviors associated with the emergence of social status and those associated with its maintenance (Coie & Kupersmidt, 1983). In order to address the question of cause or effect, research has concentrated on the entrance of children into new social settings, such as preschool, activity groups, camps, or elementary school. As children are often unknown to each other in these situations, their behavior during the school day determines the reactions of peers toward them, as well as the social status they subsequently achieve.

Examining a sample of predominantly unacquainted children, Rubin and Daniels-Beirness (1983) discovered that children who became popular evinced

more prosocial and cooperative behaviors, coupled with fewer aggressive or negative peer interactional behaviors, than their less popular peers. Children who became rejected, on the other hand, were more likely to become involved in negative peer interaction, to display aggressive behavior, and to employ nonadaptive forms of play. Specifically, they displayed significantly greater tendencies toward solitary exploratory activity (cautious investigations of aspects of the environment) and parallel-constructive play (play which is constructively near but not with peers) when high proportions of such behaviors were developmentally inappropriate.

Both exploratory activity (Rubin, et al., 1983) and parallel-constructive play (Rubin, 1982) have been found to correlate positively with sociometric status in preschool, nonsignificantly with status in kindergarten (Rubin & Daniels-Beirness, 1983), and negatively with sociometric status in Grade 1 (Rubin & Daniels-Beirness, 1983). This may reflect, as Rubin and Daniels-Beirness (1983) suggest, a developmental trend, with solitary exploratory activity and parallel constructive play reflecting maturity in preschool, normality in kindergarten, and immaturity in Grade 1. This hypothesis is further supported by evidence that the proportion of these two behaviors increases from preschool to kindergarten (Rubin, 1982) and declines thereafter (Rubin, 1983).

Rubin and Daniels-Beirness' (1983) assessment of the relationship between social problem solving skill and verbal maturity, and sociometric status, revealed that popular kindergartners suggested more relevant prosocial strategies and fewer

agonistic ones to solve hypothetical object acquisition problems than did their less popular agemates. They also performed significantly better than any other group on a test of receptive vocabulary, indicating greater verbal, and perhaps cognitive maturity.

Rejected kindergartners evidenced lower levels of verbal ability which coupled with their tendency toward aggressive behavior may have contributed to the development of the negative "reputations" that characterized them in Grade 1 (Rubin & Daniels-Beirness, 1983).

Other attempts to isolate distinctive behavioral patterns among young children of varying sociometric status levels have also been made (Dodge, 1983; Dodge, et al., 1983; Putallaz, 1983). Dodge et al. (1983) completed two studies, one with 50 kindergarten children (aged five to six), and the other with 56 Grade 2 boys (aged seven to eight). The goal of both studies was to identify behaviors which led to successful social outcomes and subsequently differentiated popular from unpopular children.

Similar to Sroufe (1983) and Howes (1987), Dodge et al. (1983) proposed that the quality of attainment of certain social behavioral constructs at different ages was related to later social adaption. They considered, as does Howes (1987), that peer group entry was the behavioral construct most relevant to the developmental stage of their subjects.

Peer group entry, which is the manner by which children attempt to join the informal social groups of their agemates, has been studied under a variety of names including assimilation (Phillips, Shenker, & Ravitz, 1951), initiation (Vandell & George, 1981), access (Corsaro, 1981) and social approach (Dodge, 1983; Putallaz, 1983). The results of this body of research suggest that the peer group entry process is often; a) difficult to master (Corsaro, 1981), b) distinguishes between popular and unpopular children (Howes, 1987; Putallaz & Gottman, 1981a, 1981b), and c) requires different actions and greater sophistication across time (Lubin & Forbes 1981).

Dodge et al.'s (1983) study is unique because it was one of the first (see also Putallaz, 1983) to discriminate between the two groups of unpopular children, something Rubin and Daniels-Beirness (1983) did not do, and use peer hosts who were not previously acquainted with the children. The latter consideration ensured that, unlike Putallaz & Gottman (1981b) whose peer hosts were known to the children, children's social behavior would be an antecedent to, rather than a product of sociometric status.

The procedure employed by Dodge et al. (1983), in the first part of their study, aimed at creating groups of either one popular, one rejected, or one neglected child and two average status children (who acted as hosts). They assessed the behavior of the target child as he or she attempted to join the host children's play. Attempts to join the group were labelled as entry tactics. Seven mutually exclusive and exhaustive tactic types including; "wait and hover", "attention getting", "group-oriented statement", "question", "self-referent statement", "disruption", or "other" were isolated (Dodge et al., 1983).

While the tactics employed by children of different social statuses frequently overlapped, important differences emerged. The popular children were less likely to use tactics that brought attention to themselves; such as selfstatements or disruptions of the group's activities; and instead used a tactic that involved making statements about the peer hosts or the group's activity. This tactic was found to be the most effective in leading to positive peer responses. It has previously been demonstrated (Lubin & Forbes, 1981) that this strategy is more likely to be employed by older children, suggesting that it may be acquired over time and that the Piagetian process of decentration, may underlie its expression (Dodge et al., 1983). Not surprisingly, Dodge et al. (1983) found that the peer hosts responded more favorably to the entry behaviors of the popular children than to those of any other child. For this reason, they concluded that the peer group entry behavior of popular children was more competent than that of their peers.

The peer group entry behavior of rejected and neglected children also differed in significant ways. Rejected children engaged in ten times as many entry behaviors causing disruptions of the peer group as did neglected or popular subjects. Rejected children were also more likely than others to respond negatively to the statements initiated by the peer hosts, and the hosts, in turn, were more prone to respond negatively to the entry behaviors of rejected children than to those of any other group. This result is consistent with the findings that rejected children act more aggressively in naturalistic settings (Dodge, 1983;

Dodge, Coie, & Brakke, 1982) with peers viewing them as more disruptive and aggressive (Carlson, Lahey, & Neeper, 1984; Coie & Dodge, 1983; Coie et al., 1982).

Conversely, the neglected children refrained from disruptions but employed a tactic of waiting and hovering around the peer group. Typically, peer hosts ignored such behavior. This non-assertive approach is consistent with Coie et al. (1982) and Bukowski and Newcomb's (1985) findings that peers perceive these children as quiet and shy.

Dodge et al. (1983) noted that even when members of the different sociometric groups employed the same tactic, peers respond more favorably to the popular group. The experimenters offered two possible explanations: a) either peers were favorably biased toward popular children because of a nonbehavioral variable, such physical attraction (Coie et al. 1982; Dodge, 1983), or b) there were subtle differences among status groups in the execution of the same entry tactics that were undetected by the coding system.

The goal of the second part of Dodge et al.'s (1983) study was to determine whether the entry behaviors observed in the laboratory also occurred in boy's initial social encounters with peers during free play, and secondly, whether these patterns had a significant impact upon sociometric status over time. They found that, although the process of peer group entry was more subtle in natural settings, it could still be distilled. Dodge et al. (1983) further determined that children's behavior during an entry attempt usually involved more than one tactic and that popular children generally moved from low risk to higher risk tactics. Low status children on the other hand, generally either remained at a stage of employing low-risk tactics (neglected) or immediately moved to high risk tactics, if their original peer group entry attempt was not embraced.

Dodge et al. (1983) postulated that this indicated that the socially incompetent children had not learned the effective entry strategy of progression from low-risk to high-risk tactics. They failed to accurately read, or were inattentive to, response cues from peers concerning whether they should withdraw or proceed. This failure to effectively perceive their peer's behavior has previously been found to be characteristic of socially incompetent children (McFall & Dodge, 1982; Putallaz, 1983).

In a study similar to Dodge et al. (1983) Putallaz (1983) examined whether the ability of a child to fit into a peer group was predictive of subsequent sociometric status, and whether the relationship between fitting in and future status was strongest for children who accurately perceived the group's behavior. The peer group entry behaviors of a small sample of boys who were about to enter Grade 1 and their sociometric status four months later were measured.

In the procedure of this study a target subject entered a room where two children were playing a game and his/her attempts to join the interaction of the dyad were evaluated. The host children were confederates of the examiner, following a behavioral script and, in an improvement over Putallaz and Gottman (1981b), they were unacquainted with the subjects. Putallaz found that a child's ability to enter into a peer group was predictive of sociometric status four months later. In addition, she found that the children who were most adroit at assuming the frame of reference of the group (i.e. contributing relevant comments), and whose perception of the group's activities was most accurate, subsequently received the highest sociometric ratings.

Consistent with these studies, Burleson et al. (1986) examined the correlation between peer acceptance and communication skills (including referential, persuasive, comforting, and listener adaptation skills) in first and third grade children. Like many other studies (e.g., Gottman, Gonso, & Rasmussen, 1975; Rubin & Borwick, 1984; Rubin, 1972; Tesch & Oden, 1981), Burleson et al. (1986) found that children who were rejected by their peers had less adequately developed communication skills. This is consistent with Dodge et al.'s (1983) and Puttallaz's (1983) conceptualization of the importance of being able to contribute relevant comments to group interaction and to accurately perceive group behavior. Children who are unable to convey their intentions clearly, or who are poor at identifying group concerns, are frustrating interactional partners. Repeated difficulty with a poor referential communicator may result in peer rejection.

Burleson et al. (1986) also found that rejected children lacked age appropriate comforting skills. This tendency to respond insensitively to distressed peers may have contributed to their low peer standing.
In a study similar to Putallaz (1983), but including a consideration of the role of physical attractiveness, and a more detailed description of the behaviors related to each of five sociometric groups, Dodge (1983) examined the behavioral antecedents of social status. In this experiment unacquainted second grade boys were brought together and assigned to play groups where their free play interactive behaviors were assessed. The results indicated that peer group entry behavior and peer-directed aggression were the critical variables determining sociometric status. Inappropriate play (i.e. outrageous, disruptive, solitary) and physical attractiveness were also shown to be important factors.

Dodge (1983) reported that boys who came to be rejected displayed the highest frequencies of aggressive behavior (i.e. rough and tumble play, hostile statements, and exclusions of others). During the early stages of the play group, rejected children (and their neglected counterparts) made the greatest number of attempts at peer group entry. Their social approaches most often led to rejection by their agemates and over time they became more isolated.

Neglected children were characterized by their inappropriate play (outrageous, disruptive) in the initial sessions and consistently inept peer interaction in the absence of aggressive or antisocial behavior. They were more physically attractive than rejected children, and tended to be perceived as shy by their peers.

The boys who became popular were quite physically attractive. Although their behavior was not greatly different from that of the average-status boys, they did engage in high rates of cooperative play and social conversation while refraining from inappropriate and aggressive behaviors. They displayed low frequencies of peer group entry attempts, but high rates of success. They tended to become involved in long interactions which they were not likely to terminate. Peer response was the most positive to popular children, and this was the case even when children from other sociometric groups behaved in a manner identical to them. Popular boys were viewed as being leaders who are willing to share (Dodge, 1983).

Average status boys behaved similarly to their popular peers, differing only slightly in frequency of prosocial behavior and the degree of their physical attractiveness.

Interestingly, children classified as 'controversial' engaged in even more prosocial behavior than popular boys. They displayed high frequencies of interpersonally skilled behavior and received very positive peer response. Conversely, they demonstrated the greatest amounts of aggressive play, hostile statements, exclusion of peers, and other antisocial acts which were responded to most negatively. Further, their physical attractiveness surpassed that of only the rejected group. Since the controversial children were actively involved with peers in both very positive and aggressive ways, the perceptions held by their peers were mixed.

The work of Rubin and Daniels-Beirness (1983), Dodge et al. (1983), Putallaz (1983), Burleson et al. (1986), and Dodge (1983) provide a

comprehensive summary of the behaviors that are important to the development of social competence among kindergarten and early elementary school grade children. The distinctiveness from and the partial overlap of these behaviors with those already described for preschoolers (e.g., Howes, 1987) illustrates the developmental processes through which social skills emerge in this age range. Forms of play appear, and are developmentally appropriate for a given period and then must be refined or replaced in order for adaptation to be successful in the next developmental stage.

### Later childhood

While the focus of the present study is on social adaptation among kindergarten students it is nevertheless important to illustrate that competence in peer relations is an ongoing process. A brief review of selected studies assessing the social interactions of older children is included to provide insight on the variables which may contribute to status during later childhood.

Coie and Kupersmidt (1983) assessed emergent status in older groups of boys (Grade 4) and examined the correlation between their relative standing in two independent but coexisting social groups. They discovered that not only was social status re-established when children entered into new peer groups but that its process required a surprisingly brief time span. Coie and Kupersmidt also demonstrated that the behavioral patterns leading to the sociometric classification of nine to ten year old boys were strikingly similar to those for seven year-olds (Dodge 1983).

