Self-concept and peer relations in preschool children
by Erin Marie Olson

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Health and Human Development
Montana State University
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Abstract:
The purpose of this study was to determine whether relationships between the self-concept and peer relations exist in early childhood. Specifically peer status and number of mutual friends were examined in relation to self-concept. This study also examined the similarity of mutual friend dyads' self-concept scores.

Children aged 3-years, 6-months to 5-years, 11-months were recruited from the Montana State University Child Development Center (CDC) and the Associated Students of Montana State University Day Care (ASMSU) in Bozeman, Montana (n = 53). The children were interviewed and their self-concepts were assessed using the Joseph Primary and Preschool Self-Concept Screening Test (JPPSST). The children's peer status and mutual friendships were also determined using sociometrics.

The results indicated a significant relationship between peer status and self-concept for the entire group and the younger group ($p < .05$). However the relationship among the older group was not significant at the .05 level. The results also indicated that mean self-concept scores did not differ significantly by mutual friendship group ($p < .10$). Lastly, descriptive statistics were used to identify patterns among mutual friend's self-concept scores. The pattern suggested a decreasing trend in difference percentages with the exception of those dyads having one friend scoring below the normal range.

Peer status appeared to be related in young children. The results suggested that self-concept and peer status may be more interrelated at earlier ages in. the preschool group and may diminish with age. The number of mutual friends was not identified as a significant factor for young children's self-concepts although the importance of friends was demonstrated in the literature. Mutual friends' self-concept scores appeared to be similar indicating that even very young children may chose friend's with similar personality traits. A portion of children had larger score differences ($x > 6$). Those dyads with large differences had one friend whose self-concept score deviated from the mean.

In conclusion, both self-concept and peer relations have important implications for young children. Implications for parents and educators are discussed and future research is recommended.

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This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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TABLE OF CONTENTS

1. INTRODUCTION....1

Statement of the Problem....4
Definition of Terms....4
Conceptual Framework....6
The Self-Concept....6
Peer Relations....9

2. REVIEW OF THE LITERATURE....13

Introduction....13
The Self-Concept in Early Childhood....13
Developmental Implications of the Self-Concept....17
Peer Relations in Early Childhood....19
The Distinction Between Peer Status and Friendship....21
Developmental Implications of Peer Relations....23
Similarities of Mutual Friends....25
The Relationships Between the Self-Concept and Peer Relations....27
Summary....30

3. METHODS AND PROCEDURES....32

Statement of the Problem....32
General Procedures....32
Participants....34
Administration of the Joseph Primary and Preschool Self-Concept Screening Test....35
Administration of Sociometrics....38
Positive Nominations....38
Peer Rating-Scale....40
Data Reduction and Transformation....42
Hypotheses....42

4. RESULTS....44

Peer Status Results....44
Mutual Friendship Results....45

TABLE OF CONTENTS – Continued

Friend Dyad Exploratory Analysis....46

6. DISCUSSION....49

Conclusions....49
Peer Status and Self-Concept....50
Mutual Friendship and Self-Concept....51
Friend Dyads' Self-Concepts....51
Implications for Parents and Educators....53
Recommendations for Future Research....54

REFERENCES....57

APPENDICES....63

Appendix A—Letters to Center Directors....64
Letter to ASMSU Director....65
Letter to CDC Director....66
Appendix B—Letters to Center Parents....67
Letter to ASMSU Parents....68
Letter to CDC Parents....69
Appendix C—Assessment Worksheet....70
Worksheet....71

LIST OF TABLES

Table Page

1. Correlations Between Peer Status Scores and Self-Concept Scores....45

2. One-Way Analysis of Variance Results on the Self-Concept Scores by Mutual Friendship Group....45

3. Mean Self-Concept Scores for Each Mutual Friendship Group....46

LIST OF FIGURES

Figure Page

1. Frequency of Mutual Friend's Self-Concept Score Difference Percentages.....47

ABSTRACT

The purpose of this study was to determine whether relationships between the self-concept and peer relations exist in early childhood. Specifically peer status and number of mutual friends were examined in relation to self-concept. This study also examined the similarity of mutual friend dyads' self-concept scores.

Children aged 3-years, 6-months to 5-years, 11-months were recruited from the Montana State University Child Development Center (CDC) and the Associated Students of Montana State University Day Care (ASMSU) in Bozeman, Montana ($n = 53$). The children were interviewed and their self-concepts were assessed using the Joseph Primary and Preschool Self-Concept Screening Test (JPPSST). The children's peer status and mutual friendships were also determined using sociometrics.

The results indicated a significant relationship between peer status and self-concept for the entire group and the younger group ($p < .05$). However the relationship among the older group was not significant at the .05 level. The results also indicated that mean self-concept scores did not differ significantly by mutual friendship group ($p < .10$). Lastly, descriptive statistics were used to identify patterns among mutual friend's self-concept scores. The pattern suggested a decreasing trend in difference percentages with the exception of those dyads having one friend scoring below the normal range.

Peer status appeared to be related in young children. The results suggested that self-concept and peer status may be more interrelated at earlier ages in the preschool group and may diminish with age. The number of mutual friends was not identified as a significant factor for young children's self-concepts although the importance of friends was demonstrated in the literature. Mutual friends' self-concept scores appeared to be similar indicating that even very young children may chose friend's with similar personality traits. A portion of children had larger score differences ($x > 6$). Those dyads with large differences had one friend whose self-concept score deviated from the mean. In conclusion, both self-concept and peer relations have important implications for young children. Implications for parents and educators are discussed and future research is recommended.

CHAPTER 1

INTRODUCTION

Both positive self-concepts and successful peer relations have been considered integral components for healthy development. Correlations have been found between self-concept and peer relations in children elementary aged and older, suggesting that children with positive self-concepts also have successful peer relations (Bukowski & Hoza, 1989; Kurdek & Krile, 1982; Mannarino, 1978). These relationships have yet to be explored within the preschool ages. Generally, the self-concept has been regarded as an overall knowledge about oneself, whereas, peer relations have been described as the interactions between oneself and one's peers. Individually, these components have been related to important developmental outcomes throughout the lifespan.

Extensive research (Hattie & Marsh, 1996; Prout & Prout, 1996; Shavelson & Bolus, 1982; Wylie, 1974, 1979) has indicated that a positive self-concept may influence a number of developmental outcomes such as adjustment, academic achievement, and mental health. Further illustrating its importance, the self-concept has been argued to be "the best single predictor of a child's ability to succeed as a human being" (Joseph, 1979, p.1). Although much self-concept research has been conducted upon children in elementary school and beyond, the crucial period for self-concept development has been

identified as the early childhood years (Joseph, 1979). The nature of the self-concept has yet to be fully understood, partly due to a lack of research upon preschool aged children.

Like positive self-concept, successful peer relations have had important developmental implications. Peer relations, specifically friendship and peer status, have been linked with emotional well-being, behavioral regulation, and academic adjustment (Bukowski & Hoza, 1989; Doll, 1996; Eisenberg, et al., 1997; Hartup, 1979,1996; Hartup & Moore, 1989; Ladd, 1990; Ladd, Kochenderfer, & Coleman, 1996, 1997). Friendships have been defined as mutual dyadic relationships among peers, whereas peer status, or popularity, has pertained to "how well regarded children are by the members of their overall peer group" (Bukowski & Hoza, 1989, p. 21). Again, early childhood has become an important time for peer relations due to the increasing amount of time young children have been spending in preschool or childcare. These settings have expanded the child's opportunities for interaction with peers (Kemple, 1991; Sullivan-Temple & Ravid, 1991). Preschool children begin to form friendships and experience a level of status among their peers. Research has shown that peer interactions allow children to experience egalitarian relationships, and give them the opportunity to deal with issues such as power and negotiation (Hartup & Moore, 1989; Kemple, 1991).

Researchers have found that friendships and peer acceptance were correlated with high self-concept in preadolescents, adolescents, and adults (Bukowski & Hoza, 1989; Kurdek & Krile, 1982; Mannarino, 1978). The importance of the examination of relationships between self-concept and peer relations in young children has been demonstrated by Damon and Hart (1982), Lewis and Brooks-Gunn (1979), and Kirchner and Vondracek (1975). Damon and Hart reported that the conception of the self develops

simultaneously with the discovery of and interaction with others. Due to the ability to differentiate the self from others, children have begun to recognize and understand the permanence of oneself. According to Lewis and Brooks-Gunn, this differentiation of self from others has begun as early as 8-months of age. Coopersmith (1967) further discussed the interwoven development of the understanding of self and others. He concluded that regard and appraisal from significant others were important determinants of self-esteem, the evaluative facet of self-concept. The significant others in Coopersmith's study were identified as parents and siblings; however, according to Kirchner and Vondracek peers were identified as significant others by high percentages of preschool children.

Although, preschool peers have been identified as significant others, the examination of the relationships between self-concept and peer interactions in the early childhood population, generally children aged 3- to 6-years of age, has been rare. The existence of relationships between friendship and self-concept and peer status and self-concept within this young age group has been unclear. The results of a study concerning the self-concept and peer relations among preschool children would be useful in providing researchers, teachers, and parents insight into the formation and maintenance of preschool friendships and peer status as well as the nature of early self-concept development. Therefore, the purpose of this study was to examine the relationship between peer relations and self-concept in early childhood.

Statement of the Problem

It is unclear at what age the relationships between self-concept and peer relations develop due to a lack of research performed at the early childhood level. The problem of this study was to determine whether relationships between the self-concept and peer relations exist in early childhood. Specifically this study was conducted to (a) assess self-concept levels of young children aged 3-6 to 5-11 using the Joseph Preschool and Primary Self-Concept Screening Test (Joseph, 1979), (b) identify mutual friendships within the same early childhood population by utilizing peer nominations (Asher, Singleton, Tinsley, & Hymel, 1979; Walden, Lemerise, & Smith, 1999), (c) identify peer status by utilizing sociometric ratings (Asher, Singleton, Tinsley, & Hymel, 1979; Walden, Lemerise, & Smith, 1999), (d) determine if any relationships exist between the self-concept and peer status of the children, (e) determine whether differences exist between the self-concepts of the friendship groups identified within this population, and (f) describe any similarities between the self-concept scores of mutual friend dyads.

