



Parent behaviors relating to social competency in a population of preschool children in Bozeman, Montana
by Susan Cook Johnston

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Home Economics
Montana State University
© Copyright by Susan Cook Johnston (1990)

Abstract:

The purpose of this study was to investigate the relationships among parent behaviors and child social competency in a population of preschool children in Bozeman, Montana. The parent behaviors of involvement, limit setting, responsiveness, reasoning guidance, free expression (mothers only), and intimacy were examined in relation to child social competency. The study also examined the factors of parental age, parental occupation, parental educational level, and child gender in relation to child social competency.

Parents of children enrolled in the Montana State University Child Development Center laboratory preschool and parents of children enrolled in the Methodist Preschool ($n = 128$) completed and returned the Iowa Parent Behavior Inventory (IPBI). The IPBI was designed to measure parent behaviors in relation to child outcomes for families in rural areas. The head teacher in each preschool group studied completed the California Preschool Social Competency Scale (CPSCS) for each child ($n = 64$) whose parents participated in the study. The CPSCS was designed to measure child social competency in the specific areas of interpersonal behavior, social responsibility, and independence. Results indicated a significant ($p < .05$) relationship between mother responsiveness and child social competency. The results also indicated a significant ($p < .05$) relationship between parental age and child social competency.

Mother responsiveness appeared to be a key factor in relation to child social competency in the study. Low to moderate mother responsiveness may promote social competence and high levels of responsiveness may have a negative effect on child social competence as measured by the CPSCS in the study. Father age also appeared to be a key factor in relation to child social competence in the study. The relationship between father age (30-39 years) and child social competence in the study may be related to developmental interactions between parent and child in the microsystem.

PARENT BEHAVIORS RELATING TO SOCIAL COMPETENCY
IN A POPULATION OF PRESCHOOL CHILDREN
IN BOZEMAN, MONTANA

by

Susan Cook Johnston

A thesis submitted in partial fulfillment
of the requirements for the degree

of

Master of Science

in

Home Economics

MONTANA STATE UNIVERSITY
Bozeman, Montana

August 1990

N378
J6475

ii

APPROVAL

of a thesis submitted by

Susan Cook Johnston

This thesis has been read by each member of the author's 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.

Date

7-5-90

Chairperson, Graduate Committee

Jamie Bullock

Approved for the Major Department

Date

7/12/90

Head, Major Department

[Signature]

Approved for the College of Graduate Studies

Date

July 25, 1990

Graduate Dean

Henry L. Parsons

STATEMENT OF PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a master's degree at Montana State University, I agree that the Library shall make it available to borrowers under rules of the Library. Brief quotations from this thesis are allowable without special permission, provided that accurate acknowledgment of source is made.

Permission for extensive quotation from or reproduction of this thesis may be granted by my major professor, or in her absence, by the Dean of Libraries when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this thesis for financial gain shall not be allowed without my written permission.

Signature Susan C. Johnston
Date July 26, 1990

ACKNOWLEDGEMENTS

I would like to extend my gratitude to the many people who have worked with me and supported my efforts throughout this endeavor. The encouragement from family and friends has been deeply appreciated.

My graduate committee members, Dr. Janis Bullock, Dr. Sandy Osborne, and Laura Massey, have been most generous with their time, knowledge, expertise, and encouragement. A special thank you to Dr. Gary Conti for his valuable assistance with statistical analysis and research design.

I would like to extend a very heartfelt thank you to my husband, Bob, for his advice, computer expertise, moral support, encouragement, and many meals cooked throughout this effort. And a thank you to my son, Jeff, who was patient and shared the computer when he really wanted to play Nintendo.

TABLE OF CONTENTS

	Page
LIST OF TABLES	viii
ABSTRACT	x
1. ORIENTATION OF THE STUDY	1
Introduction	1
Purposes and Problem Statement	3
Rationale	3
Conceptual Framework	5
Nominal Definitions	9
2. REVIEW OF LITERATURE	12
Introduction	12
Relationships Among Parental Behaviors and Children's Social Competence	13
Social Competence in Children	16
Relationships Among Parental Behaviors and Social Competence in Boys and Girls	23
Demographic Information	25
Summary	28
Research Hypotheses	29
3. METHODS	31
Sample	31
Procedures	32
Instruments	33
Demographic Questionnaire	33
The Iowa Parent Behavior Inventory	33
The California Preschool Social Competency Scale	35
Operational Definitions	36
Reductions and Transformations	37
Data Analyses	38

TABLE OF CONTENTS--(Continued)

	Page
4. RESULTS	42
Preliminary Analyses	42
Main Analyses	44
Hypothesis 1	44
Hypothesis 2	50
Hypothesis 3	57
Hypothesis 4	58
Hypothesis 5	59
Hypothesis 6	61
Hypothesis 7	62
Hypothesis 8	63
Hypothesis 9	64
Summary of Findings	65
5. DISCUSSION	68
Discussion of the Hypotheses	69
Father Behaviors and Child Social Competency	69
Mother Behaviors and Child Social Competency	70
Father Age and Child Social Competency	73
Mother Age and Child Social Competency	74
Father Occupation and Child Social Competency	75
Mother Occupation and Child Social Competency	75
Father Education and Child Social Competency	76
Mother Education and Child Social Competency	77
Child Gender and Child Social Competency	77
Limitations	78
Nature of the Sample	78
Method of Sampling	79
Data Collection Desirability	79
Discrimination of the Instruments	79
Correlational Nature of the Data Analysis	80
Implications for Parents and Educators	81
Further Implications	83
Implications for Further Research	83
REFERENCES	86

TABLE OF CONTENTS--(Continued)

	Page
APPENDICES	94
Appendix A--The Iowa Parent Behavior Inventory Mother Form	95
Appendix B--The Iowa Parent Behavior Inventory Father Form	101
Appendix C--The California Preschool Social Competency Scale	106
Appendix D--Letters of Information	111
Appendix E--Demographic Information	116

LIST OF TABLES

Table	Page
1. Father involvement and CPSCS scores	45
2. Analysis of variance of father involvement and CPSCS scores	46
3. Father limit setting and CPSCS scores	46
4. Analysis of variance of father limit setting and CPSCS scores	47
5. Father responsiveness and CPSCS scores	47
6. Analysis of variance of father responsiveness and CPSCS scores	48
7. Father reasoning guidance and CPSCS scores	48
8. Analysis of variance of father reasoning and CPSCS scores	49
9. Father intimacy and CPSCS scores	49
10. Analysis of variance of father intimacy and CPSCS scores	50
11. Mother involvement and CPSCS scores	51
12. Analysis of variance of mother involvement and CPSCS scores	51
13. Mother limit setting and CPSCS scores	52
14. Analysis of variance of mother limit setting and CPSCS scores	52
15. Mother responsiveness and CPSCS scores	53
16. Analysis of variance of mother responsiveness and CPSCS scores	53
17. Mother reasoning and CPSCS scores	54
18. Analysis of variance of mother reasoning and CPSCS scores	54

LIST OF TABLES--(Continued)

Table	Page
19. Mother free expression and CPSCS scores	55
20. Analysis of variance of mother expression and CPSCS scores	55
21. Mother intimacy and CPSCS scores	56
22. Analysis of variance of mother intimacy and CPSCS scores	56
23. Father age and CPSCS scores	57
24. Analysis of variance of father age and CPSCS scores	58
25. Mother age and CPSCS scores	59
26. Analysis of variance of mother age groups and CPSCS scores	59
27. Father occupation and CPSCS scores	60
28. Analysis of variance of father occupation and CPSCS scores	60
29. Mother occupation and CPSCS scores	61
30. Analysis of variance of mother occupation and CPSCS scores	62
31. Father educational level and CPSCS scores	62
32. Analysis of variance of father education and CPSCS scores	63
33. Mother educational level and CPSCS scores	63
34. Analysis of variance of mother education and CPSCS scores	64
35. Child gender and CPSCS scores	64
36. Analysis of variance of child gender and CPSCS scores	65

ABSTRACT

The purpose of this study was to investigate the relationships among parent behaviors and child social competency in a population of preschool children in Bozeman, Montana. The parent behaviors of involvement, limit setting, responsiveness, reasoning guidance, free expression (mothers only), and intimacy were examined in relation to child social competency. The study also examined the factors of parental age, parental occupation, parental educational level, and child gender in relation to child social competency.

Parents of children enrolled in the Montana State University Child Development Center laboratory preschool and parents of children enrolled in the Methodist Preschool ($n = 128$) completed and returned the Iowa Parent Behavior Inventory (IPBI). The IPBI was designed to measure parent behaviors in relation to child outcomes for families in rural areas. The head teacher in each preschool group studied completed the California Preschool Social Competency Scale (CPSCS) for each child ($n = 64$) whose parents participated in the study. The CPSCS was designed to measure child social competency in the specific areas of interpersonal behavior, social responsibility, and independence. Results indicated a significant ($p < .05$) relationship between mother responsiveness and child social competency. The results also indicated a significant ($p < .05$) relationship between parental age and child social competency.

Mother responsiveness appeared to be a key factor in relation to child social competency in the study. Low to moderate mother responsiveness may promote social competence and high levels of responsiveness may have a negative effect on child social competence as measured by the CPSCS in the study. Father age also appeared to be a key factor in relation to child social competence in the study. The relationship between father age (30-39 years) and child social competence in the study may be related to developmental interactions between parent and child in the microsystem.

CHAPTER 1

ORIENTATION OF THE STUDY

Introduction

The ability to successfully interact with others has been a valuable asset in our society. This ability has often been referred to as social competence and has required the acquisition of skills normally learned early in life within the home environment. Social competence has included behaviors commonly associated with successful peer relations. The behaviors commonly linked to successful peer relations have included: being friendly, being liked, having satisfying interactions, and being socially responsible which have been considered necessary in order to participate in society (O'Malley, 1977). Socially competent individuals have been those able to maintain positive relationships with others and within society in general (Damon, 1983). For the purposes of this study, social competence has been defined as the adequacy of children's interpersonal behavior, the degree to which they assume social responsibility, and independence (Levine, Elzey, & Lewis, 1969).

Educators, researchers, and parents have been concerned with the ability of young children to achieve an age appropriate ability to successfully interact with peers. Children who failed to develop the ability to establish positive peer relations at an early age were at risk for rejection by peers (Asher, Oden, &

Gottman, 1977), for engaging in delinquent behaviors (Roff, Sells, & Golden, 1972), for becoming academic underachievers (McCandless, 1967), for dropping out of school (Ullmann, 1957) and for developing mental health problems later in life (Cowen, Pederson, Babigian, Izzo, & Trost, 1973). A number of skills training programs and preventive approaches to mental health have been emphasized as possible solutions for the various consequences related to lack of social competence (Allen, Hart, Buell, Harris, & Wolf, 1964; Asher, Markell, & Hymel, 1981; McFall & Twentyman, 1973). The limitation of the skills training approach was in focusing on specific child behaviors without consideration for the various systems, including the family, which might have influenced and contributed to the child's inadequate social interaction with peers.

Early positive encounters between parents and children have formed the basis for positive interactions within the peer system. Studies reflecting the quality of parenting reported that children reared in warm, secure, and socially active family environments were more successful in establishing and maintaining positive peer relationships (Bullock, 1987; LaFreniere & Sroufe, 1985; Krantz, Webb, & Andrews, 1984; Lieberman, 1977; Peery, Jensen & Adams, 1985). Many family scientists (e.g., Bigner, 1989; Murdock, 1949; Ogborn, 1933) have believed that the socialization of children was the principal remaining function of the family unit today and that the success of family life was closely interdependent with that of society at large.

Purposes and Problem Statement

The primary purpose of this study was to expand on previous research which has investigated the relationships between parent behaviors and successful formation of positive peer relations in their young children. As primary agents of the socialization process which began early in life and has continued into adulthood, parents have exerted enormous influence on their children. It was of interest, therefore, to determine which of several notable parent behaviors were related to social competence in children's peer relations.

Specifically, the study examined the relationships among father behaviors (i.e., involvement, limit setting, responsiveness, reasoning guidance, and intimacy) and mother behaviors (i.e., involvement, limit setting, responsiveness, reasoning guidance, free expression, and intimacy) and child social competence. Family demographic variables such as father age, mother age, father occupation, mother occupation, father educational level, and mother educational level were examined in relation to children's social competence. Additionally, the study included an examination of the relationship of the gender of the children and children's social competence.

Rationale

The study of parent behaviors which relate to successful peer relations in children was extremely important for a variety of reasons. First, certain behaviors which were associated with successful peer relations included: being liked, being friendly, having satisfying interactions, and being socially responsible,

are deemed necessary for participation in society (O'Malley, 1977). Those people who were able to maintain positive relationships with others and within society in general were defined as being socially competent individuals (Damon, 1983). Second, variables associated with social competence such as positive interpersonal behavior, the ability to assume social responsibility, and independence might have increased the predictability of academic as well as social success (O'Malley, 1977). In addition, O'Malley's study of social competence presented a clearer picture of social development than was given by the more isolated components such as empathy, locus of control, and self-esteem alone. Third, research (Emmerich & Smoller, 1964) revealed that middle-class parents had clear preferences for behaviors such as assertiveness, friendliness, independence, and obedience which have been strongly linked with social competence.

Identification of significant parent behaviors that were related to child social competence was important because this information could then be used in programs of prevention and intervention to promote the development of healthy relationships. Research (Asher et al., 1977) indicated that peer rejection of socially incompetent children might have more severe consequences for later life than does low achievement.

It was important to examine the relationships among the behaviors of both fathers and mothers to the peer relations of their boys and girls. Much of the research on parent-child relations has either focused on the mother-child relationship to the exclusion of the father-child relationship (Ainsworth, 1967,

1969; Ainsworth & Bell, 1969; Brody, 1969; Putallaz, 1987)) or has focused on parent behaviors without making a distinction between mothers and fathers in their interactions with their children (Erikson, 1950; Baumrind, 1966, 1967, 1971; Emmerich & Smoller, 1964). Research (Parke & O'Leary, 1975; Pederson, 1975, 1981) clearly indicated that both fathers and mothers have influenced and contributed to the developing child and might have influenced their children in different ways. Serious consideration of the role of the father in the socialization of children has occurred only in the last few decades (Lamb, 1976, 1977a; 1977b; Lewis, Feiring & Weinraub, 1976; MacDonald, 1987; Pederson, 1981).

While the literature has suggested that satisfactory family life involved positive parent-child interactions which were related to social competence (Baumrind, 1972), more research was clearly indicated to understand the relationships of adult behaviors to children's social competence.

Conceptual Framework

There were three major theoretical approaches applied to the study of social competence in young children. The first theoretical approach has been the ecological view of human development which stresses the importance of relations between the developing person and the immediate surroundings in which the development occurred (Bronfenbrenner, 1977). Bronfenbrenner described the immediate environment as a microsystem composed of the physical space and materials present, the activities that people engaged in with

and without each other, and people in roles and relationships to the child. For the purposes of this study, the microsystem has consisted of female and male adult caregivers in which participants engaged in the particular roles of mother and father, daughter and son.

Social behavior between parent and child has involved direct patterns of interaction in which the child was a participant. The bidirectional nature of parent-child interactions has been recognized (Bigner, 1989), but there have been notable methodological difficulties in properly measuring reciprocal effects. The statistical methods commonly used for analyzing bidirectional effects are mathematically dependent on assumptions which are inherent in unidirectional causal models (Feiring & Lewis, 1978). Therefore, bidirectional influences have been very difficult to measure and describe with any accuracy (Feiring & Lewis, 1978). It has been valid to conceptualize the direct interactions between child-parent and parent-child as unidirectional rather than simultaneous and bidirectional to avoid the methodological and mathematical problems of dealing with reciprocal interactions. Despite problems in quantification, fathers, mothers and children clearly have influenced each other directly by engaging one another in social interaction (Feiring & Lewis, 1978).