Related to Coie & Kupersmidt's (1983) work are studies addressing the self-perpetuating nature of social reputations (Boivin & Begin, 1989; Cilessen, Ferguson, Van Lier & Hoeben, 1987; Ladd, 1983; Rogosch & Newcomb, 1989). This research suggests that the labelling of children by their peers, beginning around the age of seven or eight, has the effect of maintaining social status, even when the behavioral patterns which contributed to the original acquisition of the status have disappeared (Dodge, 1983; Hetherington, Cox, & Cox, 1979).

The construction of reputations is influenced not only by the characteristics of perceived children but also by the social cognitive process and capacities utilized by other children trying to understand them (Rogosch & Newcomb, 1989). Social reputations regulate the types of social interaction that peers engage in with a specific child, and may constrain the social experiences available to that child. Older children, for example, have been found to maintain and use reputations as a way of screening social relations in order to interact only with peers with whom they are likely to have positive encounters (Rogosch & Newcomb, 1989). Further, perceptions maintained by peers are more likely to bring about behavior that is consistent with the reputation of the targeted child (Snyder, Decker-Tanke & Berscheid, 1977).

Thus, while there does not seem to be great differences in the behaviors that lead to acceptance/rejection in middle and later childhood (Coie &

Kupersmidt, 1983), it appears that a child's social reputation develops and assumes great significance over this age span (Boivin & Begin, 1989; Ladd, 1983; Rogosch & Newcomb, 1989). The formation of the reputation has added importance because it is believed to be an essential contributor to the long-term negative outcomes associated with poor peer relations (Cowen et al., 1973; Hartup, 1983; Roff et al., 1972).

#### Methodological limitations and concerns

Although the studies reviewed are seminal in many ways they are not without some limitations. One obvious weakness is the failure of all but Howes (1987) and Rubin and Daniels-Beirness (1983) to include female subjects. Evidence that the patterns of behavior which contribute to sociometric status in males necessarily parallels those for status in mixed or entirely female groups have not been shown. Second, while others have referred to it's possible impact, only Dodge (1983) provided an analysis of the importance of physical attractiveness upon sociometric status. Although he concluded that, once the behavioral interaction measures were partialled out, the correlation between attractiveness and status became nonsignificant, Dodge noted, that the trend towards differential responsiveness to the more physical attractive was clearly evident. Indeed, it has been demonstrated in numerous studies that physically attractive children enjoy higher status in both preschool and elementary school peer groups (Dion & Berscheid, 1974; Langlois & Stephan, 1981). Thirdly, all the experiments, with the exception of Dodge et al. (1983) and Howes (1987), evaluated children's social behavior in experimental rather than natural settings. While an experimental setting is advantageous in terms of facilitating the occurrence of infrequent behavior or events, providing more complete control over potentially influential variables, and enabling easier video taping, it may limit the generalizability of the findings. What occurs in the laboratory may not be a replica of what occurs in the real world (Dodge et al., 1983).

Finally, this research is largely based on the interaction of children with different sociometric status in very small groups. For example, Dodge (1983) studied play groups of eight boys, Coie & Kupersmidt (1983) groups of four, and Putallaz (1983) groups of three. The degree of representativeness of these settings to the traditional classroom is unknown.

In spite of these criticisms, these studies demonstrated that behavioral style is a cause of status, not just a consequence. Further, they illustrated the swiftness with which status develops (Coie & Kupersmidt, 1983) and demonstrated that later sociometric status can be predicted from a very small sample of behavior (Putallaz, 1983).

The final contribution of this research, and the one which is of central importance to the current study, is that it specifies the behavioral constructs that are essential to effective social interaction during the preschool (ages three to five) and early elementary school (ages six to nine) years. It demonstrates that; a) the quality and proportion of a child's play behavior, b) the extent of their repertoire of peer group entry behaviors, c) their skill at sequencing these entry tactics, d) their ability to assume the frame of reference of another individual or group, e) the accuracy of their social percep<sup>ti</sup>ons, and f) their ability to regulate behavior, are crucial factors that determine social standing among peers.

#### The Medieval Kingdom

The unique information provided by Sroufe (1983), Howes (1987), Coie and Kupersmidt (1983), Dodge (1983), Dodge et al. (1983), Putallaz (1983), and Rubin and Daniels-Beirness (1983) is contained, in a somewhat more intuitive form, in the work of Adcock and Segal (1983). Adcock and Segal (1983) make direct reference to the importance of secure attachment and implicitly support Sroufe's (1983) theory concerning the processes by which it operates. Their work is similar and complimentary to Howes (1987) and to that of Coie and Kupersmidt (1983), Dodge (1983), Dodge et al. (1983), Putallaz (1983), and Rubin and Daniels-Beirness (1983), in that it views specific behaviors and abilities at different ages as being essential to successful social adaptation. Additionally, Adcock and Segal emphasize how the nature and quality of children's relationships with peers determines individual social development.

What distinguishes Adcock & Segal's (1983) research is its focus on a more global examination and differentiation of social status groups. Their classifications are not solely contingent upon children's relative standing among peers. In fact, they attempt to include children's personality (i.e., temperament, attachment behavior, motives, feelings, etc.), their behaviors, and the reactions of their peers into one gestalt. Similarities between gestalts then determine the social status topology. Each child has a distinct, personal style of meeting and playing with others. Given the unique qualities of each child's personality, no two styles are ever identical. However, the social style that a child adopts is also a function of the limited range of roles available in a preschool class. Adcock and Segal suggest that social styles fall into five distinct types and children who adopt similar roles will display broad similarities in their behavior.

This is an improvement over the sociometric view of social style which seems to mass children into categories without giving much recognition to the uniqueness of their personalities. The impression is, too frequently, that all rejected or popular children are homogeneous. Adcock and Segal provide a much deeper understanding of what it is like to be a member of a certain social status group.

Additionally, by examining large mixed samples of boys and girl's in natural settings, Adcock and Segal's work addresses many of the weaknesses of the existing research on the behaviors associated with sociometric status (e.g., Dodge, 1983; Putallaz, 1983).

Adcock and Segal (1983) contend that in preschool, social status is distributed according to leadership ability. Leadership is a scarce resource critical in organizing play, the goal of "preschool society". To encompass both the importance of leadership and the limited range of social roles, Adcock & Segal

(1983) use the "Medieval Manor" as a metaphor for the preschool classroom.

They observed 100 children, of both sexes, aged two to six years, as they interacted during free play. Children in seven classrooms were observed for three months. From these observations Adcock and Segal (1983) were able to provide extensive descriptions of the roles in the Medieval Kingdom. Segal, Peck, Vega-Lahr, and Field (1987) later supplemented Adcock and Segal's (1983) work by demonstrating that the Medieval Kingdom can reliably be observed in a variety of different preschool settings and by further confirming the behaviors that are associated with each social role.

The backbone of Adcock and Segal's (1983) Medieval Kingdom are the Lords. These are the children who mold the miniature society into different cliques. Their status is maintained through hard work. The success of the Lord is determined by his/her diligence and need to control, rather than by a preponderance of natural talent. Assuming Sroufe's (1983) perspective, their personal forcefulness presupposes a secure attachment history. The Lord has mastered both complementary-reciprocal play and cooperative social pretend play, skills that positively affect social status (e.g., Doyle & Connolly, 1988; Howes, 1987). Other children recognize the Lords as individuals who initiate and maintain play and are drawn to them (Segal et al., 1987) Lords tend to use their popularity as a means of maintaining control. They confer status on certain props (i.e. a play house) and control children by limiting access to these objects. Lords have to be flexible and versatile because to maintain their retinue they must judiciously blend commands, compliments, and a sense of humour. The archetype Lord is the domineering mother in a pretend family. This role allows the Lord to control others through the organization of play.

Lords are not always successful, however. Unsuccessful Lords tend to disrupt rather than organize play. Their attempts at interaction create tension and often lead to conflict. They lack direction in their play and appear unable to accurately interpret social situations, a shortcoming that has been shown to predict rejection (Putallaz, 1983). There are two types of unsuccessful Lords whose profiles are striking similar to those of rejected and neglected children.

The trusted lieutenant to the Lord is the Vassal. Vassals follow the Lord's every lead and are in turn favoured with special attention. The Lords need the Vassals' loyalty just as the Vassals require the leadership of the Lords. Each brings out the full range of the other's personality attributes.

Vassals are in the middle of the social hierarchy. They prefer to be followers and confidants of Lords but lower status children occasionally look to them for leadership. Their social role is marked by their adaptability since the are often required to assume the alternating roles of favored follower and leader in the same play episode. In this way they are likely to have strengths in their ability to assume the frame of reference of another and in their perceptual accuracy (Dodge, 1983; Putallaz, 1983). While seeking to be favored subordinates Vassals seem to be trying to create a peer bond similar to the parent-child attachment relationship (Erikson, 1977; Sroufe, 1983). In effect, they are like infants who receive special recognition and protection from adult-like Lords. The Vassal's need for support and reassurance paired with the ability to lead is somewhat evocative of an ambivalently attached child (Ainsworth et al., 1978).

Unsuccessful Vassals can be conceptualized as either attention-seeking or aggressive. The attention-seeking Vassal is very much like a controversial child in that their goal is to gain attention of either affective dimension. These children are treated like public nuisances because they lack the cognitive ability to read situations accurately. The aggressive Vassal is marked by an inability to selfregulate (Dodge, 1983). This inability to control themselves leads to conflict with other children.

Although the term "Serf" invokes images of helplessness and servitude, Adcock and Segal (1983) did not intend it to be disparaging. Being a Serf does not mean that the individual is disliked or unhappy since the role often neatly fits the personality and needs of a child. Serfs are distinguished by two primary characteristics: (a) they are at the bottom of the social scale, being followers with the least power, and (b) their positions within the social system are generally tenuous as they are on the periphery of group activities in which they participate only sporadically. As a result of these characteristics Serfs tend to play alone most of the time (Segal et al., 1987). Their profile is very much like that of neglected children in the social system is in constant flux, most Serfs wander from one activity to another. They are not true members of any social clique, and lack the

peer group entry tactics (Dodge et al., 1983) that would allow them more control over group inclusion. The role of Serf is not however trivial, because for the social system to work there has to be submission. Serfs will follow and therefore provide ballast for the system.

According to Adcock and Segal (1983), there are three types of Serfs; the happy Serf, the shy Serf, and the frustrated Serf. The happy Serf is satisfied with his/her low level of social involvement and status. The shy Serf makes no attempt to lead, and does not demand reasonable treatment in interactions with peers. These children seem to feel fortunate just to be included in anyone's play. The frustrated Serf does not want to be left out of peer play, but lacks the skills necessary to join. Like rejected children (e.g., Carlson et al., 1984; Coie et al., 1982) frustrated Serfs disrupt games and try to call attention to themselves.

In Adcock and Segal's (1983) Medieval Kingdom, Bishops are generally children of distinction. They have high status among their peers and yet they are somewhat quaint and old-fashioned. While most children are preoccupied with playing, Bishops are attuned to a higher plane. They tend to look down on the classroom, monitoring and supervising like an adult, while at the same time they remain children, occasionally overcome with the vitality of youth. In many ways, Bishops resemble little teachers. They remind other children about the rules of the classroom and report them when they misbehave. This should not be considered as an act of malice, but rather the result of a strong identification with the teacher's role. In fact, in play Bishops usually adopt the role of teacher or

that of some other equally directive adult. They are very good and subtly imaginative when assuming these roles because of their adult orientation.

The language of Bishops tends to be quite sophisticated. Their vocabulary is advanced, and they often demonstrate an unusually good understanding of discourse rules. These strong verbal skills are prerequisites for carrying out their adult orientations and have been found to be associated with high social status (Burleson et al., 1986; Rubin & Borwick, 1984).

Bishops try to find common ground with their play partners and seek compromise in conflict situations. They defend themselves with skillful verbal reasoning and if that fails they defer to a higher authority, the teacher. Bishops are not generally aggressive but they are not easily intimidated either. They model ways of resolving conflicts that are appropriate and mature. Their behavior helps to teach important discussion techniques to other children. Bishops possess interesting play ideas, and are also willing to compromise and share which makes them successful leaders in dyadic situations. They play equally well with members of both sexes, and with a wide range of children. Their leadership, however, tends not to be as effective in larger groups. Bishops often have difficulty with rough and tumble play because the wild humour and physical exuberance is too far removed from the sedate world of adults to which they aspire. Their leadership is also too timid and flexible to control a larger group of children.

Kings and Queens are the unquestioned masters of the preschool society. They rule by virtue of their wit and charm and by their commitment to vigourous

but peaceful play. These "monarchs" are socially gifted children who assume their position without any special effort. They are extremely highly regarded by peers and constantly sought after. This level of popularity is a somewhat rare occurrence and not every classroom will have a King or Queen.