Definition of Terms

For this study the following terms have been defined:

1. Early Childhood: This term referred to the developmental period roughly between the ages 3-years to 6-years.

2. Mutual Friendships: This term referred to mutual dyadic relationships also known as reciprocal friends. A mutual friend was defined as a peer whom the child

identified as liking to play with at school and who had, in turn, also chosen the child as liking to play with at school.

3. Peers: Peers were defined as childcare classmates between the ages 3-years, 5-months to 5-years, 11-months.

4. Peer Nominations: This term referred to a technique used to identify friendships. Children were asked to name their friends at school using photographs as references (McCandless & Marshall, 1957).

5. Peer Relations: Peer relations referred to interactions between closely-aged individuals and groups.

6. Peer Status: Peer status pertained to "how well regarded children are by the members of their overall peer group" (Bukowski & Hoza, 1989, p. 21).

7. Self-Concept: This term referred to the overall knowledge and beliefs one holds concerning the self (Shavelson & Bolus, 1982).

8. Self-Concept Level: This term referred to the self-concept classification derived from the Joseph Preschool and Primary Self-Concept Screening Test (Joseph, 1979) Global Self-Concept Scores. The levels were high positive, moderate positive, watch list, poor, and high risk negative.

9. Self-Esteem: Self-esteem was defined as the evaluative component of the self-concept.

10. Sociometric Ratings: This term referred to the technique used to identify peer status. Children were asked to quantify their degree of liking for each classmate by responding to the question: Would you really like to play with (child's name) at school,

sort of like to play with (child's name) at school, or not really like to play with (child's name) at school? (Asher, Singleton, Tinsley, & Hymel, 1979).

Conceptual Framework

The Self-Concept

The self-concept was defined by Shavelson and Bolus (1982) as the overall knowledge and beliefs one holds concerning the self. Shavelson, Hubner, and Stanton (1976) concluded that the self-concept is formed through interactions with one's environment. An individual's experiences in and interpretations of his or her environment, amount of reinforcement, and evaluations from others have been found to influence the development of the self-concept (Coopersmith, 1967; Rogers, 1951).

Conceptual frameworks or theoretical models of the self-concept have been numerous (Coopersmith, 1967; Marsh, 1989; Shavelson, et al., 1976). However, according to Byrne (1996), Damon and Hart (1982), and Wylie (1989) researchers have often used differing definitions of the term self-concept, used other self terms interchangeably (e.g., self-perception and self-understanding), and developed their own testing instruments, thereby, producing contradictory, weak, and unreplicable findings. Research (Harter & Pike, 1984; Marsh, 1989; Marsh, Craven, & Debus, 1991, 1998) has supported the multidimensionality of the self-concept and instruments have been developed accordingly. The conceptual framework for this study has been based upon the multidimensional model originally proposed by Shavelson, Hubner, and Stanton. Shavelson, et al. asserted that the self-concept is: "organized, multifaceted, hierarchical, stable, developmental, [and] evaluative, ..." (p.411). This model was designed based

upon preadolescent and adolescent studies. Research concerning younger children (Marsh, et al., 1991, 1998; Wylie, 1974) has suggested that a slight modification of the Shavelson, et al. (1976) model would be necessary in understanding the young child's self-concept. Hence, the following has established aspects of this model with consideration of relevant and recent research.

Researchers described the self-concept as organized in that an individual groups his or her experiences and perceptions into more manageable and meaningful units, or categories (Shavelson, et al., 1976; Rogers, 1951). Even young children's self-descriptive statements were categorized. For example, these categories included but were not limited to physical ability, relationships, physical appearance, and gender (Guardo & Bohan, 1971; Keller, Ford, & Meacham, 1978; Marsh, et al., 1991; Shavelson, et al., 1976).

Many researchers (Coopersmith, 1967; Guardo & Bohan, 1971; Keller, Ford, & Meacham, 1978; Marsh, et al., 1991, 1998) have provided support for the contention that children organized their self-concepts using multiple categories or facets. According to Shavelson, et al. (1976) findings these facets were shown to be organized hierarchically based upon the importance placed upon each facet, or dimension by the individual. The Shavelson, et al. model spanned from specific situational experiences at the base to an overall, or general, self-concept at the apex of the hierarchy. Many situationally specific self-concept changes that are incongruous with the general self-concept would be necessary to effect a global and enduring change in the self-concept. Based upon these premises, Wylie (1974) and Shavelson, et al. asserted that general self-concept is stable even for young children.

Another premise of the Shavelson, et al. (1976) model described the self-concept as developmental. The developmental aspect of the self-concept has been shown throughout the lifespan (Broughton, 1978; Damon & Hart, 1982; Eder, 1989; Guardo & Bohan, 1971; Kagan, 1981; Keller, Meacham, & Ford, 1978; Lewis & Brooks-Gunn, 1979; Marsh, et al., 1991; Selman, 1980). Lewis and Brooks-Gunn identified self-recognition in infants as young as 3-months. This self-recognition continued to develop and by 15-months the infants were able to recognize permanent features. These findings indicated that the self-concept begins to develop at a very early age, and although study of the self-concept at this level is limited to visual recognition, Damon and Hart (1982) pointed out "we do not know whether other modes of self-recognition (such as through touch, hearing, and smell) might provide better indexes of infant self-understanding" (p. 845). Limitations in self-concept research were diminished with the child's development of speech. By 24-months, Kagan (1981) discovered that the child's use of verbal self-descriptive statements increased in frequency (e.g., "I ran"; "I'm sleepy"). This research revealed that the very young child is aware of self's qualities and capabilities and is beginning to differentiate between the two. By early childhood, the child has begun to verbalize a conception of the self in physical terms such as appearance, possessions, and actions (Broughton, 1978; Keller, Meacham, & Ford, 1978).

Research has shown that the self-concept continues to develop throughout adulthood (Damon & Hart, 1982; Eder, 1989; Guardo & Bohan, 1971; Marsh et al, 1991; Selman, 1980). Guardo and Bohan stated that between the ages of six and nine the child develops an understanding that he or she is a "being with a unique identity who has been, is, and will be a male, or female, human person separate from and entirely like no other"

(p. 1911). Developing further, Damon and Hart illustrated that adolescents increasingly used psychological and social relational concepts for describing the self. Throughout adolescence and adulthood the self-concept has been shown to continue developing becoming increasingly abstract and self-reflective (Damon & Hart, 1982; Marsh, et al., 1991).

Lastly, the premise that the self-concept has an evaluative component has been argued by Coopersmith (1967), Harter and Pike (1984), Joseph (1979), and Marsh, Craven, and Debus (1991). The evaluative component of the self-concept has also been known as self-esteem, general self-concept, or global self-concept. In this study, so to avoid confusion and wordiness, the term self-esteem has been used to refer to the evaluative aspect of self-concept. Both Coopersmith and Joseph asserted that young children display the judgments of worth and overall attitudes about themselves--the defining characteristics of self-esteem. Contradictorily, Harter and Pike stated that self-esteem does not develop until the age of 8; however, Marsh, Craven, and Debus found well-defined self-esteem in their study of 5- to 8-year-olds, disputing the Harter and Pike claim.

Peer Relations

Peer relations, interactions between same-age individuals and groups, had been considered extensions of the adult-child, or parent-child, relationships. However, Hartup (1979) stated that the research evidence suggests peer relations contribute uniquely to development. Peer status and friendships have been identified as important aspects of peer relations. As defined earlier by Bukowski and Hoza (1989), peer status referred to

how a child was regarded by his or her peer group. Peer status, a group oriented interaction, has also been referred to as popularity or peer acceptance. On the other hand, friendships were defined as mutual dyadic relationships, also known as mutual friends or reciprocal friends.

Like the self-concept, study of peer relations has lacked a strong theoretical conceptualization (Newcomb & Bagwell, 1995). Therefore, this framework was primarily based upon the writings of Hartup (1979; Hartup & Moore, 1989), Howes (1988), Ladd, Kochenderfer, and Coleman (1996, 1997), and Rizzo (1989). The conceptual framework of peer relations within this study has emphasized that: (a) peer status and friendship are distinct constructs, (b) peer relations are established early, (c) young children form stable friendships, (d) peer relations are qualitatively different from adult-child relations, and, (e) peer relations are a central aspect of child development.

The first contention of this framework was that peer status and friendship are distinct constructs that contribute uniquely to development (Ladd, Kochenderfer, & Coleman, 1997; Parker & Asher, 1993; Vandell & Hembree, 1994; Walden, Lemerise, & Smith, 1999). Parker and Asher found that not all children with high peer status had friends while many low status children had friends. This finding supported the distinction between peer status and friendship.

Secondly, peer relations were stated to be established early. Due to the increased enrollment of very young children in childcare, these children have been afforded more opportunities to interact with their peers. Howes (1988) found that peer relations were established as early as 13-months. Corsaro (1981) also found that preschoolers

engaged in peer relations. He stated that preschool children rarely played alone and that upon finding themselves alone, the children consistently attempted to enter a playgroup. This research indicated that within early childhood, peer relations occur, friendships are formed, and at least by the preschool period due to overall peer group knowledge and awareness, peer status develops.

Peer relations were also said to be stable even at very early ages. Howes (1988) stated that toddlers formed stable friendships over the school year. She also stated that the stability of friendships increased with age. Howes found that preschoolers' peer status remained stable for two years. Support for the stability of both preschoolers' friendships and peer status over a one-year period was also found by Walden, Lemerise, and Smith (1999) and Park, Lay, and Ramsay (1993). Hence, this research has indicated that both friendships and peer status are stable in school environments at early ages.

Hartup (1979) emphasized the differences between peer interactions and adult-child interactions. Although some similarities exist, he found that peer interactions are qualitatively different than adult-child interactions. Hartup stated that peer relations, beginning as early as toddlerhood, were egalitarian and reciprocal. Adult-child interactions were described as hierarchical versus egalitarian (Hartup & Moore, 1989). Hartup and Moore asserted that because friends are both comfortable with one another and on equal terms disputes occurred more often than with adults or acquaintances. Another difference between adult-child and peer interactions was that peers engaged in sustained periods of play. Finally, prosocial activity seemed to be based upon peer relations rather than adult-child interactions (Hartup, 1979). Hartup stated that research indicated aggressiveness, sociable behavior, and prosocial activity were observed more

often between peers, while dependency, nurturance, and intimacy were seen more often within adult-child interactions. Hartup's findings have shown that peer relations are indeed qualitatively different from adult-child interactions and contribute uniquely to development.