Social behaviors between mothers and fathers and their children began as direct interactions in infancy. It was important to note that both similarities as well as differences were revealed in the father-child and mother-child subsystems of the family microsystem beginning in infancy (Bronfenbrenner, 1977). Qualitative differences were noted in father-infant and mother-infant

interactions. Researchers (Lamb, 1975; Newson & Newson, 1968) noted that mothers were more likely to engage in caregiving activities and to hold the infant while performing these activities. The researchers also noted that fathers commonly spent more time holding and interacting with their infants during play. Infants have elicited different kinds of interactions with fathers compared to mothers (Yogman, Dix, Tronick, Adamson, Als, & Brazelton, 1976), and older infants were reported to seek a more active role in interactions with their mothers compared to their fathers (Vandell, 1976). Qualitative similarities in mother-infant and father-infant interactions were noted in the numbers of interactions, the number of vocal behaviors, and the percentage of interactions initiated or terminated (Vandell, 1976). These qualitative differences in the functioning of the mother-child and father-child subsystems noted here have perhaps reflected a unique relationship of fathers and mothers to the development of their young children.

The second theoretical approach to social competence concerned the child's acquisition of social skills. Social learning theory (Bandura, 1977) has generated many hypotheses which view adults as sources of positive reinforcement for socially skilled behavior and as socially competent models for the observational learning of their children. Socially active parents have been highly salient models of social skills. Parental involvement with friends and in the community has provided a directly observable, socially skilled performance and the vicarious reinforcement for socially adaptive behavior which has been related to child social competence (Krantz et al., 1984).

Direct interaction with involved, socially competent and aware parents and with siblings has provided critical opportunities to learn, rehearse, and refine social skills. Social skills such as initiating, maintaining, and conflict resolving were common to successful social interaction in family contexts as well as in peer settings (Asher, Renshaw, & Hymel, 1982).

The third theoretical approach emphasized parenting behaviors in relation to child outcomes. Styles of parenting used in the family and the implications for child social outcomes have been described (Baumrind 1967, 1971, 1973). Baumrind (1973) has found that the development of instrumental competence or capacity for positive social interaction, self-reliance, and self-control in young children was directly related to the style of parenting and the patterns of parental authority. Baumrind (1967) identified three major styles of parenting which she termed authoritative, permissive, and authoritarian. Authoritative parents who exercised high levels of control with warmth and positive encouragement of their child's independent efforts had children who were the most self-reliant and instrumentally competent. Warm, undemanding, permissive parents had children who were the least self-controlled or instrumentally competent of those preschool children studied. Baumrind (1967) also found that detached, controlling, authoritarian parents produced children who were withdrawn, distrustful, and not instrumentally competent.

Nominal Definitions

The following definitions are presented to clarify terminology used throughout the study.

- (1) Free expression -- The parental behavior of expressing the emotions they are feeling, including fear, annoyance, frustration, and disagreement with others where the child can see and/or hear (Crase et al., 1979).
- (2) Independence -- The ability of preschool children to initiate involvement as measured by the CPSCS (Levine et al., 1969).
- (3) Interpersonal behavior -- The ability of preschool children to play with others and to communicate wants as measured by the CPSCS (Levine et al., 1969).
- (4) Intimacy -- The parental behavior of maintaining close physical proximity to the child and openly expressing physical affection to the child and others in the child's presence (Crase et al., 1979).
- (5) Limit setting -- Parental consistency and predictability in defining daily routines and establishing what was acceptable and unacceptable behavior for the child and firmly enforcing the limits set by parents (Crase et al., 1979).
- (6) Microsystem -- The setting, context, and environment in the family. In this study, the microsystem is limited to the female and male adult caregivers and their child (Bronfenbrenner, 1977).
- (7) Parental age -- The chronological age in years of mothers and fathers as reported on the demographic questionnaire.

- (8) Parental involvement -- The extent of parental participation in the child's activities, playing with the child, physically assisting the child with tasks, and facilitating the child's problem solving when the need was expressed despite parental involvement in other activities (Cruse, Clark, & Pease, 1979).
- (9) Parental occupation -- The job reported by mothers and fathers on the demographic questionnaire. In this study, occupations were grouped after Hollingshead (1975) Four Factor Index and analyzed in three groups:
 - (1) major professions (e.g., attorneys, physicians, students preparing for a profession, homemakers);
 - (2) self-employed (owns and runs a business);
 - (3) others (i.e., laborers, clerks, managers, and public school teachers).
- (10) Reasoning guidance -- The parental behavior of helping the child learn acceptable behavior by supplying reasons for why a behavior is acceptable or unacceptable while giving support to the child's emotional expression (Cruse et al., 1979).
- (11) Relationship -- The degree of homogeneity between group means as obtained by one-way ANOVAs in the study (Kerlinger, 1973).
- (12) Responsiveness -- Prompt parental response to a child's expressed or implied need without regard to the immediacy of the need (Cruse et al., 1979).
- (13) Social behavior -- The observable actions, gestures, and verbal exchanges performed by an individual when interacting with another person.

- (14) Social competence -- The adequacy of preschool children's interpersonal behavior, degree to which they assume social responsibility, and independence as measured by the California Preschool Social Competency Scale (CPSCS) (Levine et al., 1969).
- (15) Social incompetence -- The inadequacy of preschool children's interpersonal behavior, the degree to which they spend time in disagreeable peer interactions, the degree to which they assume social responsibility, and independence as measured by the CPSCS (Levine et al., 1969).
- (16) Social responsibility -- The ability of preschool children to help others and to accept limits as measured by the CPSCS (Levine et al., 1969).
- (17) Social skills -- The degree to which an individual was able to function effectively in face-to-face social encounters (Hatch, 1987).

CHAPTER 2

REVIEW OF LITERATURE

Introduction

A review of literature was conducted to examine the relationships among parental behaviors and children's social competence. A review was also specifically conducted on the following topics as they relate to parent-child relationships and the development of children's social competence: (a) the relationships among parental behaviors and children's social competence, (b) social competence in children, (c) the relationships among parental behaviors and social competence in boys and girls, (d) and demographic information such as parent age, parent occupation (mother's job and father's job), and parent educational level (number of years in school). The literature was reviewed using the ecological framework of Bronfenbrenner (1977), the social learning framework of Bandura (1977), and the framework of parenting styles and parental authority as related to child outcomes described by Baumrind (1967, 1971, 1973).

Relationships Among Parental Behaviors
and Children's Social Competence

The ability to be socially competent has required that children develop certain social skills and behaviors which are learned early within the home environment. Researchers have focused on the role of parents in this early family environment by investigating the relationships between child social competence and parental roles regarding attachment (Ainsworth, 1967; Ainsworth & Bell, 1969), parental styles of child rearing (Baumrind, 1967, 1971, 1972), parental support (Ellis, Thomas, & Rollins, 1976), and a secure environment (Maslow, 1962).

Research (Emmerich & Smoller, 1964) has indicated that middle-class parents value instrumental competence in their young children. Baumrind (1973) defined instrumental competence as behaviors which are independent and socially responsible including: friendliness to peers, cooperation with adults, acting in a dominant rather than a submissive fashion, and seeking achievement of goals in a purposeful manner. Parents value independent and socially responsible behavior in their children because these behaviors contribute in a positive way to effective functioning and survival in society (Baumrind, 1973). Baumrind (1966, 1967, 1973) reported that authoritative parental behavior (high control with warmth and encouragement) produced self-reliant, self-controlled and socially responsible behavior in children. Authoritarian parental behavior (high control with low warmth) and permissive parental behavior (noncontrolling

and nondemanding) did not produce socially responsible behaviors in children (Baumrind, 1967, 1973).

The social participation behavior of parents as a potential influence on the development of socially competent behavior in their kindergarten children has been reported (Krantz et al., 1984). Forty-two kindergarten children were assessed using measures of social behavior, popularity, and social cognitive ability. Parental social contacts were determined by interview. Results were analyzed using the framework of social learning theory. Findings indicated that social participation with friends by mothers and fathers and social participation in the community for mothers was consistently related to child social competency.

The influence of the age of the child on the relationship between parental behaviors and the development of empathy in preschool children aged three, four, and five years from six day care centers has been investigated (Abraham, Kuehl, & Christopherson, 1983). Using the Iowa Parent Behavior Inventory (IPBI), Abraham et al. (1983) reported that maternal behaviors of limit setting, free expression, and reasoning guidance and paternal behaviors of limit setting and reasoning guidance were positively correlated to development of empathy in the children studied with noted differential age effects. For example, mother limit setting behavior was negatively related to empathy for five-year-olds, but not significantly related to empathy for three and four-year-olds. Mother free expression was positively related to empathy for three-year olds, but unrelated to empathy for four and five-year-olds. Mother intimacy was negatively related to

empathy for three-year-olds, and not significantly related to empathy for four and five-year-olds. Father limit setting was negatively associated with empathy for three-year-olds, but positively related to empathy for five-year-olds. Father reasoning guidance was positively related to empathy for three-year-olds, but was not significantly related to empathy for four and five-year-old children. These findings reflected not only developmental changes in children's perception of empathy, but of changing awareness of adult sex roles and a resulting change in their interactions with their mothers and fathers.

The prosocial behavior (helping and sharing behavior, social actions) of thirty-three preschool children and their families and the relationship to parental reports of guidance behaviors as measured by the IPBI has been studied (Mullis, Smith, & Vollmers, 1983). Limit setting behavior by the mother and the father was a good predictor of sociable acts and sharing in the children. This study indicated that both parents may work together to aid the development of prosocial behaviors in their children by using guidance techniques which focused the children's attention on the effects of their behavior on others.

Children's sociometric status (peer ratings) have been carefully examined among first grade children in relationship to parental behaviors (Putallaz, 1987). The results were analyzed using the framework of Baumrind which has focused on the influence of parenting behaviors on young children, and the social learning framework. The results of direct observations of mother-child interactions, maternal interactions with another mother, and child-child interactions indicated significant relations between maternal social knowledge

and the social knowledge, behavior, and sociometric status of the children. For example, mothers of higher status children were more positive and less disagreeable in interactions with their children than were lower status mothers. The behaviors mothers exhibited with their children were highly related to child interactions both with the mothers and with peers. Findings suggested that children acquired at least some of their social behaviors in interactions with their mothers and that these social behaviors influenced child sociometric status with peers.

Social Competence in Children

Parents, researchers and educators have been concerned with the ability of young children to achieve an age appropriate competence in successfully interacting with peers. For obvious reasons of convenience, social competence has been measured in schools, preschools, or day care center environments. Children have been rated for social competence by parents, teachers, peers, and by self-ratings. Despite the finding that teacher ratings were more accurate predictors of children's behaviors in small groups (Factor & Schilmoeller, 1984), assessment of social competence in young children was consistent across raters whether teacher, peer, or self for preschoolers (Connolly & Doyle, 1981; Dubow & Cappas, 1988), and for kindergartners (Begin, 1983). Teacher ratings were accurate predictors of social competence and peer friendship and likability in first graders (Beck, Collins, Overholser, & Terry, 1984). The research strongly supported the idea that parent report, teacher ratings, peer ratings, and self

ratings are valid predictors of social competence in young children of both preschool and elementary school age.

Social competence has been measured in a sample of over 100 three and four-year-olds and defined as social influence effectiveness (Wright, 1980). The most effective discriminator of social competence was found to be the success of child-child social influence attempts as directly observed in a preschool setting (Wright, 1980). Child-child social influence attempts were measured based on peer social interaction categories developed by White and associates (White & Watts, 1973). The social behaviors measured included: seeking the attention of a peer, using a peer as a resource, leading/following a peer, expressing affection/hostility to a peer, and competing with a peer. Wright (1980) emphasized that social competence in preschool children was more likely to be reflected in interactions with peers than in interactions with adults.

The families of 22 girls and 25 preschool boys were surveyed to assess the relationship between parental factors of indulgent attitude, protective attitude, rejecting attitude, and disciplinarian attitude and child competence in social interactions with peers using the Maryland Parent Attitude Survey (MPAS) (Turner & Harris, 1984). The findings were analyzed using the framework of parent-child interactions in the family microsystem and of parenting behaviors as they relate to child outcomes in learning social competence. Combined scores for mothers and fathers on the MPAS indicated that parental nurturing behaviors were positively associated with the social competence of their

preschool children. Findings also indicated that parental rejecting and disciplinarian behaviors were negatively associated with child social competence.

Parents of 120 preschool children identified by their peers as popular (liked by peers), amiable, isolated (ignored by peers) or rejected (disliked by peers) completed the Parent Attitude Research Instrument (PARI) (Peery et al., 1985). The PARI allowed researchers to report on such maternal behaviors as patriarchal family, self-confidence, use of praise, low preference for young children, promotion of independence, and low use of discipline. The PARI also allowed researchers to measure such paternal behaviors as definite expectations, high child orientation, child rearing is mother's duty, use of threat, low preference for young children, promotion of independence, and reaction to intrusive child behavior. Findings were analyzed using the framework of parenting behaviors as related to children learning social competence, and parent-child interactions in the microsystem of the family. Mothers of popular and amiable children scored lower on patriarchal family structure, were more self-confident, were high on preference for young children, were more apt to promote independence, and were higher in use of discipline compared to mothers of isolated or rejected children. Fathers of popular and amiable children were less likely to have definite expectations for their child's behavior, to have low child orientation, to perceive child rearing as mother's duty, to frequently use threats, and to react negatively to intrusive behavior by the child compared to fathers of isolated and rejected children. Parental responses of child sociometric status (i.e., popular, amiable, isolated, or rejected) correlated

with peer classifications of child sociometric status (i.e., popular, amiable, isolated, or rejected) 49% of the time for mothers and 44% of the time for fathers. Findings indicated a potentially important relationship between parental perceptions and child-peer relations in early childhood (Peery et al., 1985).

Children 35-73 months of age from 36 middle-, upper-middle-, and upper-class families in Ontario, Canada were observed during free play in the regular classroom setting, and again in smaller free play sessions of four children in a small group room (Factor & Schilmoeller, 1984). Actual observational scores using a modified Parten scale were compared to teacher ratings in the areas of peer compatibility, peer responsiveness-positive (accepted), peer responsiveness-negative (rejected), peer responsiveness-neutral (neglected), level of social play, and degree of compliance/aggression. Factor and Schilmoeller reported that teacher ratings were significantly related to children's social ability in small group settings. For example, child social competence was positively related to observed peer compatibility, neutral peer response (neglected), positive peer response (accepted), social maturity. Child social competence was negatively related to peer noncompatibility, negative peer responsiveness (rejected).

Teacher reports were used to assess social competence in children from 31-64 months of age in four day care centers serving middle- and lower middle-class families in Quebec, Canada (Connolly & Doyle, 1981). Data from a peer-rated picture sociometric measure, teacher ratings, and behavioral observations was collected. Social competency was linked to verbal assertiveness, to positive activity, positive initiation, and successful assertion in interactions with peers.

Social competence was negatively related to negative assertiveness, and negative initiation during interactions with peers. Connolly and Doyle found that teacher ratings were more highly predictive of actual social competence than the picture sociometric measure based on comparison with actual observational data.

A sample of four to five-year-old first-born children in two preschool groups were assessed for peer social competence by teacher ratings, peer sociometrics and behavioral measures of social participation, attention structure and social dominance (LaFreniere & Sroufe, 1985). Findings indicated that social competency with peers was positively related to emotional warmth, social maturity, and peer popularity. Findings also indicated that children with secure attachment histories were highest in social competence and peer status.

Three hundred and sixty-six second, fourth, and sixth grade students completed peer nomination instruments in order to establish peer social competence over a variety of social situations including: attending birthday parties, having friends, eating lunch, and playing together after school (Luftig, 1985). Children were evaluated as popular (liked by peers), neglected (ignored by peers), and rejected (disliked by peers). The stability of peer social competence across social situations of birthday parties, ongoing friendship, eating lunch, and playing together after school was found to be quite high for all age groups surveyed.