The most striking characteristic of Kings and Queens is their supreme confidence. Instead of asking permission to join or staying around the periphery of the action, they enter a group with boundless enthusiasm and immediately adopt its frame of reference; much like popular children have been found to do (Dodge et al., 1983; Putallaz, 1983). There are no social opportunities that the monarchs are afraid to tackle and they accept rejection without feelings of recrimination or self-pity. They do not disrupt, call attention to themselves, or antagonize, which distinguishes them from children of low social status (Dodge et al., 1983). The intentions of the King or Queen are honorable, and they are confident that their contributions will be acceptable. Their attitude is "let me join and I'll make it more fun for all of us". Natural leadership ability rather than an insistence on controlling everything propels them to dominance. Being selfconfident, they accept this dominance openly, without making other children feel demeaned or oppressed. They play frequently with both sexes and will interact with all of the children in the class. Kings and Queens can engage in highly verbal intimate activities or they can organize the play of a large group.

While the leadership of Lords tends to be restricted to select groups of cliques, a monarch's orientation is toward inclusion rather than exclusion. Just as

they expect other children to accept them, they expect that different children can be induced to accept each other. They enjoy and direct broad play themes which include many children. As part of their inclusive orientation, Kings and Queens seem especially trusting of their classmates. They readily share toys and in turn trust others to share with them.

In order to preserve peace, monarchs must possess great skill at handling conflicts. They seek compromise but unlike a Bishop they try to do so using a child's, rather than an adult's, frame of reference. They are adept at using imaginative play to resolve children's conflicts. Kings and Queens often use their power to create pretend settings in which real conflict and violence become acts of play. They possess great skill at play fighting, and will initiate it even when there is no conflict just to make the interaction more entertaining. Kings/Queens are talented entertainers whose good natured temperaments and zest for life can become contagious.

Adcock and Segal's (1983) descriptions enable the reader to form very clear and detailed impressions of the social lives of each type of child. Even the layman can observe a preschool class and get a strong sense of what the authors are referring to. In this way, Adcock and Segal have provided a method for understanding and conceptualizing the nature of peer relations and the composition of social competence in preschoolers. The Medieval Kingdom classification topology is distinctive both in its descriptive charm and because it considers and encompasses the behaviors which other researchers have identified as being essential to successful social adaptation.

Despite these strengths, there are limitations to the Adcock and Segal paradigm. Foremost among these limitations is the fact that the Medieval Kingdom topology has only been assessed with samples of preschool children. It remains to be demonstrated that the topology is observable in the peer relationships of older children. Evidence that the Medieval Kingdom can be delineated in school-aged children will expand the applicability and increase the power of this conceptualization process.

Furthermore, Adcock and Segal have not examined the influence of specific non-behavioral variables as they relate to the determination of social roles. Characteristics such as a child's cognitive ability, physical attractiveness, self-esteem, and birth order have been demonstrated to effect children's social status in other studies (e.g., Dion & Berscheid, 1974; Hartup, 1983; In-Sub & Hatti, 1984; Maccoby, 1980; Zajonc, 1976) but as yet have not been included in this type of topology.

#### Chapter III

## Rationale

The review of research has suggested that children's competence in peer relationships is developmental and is influenced by certain behavioral attributes and abilities. Adcock and Segal's (1983) work has contributed a unique and innovative means of examining children's social competence. Their conceptualization, referred to as the Medieval Kingdom topology, provides detailed descriptive summaries of both typical behaviors, and the range of personality attributes incorporated into five distinct social roles. These roles are broad enough to encompass individual variation but remain sufficiently narrow to meaningfully differentiate between children.

Adcock and Segal's topology provides an efficient means of conceptualizing preschool children's play and social interaction. Yet, the very approach that makes it so valuable for studying young children may limit its applicability to older age groups. The Medieval Kingdom is a simple conception of children's social relations because the preschool child's interactions appear "relatively" straightforward, uncomplicated, and limited by the number of social roles that are available. Children do not remain so unaffected for long. Developmentally, social interaction becomes increasingly more complex and subtle. Clearly, the peer relationships of older children cannot be understood and explained by a simple metaphor or be limited to merely five social roles. Situationally specific behavior may come to be dominant and global assessments of behavior may cease to be readily observable.

This study will attempt to determine if Adcock and Segal's (1983) topology exists in a relatively more structured setting with a group of older (kindergarten) children. The kindergarten class, where demands for self-control and rule conformity are interspersed with frequent opportunities for free and rambunctious play, provides an interesting environment to test the generalizability of previous findings.

The study will also endeavour to evaluate the role of cognitive ability and specific non-behavioral variables in the determination of children's status within the topology. Children's cognitive ability has been shown to affect their skill at assuming the perspective of others, communicating and cooperating (Maccoby. 1980), as well their facility at moral reasoning (Sullivan, 1953), abilities which have in turn, been found to affect social status (Burleson, 1986; Dodge, 1983; Dodge et al., 1983; Putallaz, 1983). Variables such as chronological age (Hartup, 1983; Hetherington & Parke, 1979), birth order and family size (Miller & Maryuma, 1976; Payne, 1975; Sells & Roff, 1964; Zajonc, 1975, 1976), physical attractiveness (Dion & Berscheid, 1974; Langlois & Stephan, 1981), and selfesteem (In-Sub & Hatti, 1984; Russell, 1989) have also been found to affect an individual's status among peers and therefore will be included in this study.

Thus, the principle goals of the present study are to determine if the Medieval Kingdom topology can be extended and generalized to the kindergarten

classroom and to examine what interactions exist between cognitive ability, selfesteem, physical attractiveness, chronological age, gender, number of siblings, and birth order and the different roles within the topology.

### Chapter IV

## Method

## Subjects

One hundred and seventy-three kindergarten children (83 males and 90 females) from ten classes in two suburban Montreal public elementary schools participated in the study. The children were English speaking caucasians, from middle to upper-middle class socio-economic backgrounds. At the initial time of testing the mean age of the children was seventy-four months (sd = 3.5 mo.). All observations and testing were carried out over a three month period in the latter part of the school year. Thus, at the time of testing the children were quite familiar with each other.

## Delineation of Topology

In a qualitative study of preschool peer interaction, a framework was developed by Adcock and Segal (1983) for classifying children's social styles within the hierarchical structure of group play. Five social styles were identified based on repeated observations. Since these styles were reminiscent of a feudal society, the authors used a medieval kingdom metaphor to label the styles. The three leader styles were called Kings or Queens, Bishops, and Lords. The follower styles were delineated as Vassals and Serfs. The five styles can be summarized as follows:

<u>Kings/Oueens</u> are the unchallenged leaders of the preschool class. They tend to be socially gifted children who possess a very high degree of natural leadership ability which is characterized by benevolence rather than by a need to control. Kings/Queen3 are supremely confident, have no social fear, and deal with rejection easily and effectively. They play equally well in dyads and peer groups of any size but prefer more active games. They possess excellent conflict resolution skills and in a sense combine the best attributes of all the other leadership styles. They are talented, energetic entertainers whose attention is desired by all children and who bring out the best in their playmates.

<u>Bishops</u> are also children of distinction who enjoy high peer status. They are calm, reserved, and subtly imaginative. Bishops are heavily focused on dyadic fantasy play and enliven these interactions with excellent verbal ability and creative ideas. These skills coupled with their characteristically flexible, fair, and nurturant social style make them desired playmates. Bishops are very sophisticated, adult-oriented children who often seem like little teachers or small adults. They frequently attempt to enforce class rules in the teacher's absence and often report on their peers for behavioral transgressions. Bishops are very successful at maintaining intimate interactions and resolving conflicts, talents which contribute to their mature appearance.

Lords are diligent, focused, and assertive children. They have attained their position as leaders through hard work rather than through a preponderance of natural ability. They are adept at blending commands and compliments in order to influence and control their followers. Lords are recognized as individuals who initiate, organize, and elaborate play. They prefer cooperative social pretend play in small groups of three to five children.

The theme of the Lords' fantasy play frequently focuses upon the family where they assume the role of domineering and controlling parent.

<u>Vassals</u> are in the middle of the social hierarchy. They are very successful followers who are almost always closely linked to a child with high social power. Vassals enjoy social pretend play in dyads or groups and typically fill the role of "favourite offspring" or "partner in crime". They are highly regarded by their chosen leaders and often receive special attention and consideration. While Vassals prefer not to initiate social activities, lower status children occasionally seek their direction thereby placing them briefly in a leadership role.

<u>Serfs</u> are at the bottom of the social scale. They are followers with little, if any, social power. They exhibit very high proportions of peripheral behavior (i.e. hovering around social groups, proximal observation of peers) and solitary play. Of any group, serfs are the least involved in peer interaction and the least successful at maintaining it. Many serfs, however, are not distressed by their low levels of social involvement and their role of casual follower seems to compliment their personalities quite well.

#### Dependent Measures

<u>Canadian Cognitive Abilities Test (CCAT)- Primary Battery</u> - (Thorndike, Hagen, & Wright, 1984), was used to assess the development of cognitive abilities related to verbal, quantitative, and nonverbal reasoning and problem solving. The CCAT provides a direct assessment of children's ability to a) classify, categorize, and order familiar objects, b) use quantitative and spatial relationships and concepts, c) hold information in short-term memory, d) compare stimuli and detect similarities and differences in relative size, quantity, position, shape and time. It also provides an estimate of the child's fund of general information, verbal concept formation and ability to employ effective strategies for scanning pictorial or figural stimuli to obtain information.

The CCAT is based on the *Cognitive Abilities Test* (CAT) developed by Thorndike and Hagen (1978). In order to make the CCAT more relevant for a Canadian population, certain minor modifications in content were made. As a result of this adaptation, the test maintains the quality of measurement found in the older edition (CAT), with the additional advantage of being more suitable for a Canadian population.

The Primary Battery is a single-score, untimed, nonreading test of general cognitive skills, administered at a pace suitable for the group being tested. It uses pictorial materials and oral instructions and is divided into four subtests: Rational Concepts, Object Classification, Quantitative Concepts, and Oral Vocabulary.

The Kuder-Richardson 20 reliability estimates by levels and grades for the Primary Battery were reported to be .87 (Costantino, 1989; Cummings, 1989; McInnis, 1986) suggesting a high level of internal consistency (McInnis, 1986). The concurrent validity of the Primary Battery is fairly high, correlating at .75 with the *Canadian Tests of Basic Skills* (CTBS). The CAT has been found to correlate at .75 with the *Iowa Test of Basic Skills* and the *Tests of Academic Progress* (Nichols, 1985). Correlations of the CAT with the *Stanford-Binet* were reported to be .65-.75 (Hopkins, 1985). The predictive validity coefficients for mid-year CAT with teacher's final marks show .50-.65 correlations (Hopkins, 1985). Three year retest correlations were generally around the .50s (Nichols, 1985).

The CCAT was chosen because it provides a reliable estimate of kindergarten childrens' cognitive abilities; is standardized for the population of interest; and was requested by the administrators within the two participating schools.

Behavioral Academic Self-Esteem (BASE) Test- (Coopersmith & Gilberts, 1982) assesses children's academic self-esteem on five factors: self-initiative, social attention, success/failure, social attraction, and self-confidence. These factors were derived from factor analyses of the *Coopersmith Behavior Rating Form* (BRF). The BASE includes 16 items drawn predominantly from the BRF and revised to describe academic related behaviors. Teachers rate how frequently a child behaves in a particular way, using a five point Likert scale varying from "Never" to "Always". Due to the age of the children in the study this method was selected over the more traditional approach of measuring selfesteem based on respondents' self-reports.

The BASE was normed on 3,055 children in grades K through 8 who were representative of lower-middle to upper-middle class populations. Internal consistency coefficients were based on correlations of individual items in the total score and ranged from .37 to .76 with a mean Z transformation correlation of .61. Intercorrelations of factor scores with the total score range from .71 to .94 with a mean of .84. Inter-rater reliability was reported as .71. The authors contend that construct validity of the BASE derives from Coopersmith's self-esteem theory and that the five factors reflect those personality traits most germane to academic self-esteem.

The BASE was selected as a reliable, teacher-referenced assessment of young children's self-esteem which could be completed quickly and easily scored.

<u>Physical Attractiveness</u>- was appraised based on a global assessment by two independent raters. Children were rated using a five point Likert scale (a score of one referring to very unattractive children and a score of five referring to very attractive children). When disagreements between raters occurred, the mean of the two scores was entered as the child's physical attractiveness score.

<u>Demographic Variables</u>- several variables including sex, date of birth, chronological age, birth order, number and age of siblings were obtained through school records and a parent completed questionnaire (Appendix A).

#### Procedure

#### Training procedures

Two research assistants, naive to the hypotheses of the study, observed each of ten classes for three weeks. Prior to the observation period, each observer was given a global qualitative description (as it appears in Adcock & Segal, 1983, pp. 55-133) of the five social styles (King/Queen, Bishop, Lord, Vassal, Serf) and an abbreviated delineation of each social role.