Hartup (1979) also demonstrated the premise that peer relations are a central aspect of children's development. Hartup stated that, "Peer relations are necessities rather than luxuries in child development" (p. 158). He said "the evidence overwhelmingly suggests that success in peer relations is embedded centrally in the socialization of the child and is not a peripheral feature of social development" (p.157). Through peer interactions, children have developed emotional and behavioral regulation, learned how to relate to others, and developed social competence (Hartup, 1979; Eisenberg, et al., 1997). Newcomb and Bagwell (1995) and Hartup also asserted that children mastered their aggressive impulses, learned conflict management skills, and developed socially, emotionally, and cognitively within the context of peer relations.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This literature review was conducted in order to examine the nature of young children's self-concepts and peer relationships, specifically, their development and stability. The developmental implications of both the self-concept and peer relations were also explored. Research evidence addressing the distinction between friendship and peer status and the similarities between mutual friends was examined. Lastly, literature focusing upon the relationships between the self-concept and peer status and the relationships between the self-concept and mutual friendships was also reviewed.

The Self-Concept in Early Childhood

Joseph (1979) asserted that early childhood is a crucial period for the development of the self-concept. The foundation of one's self-concept, the structural core, has begun to form at this time. According to Lewis and Brooks-Gunn (1979), self-concept development has originated in infancy. Expanding upon prior research, Lewis and Brooks-Gunn studied the reactions of infants 6- to 24-months old when presented with mirror, photographic, and video images of themselves. The researchers discovered from this study and through informal observations that infants between 3- to 8-months of

age have the ability to recognize that the mirror images moved along with their own movements. This realization became a self-recognition through contingency cues. At approximately 8-months of age, infants have begun to use these contingency cues with feature recognition to display self-recognition and differentiation from others. Lewis and Brooks-Gunn found clear feature recognition by 15-months indicating the construction of the self as "permanent" and enduring (p.10). Further, the researchers concluded that between 15- and 24-months, infants were able to identify themselves using categories, specifically gender and age, and suggested that use of categories for self-identification increased and expanded with age. These findings indicated that the self-concept begins to develop at a very early age. Because this research has relied upon visual self-recognition, examination of infants' self-concepts has been limited. This limitation in self-concept research was diminished with the child's development of speech. Kagan (1981) discovered that by 24-months the child's use of verbal self-descriptive statements such as, "I ran," increased in frequency. Damon and Hart (1982) stated, "Self-descriptive statements reflect self-awareness because a child cannot make meaningful statements about the self if the child were not aware of the self's qualities" (p. 849). This research revealed that the very young child was aware of self's qualities and capabilities and has begun to differentiate between the two.

At this level of development, the child has tended to verbalize a conception of the self in physical terms (Broughton, 1978; Keller, Meacham, & Ford, 1978). Broughton (1978) researched several factors used by children in interpreting the world by interviewing individuals of various ages about the self, the mind, and reality. During the interview, Broughton asked children, "What is the self?" (p. 79). Four- to seven-year-old

children often responded, "It's a body." (p. 79). According to Broughton, in early childhood the self was thought to be part of the body and could be described materially with respect to size, color, and structure. Broughton concluded that young children distinguished themselves from others based upon physical appearance and material possessions. The findings of Keller, Meacham, and Ford expanded Broughton's developmental sequence to include another level for 3- to 5-year old children. These researchers asked 3-, 4-, and 5-year-old children to describe themselves. First, the researcher asked the child to say something about the self so the researcher could write about the child, and after each response the child was also asked "what else should I write to tell about you?" for up to ten responses (p. 484). Secondly, the researcher asked the child to complete the sentence, "[Child's name] is a girl/boy who _____." (p. 484) to elicit more self-statements. The researchers' findings revealed that substantially larger percentages (25 to 77%) of children's responses in each age group were in terms of action than any other category. Some action responses included "goes to school," "wash my hair by myself," and "help Mommy" (p.485). The possession and body image response categories represented the next highest percentages of responses, yet neither category contained more than 19% at any age. These responses included "have a doll" and "have eyes" (p. 485). Keller, et al. concluded the children, both boys and girls, described themselves in terms of action or activities more often than by body parts or material attributes. The Keller, et al. research expanded upon Broughton's conclusions and supported the suggestion of Lewis and Brooks-Gunn (1979) that the use of categorical features for self-identification and description expands and increases with age.

The use of categories to describe oneself has indicated a differentiated self-concept. The Broughton (1978), Keller, et al. (1978), and Lewis and Brooks-Gunn (1979) conclusions were contradictory to the following Shavelson, et al. (1976) conclusion. Shavelson, et al. stated that, "young children's self-concepts are global, undifferentiated, and situationally specific" (p. 414). Based upon the Keller, et al. (1978), Harter and Pike (1984), and Marsh, et al. (1991) findings, young children's self-concepts were differentiated, but were more global, or less differentiated, and situationally specific than older children's self-concepts. Marsh, et al. found clear differentiation in the self-concepts of 5- to 8-year old children, which steadily increased with age. Harter and Pike maintained this assumption in the development of the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children, a self-concept measure for preschool aged children. Harter and Pike used four categories to assess self-concept in their scale. Lastly, Joseph (1979) used five dimensions of self-concept to derive a global, or general, self-concept score for his scale.

Based upon the research presented above, young children's self-concepts seemed clearly differentiated. However, it has been unclear to what extent young children's self-concepts were stable. According to Wylie (1974) and Shavelson, et al. (1976), the young child's general self-concept was stable. The Shavelson model of self-concept spanned hierarchically from specific situational experiences at the base to a general self-concept apex. General self-concept as described here referred to an overall knowledge of one's self, including self-esteem. Marsh, et al. (1991) concluded from their studies that young children have self-esteem, convincingly arguing against Harter's and Pike's (1984) theory to the contrary. Moreover, both Marsh, et al. and Harter and Pike agreed that

young children have differentiated self-concepts. It would seem, then that with self-esteem and differentiated facets of the self-concept, that young children's self-concept model would resemble the multidimensional model with a relatively stable overall self-concept as proposed by Shavelson, et al.

According to the Shavelson model, the self-concept became more situationally specific and less stable when descending the hierarchy. Many lower level, situationally specific self-concept changes incongruous with the general self-concept would be necessary to effect a change in the overall general self-concept. A model of the young child's self-concept would resemble Shavelson's model, but would differ slightly. Based upon Marsh's, et al. assertion that young children's self-concepts are less differentiated and more situationally specific than older children's self-concepts, a modified multidimensional model seemed more appropriate for young children. Although still resembling the Shavelson model, the self-concept for young children would encompass less dimensions and more situationally specific experiences. The overall self-concept for the young child, while relatively stable, has tended to be more susceptible to situationally specific situations than that of older children. Therefore, the young child's self-concept may be more receptive to intervention.

Developmental Implications of the Self-Concept

The self-concept has been highly regarded and considered to be influential in numerous areas of development. According to Coopersmith (1967), self-esteem was "associated with personal satisfaction and effective functioning" (p. 3). Coopersmith asserted that individuals with high self-esteem are more competent, more creative, less

anxious, and realistically goal-oriented. The self-concept has been related to adjustment, affect, motivation, and behavior including academic achievement, mental health, and delinquency (eg., Hattie & Marsh, 1996; Marshall, 1989; Prout & Prout, 1996).

Self-concept research has historically been seriously flawed (Wylie, 1974, 1979). Therefore, it has been difficult to assess the results of past research indicating the implications of the self-concept. In fact, due to both of Wylie's thorough reviews of the past research, theorists and researchers have spent much of the 1980's and 1990's revisiting self-concept theory and developing more scientific models of the self-concept. Although further research utilizing these current models for assessment of the implications of the self-concept was necessary, the self-concept has been regarded as an integral part of development. This regard was evident in Prout's and Prout's (1996) discussion of the clinical application of the self-concept. The researchers pointed out that "the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychological Association [APA], 1994) shows that self-concept and self-esteem issues play a significant role in a variety of disorders" (p.262). The diagnosis of many disorders has involved an impaired self-concept and low self-esteem as either a cause or symptom of the disorder.

Current research (Hattie & Marsh, 1996) has supported the importance of the self-concept by indicating cognitive differences between individuals with high and low self-concepts and self-esteem. Hattie and Marsh reviewed research which has indicated that individuals with high self-esteem tended to look at situations in a more positive light while those with low self-esteem looked at the same situation more negatively. For instance, Hattie and Marsh stated in their review that, "Both high and low self-esteem

individuals prefer to succeed, but people with high self-esteem expect to succeed more than those with low self esteem" (p. 437). Hattie and Marsh also stated that individuals with low self-esteem tended to believe that negative feedback from others was more descriptive of themselves than was positive feedback. In summary, although the degree of influence the self-concept has upon development has been inconclusive, it has been apparent that the self-concept is an integral part and has important implications.

Peer Relations in Early Childhood

Early childhood has become an important time for peer relations primarily due to the increased enrollment of very young children in childcare. These children have been afforded more opportunities to interact with their peers. According to Howes (1988), peer relations were established as early as 13-months. Hartup (1979) stated that based upon the research, "the social salience of children for children seems to be established very early" (p.151). Using classroom observations and sociometric ratings, Howes studied the interactions and friendships of 1- to 6-year-old children and suggested three periods of early peer relationships: the early toddler period, the late toddler period, and the preschool period. The early toddler period ranged from 13- to 24-months of age. These children engaged in complimentary and reciprocal interactions, practicing taking turns and exchanging roles. They played games such as hide and seek or run and chase. The late toddler period, ages 25- to 36-months, was marked by the emergence of cooperative social pretend play. Cooperative social pretend play depended upon the development of symbolic function and "communication of meaning" (p. 3). The communication of meaning involved the naming of the game and roles, or a theme that was mutually

understood. Finally, in the preschool period, ages 3- to 5-years, the children no longer relied upon routine play with friends. These children were able to communicate meaning and use symbolic behavior in their play with a variety of peers. The range of playmates increased and the children developed a "social knowledge of the peer group" (p. 4). They learned peer behaviors and play styles. This new knowledge of the group has become a foundation for peer status.