In a classic study, social interactions for each of 19 preschool children were recorded by McCandless and Marshall (1957). The children were assessed by their peers using pictorial sociometric methods and by teacher report of

friendships. McCandless and Marshall reported that child social behaviors, specifically, the degree of the child's participation in friendly, spontaneous social interactions was positively related to social acceptance and positive peer and teacher perceptions of social competence.

Groups of third, fourth and fifth grade children from four lower-middle-class urban and rural schools were identified by teachers, peers and by self-report as popular, rejected, neglected, controversial, and average in social status (Dubow & Cappas, 1988). The findings confirmed previous research (Coie, Dodge, & Coppotelli, 1982; French & Waas, 1985) in which teachers and peers viewed popular children as the most socially competent, neglected children as having relatively little difficulty, and rejected children as having the most severe adjustment problems. The results indicated that the social problems for neglected children were limited to peer report of lack of group cooperation and leadership ability. There were limitations on generalizing of these results and a very small sample size among the children labeled as controversial.

Direct observation of the social interactions in a sample of 164 children from three to six years of age from four Head Start Centers revealed that the chief predictor of sociometric acceptance for a child among peers was a high incidence of positive social interactions (Quay & Jarrett, 1984). It is important to emphasize that these findings support previous research (Hartup, Glazer, and Charlesworth, 1967) on the correlation between these two variables. The findings also stress the efficacy of intervention programs which focus on helping

children with poor social competence develop the ability to interact in a positive manner with their peers.

Recent studies (Ladd, 1983; Putallaz & Gottman, 1981) of social behaviors in third and fourth grade children revealed that children who spent less time in positive social interactions and more time in antagonistic and unoccupied activities were not liked and were rejected by their peers. Direct observations of behaviors and peer evaluation of social behavior also indicated that rejected children conducted their social interactions in small groups with younger children or children who were not well liked by classmates (Ladd, 1983). Children who were well liked and were popular were frequently named as friends by classmates.

Second and third grade children whose social behaviors were disagreeable and who were not likely to offer a general rule or reason for disagreement or for criticism of peers were unpopular with peers (Putallaz & Gottman, 1981). Unpopular children were unskilled at group entry, were disagreeable, stated their own feelings, called attention to themselves, and asked more informational questions than popular children. Findings indicated that popular children used some of the same entry strategies as unpopular children (i.e. asking questions) but used them less frequently than did unpopular children. Popular children were less likely to disagree or to call attention to themselves by stating their opinion. Popular children were more skilled at integrating themselves into the group and timing their questions to gain some information without calling undue attention to themselves.

Direct observation and peer assessment of social interactions among children enrolled in a university-based laboratory preschool program revealed that unpopular children were excluded from social interactions with their more popular peers who are more socially competent (Roopnarine & Adams, 1987). Roopnarine and Adams defined this exclusion from social interaction as social segregation. Social segregation related to actual peer assessment only for children of moderate social competence compared to those children assessed by peers to have poor or very good social competence.

Relationships Among Parental Behaviors and Social Competence in Boys and Girls

Child outcomes for social competence and instrumental competence have been related to parenting styles. Instrumental competence was defined in a classic study (Baumrind, 1967) as the behaviors of positive social interaction, self-reliance, and self-control. The related concept of social competence has been defined as the adequacy of interpersonal behavior, the degree of social responsibility, and independence (Levine et al., 1969).

Baumrind (1967) found that children who lacked social responsibility and were not very instrumentally competent had permissive parents. Baumrind also found that children who were not independent and were only moderately socially responsible had authoritarian (high control, low warmth) parents. Children who had the highest degree of social responsibility and instrumental competence had parents who were authoritative (high control, high warmth and discipline with

induction). These general outcomes for boys and girls were noted, but some sex differences in the effects of parenting styles were apparent in subsequent studies (Baumrind, 1971, 1973, 1977). Authoritative parenting was strongly associated with being friendly and cooperative for boys (Baumrind, 1971, 1973). In the same two studies, Baumrind reported that authoritative parenting seemed to be correlated with self-reliance, achievement orientation, and a tendency to perform in a domineering fashion in social interactions with peers for girls. In families where the predominant parenting styles were either permissive or authoritarian, boys were less likely than girls to develop strong social skills, self reliance and instrumental competence, and were more likely than girls to exhibit angry and defiant behaviors in social interactions (Baumrind, 1971, 1973).

Sex differences were again observed in the effects of style of parenting on child outcomes in a longitudinal study of forty-two girls and fifty-six boys rated on assertiveness and boldness of social interaction (Baumrind, 1977). Boys were much more likely than girls to experience loss of achievement orientation and social withdrawal during the early school years if the major style of parenting had been authoritarian in nature. Girls were more agentic (assertive and capable in solving social problems) and more likely to actively contribute their own ideas to family discussions in cases where interaction patterns were argumentative, abrasive and more authoritarian in nature.

A multimeasure and a multicontext study of the relationship between father-child and mother-child play and children's competence in a population of preschool children ranging in age from 3-4 years and their parents was

performed (MacDonald & Parke, 1984). Maternal verbal behavior and paternal physical play were positively related to child peer relations, especially for boys. Maternal directiveness was positively linked to popularity for girls and paternal directiveness was negatively linked to popularity for boys and girls. The researchers (MacDonald & Parke, 1984) emphasized obvious linkages between family and peer social systems.

The parent-child interactions of preschool boys three to five years of age who were popular, neglected, or rejected in their social interactions with others have been compared (MacDonald, 1987). Fathers of popular and rejected boys engaged in less physically affectively arousing, physical play than did the fathers of neglected boys. In physical play among popular boys, there was less overstimulation and avoidance of stimulation than for rejected boys. The researcher (MacDonald, 1987) emphasized the importance of proper regulation for effect, and illustrated the strong links between the parent and peer social system.

Demographic Information

A review of the literature (e.g., Abraham et al., 1983; Factor & Schilmoeller, 1984; Fowler, 1980; LaFreniere & Sroufe, 1985; MacDonald & Parke, 1984; McCandless & Marshall, 1957; Mullis et al., 1983; Pettit, Dodge, & Brown, 1988; Putallaz, 1987; Turner & Harris, 1984) on social competence revealed that reporting of demographic information such as parent age, parent educational level, and parent occupation was often merely descriptive in nature.

The factors of parent age, parent educational level, and parent occupation are family demographic factors which affect the ways in which mothers and fathers interact with their sons and daughters (Bronfenbrenner, 1977). Interactions of family members in their roles as mothers, fathers, sons, or daughters have formed an integral part of the microsystem which shapes child outcomes in social competence (Bronfenbrenner, 1977).

In a study of parent behaviors related to child social competence, parent age was negatively correlated to the parent factors of intimacy and reasoning guidance as measured by Crase, Clark, and Pease (1980). Demographic data were collected on visits to each family and included parent ages, parent education, family size, farm size, family income, child's age, sex and birth order. The findings supported the idea that as mothers and fathers increased in age and children became older, there was increased resistance by children to parental display of affection. The resistance by children was accompanied by the parental perception that the children needed less intimate physical contact (Crase et al., 1980). The findings also supported the idea that the older the father and the mother, the less likely mothers were to engage in reasoning with their children. Since fathers tended to use reasoning more with increasing age of the child, the researchers (Crase et al., 1980) suggested that mothers may relinquish their reasoning guidance role as children become older.

Children attending 56 primary schools and 57 secondary schools in Australia were studied in order to determine the relative contributions of family structure resources (i.e., parental income, education, occupation, health, and

household density or number of people living in the house/number of rooms) and family process resources (i.e., parental help, time, and attention) to child competence in the four areas of reading ability, self-esteem, everyday skills, and social competence (Amato & Ochiltree, 1986). Findings for family structure resource items sampled indicated that reading ability was positively related to parental income, parental occupation, and mother education for primary students sampled. Reading ability was positively related to father education and mother education, but was negatively related to household density for secondary students sampled. Self-esteem was positively related to parental occupation, mother education, and parental health, but was negatively related to household density for primary students sampled. Self-esteem was positively related to parental health for secondary students sampled. Skills performance was significantly and positively related to mother employment for primary students, with no significant relationships emerging for secondary students sampled. Social competence was significantly related to parent health for primary students sampled.

The findings of Amato and Ochiltree (1986) for family process resources revealed that parental help, time, and attention was positively related to high self-esteem in the children sampled. Results showed that skills performance was positively related to mother help for both primary and secondary students sampled. Results also revealed that social competence was positively related to parental attention, specifically, parental educational aspirations for primary and

secondary students sampled. Father interest was positively related to social competence for secondary students sampled.

The components of the personality (i.e., independence, ego resilience, and ego undercontrol) of one hundred forty Swedish preschoolers were assessed by mothers and care providers according to a scale developed by Block (Lamb, Hwang, Bookstein, Broberg, Hult, & Frodi, 1988). Findings revealed that parent occupations (Hollingshead, 1975) together with support from maternal grandparents were major determinants ($R = .40$) of components of child personality directly related to social competence.

Preschool children were grouped according to socioeconomic status (SES) by parent occupation and were assessed for social competence by both teachers and peers (Ramsey, 1988). The middle-SES children used reassuring and sharing social strategies more frequently than did low SES children. Aggression was negatively related to social competence for the middle SES group, but not for the low SES group. High social competency ratings were related to reassurance for both middle- and low-SES children. Social competence reported by peers was related to teacher assessments for the middle SES group, but not the low SES group.

Summary

In summary, several salient points emerge:

1. Early family history and attachment patterns were significant in predicting social competence.

2. Parent behaviors may be highly predictive of social competence in young children, and yet studies of parental influences on their children have often disregarded the unique relationship between the behaviors of mothers and fathers and the development of social competence in their boys and girls.
3. There was a body of research information which supported the efficacy of using teacher evaluations as predictors of social competence in the classroom for preschool and elementary school children.
4. Demographic factors in the family including parental age, parental occupation, and parental educational level were related to child outcomes for social development.

Based on a literature search, the need exists to further explore parent behaviors and perceptions which may be related to social competence in young children, and the possible unique contribution of mothers and fathers to the social development of their boys and girls.

Research Hypotheses

Based on the review of literature and the population studied, the following research hypotheses were postulated:

- (1) There is no significant relationship between father scores on the subscales of the IPBI and child social competency as measured by the CPSCS.
- (2) There is no significant relationship between mother scores on the subscales of the IPBI and child social competency as measured by the CPSCS.

- (3) There is no significant relationship between father age and child social competency as measured by the CPSCS.
- (4) There is no significant relationship between mother age and child social competency as measured by the CPSCS.
- (5) There is no significant relationship between father occupation and child social competency as measured by the CPSCS.
- (6) There is no significant relationship between mother occupation and child social competency as measured by the CPSCS.
- (7) There is no significant relationship between father educational level and child social competency as measured by the CPSCS.
- (8) There is no significant relationship between mother educational level and child social competency as measured by the CPSCS.
- (9) There is no significant relationship between gender of the child and child social competency as measured by the CPSCS.

CHAPTER 3

METHODS

The methods used to gather the data on parent behaviors and child outcomes with regards to social competence included: (a) a description of the sample of parents and children; (b) a description of the procedure followed in conducting the research; (c) a complete description of the instruments used to measure parent behaviors and child outcomes; (d) operational definitions of critical constructs with appropriate analysis; (e) reductions and transformations of the data used; and (f) data analyses used in the study.

Sample

The initial population for this research project consisted of fifty preschool children and their families currently enrolled in the Child Development Center laboratory preschool in Herrick Hall on the campus of Montana State University. Participants also consisted of fifty preschool children and their families currently enrolled in the Methodist Preschool program at Bozeman United Methodist Church in Bozeman, Montana. The children were between the ages of three and five and one half years. Families selected for the sample were intact with both mother and father present in order to measure the unique relationship of mother and father behaviors to children's social competence.

The sample, therefore was not random. Data from the Child Development Center and the Methodist Preschool was combined for the purposes of statistical analyses.

Procedures

The study was conducted in a like manner for both preschool facilities. The parents received an introductory letter informing them of the research project and inviting them to participate. After a period of approximately one week, parents received copies of the appropriate version(s) of the Iowa Parent Behavior Inventory (IPBI).

Copies of the IPBI mother form and father form were assigned a subject number for matching parents and children and was accompanied by a cover letter explaining the purposes of the research study and instructions on returning the completed instrument forms. After a period of approximately two weeks, parents who had not returned the measure were contacted by phone and encouraged to participate. Parents were provided with additional copies of the initial research measures if needed.

Head teachers in the Child Development Center and at the Methodist Preschool received copies of the California Preschool Social Competency Scale (CPSCS) for each child whose parents had completed the IPBI parent survey. The teacher rating sheets were collected approximately one month after being received by the teachers to allow sufficient time for completion.

Response rate for fathers and mothers on the IPBI was calculated on a simple percentage basis of total instruments mailed. Out of 100 instruments sent out, 64 were returned for a response rate of 64% for both mothers and fathers. Since the CPSCS was completed by teachers only for children whose parents had returned the IPBI, a response rate of 100% was obtained.

Instruments

Demographic Questionnaire

Socioeconomic status for each family was established by classification of the occupations of both the husband and wife according to a nine-point scale for each parent adapted after the work of Hollingshead (1975) Four Factor Index. Preliminary investigation indicated that the population was predominantly Caucasian, middle-class, and composed of individuals who were self-employed or who were occupied in a major profession.

The Iowa Parent Behavior Inventory

The Iowa Parent Behavior Inventory (IPBI) (Cruse et al., 1979) was used to measure parental perception of their behavior towards their child. Each item represented an actual behavior situation which was rated on a five-point scale. A score of one indicated that the parent almost never behaves that way; two meant that the parent seldom behaves in this manner; three indicated that the parent behaves that way almost one-half the time or is not sure how often; a score of four meant that the parent often behaves in this manner; while a five indicated that the parent almost always behaves that way. Each item received a

number score and each of these scores was entered on a score sheet under the appropriate factor heading. The items within each factor were summed and this composite score was the factor score and the number used in data analysis (Cruse et al., 1979).

Childhood socialization has been highly influenced by the environment of the child throughout the early years (White and Watts, 1973), and a large body of research on significant parent attitudes and behaviors has been limited to the urban family (Gecas & Nye, 1974; Hess, 1970; Kohn, 1969). Cruse et al. (1979) responded to the need for a comprehensive assessment of critical parent factors in a more rural and midwestern setting by developing the Iowa Parent Behavior Inventory (IPBI). The IPBI was developed specifically to measure the salient parent factors of parental involvement, limit setting, responsiveness, reasoning guidance, free expression (mothers only), and intimacy on outcomes for young children.

Separate factor scores were used in analysis and since the mother and father forms were composed of different items in addition to some items in common, it is not possible to make a direct comparison between factors. The mother form consisted of 36 items from six subscales (parental involvement, limit setting, responsiveness, reasoning guidance, free expression, and intimacy) (see Appendix A). The father form of the IPBI also consisted of 36 items and included all of the above six subscales except free expression (see Appendix B). The mother and father forms contained some similar items as well as some items which are different, reflecting the contribution to child development

offered by both parents as well as possible unique relationships of the mother and the father to the child.

The researchers (Crase et al., 1979) conducted factor analysis on the IPBI subscales, and after examination of the factor intercorrelations for both mother and father forms, reliability estimates were computed for both "total variance" and "unique variance" reliability. The resulting total variance reliability was determined (Crase et al., 1979) using the Spearman-Brown formula. Actual figures were reported for each of the subscales in the IPBI manual. The validity of the scale, or the reliability with which the scale measured the factors they were designed to measure, was reported as unique variance and was found to be valid and reliable. A variation of the Spearman-Brown formula was used to determine the correlations among items from the loadings on a single factor. These correlations were then averaged and used in the Spearman-Brown formula (Crase et al., 1979).