The research assistants were trained to an interobserver reliability level of .90 on the Medieval Kingdom social role topology. This was accomplished, first by repeating many of the anecdotal examples of children and their social roles provided by Adcock and Segal (1983) with the experimenter, and then by practising the classification process in a pilot kindergarten classroom.

The practice sessions focused on ten children. Research assistants observed and rated children's behavior until they achieved 90% agreement on role classifications. The experimenter was available to answer any questions and to discuss the behaviors which separated one role from another. When disagreements occurred during the actual classification process, a meeting was held between the research assistant and the experimenter and a consensus was achieved.

Physical attractiveness ratings by the two research assistants were averaged to provide a single score for each child. Agreement between the two observers was .61. Discrepancy between the ratings of the two observers did not exceed one point for any given child.

## Data collection procedures

Observations were conducted during the free play sessions of ten classes, within two schools. All kindergarten classrooms featured a number of learning centers and special play areas partitioned by dividers or bookshelves scaled to the children's height. These interaction areas included art, book, sand and water centers, and block, Lego, and playhouse areas. The teacher-child ratio ranged from 1:10 to 1:21 with the average ratio

being 1:16. The free play sessions were scheduled at different times throughout the day in the various classes and were characterized by minimal teacher intervention and direction.

Over the three week observation period each child was observed daily for a minimum of five minutes during free play. In the initial phase of the observation (week 1) research assistants completed physical attractiveness ratings of each child and focused on conspicuous play episodes involving groups of children. During the latter phase (weeks two and three) they observed the social interactions of specific children. Peer interaction was transcribed in note form as it occurred. The research assistants recorded the name of each child's playmate(s) when interaction was observed, noted instances of conflict and included a reference to the technique the child employed to resolve it. At the end of the observation period, the research assistants rated each child's predominant affective behavior (happy, sad, or serious), noted the child's most frequent playmates, and recorded their impressions of the primary role each child assumed during observation, as well as the roles their playmates assumed.

During the last week of each three week observation period the experimenter administered the CCAT to the class and each classroom teacher completed the BASE. Parents completed a questionnaire addressing demographic variables relating to their child.

## Chapter V

### Results

An examination of the data generated through the implementation of the Medieval Kingdorn topology indicates that a more thorough representation of the results requires a presentation of both the qualitative and quantitative data. Descriptive analyses of actual social interactions, highlighting integral behaviors specific to children in each of the various social roles are included in order to convey the richness and detail encompassed by the topology.

### **Ouantitative** data

The Medieval Kingdom topology, which classifies children into one of five roles (King/Queen, Bishop, Lord, Vassal, Serf) based on their free play behaviors, was implemented in ten classrooms via the categorizations of two trained observers. All 173 children in the sample were classified into one social role by both observers. Interobserver agreement occurred for 91% of the children (156/173) and in the cases (n = 17) where it did not, a conference with the experimenter led to a mutually agreed upon classification. For the purposes of the analyses, the social roles were assigned a numerical value ranging from one to five where the highest number corresponded to highest social status; King/Queen (5), Bishop (4), Lords (3), Vassals (2), Serfs (1).

The distribution of social styles appears in Table 1 and indicates that 35% of the children assumed "leader" social roles (King/Queen, Bishop, and Lord).

# Table 1

14

-

# Distribution of Social Roles by Gender

		Gender					
Social Roles		Male	Female	Total			
King/Queen	n	6	5	11			
0	% by gender	7.0	5.6	_			
	% overall	3.5	3.0	6.4			
Bishop	n	19	12	31			
	% by gender	22.9	13.3				
	% overall	11.0	7.0	17.9			
Lord	n	8	10	18			
	% by gender	9.6	11.1	-			
	% overall	4.6	5.8	10.4			
Vassal	n	18	31	49			
	% by gender	21.7	34.4	-			
	% overall	10.4	18.0	28.3			
Serf	n	32	32	64			
	% by gender	38.6	35.6	-			
	% overall	18.5	18.5	37.0			
Total	Ν	83	90	173			
	% overall	48.0	52.0	100			

Kings/Queens composed 6.4% of the sample; Bishops 17.9%; and Lords 10.4%. The "follower" social roles of Vassal and Serf accounted for 28% and 37% of the sample respectively. There was a slightly higher but nonsignificant percentage of males in leadership roles (55% vs. 45%) caused by the greater number of boys in the Bishop category. While the role of Serf was evenly distributed by gender, more females assumed the role of Vassal which accounted for the higher percentage of females in "follower" roles.

In order to assess the relationship between social role and the dependent variables a correlation matrix was generated. Intercorrelations between the scores appear in Table 2. The correlation matrix reveals moderate correlations between social role and cognitive ability (r=.40, p<.001), physical attractiveness (r=.44, p<.001), self-esteem (r=.54, p<.001), and age (r=.34, p<.001). No significant correlations were apparent for social role and birth order or number of siblings.

Mean scores and percentile ranks on the dependent variables, for the five social roles (King/Queen, Bishop, Lord, Vassal, Serf) are presented in Table 3. The data illustrates that the mean score for the students in the present study exceeds that of the standardization sample on both the CCAT and BASE tests and surpasses the expected mean for the physical attractiveness measure.

Inspection of the percentile ranks suggests that Kings/Queens (92nd percentile) and Bishops (86th percentile) performed at very high levels on the CCAT, while Lords (68th percentile) and Vassals (65th percentile) achieved moderately high success. Serfs (50th percentile), however, performed at the mean

Table 2

-474-\*\*

ころうちょうないないであるというないできます あいちょうちょう あいちんちん ちょうちょう

# Intercorrelation Matrices

Variable	n	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		~ /	( )	~ /	. ,	~ /	.,	. ,
(1) Social Role	173	1.00	.40***	.44***	.54***	.34***	.01	.01
(2) Cog. Ability	166	_	1.00	.26***	.37***	.17*	.11	.04
(3) Phys. Attract.	173		_	1.00	.30***	.06	.02	.03
(4) Self-Esceen	172	-	-	-	1.00	.15*	.01	.07
(5) Age	173	-	-	-	-	1.00	.06	.11
(6) Birth Order	173	_	-	-	-	_	1.00	.65***
(7) # of Sibs.	173	-	_	-	-	-	-	1.00

- \*p < .05 \*\*p < .01 \*\*\*p < .0C1

# Table 3

ſ

11. 1 Test dol 24. . . . . . . .

# Mean Scores and Standard Deviations for Social Roles by Dependent Measures

		ROLE								
DEPENDENT MEASURE		King / Queen	Bishop	Lord	Vassal	Serf	Total			
CCAT <sup>1</sup>	X	63.00	60.90	56.00	55.47	51.20	55.50			
	sd	4.40	6.75	9.73	8.99	10.19	9.71			
	n percentile rank	11 92	31 86	17 68	47 65	60 50	166 68			
Self Esteem <sup>2</sup>	x	63.73	62.00	59.17	57.90	49.14	59.94			
	sd	5.31	7.43	7.07	6.50	8.71	9.24			
	n	11	31	18	49	63	172			
	percentile rank	79	72	59	56	27	63			
Phys. Att. <sup>3</sup>	X	3.82	3.53	3.08	3.19	2.57	3.05			
-	sd	0.75	0.69	0.96	0.83	0.68	0.86			
	n	11	31	18	49	64	173			
Age	x	77.45	75.39	75.06	73.37	73.19	74.10			
-	sd	2.07	3.52	3.93	3.09	3.45	3.53			
	n	11	31	18	49	64	173			
#Sibs.	×	1.45	1.48	1.44	1.60	1.45	1.49			
	sd	1.13	0.93	0.70	0.91	0.78	0.85			
	n	11	31	18	49	64	173			

Standardization population mean = 51.0Standardization population mean = 56.4Expected sample mean = 2.52 3

Range of possible scores = 0-84Range of possible scores = 16-80Range of possible scores = 1-5

for the population. Percentile rank scores on the BASE reflect moderately high self-esteem levels for Kings/Queens and Bishops, normative levels for Lords and Vassals, and low self-esteem for Serfs.

The Kruskal-Wallis mean rankings of each social group on the dependent measures (Table 4) suggests that the children who assumed social roles characterized by peer leadership (King/Queen, Bishop, Lord) were somewhat older and possessed higher average cognitive ability, self-esteem, and physical attractiveness levels than children who adopted "follower" social styles (Vassals & Serfs). No differences between the social roles were noted for sibling number or birth order (see Table 5).

Nonparametric post hoc analyses were employed to examine social role group differences with respect to non-behavioral variables. The Kruskal-Wallis Analysis of Variance for two or more independent groups was employed because of its robustness with respect to small and unequal groups. This analysis revealed significant main effects for cognitive ability  $[X^2 (166) = 62.26, p < .001]$ , physical attractiveness  $[X^2 (173) = 40.73, p < .001]$ , self-esteem  $[X^2 (172) = 62.26, p < .001]$ , and chronological age  $[X^2 (173) = 21.55, p < .001]$ .

Further post hoc analyses utilizing t-tests for independent samples were performed on the variables where significant main effects had been obtained. The small number of subjects in the King/Queen and Lord categories required that, for the purposes of these comparisons, the leader and follower social roles be collapsed into two separate groups. The results of the analyses indicated that

# Table 4

C

# Kruskal-Wallis Mean Ranks (mr) for Social Groups

		Dependent Measures							
Role		CCAT	Self Esteem	Phys.Att.	Age	#Sibs.			
King/Queen	mr	125.86	1 <b>32.77</b>	129.68	134.36	78.00			
	n	11	11	11	11	11			
Bishop	mr	113.60	119.81	116.50	105.00	<b>85</b> .74			
	n	31	31	31	31	31			
Lord	mr	85.97	106.03	87.11	100.78	86.72			
	n	17	18	18	18	18			
Vassal	mr	81.01	95.31	95.73	77.26	92.80			
	n	47	49	49	49	49			
Serf	mr	61.43	49.60	58.66	73.73	<b>84.8</b> 0			
	n	60	63	64	64	64			
			05	04	04	0			

# Table 5

\*

# Distribution of Social Roles by Birth Order

Role		First	Second	Third	Fourth	Fifth	Total
King/Queen	n %	4 36	5 45	1 9	0 -	1 9	11
Bishop	n %	16 52	9 29	4 13	2 6	0	31
Lord	n %	10 56	5 28	3 17	`0 _	0	18
Vassal	n %	17 35	17 35	12 24	2 4	1 2	49
Serf	n %	26 41	28 44	10 16	0 -	0	64
Total	n %	73 42	64 37	30 17	4 2	2 1	173

# Birth Order

"leaders" significantly exceeded "followers" in cognitive ability [t (164) = 4.57, p < .001], self-esteem [t (170) = 6.38, p < .001], physical attractiveness [t (171) = 4.69, p < .001], and had a higher chronological age [t (171) = 4.48, p < .001].

Absence or illness of children on the day(s) of assessment resulted in missing data in a small number of cases. Seven children (one Lord, two Vassals, and four Serfs) were not available to complete the CCAT, and BASE ratings were not obtained for one child (a Serf). Prior observation of these children indicated that their absence would not contaminate the analyses.

#### **Oualitative** data

In the observation of the ten different class "kingdoms" it became apparent that certain behaviors and social interactions were very typical of each social role. These representative behaviors and definitive interpersonal exchanges can be imparted by means of anecdotal descriptions of each.

When present in a classroom, Kings/Queens were easily identifiable as much because of how their peers responded to them as it was for any specific behavior(s) they displayed. The uniqueness of Kings/Queens can be illustrated by some anecdotal evidence. Observation of a King named Andy and a Queen named Monica provide representative examples.
In one observational episode Andy was involved in directing play in a far corner of the classroom when conflict arose in the building block area. Five boys had been playing without cohesion when Mike (a Bishop) noted that the standing class rule that "only four children at a time allowed in the area" was being violated. It was clear that the play space was over-crowded but they could not agree on who was the last to join, and nobody would volunteer to leave. The teacher was occupied with a visitor, so Jim (a Serf) was dispatched to get Andy to help resolve the conflict. Andy temporarily left his game and accompanied Jim back to the block area where he listened patiently as each boy recounted his perception of the incident. From the available evidence, Andy determined that Jim was the child who should leave the game. Jim, who was at first disappointed, was appeased by Andy's proclamation that he would be allowed to play with the blocks tomorrow, and by an invitation to join Andy's ongoing play.

This anecdote demonstrates both the extremely high regard with which other children hold Kings/Queens and provides an idea of some of the behaviors that are associated with this preeminence. As Adcock and Segal (1983) have demonstrated, Kings/Queens possess very high social status and excellent conflict resolution skills; a profile that Andy's behavior clearly reflects.

The supremely confident behavior of Monica provides another example of the attributes of Kings/Queens. Monica had been involved in helping the teacher with a number of errands while the other children were partaking in free play. The play was loosely centered around the play house. As such, it involved a large number of boys and girls and was not very cohesive or focused. Monica was faced with the task of integrating the play of both the boys and girls around one physical structure.