Walden, Lemerise, and Smith (1999) also found friendships at the preschool level. These researchers studied 58, 3- to 5-year-old children on two occasions during the school year and found that 75% and 84% of the children had mutual friends in the fall and spring respectively. The increase in friendships was said to be due to a change in classrooms for several of the older children, who had lost friends because of the move, but had established new friendships by the spring. Walden, et al., using sociometric ratings, also found clear popular, average, and rejected social status groups at this age level. Therefore, this research indicated that during early childhood peer relations occurred, friendships were formed, and at least by the preschool period, peer status developed.

Peer relations were asserted to be stable even at very early ages. Howes (1988) stated that toddlers form stable friendships. Children in early toddlerhood formed emotional attachments to their friends that remained stable for two years if they were not interrupted by a change such as a move. Children in the late toddler period had more friends than the younger group because the increased types of play utilized by these children expanded their range of playmates, as discussed above. The older children's friendships were even more stable, some lasting the entire three years of Howes' study.

Park, Lay, and Ramsay (1993) examined preschoolers' friendships and their stability over time. They found that not only were the friendships stable through the school year, but also that the children's interaction patterns remained stable. Finally, Walden, Lemerise, and Smith (1999) found that the preschoolers' fall friendships were moderately stable through the year, many still existing at the time of the spring assessments.

Fewer studies examined the stability of preschoolers peer status. Howes (1988), using only the children who were 3-years and older from her study, found that their status remained stable for two years. This finding was much longer than she had hypothesized based upon previous findings as summarized by Hymel (1983), yet consistent with research concerning elementary aged children. Walden, Lemerise, and Smith (1999) addressed the stability of peer status in their research. Like friendship, they found moderate stability over the school year in the preschoolers' status. The stability of preschool children's friendships and peer status has been afforded little attention. However, this research has shown that preschool aged children have both stable friendships and peer status.

The Distinction Between Peer Status and Friendship

Peer status and friendship were said to be distinct constructs that contribute uniquely to development (Ladd, Kochenderfer, & Coleman, 1997; Parker & Asher, 1993; Vandell & Hembree, 1994; Walden, Lemerise, & Smith, 1999). Ladd, et al. examined the contributions of friendship, peer acceptance, and peer victimization upon kindergarteners school affect, school liking, and school performance. Specifically, the researchers assessed 200 kindergarteners' loneliness, social dissatisfaction, school liking, school

avoidance, academic readiness, and school adjustment levels in the fall and again in the spring of the school year. These levels were compared to the children's sociometric nomination, sociometric rating, and victimization scale data. Ladd, et al. found evidence that peer acceptance, friendship, and peer victimization had both unique and redundant contributions to adjustment. They concluded that friendship and peer acceptance were correlated with academic readiness, yet each contributed uniquely to changes over the year. Also, friendship and peer acceptance were related to loneliness, and these contributions were similar, or redundant. Finally, only peer acceptance predicted changes in the children's social dissatisfaction over the year.

Parker and Asher (1993) also maintained that peer acceptance and friendship were both distinct and interrelated constructs. While exploring elementary school children's peer relations, they too used sociometric techniques in order to assess the friendships and peer acceptance in the children. Like Ladd, et al. (1997), they compared the data to the children's feelings of loneliness and social dissatisfaction. They found that not all children with high peer status had friends and that many low status children had friends, indicating that peer status and friendship are unique constructs. Peer status and friendship also made unique contributions to feelings of loneliness, supporting the Ladd, et al. findings. Other findings, which indicated that average to high status children were twice as likely to have a best friend than low status children, supported the interrelation of the two constructs.

Both Vandell and Hembree (1994) and Walden, et al. (1999) also found support for a distinction between friendship and peer status. Vandell and Hembree assessed over 300 third-graders' friendships and peer status and compared them to self-concept, socio-

emotional adjustment, and academic performance. They found that both peer status and friendship were correlated with the three variables, but did so uniquely. In other words, peer status and friendship were found to make independent, or non-shared, contributions to the self-concept, socio-emotional adjustment, and academic performance. Walden, et al. measured friendship and peer status in a preschool population. They studied the emotional regulation and behavioral regulation of 3- to 5-year-old children and their relation to the children's peer status and friendships. Walden, et al. found that friendship was correlated with emotional regulation and peer status was related with behavioral regulation, thus indicating unique contributions even at the preschool level.

In conclusion, the preceding literature has supported Ladd's, et al. (1997) contention that both friendship and peer status should be examined separately due to their distinct contributions in order to more fully understand peer relations.

Developmental Implications of Peer Relations

Peer relations have contributed to important developmental implications. Through peer interactions, children have learned how to relate to others, have developed emotional and behavioral regulation, and have developed social competence (Eisenberg, et al., 1997; for a review, see Hartup, 1979). Hartup also asserted that children master their aggressive impulses, learn conflict management skills, and develop both socially, emotionally, and cognitively within the context of peer relations (See Newcomb & Bagwell, 1995, for a review).

More specifically, positive implications of high peer status have been reported by Ladd, et al. (1997) and Parker and Asher (1993). Ladd, et al., in their examination of peer

acceptance, friendship, and victimization, found that kindergarteners' peer status predicted gains in academic readiness through the year. Parker and Asher assessed third- through fifth-grade children. Those children within the high and average peer status groups were twice as likely to have a best friend when compared to low status children. On the other hand, Hartup (1979) discussed future negative implications of peer status in his review. He stated that rejected children had higher delinquency and school drop-out rates, were nonadventuresome, and were at-risk for emotional difficulties, including mental illness. Ladd (1990) also found negative implications of peer status in his research. Ladd measured kindergarten children's friendships, peer status, and school adjustment on three occasions during the school year. He concluded that peer rejection early in the school year predicted lower performance levels, school avoidance, and unfavorable school perceptions. Other negative implications of peer status include loneliness, social dissatisfaction, and poor school performance in 5- and 6-year-olds (Ladd, et al., 1997).

Alternatively, Newcomb and Bagwell (1995) discussed positive implications of friendships. Their meta-analytic review of friendship research indicated that friends shared and cooperated, guided and helped, and developed empathy more than nonfriends. The Bachenfeld-Child and Schiavo (1989) research supported Newcomb's and Bagwell's conclusions. Brachenfeld-Child and Schiavo presented 4-, 5-, and 6-year-olds with a peer teaching exercise. The children were paired, and one of the children was taught to play a game and then instructed to teach the other child. They found those children who were friends were more task-oriented, relaxed, and playful in a collaborative problem-solving situation than nonfriends, or acquaintances. Also, positive friendship experiences were

found to be significant predictors of school adjustment for kindergartners (Ladd, 1990; Ladd, et al., 1997). Ladd found that making new friends correlated with school performance. In contrast, Doll (1996) reviewed negative future implications of friendship difficulties. She stated that children with friendship difficulties were at-risk for dependency, aggression, serious mental health problems and unemployment or underemployment in adulthood.

Summarily, the implications of peer relations, specifically peer status and friendships have been shown to be crucial to child development. Early peer relations not only affected attitudes, school adjustment, and skill development, but also correlated with outcomes into adulthood. These relations had enduring effects that could be addressed in early childhood.

Similarity of Mutual Friends

Research (Drewry & Clark, 1984; Hartup & Moore, 1989; Mannarino, 1978; Newcomb & Bagwell, 1995; Rizzo, 1989) indicated that children have a tendency to choose friends with similar self-concepts, personality traits, attitudes, and values. According to Rizzo (1989) "...similarity among individuals is a major characteristic of friendship" (p.2). Rizzo observed first-grade friends for about five-months. Interestingly, he observed similarities in personal, physical, attitudinal, and behavioral characteristics among the friends, and also the children's use of those similarities to maintain and strengthen the friendship. The children sought out and highlighted similarities with their friends. Newcomb and Bagwell (1995) found similarity among friends in their meta-analytic review including children in preschool through early adolescence. Specifically,

they found that friends were similar in demographics, behavior, aggression, activities, interests, values, personalities, and self-concepts.

Drewry and Clark (1983) examined factors important to the formation of preschool friendships such as attractiveness, race, gender, self-concept, and birth order. They found that the preschool friends were more similar in popularity and age than nonfriends. Preschool friends were also similar in age, race, and gender. In a later study, Drewry and Clark (1984) combined results from preschool, third-grade, and sixth-grade children and found that mutual friends were similar in self-concept scores and popularity. In this study, preschool friends were also found to be similar in number of siblings and birth order. Lastly, Drewry and Clark (1984) concluded that as grade increased, preference for same-sex friendships also increased. Mannarino (1978), in his study of preadolescent males, found that males with at least one close, mutual friend, or "chum," had significantly higher self-concepts than those without a chum. Mannarino asserted that the boys with a mutual friend shared similar ideas and feelings.

Hartup and Moore (1989) discussed more negative findings of friendship similarity indicating that rejected school-aged children began to seek out others with similar personality traits in order to maximize social opportunities, thereby, reinforcing and perpetuating exhibited malfunctioning behaviors. These researchers concluded that rejection in early and middle childhood lead to the association with deviant peers by preadolescence and the increased frequency of the individual's own deviance and negative attitudes. Although Hartup and Moore had not directly addressed any similarities in self-concept, their conclusions and the findings of Drewry and Clark (1983, 1984), Mannarino (1978), and Rizzo (1989) have supported the contention that

individuals form friendships with others similar to themselves, even at the preschool level.

The Relationship Between the Self-Concept and Peer Relations

The interconnection between the development of the self-concept and the formation of peer relations was shown by the following researchers. Bukowski and Hoza (1989), Vandell & Hembree (1994), and Groene and Inderbitzen-Pisaruk (1992) investigated the self-concept as it relates to both peer status and friendship in older children. Wylie (1979) found 34 studies examining the relationship between peer status and the self-concept, 23 of which had significant results. Since 1979, very few studies have researched this relationship, and only one at the preschool level (Drewry & Clark, 1984). Also, few articles were located which examined a relationship between friendship and the self-concept (Berndt & Keefe, 1993; Mannarino, 1978). The following will present the research findings, which discuss the relationships between the self-concept and peer status and the self-concept and friendships.