The California Preschool Social Competency Scale

Children of parents who had completed the Iowa Parent Behavior Inventory were then assessed by teachers on aspects of social competency using the California Preschool Social Competency Scale (CPSCS). The CPSCS was used to assess children's interpersonal behavior and social responsibility as perceived by the teacher. The scale consisted of 30 items covering a variety of observable behaviors which included: the child's ability to help others, play with others, initiate involvement, accept limits, and communicate wants. Each item

contained four descriptive statements ordered from 1 (low degree of competence) to 4 (high degree of competence). The total social competency score was the sum of all the level ratings for the thirty items. According to the CPSCS manual, validity was based on independent judgments of professionals in early childhood education and the instrument was determined to be valid. Reliability data (Pearson r 's) from independent observers ranged from .75 to .79 (Levine et al., 1969).

Operational Definitions

Parental involvement was measured by the total numerical response for items 1, 5, 8, and 10 on the mother form and by items 4, 5, 7, 8, 10, 17, and 33 on the father form of the Iowa Parent Behavior Inventory (see Appendix B).

Limit setting was measured by the total numerical response from items 2, 7, 11, 12, 13, 16, 17, and 21 on the IPBI mother form (see Appendix A) and from the sum of items 1, 9, 11, 13, 14, 16, 18, 19, 20 on the IPBI father form (see Appendix B).

Responsiveness was measured by the grand total from items 3, 4, 22, 23, 26, 27, and 29 on the IPBI mother form (see Appendix A) and the sum of items 2, 3, 24, 25, 27, 29, and 30 on the IPBI father form (see Appendix B).

Reasoning guidance was determined by adding responses from items 6, 9, 14, 18, 20, 25, and 31 on the IPBI mother form (see Appendix A) and from the total for items 6, 12, 15, 22, 23, 26, 28, 32, 34, and 35 on the father form (see Appendix B).

Free expression was measured by the total of responses from items 15, 24, and 28 on the IPBI mother form (see Appendix A).

Intimacy was determined through summation of items 19, 30, 32, 33, 34, 35, and 36 on the IPBI mother form (see Appendix A), and by summation of items 21, 31, and 36 on the IPBI father form (see Appendix B).

Child social competence was determined through consideration of the total raw score of teacher responses from the California Preschool Social Competency Scale (CPSCS) on a variety of behaviors such as ability to help others, play with others, initiate involvement, accept limits, and communicate ideas.

Reductions and Transformations

The data from Iowa Parent Behavior Inventory (IPBI) was entered directly into a dBase III file in fields indicating subject number, sex of parent, husband's occupation, wife's occupation, years of schooling, parent involvement, limit setting, responsiveness, reasoning guidance, free expression, and intimacy, followed by parent responses to the 36 item instrument using a five-point Likert Scale. Total raw scores for each factor item were generated by the computer from the totals of the salient item responses and entered as parent involvement, limit setting, responsiveness, reasoning guidance, free expression, and intimacy.

Items on the California Preschool Social Competency Scale (CPSCS) were entered directly into a dBase III file based on a four-point Likert scale and the total raw score was computer generated and added to the ASCII file.

A computer printout of the dBase III files created for the data collected from the IPBI and the CPSC was verified to the original data sheets by the investigator and a trained coder for accuracy. An accuracy rate of 100% for 10% of the data was expected for the data verified. Totals and scoring functions were performed by computer according to a program developed by Robert H. Johnston of the Department of Plant Pathology, Montana State University. Complete analyses of data for the study was conducted using programs from SPSS-X (SPSS, Inc., 1983).

The data obtained from the demographic information, the IPBI responses, and the teacher ratings given on the CPSC was placed in a dbase III file, computer scored, and the information stored in an ASCII file ready for application of statistical analysis.

Data Analyses

The independent variables in the study were: (a) father mean scores on the subscales (i.e., involvement, limit setting, responsiveness, reasoning guidance, and intimacy) of the Iowa Parent Behavior Inventory (IPBI), mother mean scores on the subscales (i.e., involvement, limit setting, responsiveness, reasoning guidance, free expression, and intimacy) of the IPBI; (b) father age, mother age, father occupation, mother occupation, father educational level, mother educational level; and (c) gender of the child. The dependent variable in the study was child mean score on the California Preschool Social Competency Scale (CPSCS).

The data was subjected to 19 separate one-way ANOVAs to determine whether relationships exist between the following variables:

- (1) Father involvement and child social competence.
- (2) Father responsiveness and child social competence.
- (3) Father limit setting and child social competence.
- (4) Father reasoning guidance and child social competence.
- (5) Father intimacy and child social competence.
- (6) Mother involvement and child social competence.
- (7) Mother responsiveness and child social competence.
- (8) Mother limit setting and child social competence.
- (9) Mother reasoning guidance and child social competence.
- (10) Mother free expression and child social competence.
- (11) Mother intimacy and child social competence.
- (12) Father age and child social competence.
- (13) Mother age and child social competence.
- (14) Father occupation and child social competence.
- (15) Mother occupation and child social competence.
- (17) Father educational level and child social competence.
- (18) Mother educational level and child social competence.
- (19) Child gender and child social competence.

A minimum significance level of $p < .05$ was established based on convention (Kerlinger, 1973) and was used as an acceptable probability level for rejecting a true null hypothesis. Rejecting a true null hypothesis has been

referred to as a Type I error (Huck, Cormier, & Bounds, 1974). A minimum significance level of $p < .05$ established the probability of .05 that sample data was extreme enough for a Type I error to occur. In the present study of social competence where small differences were expected between the independent variables and the dependent variable, a Type I error was more likely to occur than a Type II error (accepting a false null hypothesis) (Huck et al., 1974).

Significant differences were subjected to Scheffe's multiple comparison test in order to determine where significant differences existed between the means of the independent variables and of the dependent variable because this statistic allows tighter control over Type I error (Huck, Cormier, & Bounds, 1974).

For the independent variables, groups were established according to father scores and mother scores on the subscales of the Iowa Parent Behavior Inventory, father age, mother age, father occupation, mother occupation, father educational level, mother educational level, and gender of the child. The scores for the fathers and scores for the mothers on the subscales of the IPBI were grouped into three categories for each of the parent behaviors of involvement, limit setting, responsiveness, reasoning, expression, and intimacy. The three categories were low, medium and high for all subscales based on groupings across the range of scores for each subscale. Groupings were balanced in number for the purposes of statistical analysis. For purposes of analysis, age for the fathers and mothers were formed into three chronological groupings (under 30, 30-40, and 40-50 years of age). Occupations of the fathers and the mothers were assigned to three groups modified after Hollingshead (1975) Four Factor

Index. Group one contained major professionals (e.g., attorneys and physicians); group two contained those mothers and fathers who were self-employed or owned their own businesses. Group three comprised all others not included in the first two groups (e.g., managers, clerks, service people, and laborers). Educational level for the mothers and for the fathers comprised three groups (High school graduate, college graduate, post graduate work).

Social competency scores were grouped into three categories. The three categories were low, medium, and high for social competency based on groupings across the range of CPSCS scores. Groupings were balanced in number for the purposes of statistical analysis. Social competency was established as the dependent variable and was compared by one-way ANOVA to each of the independent variables to determine existing relationships.

CHAPTER 4

RESULTS

The independent variables of father mean scores on the IPBI subscales (i.e., involvement, limit setting, responsiveness, reasoning guidance, and intimacy), mother scores on the IPBI subscales (i.e., involvement, limit setting, responsiveness, reasoning guidance, intimacy, and free expression), father age, mother age, father occupation, mother occupation, father educational level, mother educational level, and gender of the child, as they relate to child social competence were examined in the study. Child mean scores as rated by teachers on the California Preschool Social Competency Scale (CPSCS) formed the dependent variable in the analyses.

Preliminary Analyses

A preliminary analysis was conducted on the father form of the Iowa Parent Behavior Inventory (IPBI). Each subscale was analyzed separately and the means, ranges and standard deviations for each subscale were reported separately. The scores for father involvement revealed a mean of 25.22, a minimum of 18.00, a maximum of 32.00, and a range of 14.00 points over scores ($SD = 3.57$). The scores for father limit setting revealed a mean of 37.81, a minimum of 28.00, a maximum of 40.00, and a range of 12.00 points over scores

(SD = 3.72). The scores for father responsiveness revealed a mean of 26.22, a minimum of 14.00, a maximum of 33.00, and a range of 19.00 points across scores (SD = 4.31). The scores for father reasoning guidance revealed a mean of 38.39, a minimum of 15.00, a maximum of 48.00, and a range of 33.00 points across scores (SD = 5.15). The scores for father intimacy revealed a mean of 13.45, a minimum of 9.00, a maximum of 15.00, and a range of 6.00 points over scores (SD = 1.63).

A similar preliminary analysis was conducted on the mother scores of the IPBI and the means, ranges and standard deviations were presented for each subscale. The scores for mother involvement revealed a mean score of 13.33, with a minimum score of 8.00, a maximum score of 18.00, and a range of 11.00 points over the scores (SD = 2.42). The scores for mother limit setting revealed a mean of 32.31, a minimum of 19.00, and a maximum of 40.00 with a range of 21.00 points across the scores (SD = 3.87). The scores for mother responsiveness revealed a mean of 31.30, a minimum of 19.00, a maximum of 35.00, and a range of 16.00 points across scores (SD = 3.12). The scores for mother reasoning guidance revealed a mean of 29.91, a minimum of 12.00, and a maximum of 35.00 for a range of 23.00 points across the scores (SD = 3.73). The scores for mother free expression revealed a mean of 8.92, a minimum of 5.00, a maximum of 15.00, and a range of 10.00 points across scores (SD = 2.17). The scores for mother intimacy revealed a mean of 23.00, a maximum of 35.00, and a range of 12.00 across the scores (SD = 2.94).

A preliminary analysis was conducted on the California Preschool Competency Scale (CPSCS) for all children sampled ($n = 64$). Of a possible total of 120.00 points, the minimum points scored was 36.00 ($n = 1$), and the maximum points scored was 114.00 ($n = 1$), producing an 84.00 point spread for the scores. The mean score for all children on the CPSCS was 96.62, with a standard deviation of 16.20.

A preliminary analysis was also conducted on the CPSCS for boys in the sample ($n = 29$). Out of a possible 120 points, the minimum points scored for boys was 69.00, and the maximum points scored was 112.00, producing a 43.00 point spread for the scores. The mean score for boys on the CPSCS was 92.45, with a standard deviation of 11.89. A similar analysis of CPSCS scores for girls ($n = 35$) was completed based on a possible total of 120 points. Findings revealed a minimum of 36.00 and a maximum of 114.00 for a 78.00 point spread across the scores. The mean score for girls on the CPSCS was 92.77, with a standard deviation of 19.23.

Main Analyses

Hypothesis 1

The first null hypothesis stated that there is no significant relationship between father mean scores on the IPBI and child social competency as measured by the CPSCS. A one-way ANOVA was conducted on each of the five subscales of father involvement, father limit setting, father responsiveness,

father reasoning guidance, and father intimacy to determine group differences between each father behavior and child social competency as measured by the CPSCS.

The sample of scores for father involvement was divided into three categories. The three categories were low, moderate, and high for father involvement based on groupings across the range of scores for the subscale. Groupings were balanced in number for the purposes of statistical analysis (see Table 1). A one-way ANOVA of CPSCS by father involvement revealed no significant differences in group means, $F(2, 61) = .66, p < .05$ (see Table 2).

Table 1. Father involvement and CPSCS scores.

Groups by Father Involvement	(n)	Mean CPSCS Score ^a
(1) Low (18-23)	19	89.37 _b
(2) Moderate (24-26)	24	92.88 _b
(3) High (27-32)	21	95.29 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 2. Analysis of variance of father involvement and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	351.67	2	175.83	.66
Within	16181.33	61	265.27	
Total	16533.00	63	262.43	

The sample of scores for father limit setting was divided into three categories. The three categories were low, moderate, and high for father limit setting based on groupings across the range of scores for the subscale. Groupings were balanced in number for the purposes of statistical analysis (see Table 3). A one-way ANOVA of CPSCS scores by father limit setting revealed no significant differences between group means, $F(2, 61) = .61, p < .05$ (see Table 4).

Table 3. Father limit setting and CPSCS scores.

Groups by Father Limit Setting	(n)	Mean CPSCS Score ^a
(1) Low (28-36)	19	93.16 _b
(2) Moderate (37-39)	21	89.57 _b
(3) High (40-43)	24	94.88 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 4. Analysis of variance of father limit setting and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	322.71	2	161.35	.61
Within	16210.29	61	265.74	
Total	16533.00	63	262.43	

The sample of scores for father responsiveness was divided into three categories. The three categories were low, moderate, and high for father responsiveness based on groupings across the range of scores for the subscale. Groupings were balanced in number for the purposes of statistical analysis (see Table 5). A one-way ANOVA of CPSCS scores by father responsiveness revealed no significant differences between group means, $F(2, 61) = .16$, $p < .05$ (see Table 6).

Table 5. Father responsiveness and CPSCS scores.

Groups by Father Responsiveness	(n)	Mean CPSCS Score ^a
(1) Low (14-24)	19	93.21 _b
(2) Moderate (25-28)	23	91.09 _b
(3) High (29-33)	22	93.73 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 6. Analysis of variance of father responsiveness and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	87.65	2	43.83	.16
Within	16445.35	61	269.60	
Total	16533.00	63	262.43	

The sample of scores for father reasoning guidance was divided into three categories. The three categories were low, moderate, and high for father reasoning based on groupings across the range of scores for the subscale. Groupings were balanced in number for the purposes of statistical analysis (see Table 7). A one-way ANOVA of CPSCS scores by father reasoning guidance revealed no significant differences between group means, $F(2, 61) = .34$, $p < .05$ (see Table 8).

Table 7. Father reasoning guidance and CPSCS scores.

Groups by Father Reasoning	(n)	Mean CPSCS Score ^a
(1) Low (15-36)	21	91.95 _b
(2) Moderate (37-40)	20	90.85 _b
(3) High (41-48)	23	94.78 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 8. Analysis of variance of father reasoning and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	179.59	2	89.79	.34
Within	16353.41	61	268.09	
Total	16533.00	63	262.43	

The sample of scores for father intimacy was divided into three categories. The three categories were low, moderate, and high for father intimacy based on groupings across the range of scores for the subscale. Groups were balanced in number for the purposes of statistical analysis (see Table 9). A one-way ANOVA of CPSCS scores by father intimacy revealed no significant differences between group means, $F(2, 61) = .35, p < .05$ (see Table 10). Since there were no significant relationships between father scores on the subscales of the IPBI (i.e., involvement, limit setting, responsiveness, reasoning guidance, and intimacy) and social competence as measured by the CPSCS, Null Hypothesis 1 was retained.

Table 9. Father intimacy and CPSCS scores.

Groups by Father Intimacy	(n)	Mean CPSCS Score ^a
(1) Low (9-12)	16	90.88 _b
(2) Moderate (13-14)	26	91.73 _b
(3) High (15)	22	94.95 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 10. Analysis of variance of father intimacy and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	189.18	2	94.59	.35
Within	16343.82	61	267.93	
Total	16533.00	63	262.43	

Hypothesis 2

The second null hypothesis stated that there is no significant relationship between the mother scores on the subscales of the IPBI and child social competency as measured by the CPSCS. A one-way ANOVA was conducted on each of the six subscales of mother involvement, mother limit setting, mother responsiveness, mother reasoning guidance, mother free expression, and mother intimacy to determine group differences between each mother behavior measured and child social competency as measured by the CPSCS.