Characteristically, Kings/Queens are motivated toward inclusion of children into large active play groups and Monica's behavior upon joining the interaction clearly reflects this. She entered the peer group with great enthusiasm and immediately changed the play house into a "post office". The boys were assigned the role of mailmen and were given "letters" to deliver around the room, a suggestion they embraced with eagerness. The girls who metamorphasized into "clerks" under Monica's "postmaster", each seem pleased with their new identities. Monica's supreme self-confidence enabled her to enter a large group of peers and successfully reorganize their play benefiting all involved. Her talented, creative leadership appeared to elicit happiness and interest in her playmates.

The characteristics that were the most representative of children categorized as Bishops were their verbal ability and desire to become involved in dyadic fantasy play. David, an archetypal Bishop, exemplified this in his play behavior. During one observation period he was absorbed in the construction of a building block fortress. Joff, a Vassal who was David's favored playmate, happened by. David described at length what he was doing and an interested Joff asked to be included. David readily accepted him and the two boys became engrossed in their construction activity. David directed the fantasy play but willingly accepted Joff's suggestions and elaborated upon them. At one point Joff proposed that their fortress was being attacked by monsters. David integrated this idea by turning Joff and himself into "ghostbusters" who were pursued to the fortress by all manner of monsters and apparitions. These invisible adversaries and their menacing actions were described in exciting and creative detail by David to the delight of Joff. Other children hovered around David and Joff's game but David refused to invite any other participants. Children who asked to join were informed that "only two could play the game".

David's elaborate and imaginative descriptions during fantasy interaction and apprehension about extending the game to include more children provide a clear example of behaviors essential to the conceptualization of a Bishop.

The Lord can be viewed as a diligent assertive child driven by a need to control; the Vassal as a highly successful follower linked to a child with high social power; and the Serf as a low status child with no control over social play. Personification of these roles in the current sample were provided by the observation of a stable pretend family during one play episode.

During this observation period Laura (a Lord) assumed her usual position at the oven in the playhouse. Her regular retinue, which included Carolyn (a Vassal), Melanie (a Serf) and Tom (a Serf), followed her and assumed the fantasy roles of favorite daughter, younger daughter, and father, respectively. This interaction began with Laura making breakfast for her family and then sending her husband off to work. While Tom wandered aimlessly about the classroom, Laura, Carolyn, and Melanie engrossed themselves in the task of preparing the family's dinner. Laura assumed total control over all details; only she had access to the stove, she decided what they were preparing and which ingredients could be included, and she determined the sequence of events that occurred in the play episode.

At one point Carolyn stated that she was making a birthday cake although to that point no mention of such an occasion had been made. Because Carolyn was her Vassal, Laura accepted and incorporated this suggestion into the fantasy play. Laura decided that it was Tom's birthday and that they would be giving him a surprise party when he came home. Melanie then declared that she was making Tom a sweater as a gift. Laura did not appreciate this unsolicited contribution to the play from a low-status child and informed Melanie that Tom already had eight sweaters and did not need any more. Melanie's protests to the contrary were ignored by both Laura and Carolyn and she soon accepted Laura's suggestion that she "buy" Tom something from the store (class dress-up box).

In the meantime, Laura and Carolyn interacted happily at the stove creating a feast for the birthday dinner. When Melanie returned from purchasing her gift she tried to help with the preparations. This was met with only mixed emotions from Laura who begrudgingly assigned her to a task and then ignored most of her input. When Tom returned from work, an activity which had actually included observation of some of the boys playing with Lego and solitary play with toy cars, he was given his surprise party. Tom accepted the dinner and gifts with

bemused detachment as Laura provided a detailed description of the proceedings. The play episode ended with the teacher's call for clean-up.

This pretend family epitomizes the characteristics of the Lord, Vassal, and Serf. Laura is extremely controlling, accepting suggestions only from Carolyn. She organizes and ritualizes the group's play. Her followers are assigned pretend roles and given a limited amount of latitude within them. Nothing "new" happens to the family without Laura's approval. She is very much in control.

Carolyn is Laura's favorite playmate, and as such she receives the vast majority of the Lord's attention. Her play suggestions are generally accepted and only minimally altered by Laura. Carolyn is happy to follow Laura's lead and enjoys her role as supportive best friend. Since Vassals are in the middle of the social hierarchy they are frequently pressured to maintain their special position with their chosen leaders. This motivation was apparent in the Carolyn's interactions with Melanie.

and the second design of the

When Laura is not present, Carolyn and Melanie often play together happily. However, once Laura arrives and the family is formed, Carolyn neglects Melanie and in concert with the Lord, often actively rejects her. Carolyn's behavior toward Melanie may be motivated by an insecurity with her own status which leads her to repudiate anyone who is in a position to potentially supplant her.

Melanie and Tom's actions within the context of the pretend family exemplify the predominant behaviors of Serfs in the present study. In many ways, Melanie is a frustrated Serf. She would like to become attached to a leader but lacks the cognitive and verbal skills that would allow her to realize this desire. As a result, Melanie is forced to accept her secondary role in social interaction. Tom, however, seems to be a happy Serf, readily accepting the role of the neglected father in the pretend family. "Going to work" allows him the freedom to pursue his other common activities; such as observing peers and solitary play; while still being peripherally attached to a stable peer group. Tom rarely seems lonely or sad, his low social involvement seems to be accepted. The role of Serf, while low in the social hierarchy, is not necessarily negative, and as a result many children who occupy it are content.

Taken together, the results of the quantitative and qualitative analyses provide valuable information on the abilities and attributes children possess and give an indication of how these skills may manifest themselves in their social styles. They suggest that differences in cognitive ability, physical attractiveness, and self-esteem may be associated with behavioral differences reflecting leadership and submissiveness. The qualitative analyses provide further support for the trends and generalizations that are apparent in the observational data.

# Chapter VI

# Discussion

In the present study, support was found for the utilization of Adcock and Segal's (1983) Medieval Kingdom social role topology with kindergarten children. Independent observers were consistently able to make stable categorizations and the proportions of children they assigned to each social role were similar to those obtained by previous research (Adcock & Segal, 1983; Segal et al., 1987). Furthermore, the types and nature of the social interactions observed were very similar to those anecdotally described by Adcock and Segal.

Certain behaviors were found to typify each of the five different social roles included in the topology. Kings/Queens exhibited extremely high levels of self-confidence, organization ability, and conflict resolution skills. Bishops were less out-going than Kings/Queens but also enjoyed great popularity within their smaller circles. Adult-orientation and high verbal ability/creativity were the predominant characteristics of the Bishops in this sample. The Lords were the hardest workers in the social interactions of the class. These children usually did not appear to be as talented as Kings/Queens or Bishops but their determination to direct others enabled them to assume leadership over their less assertive peers. Once this leadership was achieved, Lords were very conscious of their ability to control others and were dedicated toward its maintenance.

The majority of Vassals epitomized the ideal of a "best friend". Their typical social goal was to become closely attached to a child with high social power. Once this relationship was developed they became dependable playmates who happily followed their chosen leader's direction. Most of the Vassals observed in this study were very responsive interaction partners who understood what was expected of them in social exchange. While all the Serfs were readily characterized by low social status and power, there appeared to be dichotomy within the group regarding how children reacted to their low peer status. One group of Serfs were quite content with peripheral involvement in group activities and seemed to enjoy quiet solitary play. The other group of Serfs seemed dissatisfied with their limited social experiences. Unhappy being the secondary playmate to a higher status child, these Serfs aspired to greater social involvement and seemed to covet the Vassal's role. Unfortunately for such children, they usually lacked the requisite skills necessary to achieve this goal.

These findings are not only consistent with those of Adcock and Segal (1983) and Segal et al. (1987), but are also compatible with other research (e.g., Howes, 1987; Sroufe, 1983). The results suggest that social facility, leadership, and self-confidence are predominant characteristics of children of higher social status. This finding coincides with Sroufe's (1983) view that a secure and mutually rewarding relationship with the primary caregiver serves as a strong foundation for an array of subsequent social adaptational strengths. It has been demonstrated that children who have experienced such a positive relationship with

their parent(s) are more sociable (Jacobsen et al., 1987), ego resilient (Arend et al., 1979; Block & Block, 1979), confident (Jacobsen & Wille, 1986; Lieberman, 1977), and socially competent (LaFreniere & Sroufe, 1958), while at the same time demonstrating lower levels of hostility and antisocial behavior (Erickson et al., 1986; Rosenberg, 1985). They have also been shown to exhibit superior social play skills (Rosenberg, 1985) and greater curiosity (Jacobsen & Wille, 1986). Similarly, children who were classified as Kings/Queens, Bishops, or Lords in this study, seemed more self-assured, more socially skilled and also appeared to possess greater facility at social play than their peers.

The present results remain consistent with Howes' (1987) view that social competence is reflected by the frequency of certain types of social play that children exhibit during specific developmental periods. As well, it supports her contention that more sophisticated and mature forms of play evolve from a foundation of previously mastered play skills. The observations of children in different social roles suggested that the ability to organize and imaginatively create social fantasy play was related to social prominence. This ability is a logical extension and refinement of cooperative social pretend play, a skill Howes (1987) found to be essential to social competence in younger children. Just as children who are mastering social pretend play build on the turn-taking structure previously established in complementary and reciprocal play, children who are learning to organize and create interesting fantasy play may be building from the non-literal symbolic framework established in social pretend play. If learning to

and a standard and a statistic the

ארורייניוריין נופלו ביווייניוראי ארוריין אינויין ביון אונאינו אינויין אוניין אוניין אינויין אוניין אוניין אוניי

うちち ちちちちちちちちちちち いうちちち たちちちち

pretend is essential to social competence in the preschool developmental period, as Howes (1987) suggests, it is reasonable to assume that learning how to control and create innovative and exciting fantasy interactions would be related to social competence in the next period (kindergarten).

Observational evidence from the present study supports this assumption. For example, the behavior of Kings/Queens appeared to reflect both an awareness of the needs of their peers and an ability to organize and invent the appropriate theme of fantasy play. In a circumstance where his peers wanted active exciting play one king transformed the classroom into a sewer where mutant turtles battled evil rats. When a more calm and reserved tone was required the same child became an "army sergeant" directing his "charges" to complete various paper and pencil tasks.

The Bishops and Lords seemed to possess only portions of the King/Queen's behavioral repertoire as it related to play. The behavior of the Bishops suggested that they were able to generate original and interesting fantasy transformations but only within the context of dyadic interaction. They seemed to manifest dyadic interaction skills comparable to those of the Kings/Queens but did not evince similar facility at group leadership. Conversely, successful Lords were able to organize the play of small groups of children but lacked the imagination and talent required to make the group's interaction enthralling.

In addition to the observational evidence pointing to the importance of the ability to organize and create interesting fantasy play in the determination of a

kindergarten child's social status, the results of this study suggest that there are other behaviors that may be just as meaningful. In accord with previous research, a child's ability to assume the frame of reference of a peer group (Putallaz, 1983), peer group entry skill (Dodge et al., 1983; Howes, 1987; Putallaz, 1983), and affective interpersonal behavior (Dodge, 1983; Rubin & Daniels-Beirness, 1983) were salient interaction features which seemed to be related to social status within the Medieval Kingdom topology. For example, the behavior of Lords who were unsuccessful in establishing a stable retinue suggested that their affective orientation was predominantly negative. While they exhibited the ability to organize play, these Lords could not maintain a consistent group of followers because they were either uncooperative, self-centered, and/or aggressive. A similar weakness in interpersonal behavior was apparent in the social exchanges of Vassals who were unable to form a close relationship with a specific leader.

The actions of Serfs frequently conveyed the impression that they lacked appropriate peer group entry skills. On numerous occasions a Serf was observed unsuccessfully attempting to join a group of peers by hovering around its periphery or by disrupting its activities. Most Serfs seemed to have difficulty making relevant contributions to a group's ongoing interaction. Their comments or actions seemed inappropriate because they tended to focus on aspects of the activity or play that were extraneous.

Evidence in support of the observational distinctions between social groups was also generated by the assessment of the association of several non-behavioral

. .

variables; including cognitive ability, self-esteem, physical attractiveness, chronological age, gender, birth order and sibling number; with status in the topology. The results of this assessment suggested that cognitive ability, selfesteem, physical attractiveness, and age were all significantly related to social status. Further analyses indicated that there were significant differences between leader (King/Queen, Bishop, Lord) and follower (Vassal, Serf) groups on each of these variables. This outcome implies that there is a relationship between social leadership ability and these four non-behavioral variables. The meaningfulness of this statistical relationship however requires further examination.