Bukowski and Hoza (1989) examined the relationship between both friendships and peer status with the self-concept. The researchers found that fifth- and sixth-graders with friends had higher self-concepts. They stated that friendship is a significant predictor of self-concept. Bukowski and Hoza also found that peer status is a predictor of low self-concepts and that self-esteem, the evaluative self-concept, is more strongly predicted by friendship than by peer status. In a more recent study, Vandell and Hembree (1994) performed another examination of older children. They found that third-graders, who belonged to the neglected and rejected peer status groups, had poorer self-concepts than

their average to high status peers. They also found that the number of mutual friends was predictive of the self-concept. Lastly, Groene and Inderbitzen-Pisaruk (1992) researched the self-concept and both peer status and friendships in 542 ninth-grade adolescents. They administered Coopersmith's (1967) Self-Esteem Inventory (SEI) and the Sociometric and Friendship Questionnaire (SFQ) in order to determine self-concept, mutual friends, and peer status. Little information was provided regarding either test. Groene and Inderbitzen-Pisaruk concluded that mutual friends had higher self-concepts, but found an insignificant relationship between self-concept and peer status. The insignificant relationship resulting from this study may have been due to several factors. One factor may be that there was no relationship between peer status and the self-concept. However, due to ample evidence to the contrary, this conclusion was implausible. Other factors involved in insignificant findings were examined by Wylie (1979). Wylie allotted a great deal of attention to insignificant findings between the self-concept and peer status. One-third of the studies she reviewed had insignificant results. Wylie presented several arguments accounting for such results; two are pertinent here. First, she questioned the validity of the sociometric techniques. Groene and Inderbitzen-Pisaruk had not provided any validity data; therefore, the validity of the SFQ was unclear. Second, Wylie stated that these results may have been due to idiosyncratic self-regard instruments with lesser reliability and/or validity. She expressly places the SEI into this group of self-regard instruments. Wylie's arguments place Groene's and Inderbitzen-Pisaruk's results into question.

Unlike Groene and Inderbitzen-Pisaruk (1992), other studies focusing upon the relationship between the self-concept and peer status presented significant results.

Kurdek and Krile (1982) studied 313 white, middle class, Catholic third- through eighth-grade children. The researchers utilized Harter's Perceived Competence Scale for Children (PCSC) (as cited in Kurdek & Krile) and sociometric nominations to determine self-concepts and peer status, respectively. They found that children with high peer status also had high PCSC scores, indicating increased self-concepts. Bovin and Bégin (1989) had similar results in their study of 9- to 11-year-olds. These researchers also used the PCSC, yet used a slightly differing sociometric technique, which made use of photographs. Those children with high peer status also had higher self-concepts. Finally, the only researchers located who assessed preschool aged children were Drewry and Clark (1983). Drewry and Clark examined how sex, race, physical appearance, social class, and self-concept influenced peer relations in preschoolers. These researchers were not focusing directly upon the relationship between peer status and self-concept and reported no results concerning the relation between friendship and self-concept. However, they found a correlation between peer status and the self-concept. Drewry and Clark used a sociometric technique developed by McCandless and Marshal (1957). Using photographs, the researchers asked each child to point to their best friend and two other friends. Popularity was assessed by determining the number of times the child was selected as a friend. Drewry and Clark also used a self-concept inventory to assess the preschoolers' self-concepts. They found that the self-concept predicted peer status. Specifically, Drewry and Clark concluded that children with low self-concept scores were less popular than those with high self-concept scores. Summarily, the evidence has indicated that children, including preschoolers, with high peer status also tended to have high self-concepts and inversely, that children with low self-concepts tended to be less

popular.

Fewer studies focused directly upon the relationship between the self-concept and friendship; however, both studies (Berndt & Keefe, 1989; Mannarino, 1978) presented here have provided support for the findings of Bukowski and Hoza (1989) and Groene and Inderbitzen-Pisaruk (1992). Berndt and Keefe found that seventh- and eighth-grade children with supportive mutual friendships also had greater self-concepts. These researchers assessed almost 300 students using a self-perception inventory and an informal questionnaire concerning the friendship quality of three of the child's friendships. Lastly, Mannarino found a correlation between friendship and the self-concept in his study of 60 sixth-grade males (females were not included in this study). He concluded that boys with a mutual friend, or "chum" relationship, had significantly higher self-concepts than those without a chum. In conclusion, these findings have generally indicated that older children with friends have higher self-concept than those without friends.

Summary

In conclusion, the literature presented above provides the following evidence:

(1) Relatively stable self-concepts develop in early childhood.

(2) The development of positive self-concepts seems to have important implications for healthy development. The opposite also appears to be true; the development of negative self-concepts has negative implications.

(3) Stable peer relations develop in early childhood.

(4) Friendship and peer status are distinct constructs.

(5) Both childhood friendships and peer status have important developmental implications.

(6) Mutual friends have similar self-concepts, personality traits, beliefs, and values.

(7) The self-concept and peer status are related in children preschool aged and older.

(8) The self-concept and mutual friendship are related in preadolescent children and adolescents.

CHAPTER 3

METHODS AND PROCEDURES

Statement of the Problem

The problem of this study was to determine whether relationships between the self-concept and peer relations exist in early childhood. Specifically this study was conducted to (a) assess self-concept levels of young children aged 3-6 to 5-11 using the Joseph Preschool and Primary Self-Concept Screening Test (Joseph, 1979), (b) identify mutual friendships within the same early childhood population by utilizing peer nominations (Asher, Singleton, Tinsley, & Hymel, 1979; Walden, Lemerise, & Smith, 1999), (c) identify peer status by utilizing sociometric ratings (Asher, Singleton, Tinsley, & Hymel, 1979; Walden, Lemerise, & Smith, 1999), (d) determine if any relationships exist between the self-concept and peer status of the children, (e) determine whether differences exist between the self-concepts and the friendship groups identified within this population, and (f) describe any similarities between the self-concept scores of mutual friend dyads.

General Procedures

1. A literature review was conducted in order to examine young children's self-concepts and peer relations. The review addressed the following areas: (a) self-concept

development; (b) the nature of the self-concept in early childhood; (c) developmental implications of the self-concept; (d) the development and nature of friendship and peer status in early childhood; (e) the distinction between peer status and friendship; (f) developmental implications of peer relations; (g) the similarity of mutual friends; (h) the relationship between self-concept and peer relations.

2. The directors of two university day care centers, the Montana State University Child Development Center (CDC) and the Associated Students of Montana State University Day Care (ASMSU), were contacted in person to discuss the details of this study and in writing (see Appendix A) to formally request permission to conduct research in the centers.

3. A weekly staff meeting at each center was utilized as a forum for discussing the purpose and procedures of the study with the teachers and to address their questions and concerns.

4. Children who qualified for the study were identified by determining enrollment dates, attendance, and age.

5. Parents of qualifying children were contacted in writing (see Appendix B) through the centers. The letters outlined the purpose of the study and requested permission for their child to participate.

6. Permission slips were collected and sample size was determined.

7. Neutral color photographs were taken of each qualifying child, developed and mounted on a picture board in alphabetical order.

8. University students employed within each center were recruited and trained as data collectors. The students were specifically informed of testing procedures and ethics of data collection (See Appendix C).

9. Sociometric techniques, ratings and nominations, and the Joseph Preschool and Primary Self-Concept Screening Test (JPPSST) were administered to all subjects by July 2000.

10. Tests were scored upon receipt and data was analyzed.

Participants

The children involved in this study were selected from both the Montana State University's Child Development Center (CDC) and the Associated Students of Montana State University Day Care (ASMSU). The CDC was a teaching laboratory childcare center open to the public, while ASMSU enrollment was reserved for university students' children. Both centers are located on the Montana State University (MSU) campus in Bozeman, Montana. The children were selected based upon four participation criteria: age, enrollment date, attendance, and permission. The children were between the ages of 3-years, 6-months and 5-years, 11-months. They had been enrolled within the centers in both the fall and spring semesters of the 1999-2000 academic year and were familiar with over 80% of the other qualifying children. Familiarity was determined by mutual attendance. The final participation criteria was written parental permission.

The selection process resulted in a total sample size of 53 children (n=53), 65% from the CDC (n=34) and 36% from ASMSU (n=19). Females comprised 57% (n=30) and males comprised 43% (n=23). The majority of the children were Caucasian (85%).

The remaining children were Asian (5.6%), Native American (3.7%), African American (1.9%), African American/ Caucasian (1.9%), and African American/ Hispanic (1.9%).

Administration of the Joseph Preschool and Primary Self-Concept Screening Test

Joseph (1979) developed the Joseph Preschool and Primary Self-Concept Screening Test (JPPSST) for use with preschool children. The JPPSST was designed to anticipate adjustment problems and learning difficulties due to poor self-concepts of young children. Joseph based the assessment upon his beliefs that the self-concept is fundamental in the social and emotional development and that learning and adjustment difficulties arise from the negative self-appraisals due to poor self-concepts. Joseph stated that the JPPSST has potential use as a flexible research tool thereby establishing appropriateness of this measure for this study. Reviewers concluded that the JPPSST was one of the best self-concept instruments available for use with young children (Byrne, 1996; Gerken, 1985; Telzrow, 1985). However, they asserted that the JPPSST was in need of additional reliability and validity research, and was most appropriately used as a research tool.

The JPPSST was standardized on a sample consisting of 1,245 children from rural, suburban, and urban areas in Illinois. The majority of the children were Caucasian (91%). From this sample, three normative age groups were identified. The two used for this study were 3-years, 6-months to 4-years, 6-months (n=285), 4-years, 7-months to 5-years, 11-months (n=328).

The test-retest reliability was calculated on a small sample of preschool children. Joseph (1979) reported a test-retest reliability coefficient of .87 for a four week interval suggesting that self-concept scores for preschoolers remained stable over four weeks. Joseph also reported internal consistency reliability using the Kuder-Richardson formula and item analysis. The median Kuder-Richardson was .73. Joseph stated that the Kuder-Richardson formula may have underestimated the test reliability due to the wide range of JPPSST item popularity. Joseph indicated that all test items significantly contributed to the global score ($p < .01$).

Validity of the JPPSST was determined by establishing concurrent validity. Concurrent validity was established by comparing the global self-concept scores with two inferred self-concept scales completed by teachers. Significant correlations were found among teacher ratings and the JPPSST for various age groups. For example, preschool age groups' JPPSST scores were significantly correlated with both the Inferred Self-Concept Judgment Scale ($r = .51$, $p < .01$) and Coopersmith's (1967) Behavior Rating Scale ($r = .65$, $p < .001$).