The sample of scores for mother involvement was divided into three categories. Mother involvement based on groupings across the range of scores for the subscale were categorized as low, moderate, and high. Groupings were balanced in number for the purposes of statistical analysis (see Table 11). A one-way ANOVA of CPSCS scores by mother involvement revealed no significant differences between the group means, $F(2, 61) = .56, p < .05$ (see Table 12).

Table 11. Mother involvement and CPSCS scores.

Groups by Mother Involvement	(n)	Mean CPSCS Score ^a
(1) Low (8-12)	21	93.86 _b
(2) Moderate (13-14)	20	94.60 _b
(3) High (15-19)	23	89.78 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 12. Analysis of variance of mother involvement and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	295.72	2	147.86	.56
Within	16237.28	61	266.19	
Total	16533.00	63	262.43	

The sample of scores for mother limit setting was divided into three categories. The three categories were low, moderate, and high for mother limit setting based on groupings across the range of scores for each subscale.

Groupings were balanced in number for the purposes of statistical analysis (see Table 13). A one-way ANOVA of CPSCS scores by mother limit setting revealed no significant differences between group means, $F(2, 61) = .27$, $p < .05$ (see Table 14).

Table 13. Mother limit setting and CPSCS scores.

Groups by Mother Limit Setting	(<u>n</u>)	Mean CPSCS Score ^a
(1) Low (19-30)	20	90.70 _b
(2) Moderate (31-34)	23	92.61 _b
(3) High (35-40)	21	94.48 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 14. Analysis of variance of mother limit setting and CPSCS scores.

Source of Variation	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Between	146.08	2	73.04	.27
Within	16386.92	61	268.64	
Total	16533.00	63	262.43	

The sample of scores for mother responsiveness was divided into three categories. The three categories were low, moderate, and high for mother responsiveness based on groupings across the range of scores for the subscale. Groupings were balanced in number for the purposes of statistical analysis (see Table 15). A one-way ANOVA of CPSCS scores by mother responsiveness revealed significant differences between group means, $F(2, 61) = 4.51, p < .05$

(see Table 16). A post-hoc Scheffe's multiple comparison statistic revealed that groups one and two were significantly different from group three at the .05 level.

Table 15. Mother responsiveness and CPSCS scores.

Groups by Mother Responsiveness	(<u>n</u>)	Mean CPSCS Score ^a
(1) Low (19-30)	18	97.67 _b
(2) Moderate (31-32)	20	97.15 _b
(3) High (33-35)	26	85.65 _c

^a Means having different subscripts (b, c) are significantly different at $p < .05$ using Scheffe's multiple comparison statistic.

Table 16. Analysis of variance of mother responsiveness and CPSCS scores.

Source of Variation	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Between	2130.57	2	1065.28	4.51*
Within	14402.44	61	236.11	
Total	16533.00	63	262.43	

*Significant at the .05 level.

The sample of scores for mother reasoning guidance was divided into three categories. The three categories were low, moderate, and high for mother reasoning guidance based on groupings across the range of scores for the subscale. Groupings were balanced in number for the purposes of statistical

analysis (see Table 17). A one-way ANOVA of CPSCS scores by mother reasoning revealed no significant differences between group means, $F(2, 61) = .11, p < .05$ (see Table 18).

Table 17. Mother reasoning and CPSCS scores.

Groups by Mother Reasoning	(<u>n</u>)	Mean CPSCS Score ^a
(1) Low (12-29)	20	93.40 _b
(2) Moderate (30-31)	23	93.22 _b
(3) High (32-35)	21	91.24 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 18. Analysis of variance of mother reasoning and CPSCS scores.

Source of Variation	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Between	60.48	2	30.24	.11
Within	16472.52	61	270.04	
Total	16533.00	63	262.43	

The sample of scores for mother free expression was divided into three categories. The three categories were low, moderate, and high for mother free expression based on groupings across the range of scores for the subscale.

Groupings were balanced in number for the purposes of statistical analysis (see

Table 19). A one-way ANOVA of CPSCS scores by mother free expression revealed no significant differences in group means, $F(2, 61) = .36, p < .05$ (see Table 20).

Table 19. Mother free expression and CPSCS scores.

Groups by Mother Free Expression	(<u>n</u>)	Mean CPSCS Score ^a
(1) Low (5-7)	16	90.87 _b
(2) Moderate (8-9)	24	94.83 _b
(3) High (10-15)	24	91.58 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 20. Analysis of variance of mother expression and CPSCS scores.

Source of Variation	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Between	192.08	2	96.04	.36
Within	16340.92	61	267.88	
Total	16533.00	63	262.43	

The sample of scores for mother intimacy was divided into three categories. The three categories were low, moderate, and high for mother intimacy based on groupings across the range of scores for the subscale. Groupings were balanced in number for the purposes of statistical analysis (see Table 21). A one-way ANOVA of CPSCS scores by mother intimacy revealed no significant differences between group means, $F(2, 61) = .18, p < .05$ (see Table 22).

Table 21. Mother intimacy and CPSCS scores.

Groups by Mother Intimacy	(n)	Mean CPSCS Score ^a
(1) Low (23-29)	21	91.52 _b
(2) Moderate (30-32)	23	94.26 _b
(3) High (33-35)	20	91.90 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 22. Analysis of variance of mother intimacy and CPSCS scores.

Source of Variation	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Between	97.53	2	48.76	.18
Within	16435.47	61	269.43	
Total	16533.00	63	262.43	

Since there were no significant relationships between mother involvement, mother limit setting, mother reasoning guidance, mother free expression, mother intimacy and child social competence as measured by the CPSCS, Null Hypothesis 2 was retained for these subscales. Since there was a significant relationship between mother responsiveness and child social competency as measured by the CPSCS, Null Hypothesis 2 was rejected for this subscale.

Hypothesis 3

The third null hypothesis stated that there is no significant relationship between father age and child social competency as measured by the CPSCS. The sample was divided into three groups of increasing age based approximately on ten-year intervals (see Table 23). A one-way ANOVA of age groups for fathers by CPSCS scores revealed significant differences in mean group scores, $F(2, 61) = 3.96, p < .05$ (see Table 24). A post-hoc Scheffe's multiple comparison statistic indicated that group two was significantly different from group one and group three at the .05 level.

Table 23. Father age and CPSCS scores.

Groups by Father Age	(<u>n</u>)	Mean CPSCS Score ^a
(1) 20-29	10	88.60 _c
(2) 30-39	35	97.51 _b
(3) 40-50	19	85.74 _c

^a Means with different subscripts (b, c) are significantly different at $p < .05$ using Scheffe's multiple comparison statistic.

Table 24. Analysis of variance of father age and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	1900.17	2	950.09	3.96*
Within	14632.83	61	239.88	
Total	16533.00	63	262.43	

*Significant at the .05 level.

Since there was a relationship between father age and child social competency as measured by the CPSCS, Null Hypothesis 3 was rejected.

Hypothesis 4

The fourth null hypothesis stated that there is no significant relationship between mother age and child social competence as measured by the CPSCS. The sample was divided into three groups of increasing age based approximately on ten-year intervals (see Table 25). A one-way ANOVA of age groups for mothers by CPSCS scores showed significant differences in group mean scores, $F(2, 61) = 3.19, p < .05$ (see Table 26). A post-hoc Scheffe's multiple comparison statistic indicated that no two groups were significantly different at the .05 level. Since there was no significant relationship between mother age and child social competency as measured by the CPSCS, Null Hypothesis 4 was retained.

Table 25. Mother age and CPSCS scores.

Groups by Mother age	(n)	Mean CPSCS Score ^a
(1) 20-29	6	81.83 _b
(2) 30-39	47	95.53 _b
(3) 40-50	11	86.09 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$ using Scheffe's multiple comparison statistic.

Table 26. Analysis of variance of mother age groups and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	1565.56	2	782.78	3.19*
Within	14967.45	61	245.37	
Total	16533.00	63	262.43	

*Significant at the .05 level.

Hypothesis 5

The fifth null hypothesis stated that there is no significant relationship between father occupation and child social competency as measured by the CPSCS. The sample was divided into three groups modified after Hollingshead (1975) Four Factor Index. Group one contained major professionals (e.g., attorneys and physicians); group two contained individuals who were self-employed or owned their own businesses; and group three contained others such

as managers, public school teachers, clerks, service people, and laborers. A one-way ANOVA conducted on father occupation by CPSCS scores revealed no significant differences in group mean scores, $F(2, 61) = .58, p < .05$ (see Table 28). Since no significant relationship was found between father occupation and child social competency as measured by the CPSCS, Null Hypothesis 5 was retained.

Table 27. Father occupation and CPSCS scores.

Groups by Father Occupation	(<u>n</u>)	Mean CPSCS Score ^a
(1) Professional	27	90.11 _b
(2) Self-employed	17	93.82 _b
(3) Others	20	95.00 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 28. Analysis of variance of father occupation and CPSCS scores.

Source of Variation	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>
Between	307.86	2	153.93	.58
Within	16225.14	61	265.99	
Total	16533.00	63	262.43	

Hypothesis 6

The sixth null hypothesis stated that there is no significant relationship between mother occupation and child social competency as measured by the CPSCS. The sample was divided into three groups modified after Hollingshead (1975) Four Factor Index. Group one contained major professionals; group two contained individuals who were self-employed or who owned their own businesses; and group three contained others such as clerks, managers, public school teachers, service people, and laborers. A one-way ANOVA conducted on mother occupation by CPSCS indicated no significant differences in group mean scores, $F(2, 61) = 1.25, p < .05$ (see Table 30). Since there was no significant relationship between mother occupation and child social competency, Null Hypothesis 6 was retained.

Table 29. Mother occupation and CPSCS scores.

Groups by Mother Occupation	(n)	Mean CPSCS Score ^a
(1) Professional	20	88.15 _b
(2) Self-employed	28	93.71 _b
(3) Others	16	96.31 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 30. Analysis of variance of mother occupation and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	651.30	2	325.65	1.25
Within	15881.70	61	260.36	
Total	16533.00	63	262.43	

Hypothesis 7

The seventh null hypothesis stated that there is no significant relationship between father educational level and child social competency as measured by the CPSCS. The sample was divided into three groups of increasing educational attainment (high school graduates, college graduates, and post graduate work). A one-way ANOVA conducted on CPSCS scores by father educational level revealed no significant differences in the group mean scores, $F(2, 61) = .16$, $p < .05$ (see Table 32). Since there was no significant relationship between father educational level and child social competency as measured by the CPSCS, Null Hypothesis 7 was retained.

Table 31. Father educational level and CPSCS scores.

Groups by Father Education	(n)	Mean CPSCS Score ^a
(1) High school	18	92.50 _b
(2) College	26	93.96 _b
(3) Post Graduate	20	91.00 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 32. Analysis of variance of father education and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	88.24	2	44.12	.16
Within	16444.77	61	269.59	
Total	16533.00	63	262.43	

Hypothesis 8

The eighth null hypothesis stated that there is no significant relationship between mother educational level and child social competency as measured by the CPSCS. The sample was divided into three groups of increasing educational attainment (high school graduates, college graduates, and those with post graduate work). A one-way ANOVA conducted on CPSCS scores by mother educational level revealed no significant differences in the group mean scores, $F(2, 61) = 1.61, p < .05$ (see Table 34). Since there was no significant relationship between mother educational level and child social competency as measured by the CPSCS, Null Hypothesis 8 was retained.

Table 33. Mother educational level and CPSCS scores.

Groups by Mother Education	(n)	Mean CPSCS Score ^a
(1) High school	19	87.21 _b
(2) College	25	94.08 _b
(3) Post graduate	20	95.95 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 34. Analysis of variance of mother education and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	831.05	2	415.53	1.61
Within	15701.95	61	257.41	
Total	16533.00	63	262.43	

Hypothesis 9

The ninth null hypothesis stated that there is no significant relationship between gender of the child and child social competency as measured by the CPSCS. The sample was divided into two groups based on gender of the child. A one-way ANOVA conducted on CPSCS scores by child gender revealed no significant differences between group means, $F(2, 61) = .01, p < .05$ (see Table 36). Since there was significant relationship between gender of the child and child social competency as measured by the CPSCS, Null Hypothesis 9 was retained.

Table 35. Child gender and CPSCS scores.

Groups by Child Gender	(n)	Mean CPSCS Score ^a
(1) Girls	35	92.77 _b
(2) Boys	29	92.45 _b

^a Means having the same subscript (b) are not significantly different at $p < .05$.

Table 36. Analysis of variance of child gender and CPSCS scores.

Source of Variation	Sum of Squares	df	Mean Square	F
Between	1.66	1	1.66	.01
Within	16531.34	62	266.64	
Total	16533.000	63	262.429	

Summary of Findings

Analyses of the variables of father scores (i.e., involvement, limit setting, responsiveness, reasoning guidance, and intimacy) on the IPBI subscales and mother scores (i.e., involvement, limit setting, responsiveness, reasoning guidance, free expression, and intimacy) on IPBI subscales, father age, mother age, father occupation, mother occupation, father educational level, mother educational level, and child gender in conjunction with the dependent variable of CPSCS scores revealed the following findings:

- (1) Father involvement, limit setting, responsiveness, reasoning guidance, and intimacy were not related to child social competency as measured by the CPSCS in the study, denoting no significant relationship between the variables.
- (2) Mother responsiveness was related to child social competency as measured by the CPSCS. Mothers of low and moderate responsiveness had children who scored significantly higher on the CPSCS than did mothers of high responsiveness at the .05 level. Mother involvement, limit setting,

reasoning guidance, free expression, and intimacy were not related to child social competency as measured by the CPSCS in the study, denoting no significant relationship between the variables.

- (3) Father age was related to child social competency as measured by the CPSCS, with fathers of 30-39 years scoring significantly higher than the other two age groups at the .05 level.
- (4) Mother age was not related to child social competency as measured by the CPSCS.
- (5) Father occupation was not related to child social competence as measured by the CPSCS in the study, denoting no significant relationship between the variables.
- (6) Mother occupation was not related to child social competence as measured by the CPSCS in the study, denoting no significant relationship between the variables.
- (7) Father educational level was not related to child social competence as measured by the CPSCS in the study, denoting no significant relationship between the variables.
- (8) Mother educational level was not related to child social competence as measured by the CPSCS in the study, denoting no significant relationship between the variables.

- (9) The gender of the child was not related to child social competency as measured by the CPSCS in the study, denoting no significant relationship between the variables.

CHAPTER 5

DISCUSSION

The study investigates the relationships between (a) the independent variables of father mean scores on the subscales (i.e., involvement, limit setting, responsiveness, reasoning guidance, and intimacy) of the Iowa Parent Behavior Inventory (IPBI), mother mean scores on the subscales (i.e., involvement, limit setting, responsiveness, reasoning guidance, free expression, and intimacy) of the IPBI; (b) father age, mother age, father occupation, mother occupation, father educational level, mother educational level, and child mean score on the California Preschool Social Competency Scale (CPSCS); and, (c) gender of the child and child mean score on the CPSCS. Social competence as measured by the CPSCS is the dependent variable used for examination of the independent variables in the study.

The research findings are examined and are presented in the following format. Each of the research hypotheses is discussed and presented as relates to the literature review and to the three theoretical approaches that have been applied to the study of social competence. The three approaches are the ecological framework of Bronfenbrenner (1977), the social learning framework of Bandura (1977), and the parenting styles approach of Baumrind (1967, 1971, 1973). The limitations of the study, implications for parents and educators, and implications for research are then examined.

Discussion of the Hypotheses

The results of the study indicate a significant relationship between mother responsiveness and child social competence in the second research hypothesis. The findings reveal significant relationships between age for fathers and child social competency in the third research hypothesis. The findings show no significant relationships between the remaining father behaviors and mother behaviors. No significant differences exist between the demographic variables of father occupation, mother occupation, father education, mother education, or the variable of child gender and child social competency in the study. The discussion of each research hypothesis relates findings to the literature review and to the conceptual framework previously presented in the study.