The finding that cognitive ability is related to social status within the Medieval Kingdom is not surprising given the existing body of research. Cognitive and intellectual abilities have long been found to correlate with peer social standing (Hartup, 1983). Roff et al. (1972), for example demonstrated, that popular children were significantly brighter than less popular children within each of four socioeconomic levels. Specific cognitive skills such as interpersonal problem solving ability (Conger & Keane, 1981; Rubin & Daniels-Beirness, 1983), communication ability (Burleson, 1986; Putallaz, 1983), and moral reasoning (Sullivan, 1953) have also been associated with social status.

It seems reasonable to assume that children with heightened cognitive abilities, relative to their peers, would be in a better position to assume social leadership roles and that leadership itself may be an ability that is important in identifying children with high potential for success. In fact, the combination of

1

cognitive skill and leadership ability exhibited by Kings/Queens in this study parallels that which has been proposed as being reflective of "giftedness" (Renzulli, 1978).

Renzulli (1978) cautioned against overly restrictive definitions of giftedness and recommended that skills in addition to general intellectual ability be included in the conceptualization of it. To this end, he proposed that giftedness was determined by the interaction of three clusters of ability including; a) above average general ability, b) task commitment, and c) creativity. Within the creativity cluster Renzulli (1978) stressed, among other skills, the importance of constructive ingenuity and social purpose. Observation of the Kings/Queens in the present study indicated that they tended to be creative, directed toward social interaction, and skilled at group leadership. Additionally, their general cognitive levels were advanced.

The present results indicating that there is a significant relationship between self-esteem and social status is consistent with the work of several researchers who obtained similar correlations (e.g., Russell, 1989; Withycombe, 1973; Wylie, 1979). However, in contrast, to the finding that positive self-esteem scores were strongest for children with the highest social status, some researchers (e.g., Reese, 1961) have found the relationship between the two variables to be curvilinear.

It is difficult to address these somewhat contrasting findings because of the discrepancy between the manner with which self-esteem was assessed in this study

as compared to the majority of other research. Schunk (1985b) has suggested that teacher ratings, such as those presently utilized, may not be equivalent to children's own ratings of self-esteem. Therefore, it cannot be assumed that kindergarten children viewed by their teachers as having high self-concepts are the same as children whose own ratings reflect such a self-perception. However, it does seem plausible that there exists a relationship whereby high self-esteem enhances leadership ability and successful leadership augments self-esteem. Although further research is needed to specify the exact nature of this relationship, the current research and prior studies suggest that such a relationship may exist.

Of the possible correlates of social status, physical attractiveness is the most widely supported. There is a consistent and diverse body of evidence demonstrating the existence of this relationship. Consonant with the findings of this study is evidence that preschoolers more frequently attribute friendliness and non-aggressiveness to attractive children while they more readily attribute negative social behaviors to unattractive children (Adams & Crane, 1980; Dion, 1973; Dion & Berschied, 1974). Further, attractive kindergarten children are rated as smarter, more prosocial, and less antisocial than unattractive children by their peers (Langlois & Stephan, 1977). Attractive individuals were also judged by preschool children (Dion, 1973; Langlois & Stephan, 1977), elementary school children and adolescents (Cavior & Dokecki, 1973) as being more likely to be

good friends. Thus, it is not surprising that children perceived as physically attractive were found to be more likely to assume positions of social leadership.

Anecdotal evidence also suggests that a child's size and athletic prowess are other physical factors potentially associated with social status among boys. The six Kings in the sample all appeared to be above average in physical size relative to their peers. They also stood out in playground and gymnasium settings as being highly co-ordinated and athletically skilled. Although based on the observation of a limited and small sample of boys, these findings, in concert with previous research (e.g., Eitzen, 1975), may warrant further investigation.

Chronological age was the final variable that was found to be significantly correlated with social status. There was a trend in the data suggesting that the eldest children tended to be leaders in the peer group. Although this finding is consistent with Segal et al. (1987), who reported that a greater proportion of leadership styles were found in older children, the age differences in both studies are small thus limiting definitive conclusions.

Several factors including gender, birth order, and sibling number were found not to be significantly related to social status within the Medieval Kingdom. Neither Adcock and Segal (1983) nor Segal et al. (1987) reported significant differences between the sexes in behavior relating to social success. The results of the present study suggested that although dufferences in leadership ability and/or social status were not statistically related to gender, there was a trend in the data wherein a higher proportion of males assumed the leadership role of Bishop while

a correspondingly higher percentage of females were found in the follower role of Vassal. Given the fact that previous research (.\dcock & Segal, 1983; Segal et al., 1987) has not reported such a result it is difficult to put this finding in perspective. It may be that kindergarten boys are more suited to the role of Bishop because of the processes of socialization (e.g., role play games such as Dungeons & Dragons and video activities like those popularized by Nintendo) which tend to foster and reinforce male dyadic fantasy play. Girls may be implicitly encouraged to adopt the role of favored follower because this is consistent with the traditionally subordinate roles of housewife and mother. However, it may be that the gender differences in the Bishops and Vassals category were merely spurious results.

A number of researchers (Miller & Maruyama, 1976; Sells & Roff, 1964) have demonstrated that youngest-born children, compared to middle or first-born children, are chosen more consistently as friends and playmates. No significant relationship of any kind was noted in this data and there is evidence (Baughman & Dahlstrom, 1968; Ernst & Angst, 1983; Neetz, 1974) to support this finding as well. The inconsistent evidence makes it difficult to draw conclusions regarding the effects of birth order on social status other than to assume that if such a relationship exists it is limited.

Similarly, the proposed effects of the number siblings a child has, previously reported (Zajonc, 1975; 1976), were not supported by the present results. Zajonc's work has recently come under substantial criticism (e.g., Ernst & ngst, 1983) and the influence of family size on a number of factors including social status brought into doubt.

## Educational implications

-

The Medieval Kingdom topology may be useful to educators as it represents a detailed heuristic which facilitates the understanding of peer relationships of young children. The process of considering and implementing the topology may increase the likelihood that preschool and kindergarten teachers will focus on behaviors that are important to the social adaptation of their students. This awareness may influence the expectations teachers hold for specific children regarding social interaction and may help them to understand the motivations that underlie antisocial behavior.

Segal et al. (1987) provide an illustration of one of the ways in which this understanding can be implemented in the classroom. They reported that once teachers identified the social styles of more aggressive children this information could be used to modify the inappropriate behavior. Teachers accomplished this by reinforcing the aggressive child's dyadic play with less truculent children having complementary social roles. They paired aggressive Vassals and Serfs with socially appropriate Lords and Bishops, respectively. Segal et al. (1987) found that the frequency of aggressive acts subsequently declined while their severity remained constant. Following from the work of Howes (1987), the results of the present study suggest that the ability to organize and create interesting fantasy play may form an essential skill in the acquisition of social competence and leadership during kindergarten. When considered with evidence (Dodge et al., 1963; Putallaz, 1983) demonstrating the importance of peer group entry ability during kindergarten, fantasy play skills take on added significance. Since kindergarten children spend a considerable proportion of their unstructured time in fantasy play (Connolly & Doyle, 1984; Howes, 1987) a child may experience difficulty in joining a peer group unless he/she is able to adopt its fantasy frame of reference. The inability to participate effectively in this activity may eventually cause the child to be excluded or neglected. Thus, there may be added value in reinforcing and facilitating fantasy play skills in children and in trying to stimulate their imagination and creativity.

Teachers who are aware of the leadership hierarchy within their classes may use this knowledge to determine children's classroom chores. By selecting children who already possess leadership skills to perform tasks within the class that draw heavily on these abilities, teachers can utilize the process of peer modelling to encourage the acquisition of these behaviors in less skilled pupils (Bandura, 1977).

Teachers may also use their knowledge of the social structure within their classes to identify children who are poorly accepted by their peers. As has been previously suggested (Coie & Dodge, 1983; Dodge, 1983; Segal et al., 1987),

children who are experiencing difficulty in their relationships with peers often require acquisition, modification, or refinement of social interaction skills and affective behavior. By providing teachers with a framework for examining the nature and effectiveness of children's social behavior, the Medieval Kingdom may be an effective way to identify individuals in need of social skills remediation.

The final contribution of this research is that it may provide an important perspective from which to consider the concept of leadership. The results suggest that a child's leadership ability may vary with the social context by which he or she is confronted. For example, Vassals were observed to be unique because their behavior reflected both the role of follower - during interaction with a child of higher social power - and leader - during involvement with children of lower social dominance. Similarly, in other situations children of the various social roles may behave in ways contrary to what would be expected based on such roles. For example, if several Kings and Queens were placed together in one play group, it is likely that some of these children would take on follower roles during this interaction. Likewise, a Serf may be unlikely to direct the play of his/her agemates, but may take on a leadership role if placed in a group of younger children.

## Limitations

Despite efforts to the contrary, this study was limited in a number of ways. Foremost among them was the failure to assess the relationship between social

roles within the Medieval Kingdom and sociometric status. Such an evaluation would have permitted a greater synthesis of the two separate yet comparable sources of data. Not surprisingly, analyses of the observational data suggested that there was great similarity and overlap between the five social roles and the five types of sociometric status described in the literature (e.g., Bukowski & Newcomb, 1984). Furthermore, sociometric information would have provided a child-referenced complement to observer ratings of social standing.

Another limitation of this study was its failure to longitudinally assess behavioral variables, such as peer group entry skill, affective control, and the ability to assume the frame of reference of a group of peers, which have previously been demonstrated to effect social adaptation (e.g., Dodge, 1983; Dodge et al., 1983; Putallaz, 1983). Although the importance of these variables was supported by the observational data a more structured assessment of their association with the roles children assumed within the Medieval Kingdom would enhance the validity of the topology.

## **Conclusion**

In conclusion, this study presented evidence that Adcock and Segal's (1983) method of conceptualizing and summarizing the peer relationships of preschoolers could be applied to a sample of kindergarten children. The resultant topology was highly consistent with that which Adcock and Segal described for preschoolers. The present study also suggested that cognitive ability, self-esteem,

85

ż

and physical attractiveness were significantly associated with the outcome of the Medieval Kingdom topology.

Although a number of behavioral and non-behavioral variables were assessed, an important factor that may influence a child's social adaptation still remains to be explored. The significance of this is variable was apparent to Sullivan (1953) who specified it in his analysis of the two distinct dimensions of peer relations. Sullivan's first dimension, whether a child is an accepted member of the peer group, has received extensive scrutiny. However, the second, whether a child has reciprocated friendships, is a variable which requires much greater consideration.

There is a growing body of research (e.g. Cauce, 1986; 1987) indicating that the achievement of reciprocated friendships is related to indices of self-esteem and perceived emotional support (Cauce, 1986; 1987), altruism and perspectivetaking skill (McGuire & Weisz, 1982), and successful interaction within the peer group (Bukowski & Howza, 1988). As a result, it would appear that an assessment of a child's social status within the peer group is certainly not complete without an examination of his/her friendship network.

#### References

- Adams, G. & Crane, P. (1980). An assessment of parents' and teachers' expectations of preschool children's social preference for attractive or unattractive children and adults. *Child Development*, 51, 224-231.
- Adcock, D., & Segal, M. (1983). *Making friends*. Englewood Cliffs, N.J.: Prentice-Hall.
- Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of strange situation. Hillsdale, NJ: Erlbaum.
- Arend, R., Grove, F., & Sroufe, L. (1979). Continuity of individual adaptation from infancy to kindergarten: A predictive study of ego-resiliency and curiosity in preschoolers. *Child Development*, 50, 950-959.
- Asher, S., Hymel, S., & Renshaw, P. (1984). Loneliness in children. Child Development, 55, 1456-1464.
- Bandura, A. (1977). Social Learning Theory. Englewood Cliffs N.J.: Prentice-Hall.
- Bandura, A. (1981). Self-referent thought: A developmental analysis of self efficacy. In J. Flavell & L. Ross (Eds.), Social cognitive development: Frontiers and possible futures (pp. 200-239). Cambridge: Cambridge University Press.
- Bandura, A. (1986). Social foundations of thought and action. Englewood Cliffs, NJ: Prentice Hall.
- Baughman, E., & Dahlstrom, W. (1968). Negro and White children: A psychological study in the rural south. New York: Academic Press.
- Block, J., & Block, J. (1979). The role of ego-control and ego resiliency in the organization of behavior. In W.A. Collins (Ed.). *Minnesota symposia on child psychology (vol 13)*. Hillsdale, NJ: Erlbaum.
- Boivin, M., & Begin, G. (1989). Peer status and self-perception among early elementary school children: case of the rejected child. *Child Development*, 60, 591-596.
- Bowlby, J. (1969). Attachement and loss, vol. 1: Attachment. New York: Basic Books.

Bowlby, J. (1971). Attachment and loss: Separation (vol.2). London: Hogarth.