In summary, the JPPSST had moderately high test-retest reliability over a four-week interval with a small sample of preschoolers and internal consistency was varied, yet all test items were found to be significantly correlated with the global score. Joseph stated that the JPPSST is a fairly internally consistent test. Validity was also established. However, Byrne (1996), Gerken, (1985) and Telzrow (1985) attested to the necessity of more psychometric research. Due to this limitation the reviewers agreed that the JPPSST was best utilized in research.

Each child was interviewed individually. The children at the CDC were taken to an office adjacent to the center, within the building and the children at ASMSU were interviewed in a small meeting room within the center. The administration of the JPPSST entailed two tasks. First, the child was instructed to draw his or her face on a blank figure—the Identity Reference Drawing (IRD). The IRD was a simple line drawing of either a boy or a girl. This task was intended to help the children focus upon the self and served as a reminder throughout the test that the children were being asked to describe themselves. Next, the child was asked a series of fifteen questions. Each question, with the exception of two, was illustrated with two simple black and white line drawings. Separate sets of illustrations were provided for each sex. For example, the question, "One of these boys (girls) jogs slowly and the other boy (girl) runs fast. Which one is most like you?" was illustrated by one drawing of a child sprinting and one of a child jogging. The child was asked to identify the pictures and then to point to the one most like him or herself. Administration of the JPPSST took approximately 5- to 7-minutes.

A global self-concept score was calculated using the JPPSST. The global scores ranged from 0 to 30 and were derived from positive responses worth two points, ambivalent responses or don't know responses worth one point, and negative responses worth zero points. As a whole, the global score was based upon questions tapping five dimensions. Those five dimensions were based upon Coopersmith's (1967) antecedents of self-esteem: significance, virtue, competence, and power as well as general evaluative contentment.

Administration of Sociometrics

For the purposes of this study positive peer nominations and a peer rating-scale measures were utilized in order to determine mutual friendships and peer status levels, respectively. According to Asher and Hymel (1981), positive peer nominations and rating-scale measures tapped different aspects of peer relations. Positive peer nominations provided insight into the number of friends or best friends a child had, while peer rating-scale scores indicated an overall level of acceptability among peers, or peer status (Bukowski & Hoza, 1989; Parker & Asher, 1993). The sociometric techniques took 6- to 10-minutes. The JPPSST and the sociometrics were administered during the same sitting resulting in a total assessment interview of approximately 15-minutes.

Positive Peer Nominations

For this study positive nominations were used in order to determine mutual friendships. Howes (1988) and Walden, Lemerise, and Smith (1999) identified mutual friendships using positive nominations. A modified version of their technique was utilized here.

First, at least two photographs were taken of each child as recommended by McCandless and Marshall (1957). Color photographs were used and in an attempt to control for attractiveness, each child was photographed before a neutral background, covered by a sheet from the shoulders down. Each child was instructed to keep a neutral face. After the photographs had been developed the most representative photo of the child was chosen with the aid of the child's regular teacher. The photos were trimmed so the child's face was centered and each photo was the same size. All the photos of the

children were then attached to a poster board in alphabetical order for presentation during the assessment.

The entire peer group, both boys and girls, were displayed for the purpose of identifying mutual friendships. This decision was based upon the findings of Walden, et al. (1999). The researchers assessed the mutual friendships of children aged 3- to 5-years in the fall and again in the spring. Of the 39 mutual friendships identified in the fall 74% of the friendships were same-sex dyads (8 female-female and 21 male-male), and 26% were cross-sex dyads (10 female-male). In the spring, 48 mutual friendships were identified. Gender results were similar to those in the fall. Of the friendships identified, 71% were same-sex and 29% were cross-sex. Had these researchers identified only same-sex friendships, they would have failed to identify all possible mutual friendships, omitting a large portion of dyads. The purpose of this study was to identify all mutual friendships within the sample; therefore, it would not be advantageous to disregard any mutual friendships regardless of gender.

The administration began with the child identifying his or her own picture on the picture board. Then the examiner instructed the child to look at the picture board as a reference and asked the child to identify at least three friends. Specifically, the examiner asked, "Who would you like to play with at school" and "Who else (do you like to play with at school)?"

After every child had been assessed mutual friendship dyads were identified. A mutual friend was defined as a peer whom the child identified as liking to play with at school and who had, in turn, also chosen the child as liking to play with at school. Both mutual friend dyads and the number of mutual friends per child were recorded. For

number of mutual friend scores, three groups were formed: zero, one, and two-or-more mutual friends.

Reliability of positive peer nominations was determined using test-retest reliability measures in several studies. Generally, moderate correlations (i.e., $r = .66$, $p < .05$ and $r = .71$, $p < .05$) have been reported indicating moderate stability over time (Asher, et al., 1979; Connolly & Doyle, 1981; McCandless & Marshall, 1957). Positive nominations have been identified as more reliable than negative nominations (see Hymel, 1983).

Concurrent validity has been identified for nomination measures. Connolly and Doyle (1981) found nomination methods to be similar to teacher inferences; however, the total number of positive nominations was used as an index of popularity rather than mutual friendships. Hymel (1983) stated that nomination measures repeatedly demonstrated concurrent validity in relation to observational methods and teacher ratings. She concluded that combined peer nomination scores indicating status level were less valid than separate peer nomination scores. In determining mutual friendships, validity has been established for older children. The nomination technique will be utilized in this study to identify friendships due to the increased and successful use of this technique with preschool children (e.g., Howes, 1988; Walden, et al., 1999) and the assertion that preschool children have well established and relatively stable friendships.

Peer Rating-Scale

The rating-scale technique introduced by Asher, Singleton, Tinsley, and Hymel (1979) and Cassidy and Asher (1992) was utilized. The advantage of using a rating-scale

technique in order to determine peer status levels was that each child was considered. Every child was asked to rate each peer in the class as an indication of the child's attitude toward each of his or her peers. The ratings were administered immediately following the peer nomination measure.

For the peer-rating technique, the children were instructed to rate both male and female peers in order to maintain consistency with the peer nominations. The examiner explained the instructions and determined the child's understanding. A smiley face, a neutral face, and a sad face were placed before the picture board. The examiner pointed to a photo and asked the child to name the pictured child. If the child did not recognize or didn't know the child, the examiner moved on to the next photo and repeated the process. If the child named the child or indicated that he or she knew the child, the examiner asked, "Would you really like to play with [name of pictured child] at school? Would you sort of (or sometimes) like to play with [child's name] at school, or would you not really like to play with [child's name] at school?" While questioning the child, the examiner pointed to the corresponding face. The happy face indicated "really like," the neutral face represented "sort of like," and the sad face corresponded to "not really like." The question and choices were repeated if necessary. Both verbal and pointing responses were recorded. The child's score was computed by combining each rating received from each peer in both age groups. "Really like" was assigned three points, "sort of like" was worth two points and "not really like" was one point.

Test-retest reliability was established for the peer rating-scale technique. Hymel (1983) reviewed several studies and concluded that the rating-scale had higher reliability for both elementary school and preschool children than nomination status scores.

Although, the stability of preschool children's ratings seemed to increase with age, 4- and 5-year-olds had reasonably consistent ratings. She concluded that the rating-scale technique was an appropriate way to assess peer acceptance in preschool children. Asher, et al. (1979) calculated a test-retest correlation of .81, $p < .01$, for preschool children, which indicated moderate stability of scores.

Concurrent validity has been established for preschool children. The rating-scale technique has been significantly correlated to observational methods and teacher ratings (see Hymel, 1983). Rating-scale measures have been shown to be predictive with elementary school children and adolescents, but predictive validity has not been established for preschoolers.

Data Reduction and Transformation

After calculating the scores for each assessment, the data was entered into the Statistical Program for Social Sciences (SPSS; SPSS Inc., 2000). In order to deal with the problem of differing sample sizes from each school, the scores were standardized using a ratio based upon peer status score and total possible rating. The self-concept scores, mutual friend dyads, and number of mutual friends were not affected by the sample difference. Descriptive statistics, correlations, and a one-way ANOVA were then performed using the SPSS 10.0 program.

Hypotheses

The following hypotheses were tested for this study. The Pearson product-moment coefficient was used to test for relationships at the .05 level of significance. A

one-factor ANOVA was used to test for difference among three means at the .10 level of significance.

Null Hypothesis 1. There was no significant correlation between the children's self-concept scores and peer status scores for the entire group.

Null Hypothesis 2. There was no significant correlation between the younger children's self-concept scores and peer status scores.

Null Hypothesis 3. There was no significant correlation between the older children's self-concept scores and peer status scores.

Null Hypothesis 4. There was no significant difference among the mean self-concept scores of the three groups: zero, one, and two-or-more mutual friends.

Lastly, descriptive statistics were used to identify trends, or patterns among mutual friend's self-concept scores. The exploratory data analysis was used in order to address the question of similarity between mutual friends' self-concept scores.

CHAPTER 4

RESULTS

The variables examined within this study were self-concept, peer status, and mutual friendship. The results of this study have been organized into three sections based upon the independent variables and descriptive data analysis: (a) peer status results, (b) mutual friendship results, and (c) friendship dyad exploratory analysis results.

Peer Status Results

The first three hypotheses were tested using the Pearson Correlation Coefficient at the .05 level of significance. Null Hypothesis 1 stated that there was no significant correlation between the children's self-concept scores and peer status scores for the entire group. Null Hypothesis 2 stated that there was no significant relationship between the younger (3-years, 6-months to 4-years, 6-months) children's self-concept scores and peer status scores, and Null Hypothesis 3 stated there was no significant relationship between the older (4-years, 7-months to 5-years, 11-months) children's self-concept scores and their peer status scores. The results are depicted in Table 1.

Table 1. Correlations Between Peer Status Scores and Self-Concept Scores.

	N	Pearson Correlation (r)	Sig. (2-tailed)
Peer Status	53	.352	.010*
Younger Peer Status	20	.504	.023*
Older Peer Status	33	.325	.065

* Correlation is significant at the 0.05 level (2-tailed).