Father Behaviors and Child Social Competency

The findings reveal no significant relationships between father behaviors of involvement, limit setting, responsiveness, reasoning guidance, and intimacy and child social competence in the study. The findings are not congruent with literature (Ainsworth, 1967, 1969; Brody, 1969; Fowler, 1980; Lamb, 1975, 1976; 1977a, 1977b; Maslow, 1962; Parke & O'Leary, 1975; Pettit et al., 1988) which relate parent behaviors, early family environment, parent social models, and child social competence. Findings are not congruent with literature (Baumrind, 1973; Lamb, 1975, 1976, 1977a, 1977b; Lewis et al., 1976; Parke & O'Leary, 1975; Pederson, 1981) which suggests a significant and unique relationship

between father behaviors and child outcomes. The lack of significant relationships between father behaviors (i.e., involvement, limit setting, responsiveness, reasoning guidance, and intimacy) and child social competence may relate to lack of detection of small variations among the variables for the sample on the part of instruments used rather than an absence of relationships among the variables studied. Perhaps the lack of significant relationships between father behaviors and child social competency relates to the choice of instrument for measuring social competency. An instrument capable of detecting smaller differences between the variables in the study may reveal differences undetected by the CPSCS due to lack of instrument sensitivity. The absence of significant findings perhaps relates to the lack of a random sample. The lack of significant findings may reflect the intervening variable of child age which was not analyzed in the study.

Mother Behaviors and Child Social Competency

The data indicate that mothers of low and moderate responsiveness have children who are significantly higher ($p < .05$) in social competence than do mothers of high responsiveness. This finding is not congruent with literature (Ainsworth, 1967, 1969; Brody, 1969; Fowler, 1980; Lamb, 1975, 1976, 1977a, 1977b; Maslow, 1962; Parke & O'Leary, 1975; Pettit et al., 1988) which relates early bonding, attachment, and environment with child outcomes. Current findings may not be congruent with the literature cited because of time elapsed since earlier studies were completed. Lack of congruent findings may be due to changes in the nature of father-child interactions, the changing nature of the

family, and changes in the research instruments used since the literature cited was completed. The relationship between early environment (i.e., physical space and materials, activities engaged in by people with and without each other, and people in roles and relationships to the child) in the family microsystem and child outcomes is congruent with the ecological framework of Bronfenbrenner (1977), but not with the research findings in the study.

The finding is also not congruent with literature (Brody, 1969; Krantz et al., 1984; Putallaz, 1987) which suggests that children learn social competence from significant adult models such as parents. The concept of children learning from significant adults in a social context is consistent with the social learning framework of Bandura (1977). The finding is not congruent with literature (Abraham et al., 1983; Baumrind, 1966, 1967, 1971, 1973; Bigner, 1989; Brody, 1969; Peery et al., 1985; Turner & Harris, 1984) which relates mother and father parenting behaviors to child social and instrumental competence. The relationship between parenting behaviors and child social competence is consistent with Baumrind's (1967, 1971, 1973) parenting styles approach which emphasizes parental ability to influence child behaviors based on how parents act when they interact with their children with respect to level of warmth, control, and reasoning involved with discipline.

The research findings suggest that low and moderate levels of mother responsiveness result in higher child social competence than do high levels of mother responsiveness. Findings also suggest an optimum level of mother responsiveness for development of child social competence, and a slight negative

effect of high mother responsiveness on child social competence. Low and moderately responsive mothers seem to foster higher levels of social competence than do highly responsive mothers in the study. The research findings may relate to the absence of a random sample. The findings may not generalize to other populations due to the fact that the sample is not random. The findings may also relate to the intervening variable of maturity demands, warmth, and control not specifically addressed in the study. Further research is needed using a random, larger sample to clarify the relationship between different levels of mother responsiveness and child social competence.

There are no significant relationships between mother behaviors of involvement, limit setting, reasoning guidance, free expression, and intimacy in the study. The findings are not congruent with literature which suggest a relationship between parent behaviors (Abraham et al., 1983; Baumrind, 1966, 1967, 1971, 1973; Bigner, 1989; Brody, 1969; Peery et al., 1985; Turner & Harris, 1984) early family environment (Ainsworth, 1967, 1969; Brody, 1969; Fowler, 1980; Lamb, 1975, 1976, 1977a, 1977b; Maslow, 1962; Parke & O'Leary, 1975; Pettit et al., 1988), parent social models (Brody, 1969; Krantz et al., 1984; Putallaz, 1987) and child social competence. The lack of significant relationships between mother behaviors (i.e., involvement, limit setting, reasoning guidance, free expression, and intimacy) and child social competence may be a result of the lack of discrimination between small variations among variables for the sample population on the part of the instruments used rather than an absence of relationships among the variables studied. Perhaps the lack of significant

relationships between mother behaviors and child social competency relates to the choice of instrument for measurement of social competency. The absence of significant findings is perhaps due to the lack of a random sample. The lack of significant findings may also relate to the intervening variable of child age which is not analyzed in the study.

Father Age and Child Social Competency

The data indicate that there is a positive significant ($p < .05$) relationship between father age and child social competence. Findings suggest that fathers 30-39 years of age have children who score higher in social competency than do younger (20-29 years of age) or older fathers (40-50 years of age). The findings are congruent with literature (Amato & Ochiltree, 1986; Bronfenbrenner, 1977; Crase et al., 1980) which relates demographic factors such as parent age to parent-child interactions in the microsystem. The concept of analyzing the relationship between the microsystem and child outcomes is central to the ecological view of Bronfenbrenner (1977) which emphasizes the importance of physical space, materials, activities that people engage in with and without each other, and people in roles and relationships to the child.

The findings suggest a possible optimum father age (i.e., 30-39 years) when father-child interactions result in increased child social competence compared to younger or older fathers. Findings may relate to the concept of developmental interaction which emerges from Erikson's (1950) description of psychosocial development throughout the life span. Developmental interaction refers to the correspondence of developmental stages and needs between parents and children

which is reciprocal in nature (Bigner, 1989). The parent-child relationship is perceived as an interactional system in which each individual is the recipient as well as an initiator of behaviors (Bigner, 1989). Fathers 30-39 years of age may be influenced by their own psychosocial need (generativity) for taking care of children (Erikson, 1950) to parent in a way that encourages the development of child social competence. Fathers 30-39 years of age may also be influenced by the psychosocial need of their preschool children to initiate social behaviors (Erikson, 1950) to parent in a way that encourages the development of child social competence. Further research is necessary to clarify the relationship between father age and child social competence.

Mother Age and Child Social Competency

The data indicate that there is no significant ($p < .05$) relationship between mother age and child social competence. The findings are not congruent with literature (Amato & Ochiltree, 1986; Bronfenbrenner, 1977; Crase et al., 1980) which relate demographic factors such as parent age to parent-child interactions in the microsystem. The concept of analyzing the relationship between the microsystem and child outcomes is emphasized in the ecological view of Bronfenbrenner (1977).

Due to a lack of significant findings using Scheffe's multiple comparison statistic, it is impossible to detect differences between the specific mother age groups in the study. Further research is necessary to clarify the relationship between mother age and child social competency.

Father Occupation and Child Social Competency

The data reveals no significant relationship between father occupation and child social competence in the study. The research findings are not congruent with literature (Amato & Ochiltree, 1986; Bronfenbrenner, 1977; Lamb et al., 1988; Ramsey, 1988) which relates demographic factors such as parent occupation to parent-child interactions in the microsystem. The lack of relationship found between father occupation and child social competence may relate to the lack of a random sample rather than to a lack of relationship between the variables. The sample is very homogenous for occupation and contains many fathers ($n = 44$) in both the professional and self-employed groups. The homogeneity of the sample ($n = 64$) prevents generalization of results to other populations which contain more fathers in the group labelled others in the study (i.e., laborers, clerks, and public school teachers).

Mother Occupation and Child Social Competency

The data indicates no significant relationship between mother occupation and child social competence in the study. The research findings are not congruent with literature (Amato & Ochiltree, 1986; Bronfenbrenner, 1977; Lamb et al., 1988; Ramsey, 1988) which relates demographic factors such as parent occupation to child outcomes. The lack of relationship found between mother occupation may relate to the lack of a random sample rather than to the lack of a relationship between variables. The sample is very homogenous for occupation and contains a large number of mothers in professions currently engaged in child rearing activities at home and/or employed in running family

businesses ($n = 48$). The homogeneity of the sample ($n = 64$) prevents generalization of results to other populations which may contain more mothers in the group labelled others (i.e., laborers, clerks, and public school teachers) in the study.

Father Education and Child Social Competency

The results reveal no significant relationship between father education and child social competence in the study. The research findings are not congruent with literature (Bronfenbrenner, 1977) which relates demographic factors in the microsystem such as parent education to child outcomes. The findings are, however, congruent with literature (Amato & Ochiltree, 1986) which found no significant relationship between parent education and child social competency, but which reported a positive relationship between parent education and other child outcomes (i.e., self-esteem and reading ability) not directly related to social competence. A lack of significant findings in relationship to the variables may be due to the lack of a random sample rather than to an absence of relationship between variables. The sample contains many fathers with a college education and some post graduate work ($n = 46$). The sample contains no fathers with less than a high school education. The homogeneity of the sample ($n = 64$) prevents generalization of results to other populations which contain fathers who have not attained a high school education. The lack of significant findings suggests that additional work is needed in this area.

Mother Education and Child Social Competency

Research findings indicate no significant relationship between mother education and child social competency in the study. The results are not congruent with the literature (Bronfenbrenner, 1977) which relates demographic factors in the microsystem such as parent education to child outcomes. The findings are, however, congruent with literature (Amato & Ochiltree, 1986) which report no significant relationship between parent education and child social competency, but which report a positive relationship between parent education and other child outcomes (i.e., self-esteem and reading ability) not directly related to social competency. Lack of significant findings in relationship to the variables may relate to the lack of a random sample rather than to an absence of relationships between variables. The sample contains many mothers ($n = 45$) with a college education and some post graduate work. The sample contains no mothers with less than a high school education. The homogeneity of the sample ($n = 64$) prevents generalization of the results to other populations which contain mothers who have not attained a high school education. The lack of significant findings suggests that additional work is needed in this area.

Child Gender and Child Social Competency

The findings reveal no significant relationship between child gender and child social competency in the study. The data are not congruent with literature (Baumrind, 1971, 1973) which reports differences between boys and girls as related to social and instrumental competence. The findings are, however, congruent with literature (Connolly & Doyle, 1981; Factor & Schilmoeller, 1984;

LaFreniere & Sroufe, 1985; McCandless & Marshall, 1957) which report no difference in the social competency of boys and girl as rated by teachers. The relationship is valid, especially for middle-class children such as appeared in the research sample in the study. The lack of significant findings suggests that additional work is needed in this area.

Limitations

The limitations of the study are in the nature of the sample, the method of sampling, the data collection desirability, the discrimination of the instruments, and in the correlational nature of the data analysis. A discussion of limitations follows in order of the above areas of concern.

Nature of the Sample

The nature of the sample is a limitation in the study. The sample chosen for the study reflects the availability and interest of preschool staff in participating in the study, and willingness by parents to participate and to let their children participate in the study. The sample selection also reflects the desire to examine intact families and the possible unique relationship of mother behaviors and father behaviors to the development of child social competence. The sample is limited in demographic diversity and in geographic location to Bozeman, Montana. Bozeman is an area of relatively low population density (30,000) with a high incidence of practicing professionals and educated people

due to the presence of Montana State University and related activities. The nature of the sample limits the generalizability of the results in the study.

Method of Sampling

The method of sampling is a limitation in the study. Parents and children in the sample are limited to the laboratory preschool at Montana State University and to the Methodist Preschool. The method of sampling is not random. Out of a sample of 100 families, 64 responded with information on both parents. The process for subject selection may limit generalization of findings to parents willing to participate in research studies.

Data Collection Desirability

A limitation in the study involves the method of data collection. The accuracy of survey information which depends upon self-reported information is often questioned for accuracy (Mitchell & Jolley, 1988). Despite concerns regarding the validity of survey information, behavioral observations involving the sample of parents in the study are not feasible due to the cost and the time involved in collecting the information.

Discrimination of the Instruments

The discrimination of the instruments is a limitation in the study. The California Preschool Social Competency Scale (CPSCS) may lack specificity. The lack of specificity in the instrument may restrict the variance in the scores and the ability of the instrument to detect significant relationships between variables in the study. The CPSCS tests as reliable and valid. However, the

frequency distribution of the scores on the CPSCS reveals that 79.7% of the scores cluster around ± 1 standard deviation from the mean. A normal curve reveals 68% of the score distribution located within ± 1 standard deviation of the mean (Mitchell & Jolley, 1988). The distribution in the sample indicates that the instrument may not identify enough factors regarding child social competency to discriminate between children of low, moderate, and high social competence. A measure that is more specific and allows for more variance in scores may identify more children across the range of social competence.

Correlational Nature of the Data Analysis

A limitation of the study is in the area of causality. The independent variables of low and moderate mother responsiveness, father age (30-39 years), and mother age (30-39 years) were found to be significantly ($p < .05$) related to child social competency as measured by the CPSCS in the study. Due to the design of the study and the statistics applied, the direction of this relationship remains unspecified. Since the direction of the relationship is unspecified, it is unclear whether low and moderate mother responsiveness promotes development child social competence. It is also unclear whether socially competent children may engage in behaviors which encourage their mothers to be responsive at low or moderate levels. Since the direction of the relationship remains unspecified, it is also unclear whether parents 30-39 years of age parent in a way that encourages the development of child social competence. It is also unclear if socially competent preschool children initiating social behaviors may influence the parenting behaviors of their parents. Clearly, the existence of

significant relationships with unspecified direction cannot explain the reciprocal effects present in parent-child interactions. Different statistical methods (i.e., multiple regression, discriminant analysis) are needed for prediction of significant relationships.

Implications for Parents and Educators

The findings indicate a relationship between low and moderate mother responsiveness and child social competency. The implications of this finding for parents and educators relate to the areas of parent information, teacher education, and preventive and interventive measures to encourage the development of social competence in young children.

Information to parents regarding the significance of their role in the development of social competency in their young children may produce an awareness of which parenting behaviors encourage positive child social outcomes. Despite the lack of findings in the study, parents need to be aware of the importance of nurturing behaviors (i.e., involvement, responsiveness, and intimacy) and optimal level of response to child needs which encourage positive social development in young children. Information to parents should emphasize the importance of modelling positive social behaviors to encourage the positive social development of their children.

Educators need to know theoretical information related to the development of social competence in young children. Despite the lack of findings in the study, information on social competence and the factors related

to the development of social competence, effective preventive and interventive measures for developing social competence in young children should be an integral part of required or continuing education curriculum for early childhood educators, day care providers, and public school teachers. Educators need practical information for formal and informal assessment of social competence and the factors related to the development of social competence in young children. Teachers should be educated in the interpretation of information on social competence for parents.

The role of early childhood educators, day care providers, and public school teachers as sources of information and support to parents and children is a logical extension of professional commitment. In spite of findings in the study, teachers need to provide ongoing parent education related to practical methods of promoting child social competence. Educators need to know methods of observing and measuring social competence for the children they serve. Educators should be able to evaluate factors which may influence social competence in the children they serve. Educators need to provide appropriate intervention strategies to maximize positive social development in the children they serve. Teachers can provide informative dialogue on social competence through parent conferences, school newsletters, and through parenting classes.