- Bowlby, J. (1973). Attachment and loss, vol. II: Separation, anxiety, and anger. London: Hogarth.
- Brenner, J., & Mueller, E. (1982). Shared meaning in boy toddlers peer relations. Child Development, 53, 380-391.
- Bronfenbrenner, U. (1979). Ecology of human development: Experiments by nature and design. Cambridge MA: Harvard University Press.
- Bronson, W. (1985). Growth in the organization of behavior over the second year of life. Development Psychology, 21, 108-117.
- Brown, I., & Inouye, D. (1978). Learned helplessness through modeling: The role of perceived similarity in competence. Journal of Personality and Social Psychology. 36, 900-908.
- Brownell, C. (1986). Convergent developments: Cognitive-developmental correlates of growth in infant/toddler peer skills. Child Development, 57, 275-286.
- Bruner, J. (1972). Nature and uses of immaturity. American Psychologist, 27, 687-708.
- Bruner, J. (1973). Organization of early skilled action. Child Development, 44, 1-11.
- Bukowski, W., & Hoza, B. (1988). Popularity and friendship: Issues in theory, measurement, and outcome. In T. Berndt & G. Ladd (Eds.), Peer relations in child development. New York: Wiley.
- Lukowski, W., & Newcomb, A. (1984). Stability and determinants of sociometric status and friendship choice. *Developmental Psychology*, 20, 941-952.
- Bukowski, W., & Newcomb, A. (1985). Variability in peer group perceptions. Developmental Psychology, 21, 1032-1038.

Proto at

i,

ŝ

Burleson, B. (1986). Communication skills and children's peer relationships. In M. McLaughlin (Ed.), Communication Yearbook (vol. 9, pp. 143-180). Beverly Hills, CA: Sage.

- Burleson, B., Applegate, J., Burke, J., Clark, R., Delia, J., & Kline, S. (1986). Communication correlates of peer acceptance in childhood. Communication Education, 35, 348-361.
- Burns, S., & Brainerd, C. (1979). Effects of constructive and dramatic play on perspective taking in very young children. Developmental Psychology, 15, 512-521.
- Carlson, C., Lahey, B., & Neeper, R. (1984). Peer assessments of the social behavior of accepted, rejected, and neglected children. Journal of Abnormal Child Psychology, 12, 187-198.
- Cauce, A. (1986). Social networks and social competence: Exploring the effects of early adolescent friendships. *American Journal of Community Psychology*, 14, 607-628.
- Cauce, A. (1987). School and peer competence in early adolescence: A test of domain specific self-perceived competence. Developmental Psychology, 23, 287-291.
- Cavior, N., & Dokecki, P. (1973). Physical attractiveness, perceived attitude similarity, and academic achievement as contributors to interpersonal attachment among adolescents. *Developmental Psychology*, 9, 44-54.
- Cilessen, T., Ferguson, T., Van Lier, P., & Hoeben. S. (1987). On the selfperpetuating nature of children's peer relationships. Eric # ED 016560.
- Coie, J., & Dodge, K. (1983). Continuities and changes in children's social status: A five year longitudinal study. *Merrill-Palmer Quarterly*, 29, 261-281.
- Coie, J., Dodge, K., & Coppotelli, H. (1982). Dimensions and types of social status. A cross-age perspective. Developmental Psychology, 18, 557-570.
- Coie, J., & Kupersmidt, J. (1983). A behavioral analysis of emerging social status in boy's groups. Child Development, 54, 1400-1416.
- Conger, J., & Keane, A. (1981). Social skills intervention in the treatment of isolated or withdrawn children. *Psychological Bulletin*, 90, 478-495.
- Connolly, J., & Doyle, A. (1984). Relations of social fantasy play to social competence in preschoolers. *Developmental Psychology*, 20, 797-806.

ころうないないないないないないないないないないない ジッ

-

Connolly, J., Doyle, A., & Reznick, E. (1988). social pretend play and social interaction in preschoolers. Journal of Applied Developmental Psychology, 9, 301-314.

AR-INT STOCK THE TO THE TO THE WINT WATCHING THE O

Santa a

- Constantino, G. (1989). Review of the CCAT. In J. Conoley & J. Kramer (Eds.), The tenth mental measurements yearbook. Lincoln: University of Nebraska.
- Coon, D. (1983). Introduction to psychology: Exploration and application. New York: West Publishing Company Third Edition (pp. 370-371).
- Coopersmith, S., & Gilberts, R. (1982). Behavioral Academic self-esteem: A rating scale. Palo Alto CA: Consulting Psychologists Press.
- Corsaro, W. (1981). Friendship in the nursery school: social organization in a peer environment. In S. Asher & J. Gottman (Eds.), *The development of children's friendships*. Cambridge: Cambridge University Press.
- Cowen, E., Peterson, A., Babegian, H., Izzo, L., & Trost, M. (1973). Long-term follow-up of early detected vulnerable children. Journal of Consulting and Clinical Psychology, 41, 438-446.
- Cummings, J. (1989). Review of the CCAT. In J. Conoley & J. Kramer (Eds.), The tenth mental measurements yearbook. Lincoln: University of Nebraska.
- Curry, N., & Arnaud, S. (1984). Play in developmental preschool settings. In T. Yawkey & A. Pellegrini (Eds.), *Child's Play: Developmental and applied.* Hillsdale, NJ: Erlbaum.
- Damon, W., & Miller, M. (1982). Peer interaction and the process of change in children's moral reasoning. *Merrill-Palmer Quarterly*, 28, 347-367.
- Dion, K. (1973). Young children's stereotyping of facial attractiveness. Developmental Psychology, 9, 183-198.
- Dion, K., & Berscheid, E. (1974). Physical attractivenss and peer perception among children. Sociometry, 37, 1-12.
- Dodge, K., Coie, J., & Brakke, N. (1982). Behavior patterns of socially rejected and neglected preadolecents. Journal of Abnormal Child Psychology, 10, 389-410.
- Dodge, K. (1983). Behavioral antecedents of peer social status. Child Development, 54, 1386-1399.

- Dodge, K., Schlundt, D., Schocken, I., & Delugach, K. (1983). Social competence and children's sociometric status: The role of peer group entry strategies. *Merrill-Palmer Quarterly*, 29, 309-335.
- Doyle, A. (1988). A sequential analysis of the relation of social pretend play to affect and social behavior. Final Report of Project 410-87-0090 (1987-1988) to the Social Sciences and Humanities Research Council.
- Doyle, A., & Connolly, J. (In press). Negotiation and enactemnt in social pretend play: Relations to social acceptance and social cognition. *Early Childhood Research Quarterly*.
- East, P., & Lerner, R. (1987). A model of children's adjustment: Child peer group fit, peer relations, and peer social support. Paper presented at the biennial meeting of the Society for Research in Child Development, Baltimore, Maryland.
- Eitzen, D. (1975). Athletics in the status system of male adolescents. Adolescence, 10, 267-276.
- Erickson, M., Egeland, B., & Sroufe, L. (1986). The relationship of quality of attachment and behavior problems in preschool children from a high risk sample. In I. Bretherton & E. Waters (Eds.), Growing points in attachment theory and research. New York: Wiley.
- Erikson, E. (1963). Childhood and society (2nd ed.). New York: Norton.
- Erikson, E. (1977). Toys and reasons. New York: Norton.
- Ernst, C., & Angst, J. (1983). Birth order: Its influence on personality. New York: Springer-Verlag.
- Fagot, B. (1977). Consequences of moderate cross-gender behavior in preschool children. Child Development, 48, 902-907.
- Festinger, L. (1954). A Theory of Social Comparison Processes. Human Relations, 7, 117-140.
- Fink, R. (1976). Role of imaginary play in cognitive development. Psychological Reports, 39, 895-906.
- Flannery, K., & Watson, M. (1987). Fantasy play as it relates to cognitive competence and social acceptance. Paper presented at APA, New York, NY.

French, D., & Waas, G. (1985). Behavior problems of peer-neglected and peerrejected elementary-age children: Parent and teacher perspectives. Child Development, 56, 246-252.

Freud, S. (1938). An outling of psychoanalysis. London: Hogarth.

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

- Gottman, J., Gonso, J., & Rasmussen, B. (1975). Social interaction, social competence and friendship in children. Child Development, 46, 709-718.
- Green, K., Forehand, R., Beck, S., & Vosk, B. (1980). An assessment of the relationship among measures of children's academic achievement. *Child Development*, 51, 1149-1156.
- Grubb, T., & Watt, N. (1979). Longitudinal approaches to promoting social adjustment through public school programs. Paper presented at the meeting of the Society for Research in Child Development, San Francisco, CA.
- Grusec, J., & Lytton, H. (1988). Social development: History, theory and research. New York: Springer-Verlag
- Havinghurst, R., Bowman, P., Liddle, G., Mathews, C., & Pierce, J. (1962). Growing up in River City. New York: Wiley.
- Hartup, W. (1983). Peer relations. In P. Mussen and E. Hetherington (Ed.), Manual of child psychology (4th ed.). New York: Wiley.
- Hetherington, M., Cox, M., & Cox, M. (1979). Play and social interaction in children following divorce. Journal of Social Issues, 35, 26-49.
- Hetherington, E., & Parke, R. (1979). Child Psychology: A contemporary viewpoint (2nd ed.). New York: McGraw-Hill.
- Hopkins, K. (1985). Review of the CAT. In J. Mitchell (Ed.), The ninth mental measurements yearbook. Lincoln: University of Nebraska.
- Howes, C. (1983). Patterns of Friendship. Child Development, 54, 1041-1053.
- Howes, C. (1987). Peer interaction of young children. Monographs of the Society for Research in Child Development, 53 (1, serial no. 217).

- Hymel, S. (1982). Identifying preschool children at risk in peer relations. Paper presented at the biennial University of Waterloo Conference on Child Development, Waterloo, Ontario.
- Hymel, S. (1983). Preschool children's peer relations: Issues in sociometric assessment. Merrill-Palmer Quarterly, 29, 237-260.
- In-Sub, S., & Hatti, J. (1984). The home environment, self-concept and academic achievement: A causal modeling approach. Journal of Educational Psychology 76, 1269-1281.
- Jacobsen, J., & Wille, D. (1986). The influence of attachment pattern on developmental changes in peer interaction. Child Development, 57, 338-347.
- Jacobsen, J., Tianen, R., Wille, D., & Aytch, D. (1987). Infant-mother attachment and early peer relations. In E. Mueller & C. Cooper (eds.), *Process and* outcome in peer relations. New York: Academic Press.
- Janes, C., & Hesselbrock, V. (1978). Problem children's adult adjustment predicted from teacher's ratings. American Journal of Orthopsychiatry, 48, 300-309.
- Janes, C., Hesselbrock, V., Myers, D., & Penniman, J. (1979). Problem boys in young adulthood: Teacher's ratings, a 12 year follow-up. Journal of Youth and Adolescence, 8, 453-472.
- John, R., Mednick, S., & Schlusinger, F. (1982). Teacher reports as a predictor of schizophrenia and borderline schizophrenia: A Bayesian decision analysis. Journal of Abnormal Psychology, 6, 399-413.
- Johnson, D. (1980). Group processes: Influences of student-student interaction on school outcomes. In J.H. McMillan (Ed.), Social psychology of school learning (pp. 123-168). New York: Academic Press.
- Kleck, R., Richardson, S., & Ronald, L. (1974). Physical appearance cues and interpersonal attraction in children. *Child Development*, 45, 305-310.
- Kohlberg, L. (1969). Stage and sequence: The cognitive-development to socialization. In D. Goslin (Ed.), Handbook of socialization theory and research (pp. 347-480).

Kohlberg, L., Lacross, J., & Ricks, D. (1972). The predictability of adult mental health form childhood behavior. In B. Wolman (Ed.), *Manual of child* psychopathology (pp. 1217-1284). New York: McGraw-Hill.

- Kupersmidt, J., & Coie, J. (in press). Preadolescent peer status, aggression, and school adjustment as predictors of externalizing problems in adolescence. *Child Development*.
- Kurdek, L., & Krile, D. (1982). A development analysis of the relation between peer acceptance and both interpersonal understanding and perceived social self-competence. *Child Development*, 53, 1485-1491.
- Ladd, G. (1983). Social networks of popular, average and rejected children in school settings. *Merrill-Palmer Quarterly*, 29, 283-308.
- LaFreniere, P. (1983). From attachment to peer relations: An analysis of individual differences in preschool peer competence. Paper presented at the biennial meeting of the society for Research in Child Development, Detroit, MI.
- LaFreniere, P., & Sroufe, L. (1985). Profiles of peer competence in the preschool: Inter-relations between measures, influence of social ecology and relation to attachment theory. *Developmental Psychology*, 21, 56-69.
- Langlois, J. & Stephan, C. (1977). The effects of physical attractiveness and ethnicity on children's behavioral attributions and peer preferences. *Child Development*, 48, 1694-1698.
- Langlois, J., & Stephan, C. (1981). Beauty and the beast: The role of physical attractiveness in the development of peer relations and social behavior. In S. Brehm & S. Kassin & F. Gibbons (Eds.), *Developmental social psychology: Theory and research*. New York: Oxford University Press.
- Lederberg, A., Rosenblatt, S., Vandell, D., & Chapin, S. (1987). Temporary and long-term friendships in hearing and deaf preschoolers, *Merrill-Palmer Quarterly*, 33, 515-534.
- Ledingham, J., & Schwartzman, A. (1984). A 3-year follow up of aggressive and withdrawn behavior in childhood: Preliminary findings. *Journal of Abnormal Child Psychology*, 12, 157-168.
- Li, A. (1985). Early rejected status and later social adjustment: A 3-year followup. Journal of Abnormal Child Psychology, 13, 567-577.