A significant positive correlation was found between the entire group's peer status scores and their self-concept scores ($r = .352$, $p = .01$). As the children's peer status scores increased, their self-concept scores increased. The Null Hypothesis 1 was rejected for the overall group. A significant positive correlation was also found within the younger group ($r = .504$, $p = .023$). The Null Hypothesis 2 was rejected for younger children. Lastly, the correlation for the older group was not significant at the .05 level ($r = .325$, $p = .065$). The Null Hypothesis 3 was retained for older children.

Mutual Friendship Results

The fourth null hypothesis stated that there was no significant difference among the mean self-concept scores of the three friendship groups: zero, one, and two or more mutual friends. This hypothesis was tested at the .10 level of significance using a one-way analysis of the variance. Table 2 depicts the results.

Table 2. One-Way Analysis of Variance Results on the Self-Concept Scores by Mutual Friendship Group

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	43.907	2	21.954	1.731	.188
Within Groups	634.282	50	12.686		
Total	678.189	52			

The comparison of the mean self-concept scores for each friendship group revealed no significant difference among the groups ($F = 1.731$, $p = .188$). Although no significance was found, the self-concept score means appeared to have an increasing trend (See Table 3). The R^2 was equal to .065 indicating that only a small portion of the variance among the self-concept scores was explained by taking into account mutual friendship group. Based upon these results, Null Hypothesis 4 was retained.

Table 3. Mean Self-Concept Scores for Each Mutual Friend Group.

Mutual Friend Group	Mean	N	Std. Deviation
0 MF	22.17	6	2.79
1 MF	24.67	18	3.38
2+ MF	25.14	29	3.79

Friend Dyads Exploratory Analysis

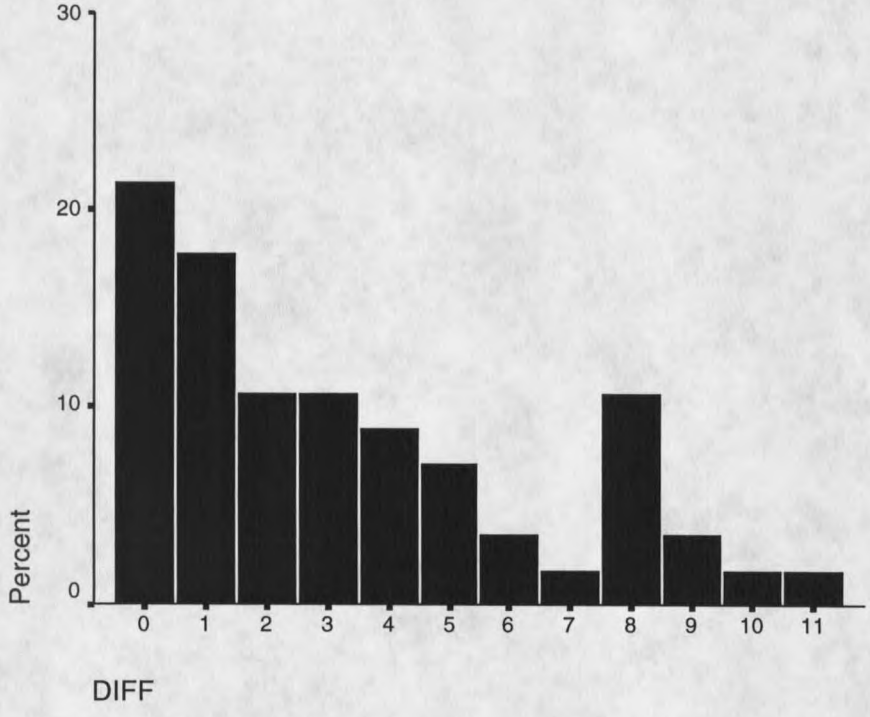
Exploratory data analysis was performed in order to identify any trends among the self-concept scores of mutual friends. The exploration of dyad similarities was conducted by exploring the individuals whose self-concept scores deviated from the mean and by examining the difference between each self-concept score within a dyad.

The mean self-concept score was 24.64 in a range of 16 to 30 with a standard deviation of 3.61. Of the 53 individuals participating in this study 13 individuals had scores below –1 standard deviation from the mean (24.5%). Of these 13, three had no mutual friends and only two chose friends who also had self-concept scores –1 standard deviation from the mean. The remaining eight individuals all had mutual friends whose self-concept scores were above average (61.5%). All but two other individuals ($n = 38$, 71.6%) had mutual friends within the normal range. These findings suggest that the

individuals who scored below −1 standard deviation from the mean tended to have mutual friends with above average self-concepts.

The difference between each mutual friend dyad's self-concept scores was examined. A total of 56 distinct mutual friend dyads were obtained. The difference between the scores ranged between 0 and 11 points with a mean difference of 3.32 and median difference of 2. Figure 1 depicts the frequency distribution of the percentages of differences.

Figure 1. Frequency of Mutual Friend's Self-Concept Score Difference Percentages



Greater percentages of mutual friends had fewer than three points difference between their self-concept scores (61%, n = 34). Twenty-two dyads had zero to one point difference between their self-concept scores (39%). Of those dyads with greater than six points difference between the self-concept scores (n = 13) all had one friend who scored

below –1 standard deviation from the mean overall self-concept score (M = 24.64). The pattern suggests a decreasing trend in difference percentages with the exception of those dyads having one friend scoring below the normal range.

CHAPTER 5

DISCUSSION

This study investigated the independent variables, peer status and mutual friendship, as they related to the dependent variable, self-concept, in preschool aged children. The pattern of similarity between mutual friend's self-concept scores was also explored. This chapter presents the results of the study as they relate to the conceptual framework and literature review. Implications for parents and educators and recommendations for future research conclude the discussion.

Conclusions

A correlational analysis of peer status scores and self-concept scores revealed a significant relationship within the entire sample and the younger group (3-years, 6-months to 4-years, 6-months). The relationship within the older group (4-years, 7-months to 5-years, 11-months) was not significant at the .05 level. No significant difference was determined between the mean scores of each friendship group: zero, one, and two-or-more mutual friends. Finally, a decreasing trend appeared to exist among the mutual friend's self-concept score differences with the exception of those dyads with a friend scoring below the normal range.

Peer Status and Self-Concept

Peer status scores were found to be significantly related to self-concept scores when both age groups were combined. The relationship was also found to be significant for the younger age group. The results indicated that as peer status scores increased self-concept scores also increased. These results were consistent with the findings of Bukowski and Hoza (1989), Drewry and Clark (1984), Kurdek and Krile (1982), and Vandell and Hembree (1994) which related peer status and self-concepts within various age groups.

Peer status and self-concept were not significantly related for the older group. These results were inconsistent with the aforementioned researchers, yet were consistent with the findings of Groene and Inderbitzen-Pizaruk (1992) who found no significant relationship between peer status and self-concept. These insignificant results may be due to the assessments utilized within this study as discussed by Wylie (1979). Wylie concluded that such insignificant results and weak findings could be attributed to the questioned validity of the sociometric techniques and to self-concept instruments with lesser reliability and validity. These findings may also be due to other variables that were not analyzed within this study, such as the school since the sample came from two different schools.

The significance found for the younger group and insignificance for the older group was unexpected. Due to the developmental aspects of both the self-concept and peer relations and the review of the literature which indicated that peer status and self-concept were related for older children, the expected outcome would have been greater significance within the older group. The results suggest that self-concept and peer status

may be more interrelated at earlier ages in the preschool group and may lose this affect with increased peer group familiarity or due to other intervening variables, such as school differences or socioeconomic status.

Mutual Friendship and Self-Concept

Although an increasing trend was found among the self-concept score means of the three friendship groups, the difference was not significant. These results are incongruent with the findings of Berndt and Keefe (1993), Bukowski and Hoza (1989), Groene and Inderbitzen-Pizaruk (1992), and Mannarino (1978) which associated having a mutual friend and number of mutual friends with self-concept. These researchers studied much older children in the fifth- through ninth-grades. The difference in findings may be that the number of mutual friendships was not related in younger children. Another alternative may be that other familial and environmental variables may better explain a difference between friendship groups. Again, the effects of the school, age, and gender of the child may be reflected in these insignificant results. This alternative is supported by the small portion of self-concept score variance ($R^2 = .065$) accounted for by mutual friendship group. Also, the sample size was fairly small and homogenous. All but six children from the sample ($n = 53$) had at least one mutual friend. The use of a larger, more diverse sample is recommended for future research.

Friend Dyads' Self-Concepts

Similarity between mutual friends has been well documented (Drewry & Clark, 1984; Hartup & Moore, 1989; Mannarino, 1978; Newcomb & Bagwell, 1995; Rizzo, 1989). Drewry and Clark were the only researchers to find similarities between friends at

the preschool level; however, their results may be statistically questionable due to a dependency of the scores because individuals appeared in more than one dyad. This issue was encountered within this study as well. In order to account for the dependency, sophisticated statistical analysis beyond the scope of this study would be required. Therefore, to address the question of similarity between friends' self-concept scores, descriptive statistics were utilized in order to identify trends among the dyads.

A pattern of decreasing self-concept score differences was found among mutual friends. Greater numbers of mutual friends had less point difference between their self-concept scores, while fewer friends had point differences of more than four points. Those friend dyads with greater than six point differences all included one friend who scored less than -1 standard deviation from the mean self-concept score. These results were not tested statistically and must be interpreted with caution, yet they appear to agree with conclusions of Drewry and Clark (1984), Mannarino (1978), Newcomb and Bagwell (1995) and Rizzo (1989). On the other hand, these results do not agree with the conclusions of Hartup and Moore (1989). Hartup and Moore stated that deviant children sought out friends with similar personality traits. These findings indicated that children who deviated from the mean self-concept score appeared to choose friends with above average scores. The direction of choice is not clear. It may very well be that the children with above average self-concept scores within these particular dyads befriended those with the lower self-concepts.

Implications for Parents and Educators

Peer status and self-concept appeared to be related in young children. This relationship has important implications for both parents and educators. Although the findings of this study do not support the relationship between self-concept and friendships, the literature construes such a relation. Peer relations, as asserted by Howes (1988) and Walden, Lemerise, and Smith (1999), appear to be significant at the preschool level, specifically peer status. Parents and educators need to be aware of this important interaction at such an early age. Parents should provide opportunities for peer interaction in order for their children to develop appropriate social skills at an early age.