Further Implications

There are research findings in the study which are not congruent with literature cited [e.g. (Ainsworth, 1967, 1969; Brody, 1969; Fowler, 1980; Lamb, 1975, 1976, 1977a, 1977b; Maslow, 1962; Parke & O'Leary, 1975) on page 70]. Current findings may not be congruent with literature cited because of time elapsed since earlier studies were completed. Lack of congruent findings may be due to changes in the nature of father-child interactions and father role as parent. Lack of congruent findings may be due to social changes which influence the nature of the family microsystem. Lack of congruent findings may also be due to the nature and relevance of the research instruments used in the literature cited.

Implications for Further Research

The findings of the study suggest a significant relationship between the independent variables of low and moderate mother responsiveness, father age, and the dependent variable of child social competence as measured by the CPSCS. Further research including a broader, random population sample is needed to clarify the significant relationships found in the study, especially regarding the findings that fathers 30-39 years of age have children who score higher on social competency than do younger or older fathers. Further research using a broader, random sample may clarify possible relationships between the independent variables of father involvement, mother involvement, father limit setting, mother limit setting, father responsiveness, father reasoning guidance,

mother reasoning guidance, mother free expression, father intimacy, and mother intimacy and the dependent variable of child social competence not found in the study. Further research using a broader, random sample is needed to clarify possible relationships between the independent variables of father occupation, mother occupation, father education, mother education and child gender and the dependent variable of child social competency not found in the study.

Since instrumentation is a limitation in the study, further research should be directed toward finding a more sensitive measure of social competence which is able to detect smaller variations in a sample. A part of this process may include clarification of the definition of social competence as a construct and what child behaviors comprise social competence.

Another approach to further research is to apply discriminant analysis to the present data. Related to multiple regression, discriminant analysis is used to assign group membership based on the scores on the independent measures (Kerlinger, 1973) in the study. The independent variables of father and mother involvement, father and mother limit setting, father and mother responsiveness, father and mother reasoning guidance, father and mother intimacy, mother free expression, father and mother age, father and mother occupation, father and mother education, and child gender could be considered separately to determine which of the independent variables best predict child social competence as measured by the CPSCS. The level of social competence is expressed as group membership based on CPSCS scores [i.e., low score ($\underline{SD} = -1$) = low social competence, high score ($\underline{SD} = 1$) = high social competence]. Prediction of

child social competency from parent surveys would provide a rapid and cost-effective way to identify children who would benefit from pairing with socially competent peers in the classroom, skills training programs, or from family intervention strategies directed at developing social competency.

REFERENCES

- Abraham, K.G., Kuehl, R.O., & Christopherson, V.A. (1983). Age-specific influence of parental behaviors on the development of empathy in preschool children. Child Study Journal, 13(3), 175-185.
- Ainsworth, M.D., (1967). Infancy in Uganda, infant care and the growth of love. Baltimore: Johns Hopkins University Press.
- Ainsworth, M.D. (1969). Object relations, dependency, and attachment: A theoretical review of the mother-infant relationship. Child Development, 40, 696-1025.
- Ainsworth, M.D. & Bell, S.M. (1969). Some contemporary patterns of mother-infant interaction in the feeding situation. In A. Ambrose (Ed.), Stimulation in early infancy (pp. 133-170). New York: Academic Press.
- Allen, K.E., Hart, B. Buell, J.S. Harris, F.R., & Wolf, M.M. (1964). Effects of social reinforcement of isolate behavior of a nursery school child. Child Development, 35, 511-518.
- Amato, P.R. & Ochiltree, G. (1986). Family resources and the development of child competence. Journal of Marriage and the Family, 48, 47-56.
- Asher, S.R., Markell, R.A., & Hymel, S. (1981). Identifying children at risk in peer relations: A critique of the rate-of-interaction approach to assessment. Child Development, 52, 1239-1245.
- Asher, S.R., Oden, S.L., & Gottman, J.M. (1977). Children's friendships in school settings. In L. Katz (Ed.), Current topics in early childhood education: Vol. 1. (pp. 36-39). Norwood, NJ: Ablex.
- Asher, S.R., Renshaw, P.D., & Hymel, S. (1982). Peer relations and the development of social skills. In S.G. Moore & C.R. Cooper (Eds.), The young child: Vol. 3. (pp. 137-158). Washington, D.C.: National Association for the Education of Young Children.
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, N.J: Prentiss-Hall.
- Baumrind, D. (1966). Effects of authoritative parental control on child behavior. Child Development, 37, 887-907.
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. Genetic Psychology Monographs, 75, 43-88.
- Baumrind, D. (1971). Current patterns of parental authority. Developmental Psychology Monograph, 4, (1, Pt. 2.).

- Baumrind, D. (1972). Socialization and instrumental competence in young children. In W.W. Hartup (Ed.), The young child: Reviews of research: Vol. 2, (pp. 202-224). Washington, D.C.: National Association for the Education of Young Children.
- Baumrind, D. (1973). The development of instrumental competence through socialization. In A.D. Pick (Ed.), Minnesota symposium on child psychology: Vol. 7. Minneapolis: University of Minnesota Press.
- Baumrind, D. (1977). Socialization determinants of personal agency. Paper presented at the biennial meetings of the Society for Research in Child Development, New Orleans, LA.
- Beck, S., Collins, L., Overholser, J., & Terry, K. (1984). A cross-sectional assessment of social competence measures to peer friendship and likeability in elementary-age children. Genetic, Social, and General Psychology Monographs, 111(1), 43-63.
- Begin, G. (1983). Convergent validity of four instruments for teachers' assessing social competence of kindergarten children. Perceptual and Motor Skills, 57, 1007-1012.
- Bigner, J.J. (1989). Parent-child relations. An introduction to parenting. New York: Macmillan.
- Bullock, J. (1987). Parental perceptions of the family and social competence in children's peer relations. Unpublished paper, Montana State University, Bozeman, MT.
- Brody, G. (1969). Maternal child-rearing attitudes and child behavior. Developmental Psychology, 1, 1-8.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. American Psychologist, 32(7), 513-531.
- Coie, J.D., Dodge, K.A., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. Developmental Psychology, 18, 557-570.
- Cowen, E.L., Pederson, A., Babigian, H., Izzo, L.D., & Trost, M.A. (1973). Long-term follow-up of early detected vulnerable children. Journal of Consulting and Clinical Psychology, 41, 439-446.
- Connolly, J., & Doyle, A. (1981). Assessment of social competence in preschoolers: Teachers versus peers. Developmental Psychology, 17(4), 454-462.

- Cruse, S.J., Clark, S.G., & Pease, D. (1979). Iowa Parent Behavior Manual. Ames, IA: Department of Child Development Research Laboratories.
- Cruse, S.J., Clark, S.G., & Pease, D. (1980). Assessment of child-rearing behaviors of midwestern rural parents. Home Economics Research Journal, 9(2), 163-172.
- Damon, W. (1983). Social and personality development. New York: Norton.
- Dubow, E.F., & Cappas, C.L. (1988). Peer social status and reports of children's adjustment by their teachers, by their peers, and by their self-ratings. Journal of School Psychology, 26, 69-75.
- Ellis, J.R., Thomas, D.L., & Rollins, B.C. (1976). Measuring parental support: The interrelationship of three measures. Journal of Marriage and the Family, 38, 713-722.
- Emmerich, W., & Smoller, F. (1964). The role patterning of parental norms. Sociometry, 27, 382-390.
- Erikson, E. (1950). Childhood and society. New York: Norton.
- Factor, D.C., & Schilmoeller, G.L. (1984). The relationship between teachers' ratings and preschool children's social behavior in two naturalistic settings. The Journal of General Psychology, 111, 101-107.
- Feiring, C., & Lewis, M. (1978). The child as a member of the family system. Behavioral Science, 23, 225-233.
- Fowler, P.C. (1980). Family environment and early behavioral development: A structural analysis of dependencies. Psychological Reports, 47, 611-617.
- French, D.C., & Waas, G.A. (1985). Behavior problems of peer-neglected and peer-rejected elementary-age children: Parent and teacher perspectives. Child Development, 56, 246-252.
- Gecas, V., & Nye, F.I. (1974). Sex and class differences in parent-child interaction: A test of Kohn's hypothesis. Journal of Marriage and the Family, 36(4), 742-749.
- Hartup, W.W., Glazer, J.A., & Charlesworth, R. (1967). Peer reinforcement and sociometric status. Child Development, 38, 1017-1024.
- Hatch, A. (1987). Peer interaction and the development of social competence. Child Study Journal, 17(3), 169-183.

- Hess, R.D. (1970). Social class and ethnic influences on socialization. In P. H. Mussen (Ed.), Carmichael's manual of child psychology: Vol. 2. (pp. 457-557). New York: Wiley.
- Hollingshead, A.B. (1975). Four factor index of social status, unpublished manuscript, Yale University, Department of Sociology, New Haven, Connecticut.
- Huck, S.W., Cormier, W.H., & Bounds, W.G. (1974). Reading statistics and research. New York: Harper & Row.
- Kerlinger, F.N. (1973). Foundations of behavioral research. New York: Holt, Rinehart & Winston.
- Kohn, M. (1969). Class and conformity. Homewood, IL.: Dorsey.
- Krantz, M., Webb, S.D., & Andrews, D. (1984). The relationship between child and parent social competence. The Journal of Psychology, 118, 51-56.
- Ladd, G.W. (1983). Social networks of popular, average, and rejected children in school settings. Merrill-Palmer Quarterly, 29(3), 283-307.
- LaFreniere, P.J., & Sroufe, L.A. (1985). Profiles of peer competence in the preschool: Interrelations between measures, influence of social ecology, and relation to attachment history. Developmental Psychology, 21, 56-69.
- Lamb, M.E., Hwang, C.P., Bookstein, F.L., Broberg, A., Hult, G., & Frodi, M. (1988). Determinants of social competence in Swedish preschoolers. Developmental Psychology, 24(1), 58-70.
- Lamb, M.E. (1975). Interactions between two year olds and their mothers and fathers. Paper presented at the Society for Research in Child Development meetings, Denver, CO.
- Lamb, M.E. (Ed.) (1976). The role of the father in child development. New York: Wiley.
- Lamb, M. (1977a). Father-infant and mother-infant interaction in the first year of life. Child Development, 48, 167-181.
- Lamb, M. (1977b). The development of mother-infant and father-infant attachments in the second year of life. Developmental Psychology, 13, 637-648.
- Levine, S., Elzey, F., & Lewis, M. (1969). California preschool social competency scale manual. Palo Alto, CA: Consulting Psychologists Press.

- Lewis, M., Feiring, C., & Weinraub, M. (1976). The father's role in the child's social network. In M. Lamb (Ed.), The role of the father in child development (pp. 259-294). New York: Wiley.
- Lieberman, A. (1977). Preschoolers' competence with a peer: Relations with attachment and peer experience. Child Development, 48, 1277-1287.
- Luftig, R.L. (1985). The stability of children's social status over social situations. Education, 107(4), 417-423.
- MacDonald, D., & Parke, R.D. (1984). Bridging the gap: Parent-child play interaction and peer interactive competence. Child Development, 55, 1265-1277.
- MacDonald, K. (1987). Parent-child physical play with rejected, neglected, and popular boys. Developmental Psychology, 23(5), 705-711.
- Maslow, A.H. (1962). Toward a psychology of being. New York: Van Nostrand & Reinhold.
- McCandless, B.R. (1967). Children: Behavior and development. New York: Holt, Rinehart, & Winston.
- McCandless, B.R., & Marshall, H.R. (1957). A picture sociometric technique for preschool children and its relation to teacher judgements of friendships. Child Development, 28, 139-148.
- McFall, R.M., & Twentyman, C.T. (1973). Four experiments in the relative contributions of rehearsal, modeling, and coaching to assertiveness training. Journal of Abnormal Psychology, 3, 45-53.
- Mitchell, M., & Jolley, J. (1988). Research design explained. New York: Holt, Rinehart, & Winston.
- Mullis, R.L., Smith, D.W., & Vollmers, K.E. (1983). Prosocial behaviors in young children and parental guidance. Child Study Journal, 13(1), 13-21.
- Murdock, G.P. (1949). Social structure. New York: Macmillan.
- Newson, J., & Newson, E. (1968). Four years old in an urban community. Chicago: Aldine Publishing.
- Ogborn, W.F. (1933). Recent social trends in the United States. New York: McGraw-Hill.
- O'Malley, J.M. (1977). Research perspective on social competence. Merrill-Palmer Quarterly, 23, 29-44.

- Parke, R.D., & O'Leary, S. (1975). Father-mother-infant interaction in the newborn period: Some findings, some observations, and some unresolved issues. In K. Reigel & J. Meacham (Eds.), The developing individual in a changing world: Social and environmental issues (Vol. 2). The Hague: Mouton.
- Pederson, F.A. (1975). Mother, father and infant as an interactive system. Paper presented in the symposium, Fathers and Infants, at the American Psychological Association meetings, Chicago, IL.
- Pederson, F.A. (1981). Fathers influences viewed in a family context. In M.E. Lamb (Ed.), The role of the father in child development. New York: Wiley.
- Peery, J.L., Jensen, L., & Adams, G. (1985). The relationship between parents' attitudes toward child rearing and the sociometric status of their preschool children. The Journal of Psychology, 119, 567-574.
- Pettit, G.S., Dodge, K.A., & Brown, M. (1988). Early family experience, social problem-solving patterns, and children's social competence. Child Development, 59, 107-120.
- Putallaz, M. (1987). Maternal behavior and children's sociometric status. Child Development, 58, 324-340.
- Putallaz, M., & Gottman, J.M. (1981). An interactional model of children's entry into peer groups. Child Development, 52, 986-994.
- Quay, L.C., & Jarrett, O.S. (1984). Predictors of social acceptance in preschool children. Developmental Psychology, 20(5), 793-796.
- Ramsey, P.G. (1988). Social skills and peer status: A comparison of two socioeconomic groups. Merrill-Palmer Quarterly, 34(2), 185-202.
- Roff, M., Sells, S.B., & Golden, M.M. (1972). Social adjustments and personality development in children. Minneapolis: University of Minnesota Press.
- Roopnarine, J.L., & Adams, G.R. (1987). Social interaction patterns of high, average, and low socioeconomic status children. The Journal of the American Academy of Child and Adolescent Psychiatry, 26(1), 28-32.
- SPSS Inc. (1983). SPSSx user's guide. New York: McGraw Hill.
- Turner, P.H., & Harris, B. (1984). Parental attitudes and preschool children's social competence. The Journal of Genetic Psychology, 144, 105-113.

- Ullmann, C.A. (1957). Teachers, peers, and tests as predictors of adjustment. Journal of Education Psychology, 48, 257-267.
- Vandell, D.L. (1976). Mother's and father's social interaction with their toddler sons. Paper presented at the Eastern Psychological Association meetings, New York, N.Y.
- White, B., & Watts, J.C. (1973). Experience and environment. Major influences on development of the young child: Vol. 1. Engelwood Cliffs, N.J: Prentice Hall.
- Wright, M.J. (1980). Measuring the social competence of preschool children. Canadian Journal of Behavioral Science, 12(1), 18-32.
- Yogman, M.W., Dix, S., Tronick, E., Adamson, L., Als, H., & Brazelton, T.B. (1976). Development of infant interaction with fathers. Paper presented at the eastern Psychological Association meetings, New York, N.Y.

APPENDICES

APPENDIX A

THE IOWA PARENT BEHAVIOR INVENTORY MOTHER FORM



IOWA PARENT BEHAVIOR INVENTORY¹ (Mother Form)

Sedahlia Jasper Crase, Sam Clark, Damaris Pease
Department of Child Development
Iowa State University

CHILD'S NAME _____ DATE OF RATING _____
CHILD'S SEX _____ CHILD'S BIRTHDATE _____
(month, day, year)
MOTHER'S NAME _____

We are interested in learning more about how parents and children interact. The following statements represent a variety of ways that parents may interact with their children. Before you begin, have firmly in mind the child you are rating. Please respond to the statements in the way which you feel best represents your behavior toward the child. Base your ratings on your own experiences with this child over the last month.