- Lieberman, A. (1977). Preschoolers competence with a peer: Relationship with attachment and peer experience. Child Development, 48, 1277-1287.
- Londerville, S., & Main, M. (1981). Security of attachment, compliance, and maternal training methods in the second year of life. *Developmental Psychology*, 17, 289-299.
- Lubin, P., & Forbes, D. (1981). Motivational and peer culture issues in reasoningbehavioral relations. Paper presented at the biennial meeting of the Society for Research in Chuld Development, Boston, Mass.
- Maccoby, E. (1980). Social Development Psychological growth and the parentchild relationship. New York: Harcourt Brace Jovanovich.
- Mannarino, A. (1978). Friendship patterns and self-concept development in preadolescent males. Journal of Genetic Psychology, 133, 105-110.
- Masters, J., & Furman, W. (1981). Popularity, individual friendship selections, and specific peer interaction among children. *Developmental Psychology*, 17, 344-350.
- Matas, L., Arend, R., & Sroufe, L. (1978). Continuity of adaptation in the second year: The relationship between quality of attachment and later competence. *Child Development*, 49, 547-556.
- McFall, R., & Dodge, K. (1982). Self-management and interpersonal skills learning. In P. Karoly & F. Kanfer (Eds.), Self-management and behavior change. New York: Pergamon.
- McGinnis, C. (1986). Review of the CCAT. In D. Keyser & R. Sweetland (Eds.), Test critiques (Vol V.). Kansas City, Mo: Test Corporation of America.
- McGuire, K., & Weisz, J. (1982). Social cognition and behavior correlates of preadolscent chumships. *Child Development*, 53, 1478-1484.
- Mednick, S., & Schlusinger, F. (1969). Factors related to breakdown in children at high-risk for schizophrenia. In M. Roff & D. Ricks (Eds.), *Life history research in psychopathology*. Minneapolis: University of Minnesota Press.
- Miller, N., & Maruyama, G. (1976). Ordinal position and peer popularity. Journal of Personality and Social Psychology, 33, 123-131.

~

Mueller, E., and Lucas, T. (1975). A developmental analysis of peer interaction among toddlers. In M. Lewis & L. Rosenblum (Eds.), *Peer relations and* friendship (pp. 223-258). New York: Wiley.

A. 11 .....

- Neetz, V. (1974). Birth order and leadership in elementary school. Developmental Psychology, 6, 409-415.
- Nichols, R. (1985). Review of the CAT. In J. Mitchell (Ed.), The ninth mental measurements yearbook. Lincoln: University of Nebraska.
- Parker, J., & Asher, S. (1987). Peer relations and later personal adjustment: Are low accepted children at risk? *Psychological Bulletin*, 102, 357-387.
- Patterson, G., Littman, R., & Bricker, W. (1967). Assertive behavior in children: A step toward a theory of aggression. Monographs of the Society for Research in Child Development, 32, (5, serial no. 113).
- Payne, D. (1975). Birth order, personality, and performance in the Ai Force Academy. Journal of Individual Psychology, 27, 185-187.
- Phillips, E., Shenker, S., & Ravitz, P. (1951). The assimilation of the new child into the group. *Psychiatry*, 14, 329-325.
- Piaget, J. (1932). The moral judgement of the child. London: Routledge & Kegan Paul.
- Piaget, J. (1954). The construction of reality in the child. New York: Basic Books.
- Piaget, J. (1962). Play, dreams, and imitation in childhood. New York: Norton.
- Putallaz, M. (1983). Predicting children's sociometric status from their behavior. Child Development, 54, 1386-1399.
- Putallaz, M., & Gottman, J. (1981a). Social skills and group acceptance. In S. Asher & J. Gottman (Eds.), *The development of children's friendships*. Cambridge: Cambridge University Press.
- Putallaz, M., & Gottman, J. (1981b). An interactional model of children's entry into peer groups. *Child Development*, 52, 986-994.
- Putallaz, M., White, A., & Shipman, R. (1985). Sociometric status and adjustment: A developmental perspective. Paper presented at the Society for Research in Child Development. Toronto, Ontario.

- Rardin, D., & Moan, C. (1971). Peer interaction and cognitive development. Child Development, 42, 105-110.
- Renzulli, J. (1978). What makes giftedness: Reexamining a definition. Phi Delta Kappan, 60, 180-184.
- Reese, H. (1961). Relationships between self-acceptance and sociometric choice. Journal of Abnormal and Social Psychology, 62, 472-474.
- Roff, M. (1969). Juvenile delinquency and military service. In R. Little (Ed.), Selective service and American society. New York: Sage.
- Roff, M. (1970). Some life history factors in relation to various types of adult maladjustment. In M. Roff & D. Ricks (Eds.), *Life history research in psychopathology*. Minneapolis: University of Minnesota Press.
- Roff, M. (1972). A two-factor approach to juvenile delinquency and the later histories of juvenile delinquents. In M. Roff, L. Robins, & M. Pollack (Eds.), Life history research in psychopathology. Minneapolis: University of Minnesota Press.
- Roff, M., Sells, S., & Golden, M. (1972). Social adjustment and personality development in children. Minneapolis: University of Minnesota Press.
- Roff, J., & Wirt, R. (1984). Childhood aggression and social adjustment as antecedents of delinquency. Journal of Abnormal Child Psychology, 12, 111-126.
- Rogosch, F., & Newcomb, A. (1989). Children's perceptions of peer reputations and their social reputations among peers. Child Development, 60, 597-610.
- Rosenberg, D. (1985). Fantasy play and socio-emotional development: A longitudinal and concurrent study. Paper presented at the Society for Research in Child Development, Toronto, Ontario.
- Rotheram, M. (1985). Children's social and academic competence. Journal of Educational Research, 80, 206-211.

あまにからであっ まったいま に、 サイビートレーサーショウインシーレン

ł

ų

- Rubin, K. (1972). Relationship between egocentric communication and popularity among peers. Developmental Psychology, 7, 364.
- Rubin, K. (1982). Social and social-cognitive developmental characteristics of young isolated, normal, and sociable children. In K. Rubin & H. Ross (Eds.), Peer relations and social skills in childhood. New York: Springer.

Rubin, K. (1983). The play behaviors of kindergarten and Grade 1 children. Paper presented at the Biennial University of Waterloo Conference on Child Development. Waterloo, Ontario.

There was also by 128 - + 10 mariles and

بيو بار درمه

- Rubin, D., & Borwick, D. (1984). Communicative skills and sociability. In H. Sypher & J. Applegate (Eds.), Communication by children and adults (pp. 152-170). Beverly Hills: Sage.
- Rubin, K., & Daniels-Beirness, T. (1983). Concurrent and predictive correlates of sociometric status in kindergarten and Grade 1 children. Merrill-Palmer Quarterly, 29, 337-351.
- Rubin, K., Fein, G., & Vandenberg, B. (1983). Play. In E. Hetherington (Ed.), Socialization, personality and social development: Handbook of child psychology, vol. 4. New York: Wiley.
- Rubin, K., & Maioni, T. (1975). Play preference and its relationship to egocentrism, popularity, and classification skills in preschoolers. *Merrill-Palmer Quarterly*, 21, 171-179.
- Russell, A. (1989). Self-esteem. Winnipeg: Peguis Publishers.
- Saltz, E., Dixon, D., & Johnson, J. (1977). Training disadvantaged preschoolers on various fantasy activities: Effects on cognitive functioning and impulse control. *Child Development*, 48, 367-380.
- Schunk, D. (1985a). Self-efficacy and classroom learning. Psychology in the Schools, 22, 208-223.
- Schunk, D. (1985b). Review of the BASE. In J. Mitchell (Ed.), The ninth mental measurements yearbook. Lincoln: University of Nebraska.
- Schunk, D., & Hanson, A. (1986). Peer models: Influence on children's selfefficacy and achievement. Journal of Educational Psychology, 77, 311-322.
- Segal, M., Peck, J., Vega-Lahr, N., & Field, T. (1987). A Medieval Kingdom: Leader-follower styles of preschool play. *Journal of Applied Developmental Psychology*, 8, 79-95.
- Sells, S., & Roff, M. (1964). Peer acceptance-rejection and birth order. Psychology in the Schools, 1, 156-162.

- Sells, S., Roff, M., Cox, S., & Mayer, M. (1967). Peer acceptance-rejection and personality development. Office of Education, Final Report of Project OE 5-0417.
- Smith, P., Dalgleish, M., & Herzmark, G. (1981). A comparison of the effects of fantasy play and skills tutoring in nursery classes. International Journal of Behavioral Development, 4, 421-441.
- Smith, P., & Syddall, S. (1978). Play and non-play tutoring in preschool children: Is it play or tutoring which matters? British Journal of Behavior Development, 4, 421-441.
- Snyder, M., Decker-Tanke, E., & Berscheid, E. (1977). Social perception and interpersonal behavior: On the self-fulfilling nature of social stereotypes. *Journal of Personality and Social Psychology*, 35, 656-666.
- Sroufe, L. (1979). Socio-emotional development. In J. Osofsky (Ed.), Handbook of Infant Development. New York: Wiley.
- Sroufe, L. (1983). Infant-caregiver attachment and patterns of adaptation in preschool: The roots of maladaptation and competence. In M. Perlmutter (Ed.), Minnesota symposia in child psychology (vol.16). Hillsdale, NJ: Erlbaum.
- Sroufe, L., & Fesson, J. (1986). Attachment and the construction of relationships. In W. Hartup & Z. Rubin (Eds.), *Relationships and development*. Hillsdale, NJ: Erlbaum.
- Sullivan, H. (1953). The interpersonal theory of psychiatry. New York: Norton.
- Tesch, S., & Oden, S. (1981). Referential communication skills and peer status in third and sixth grade children. Paper presented at the Annual Meeting of the American Psychological Association, Los Angeles.

Thorndike, R. & Hagen, E. (1978). The cognitive abilities test. Chicago: Riverside.

- Thorndike, R., Hagen, E., & Wright, E. (1984). The Canadian cognitive abilities test. Chicago: Riverside.
- Vandell, D., & George, L. (1981). Social interaction in hearing and deaf preschoolers: successes and failures in initiation. *Child Development*, 52, 627-635.
- Vygotsky, L. (1976). Play and its role in the mental development of the child. In J. Bruner, G. Jolly, & K. Sylva (Eds.), *Play.* New York: Basic Books.

- Waters, E., Wippman, J., & Sroufe, L. (1979). Attachment, positive affect, and competence in the peer group. Child Development, 50, 821-829.
- Watt, N., Stoloron, R., Lubensky, L., & McClelland, D. (1970). School adjustment and behavior of children hospitalized for schizcphrenia as adults. *American Journal of Orthopsychiatry*, 40, 637-657.
- West, D., & Farrington, J. (1973). Who becomes delinquent? London; Heinemann.
- Withycombe, J. (1973). Relationships of self-concept, social status, and racial differences. Journal of Social Psychology, 91, 337-338.
- Wylie, R. (1979). The self-concept (Vol.2): Theory and research on selected topics. Lincoln: University of Nebraska Press.
- Zahn-Waxler, C., Iannotti, R., & Chapman, M. (1982). Peers and prosocial development. In K. Rubin & H. Ross (Eds.), *Peer relationships and social skills in childhood* (pp. 133-162). New York: Springer-Verlag.
- Zanjonc, R. (1975). Birth order and intellectual development. *Psychological Review*, 82, 74-88.
- Zanjonc, R. (1976). Family configuration and intelligence. Science, 192, 227-236.
- Zimmerman, B., & Ringle, J. (1981). Effects of model persistence and statements of confidence on children's self-efficacy and problem solving. *Journal of Educational Psychology*, 73, 485-493.

#### Appendix A

Dear Parent(s)

As Mr. Buccongello delineated in his letter and accompanying request for permission form of May 18, I am completing a study addressing social development in kindergarten children. It would be most helpful if you could complete the attached questionnaire and have your son or daughter return it to the school at your earliest convenience. If you have any questions or concerns please do not hesitate to contact the school. Thank you in advance for your assistance in this matter.

Respectfully yours,

Andrew Bennett