Educators need to receive training concerning the importance of peer relations and self-concept, observational assessment of peer status and self-concept, and techniques for intervention, such as creating a tolerant, anti-biased classroom that facilitates positive peer interaction and individual self-concept development. With an understanding of the theories, observations, and intervention techniques, the educators can then inform parents and better interpret information from parents regarding the self-concept and peer relations of the child. Early childhood educators, in particular, need to be aware of self-concept, peer relations, and their interactions. Early childhood educators are often at an advantage by being able to deal with these issues while the self-concept is more receptive to intervention, while social skills are developing, and before the peer group changes into the more enduring peer group of elementary school.

In conclusion, knowledge of self-concept and peer relation theory is important for anyone dealing with children. The awareness of the importance of the self-concept at

such early ages can benefit parents and educators in their interaction styles. Sensitivity to the child's developing self-concept by encouraging the child's abilities, giving special attention to skill development, and providing opportunities for peer interaction will enhance the child's healthy development.

Recommendations for Future Research

This study has provided a glimpse into the complexity of self-concept, peer relations, and the interactions between them. The literature supported relationships between the dependent variable, self-concept, and the independent variables, peer status and friendship. The findings of this study supported a relationship between peer status and self-concept for the whole sample and the younger group, yet not for the older group. A relationship between the self-concept and friendship was also not supported within this study. The literature supported similarity between mutual friends' self-concepts. However, due to the design of this study, specifically the dependence of scores, this similarity could only be explored descriptively. More research is necessary in order to further clarify the relationships among the variables, particularly within the preschool population. Future research is recommended with consideration of the limitations of this study.

One limitation of this study was the sample. The sample was not random. The participants were recruited through parent permission from two on-campus day care centers at a small northwestern university. The small sample ($n = 53$) lacked diversity and was 85% Caucasian. A large and more diverse sample would provide more representative results in future research. Also a difference between the two day care centers from which

the sample was taken may have been an intervening variable in this study. For instance, the centers' enrollments were geared toward different populations. The ASMSU enrollment was reserved for the children of Montana State University students and the CDC was open to the community. This difference may have influenced the results. These limitations should be taken into consideration in future research.

In addition to taking into consideration school as an intervening variable, other variables should be analyzed in future research. Another limitation of this study was the analysis of few variables. Other variables such as age, siblings, parent age, and gender may better account for the variance among the self-concept scores. Such research would benefit self-concept theory by providing a better understanding of the influences upon self-concept at an early age. Overall, more self-concept research is necessary in order to develop a comprehensive theoretical model. For peer relations, additional considerations such as friendship quality and both friendship and peer status stability may enhance future research.

More research is also necessary regarding the testing instruments. Appropriate self-concept assessments for use with the preschool population are rare. Research and test development are necessary in this area. Reviewers recommended that more validity and reliability testing be performed on the JPPSST (Byrne, 1996; Gerken, 1985; Telzrow, 1985). The insignificant results concerning the older group's peer status and self-concept may have been due to the use of the JPPSST to assess self-concept. These results may also have been due to the use of sociometrics which are also in need of additional reliability and validity research, especially for use with preschool aged children.

In summary, both self-concept and peer relations have important implications for development. The preschool age is a crucial period for self-concept and peer relations, yet very little research has examined the young child's self-concept as a whole and its interactions with peer relations. Future research is necessary in order to enhance self-concept theory. More studies have examined the formation of preschool peer relations, although with the escalated enrollment in childcare and the increased opportunity for peer interaction at earlier ages, both replication of prior research and future research would benefit the understanding of the changing nature of peer relations.

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APPENDICES

APPENDIX A

LETTERS TO DIRECTORS

MONTANA STATE UNIVERSITY
BOZEMAN

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Herrick Hall
P O Box 173540
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Telephone (406) 994-3241
Fax (406) 994-2013

Mary Bolick, Director
ASMSU Day Care Center
Montana State University
Bozeman, Montana 59717

Dear Mary:

In March, we met briefly when I visited the ASMSU day care center. I am a graduate student and have been preparing a thesis involving preschool children's self-concepts, peer status, and friendships. I would like to meet with you to discuss the details of this research.

Further, I would like to formally request permission to include the children attending ASMSU in the study. Upon your approval, I will contact the parents in order to inform them of this study and to request that their child participate. I will also contact the teachers to arrange testing dates.

I appreciate your time and consideration. I am looking forward to meeting with you concerning this research. Thank you.

Sincerely,

Erin M. Olson
Graduate Student in Child Development

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Telephone (406) 994-3241
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Dorothy Baker, Director
Child Development Center
Montana State University
Bozeman, Montana 59717

April 20, 2000

Dear Dede:

I am writing to formally request permission to include the children attending the Child Development Center in research for a master's thesis. As you are aware, this study involves preschool children's self-concepts, peer status, and friendships. Upon your approval, I will contact the parents in order to inform them of this study and to request that their child participate. In order to inform the teachers of this study, I would also like to request your permission to address the topic at a center staff meeting.
Thank you for your time and consideration.

Sincerely,

Erin M. Olson
Graduate Student in Child Devlopment

APPENDIX B

LETTERS TO PARENTS

MONTANA STATE UNIVERSITY
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Fax (406) 994-2013

May 22, 2000

Dear ASMSU Day Care Parent.

This letter is to inform you of an upcoming research project and to request your permission to include your child in the study I am a graduate student studying child development at MSU I have been preparing a thesis in order to examine the relationship between peer relations and self-concept at the preschool level.

Research has provided important information for parents and educators concerning the nature of self-concept and the formation of both friendships and popularity. Although self-concept and peer relations develop in preschool, little research has been conducted with preschoolers. More research at this age will provide parents and educators insight into the enhancement of children's development.

Therefore, I will be conducting research at ASMSU under the supervision of Dr. Janis Bullock. In order to conduct this study, I am asking for your permission to interview your child on two occasions. The first interview will involve asking your child to identify his or her friends and how much he or she likes to play with classmates. It should last approximately 10 minutes. The second will include a few questions concerning the self-concept and will last 5 to 10 minutes. The interview will be conducted in the conference room, with either myself or another trained student with early childhood education experience. Your child's name and responses will remain anonymous.

I am very excited about this research and the results should prove to be quite interesting. Please take a moment to fill out the attached permission slip and return it to Mary Bolick or a teacher by Friday, May 26, 2000 Feel free to ask Mary or me any questions, you may contact me at home, 522-7360. Thank you for your consideration.

Sincerely,

Erin M. Olson
CDC Assistant Teacher and Graduate Student

Janis Bullock, Ph D
Child Development/Family Science

MONTANA STATE UNIVERSITY
BOZEMAN

Department of Health and Human Development

Herrick Hall
PO Box 173540
Bozeman MT 59717-3540

Telephone (406) 994-3241
Fax (406) 994-2013

May 5, 2000

Dear Child Development Center Parent:

This letter is to inform you of an upcoming research project and to request your permission to include your child in the study. As many of you know, I am a graduate student studying child development at MSU. I have been preparing a thesis in order to examine the relationship between peer relations and self-concept at the preschool level.

Research has provided important information for parents and educators concerning the nature of self-concept and the formation of both friendships and popularity Although self-concept and peer relations develop in preschool, little research has been conducted with preschoolers. More research at this age will provide parents and educators insight into the enhancement of children's development.

Therefore, I will be conducting research in the CDC under the supervision of Dr. Janis Bullock and the director Dede Baker. In order to conduct this study, I am asking for your permission to interview your child on two occasions. The first interview will involve asking your child to identify his or her friends and how much he or she likes to play with classmates. It should last approximately 10 minutes. The second will include a few questions concerning the self-concept and will last 5 to 10 minutes. The interview will be conducted in the teacher's office, next to Dede's office, with either myself or another trained student teaching at the CDC. Your child's name and responses will remain anonymous.

I am very excited about this research and the results should prove to be quite interesting. Please take a moment to fill out the attached permission slip and return it to a CDC teacher by Thursday May 11, 2000 Feel free to ask me any questions at the CDC or call me at home, 522-7360. Thank you for your consideration.

Sincerely,

Erin M. Olson
CDC Assistant Teacher and Graduate Student

Janis Bullock, Ph D
Child Development/Family Science

APPENDIX C

ASSESSMENT WORKSHEET

Assessment Worksheet

Before Testing

1.) Make sure teacher's office is clean and toys, computer desk, and bookshelf are covered with sheets.
2.) Arrange assessment tools.
3.) Establish rapport with child. Ie: *I'm going to show you some pictures*
4.) Once in office, sit on the same side of table or desk, briefly state directions, and begin.

Sociometrics

Tools: picture board, smiley faces, scoring sheet.
Place smiley faces ☺ 😐 ☹ in front of picture board.
Allow child to check out pictures before testing.

Friends

1.) Ask the child to identify 3 to 5 friends (refer to picture board if necessary).
Who are your friends? Who do you like to play with best at school?
Who else?
(if child chooses someone not pictured, ask for someone else—we can only use children pictured for this study)
2.) Record names on score sheet.

Status

1.) Using the picture board, point to the first picture. Ask the child to identify the pictured child. (if he/she cannot ID the picture score DK and move on).
2.) Ask the child while pointing to the corresponding smiley face:
Would you really like to play with (name) at school, would you sort of like to play with (name) at school, or would you not like to play with (name) at school? REPEAT IF NECESSARY
3.) Confirm response.
4.) Record both verbal responses and pointing responses if the child points to a smiley face.
5.) Ask about each picture. If the child clearly understands the procedure, a pattern may develop and you may abbreviate the questions by eliminating the second and last "*at school*" in order to keep on task and develop a steady pace.
6.) Record all responses.

JPPSST (Self-Concept)

Tools: IRD, 2-3 crayons or markers, reference pictures (in order), questionnaire, scoring sheet.

1.) Instruct the child to color a picture of themselves using the appropriate IRD.
2.) Allow one to two minutes to color. Then place the IRD in above reference pictures—*to remind us that we are talking about you.*
3.) Place pictures before child and ask corresponding questions.
4.) Have the child identify which picture belongs to each situation, then ask:
Now which one happens to you the most, or which one is like you? Etc.
5.) Confirm every answer: *so you...*
6.) Record answers on scoring sheet. (Be discrete while recording, don't let it be an issue, if they ask, tell them *I'm writing your answers so I can remember them later.* Move on).
7.) Keep IRD pictures. *Erin needs to see these first, you can ask her for it later.*

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