Consider each statement separately. There are no "right" or "wrong" responses. In the space provided to the left of each statement, place the number (1 to 5) that best describes how you see your behavior toward your child.

Respond "5" if you think you always behave as described and "1" if you think you never behave that way. Use numbers larger than "3" to show you behave that way more than half the time, and numbers smaller than "3" to show you behave that way less than half the time. This means the more you behave as described, the larger the numbers should be, and the less you behave as described, the smaller the numbers should be. To the extent you are uncertain you behave that way, your response should be "3". If an item does not apply to your particular home situation, place a "3" in the rating column. Please make use of the full range of the scale.

RATING SCALE

I almost never behave this way	I seldom behave this way	I behave this way about half the time OR I'm not sure how often I behave this way	I often behave this way	I almost always behave this way
1	2	3	4	5

RATING SCALE

I almost never behave this way	I seldom behave this way	I behave this way about half the time OR I'm not sure how often I behave this way	I often behave this way	I almost always behave this way
1	2	3	4	5

TO WHAT EXTENT DO YOU.....

RATING	ITEM
_____ 1.	Excuse yourself from invited guests when your child asks for help with such things as pasting, sewing, or model building?
_____ 2.	Require your child to remain seated in the car while you are driving?
_____ 3.	Give your child things he or she especially likes when he or she is ill?
_____ 4.	Go to your child quickly when you see his or her feelings are hurt?
_____ 5.	Find children's books, reference books or records that you and your child can share together?
_____ 6.	Explain to your child the consequences related to his or her behavior?
_____ 7.	Restrict the times your child can have friends over to play?
_____ 8.	Find crafts such as painting, coloring, woodworking or needlework you and your child can do together on cold, rainy days?
_____ 9.	Listen when your child tells you of a disagreement he or she has had with another child?
_____ 10.	Interrupt a telephone conversation to assist your child if he or she can't find such things as scissors, thread or paste?
_____ 11.	Require your child to put away his or her clothes?
_____ 12.	Enforce your child's established bedtimes when he or she ignores them?
_____ 13.	Restrict the kinds of food your child eats?
_____ 14.	Listen to your child when he or she is upset even though you feel he or she has nothing to be upset about?

RATING SCALE

I almost never behave this way	I seldom behave this way	I behave this way about half the time OR I'm not sure how often I behave this way	I often behave this way	I almost always behave this way
1	2	3	4	5

TO WHAT EXTENT DO YOU.....

RATING	ITEM
_____ 15.	Tell your spouse of your annoyance with a neighbor or employer while your child is listening?
_____ 16.	Insist your child speak politely to you as opposed to being sassy?
_____ 17.	Remind your child when he or she forgets to do daily household chores?
_____ 18.	Explain to your child, when he or she behaves in an unacceptable way, your reasons for not approving that kind of behavior?
_____ 19.	Hold, pat or hug your child?
_____ 20.	Point out to your child the acceptable choices of behavior when he or she misbehaves?
_____ 21.	Maintain the limits you have set for your child's television watching?
_____ 22.	Change plans to attend a night meeting so you can be with your child if he or she becomes ill?
_____ 23.	Go immediately to your child when you see him or her hurt from a fall off a bicycle?
_____ 24.	Disagree with your spouse when your child is present?
_____ 25.	Ask your child for his or her reasons when he or she misbehaves?
_____ 26.	Go to your child quickly when you hear him or her sobbing?
_____ 27.	Get out of bed at night to go to your child as soon as you hear him or her crying?
_____ 28.	Let your child know that you are afraid during fear provoking situations such as storms?
_____ 29.	Make special efforts to stay with your child when he or she is ill?
_____ 30.	Hug or kiss your spouse in the presence of your child?

RATING SCALE

I almost never behave this way	I seldom behave this way	I behave this way about half the time OR I'm not sure how often I behave this way	I often behave this way	I almost always behave this way
1	2	3	4	5

TO WHAT EXTENT DO YOU.....

RATING	ITEM
_____ 31.	Help your child to recognize another person's point of view?
_____ 32.	Take your child with you when you visit friends?
_____ 33.	Tell your child when you are in agreement with him or her?
_____ 34.	Cry if you feel like crying when your child is present?
_____ 35.	Work together with your child on household and yard cleaning tasks?
_____ 36.	Hold, pet and/or hug your child when other children are watching?

Thank you.

Iowa State University *of Science and Technology*



Ames, Iowa 50011-1030

March 28, 1990

Susan C. Johnston
Department of Health & Human Development
Montana State University
Bozeman, MT 59717

College of Family and Consumer Sciences
Child Development Department
101 Child Development Building
Telephone 515-294-3040

Dear Ms. Johnston:

This letter is to confirm your request of 2/22/90 to reproduce both the mother form and the father form of the Iowa Parent Behavior Inventory. Would you send me a copy of your thesis, as I am interested in your findings also!

Sincerely,

Sedahlia Jasper Crase

Sedahlia Jasper-Crase, Ph.D.
Professor

SJC:jj

APPENDIX B

THE IOWA PARENT BEHAVIOR INVENTORY FATHER FORM



IOWA PARENT BEHAVIOR INVENTORY¹ (Father Form)

Sedahlia Jasper Crase, Sam Clark, Damaris Pease
Department of Child Development
Iowa State University

CHILD'S NAME _____ DATE OF RATING _____

CHILD'S SEX _____ CHILD'S BIRTHDATE _____
(month, day, year)

FATHER'S NAME _____

We are interested in learning more about how parents and children interact. The following statements represent a variety of ways that parents may interact with their children. Before you begin, have firmly in mind the child you are rating. Please respond to the statements in the way which you feel best represents your behavior toward the child. Base your ratings on your own experiences with this child over the last month.

Consider each statement separately. There are no "right" or "wrong" responses. In the space provided to the left of each statement, place the number (1 to 5) that best describes how you see your behavior toward your child.

Respond "5" if you think you always behave as described and "1" if you think you never behave that way. Use numbers larger than "3" to show you behave that way more than half the time, and numbers smaller than "3" to show you behave that way less than half the time. This means the more you behave as described, the larger the numbers should be, and the less you behave as described, the smaller the numbers should be.

If you are uncertain you behave that way, your response should be "3". If an item does not apply to your home situation, place a "3" in the rating column. Please make use of the full range of the scale.

RATING SCALE

I almost never behave this way	I seldom behave this way	I behave this way about half the time OR I'm not sure how often I behave this way	I often behave this way	I almost always behave this way
1	2	3	4	5

¹ © copyright, 1977, 1976. Iowa State University Research Foundation, Inc. All rights reserved.

RATING SCALE

I almost never behave this way	I seldom behave this way	I behave this way about half the time OR I'm not sure how often I behave this way	I often behave this way	I almost always behave this way
1	2	3	4	5

TO WHAT EXTENT DO YOU.....

RATING	ITEM
_____ 1.	Require your child to remain seated in the car while you are driving?
_____ 2.	Give your child things he or she especially likes when he or she is ill?
_____ 3.	Go to your child quickly when you see his or her feelings are hurt?
_____ 4.	Find children's books, reference books or records that you and your child can share together?
_____ 5.	Suggest to your child outdoor games that you and he or she might play together?
_____ 6.	Explain to your child the consequences related to his or her behavior?
_____ 7.	Help your child select items that interest him or her at the store?
_____ 8.	Express your appreciation when your child carries his or her dishes to the sink?
_____ 9.	Enforce rules for your child concerning pushing or shoving of other children?
_____ 10.	Find crafts such as painting, coloring, woodworking or needlework you and your child can do together on cold, rainy days?
_____ 11.	Maintain the limits you set for your child's behavior in public places like basketball games, church or grocery stores?
_____ 12.	Listen without interrupting when your child tells you reasons for his or her misbehavior?
_____ 13.	Require your child to put away his or her clothes?
_____ 14.	Enforce your child's established bedtimes when he or she ignores them?

RATING SCALE

I almost never behave this way	I seldom behave this way	I behave this way about half the time OR I'm not sure how often I behave this way	I often behave this way	I almost always behave this way
1	2	3	4	5

TO WHAT EXTENT DO YOU.....

RATING	ITEM
_____ 15.	Listen to your child when he or she is upset even though you feel he or she has nothing to be upset about?
_____ 16.	Tell your child that you are unhappy when he or she tracks mud into the house?
_____ 17.	Participate with your child in storytelling and reading?
_____ 18.	Insist your child speak politely to you as opposed to being sassy?
_____ 19.	Have rules about the places your child can go alone?
_____ 20.	Remind your child when he or she forgets to do daily household chores?
_____ 21.	Hold, pat or hug your child?
_____ 22.	Point out to your child the acceptable choices of behavior when he or she misbehaves?
_____ 23.	Talk with your child about his or her fears of the dark, of animals or of school failures?
_____ 24.	Change plans to attend a night meeting so you can be with your child if he or she becomes ill?
_____ 25.	Go immediately to your child when you see him or her hurt from a fall off a bicycle?
_____ 26.	Ask your child for his or her reasons when he or she misbehaves?
_____ 27.	Go to your child quickly when you hear him or her sobbing?
_____ 28.	Ask your child for his or her opinion in family decisions?
_____ 29.	Get out of bed at night to go to your child as soon as you hear him or her crying?
_____ 30.	Make special efforts to stay with your child when he or she is ill?
_____ 31.	Hug or kiss your spouse in the presence of your child?
_____ 32.	Consider suggestions made by your child?

RATING SCALE

I almost never
behave
this way

I seldom
behave
this way

I behave this way about
half the time OR I'm
not sure how often I
behave this way

I often
behave
this way

I almost always
behave
this way

1

2

3

4

5

TO WHAT EXTENT DO YOU.....

RATING

ITEM

- ____ 33. Suggest to your child indoor games that you and he or she might play together?
- ____ 34. Tell your child why you are angry, irritable or impatient when he or she is not to blame?
- ____ 35. Help your child to recognize another person's point of view?
- ____ 36. Hold, pat and/or hug your child when other children are watching?

Thank you.

APPENDIX C

THE CALIFORNIA PRESCHOOL SOCIAL COMPETENCY SCALE



CALIFORNIA PRESCHOOL SOCIAL COMPETENCY SCALE

SAMPLE ITEMS

Samuel Levine
Freeman F. Elzey
Mary Lewis
San Francisco State College

CHILD'S NAME _____ RATED BY _____

PARENT'S NAME _____ TEACHER _____

ADDRESS _____

OTHER INFORMATION _____

Chronological Age:

A. Sex: Boy _____ Girl _____

	Year	Month	Day
Date	_____	_____	_____
Birthdate	_____	_____	_____
Age	_____	_____	_____

B. Age Norm

2-6 thru 2-11 _____
3-0 thru 3-11 _____
4-0 thru 4-11 _____
5-0 thru 5-6 _____

C. Occupational Level of Major Wage Earner

☐ Low OL

Unemployed, welfare recipient, unskilled or semiskilled (building helper, janitor, farm laborer, untrained aide, clerk).

☐ High OL

Skilled worker, semiprofessional (craftsman, technician, salesman, accountant, office manager), professional and executive (lawyer, physician, engineer, minister, business executive).

The three items checked above should be carefully observed in finding the appropriate column in the correct norm table.

DIRECTIONS

For each item, circle the number of the option that is most characteristic of the child being rated. *Be sure to rate all 30 items.*

Add the circled numbers and enter the total at the lower right corner of page 3. Then transfer the total to the appropriate line on the profile sheet on the back page. Refer to the appropriate table in the manual to obtain the percentile. If examiner wishes, the individual items may be profiled on the back page to facilitate interpretation.



CONSULTING PSYCHOLOGISTS PRESS, INC.
577 College Avenue, Palo Alto, California 94306

Published 1969. Portions of this scale are reproduced by permission from the Cain-Levine Social Competency Scale, copyright 1963, by Consulting Psychologists Press, Inc. Any reproduction of this scale without written permission of the copyright holder is a violation of the law.

SAMPLE ITEMS FROM THE CALIFORNIA PRESCHOOL SOCIAL COMPETENCY SCALE

1. IDENTIFICATION

1. Can state first name only.
2. Can state full name.
3. Can state full name and age as of last birthday.
4. Can State name, age and address.

5. REPORTING ACCIDENTS

When he has an accident (e.g. spilling, breaking)-

1. He does not report accidents.
2. He sometimes reports accidents.
3. He frequently reports accidents.
4. He nearly always reports accidents.

17. PLAYING WITH OTHERS

1. He usually plays by himself.
2. He plays with others but limits play to one or two children.
3. He occasionally plays with a large group (three or more Children).
4. He usually plays with a large group of children (three or more).

15. SHARING

1. He does not share equipment or toys.
2. He shares but only after adult intervention.
3. He occasionally shares willingly with other children.
4. He frequently shares willingly with other children.

24. ACCEPTING LIMITS

When an adult sets limits on the child's activity (play space, use of material, type of activity) he accepts the limits-

1. Hardly ever.
2. Sometimes.
3. Frequently.
4. Nearly always.

Please do not present these items to your readers as any kind of mini-test, but only as an illustrative sample of items from this instrument. We have provided these items as samples in order that we may maintain some measure of control over the items which appear in any published media. The reason for this control is to avoid having the instrument appear in its entirety, or in segments that may be pieced together to form an entire working instrument, allowing access to the instrument by unqualified individuals.

Thank you for your cooperation.

CONSULTING PSYCHOLOGISTS PRESS, INC.
 577 College Avenue (P.O. Box 60070), Palo Alto, CA 94306 (415) 857-1444

Susan C. Johnston
 Dept. of Health & Human Development
 Montana State University
 Bozeman, MT. 59717

Customer # _____
 Purchase order # _____
 Product # _____
 Quantity _____
 Price _____

In response to your request of February 22, 1990 permission is hereby granted to you to
 (Date)
 include a copy of sample items from the California Preschool Social
 Competency Scale in the appendix of your dissertation

for ☒ research ONLY ☐ commercial use ☐ clinical use
 subject to the following restrictions:

(a) Any material used must contain the following credit lines:

"Reproduced by special permission of the Publisher, Consulting Psychologists Press, Inc.,
 Palo Alto, CA 94306,

from California Preschool Social Competency Scale

by Samual Levine, Freeman F. Elzey & Mary Lewis 1969

Further reproduction is prohibited without the Publisher's consent."

- (b) None of the materials may be sold or used for purposes other than those mentioned above.
- (c) One copy of any material reproduced will be sent to the Publisher to indicate that the appropriate credit line has been used.
- (d) Payment of a reproduction fee of NO FEE
- (e) Susan C. Johnston agree(s) to assign all right, title, and interest in translations, versions, and/or modifications of this instrument to CPP or as directed by CPP.

CONSULTING PSYCHOLOGISTS PRESS, INC.

By Eric Kaufman
 Eric Kaufman Permissions Department

Date 3/9/90



CONSULTING PSYCHOLOGISTS PRESS, INC.
577 College Ave. (P.O. Box 60070), Palo Alto, CA 94306 (415) 857-1444

Susan C. Johnston
Dept. of Health & Human Development
Montana State University
Bozeman, MT. 59717

March 9, 1999

Dear Ms. Johnston,

Thank you for your letter of February 22, 1990 concerning the California
Preschool Competency Scale.

Due to copyright concerns we do not allow the inclusion of entire instruments
in appendices of dissertations. We do however allow the inclusion of sample
items taken from our instruments.

Enclosed you will find a copy of sample items taken from the California
Preschool Competency Scale.

Thank you for your cooperation.

Sincerely,



Eric Kaufman
Permissions Editor

APPENDIX D

LETTERS OF INFORMATION



Montana State University
Bozeman, Montana 59717

Unit of Human Development and Counseling

Department of Health and Human Development
Herrick Hall

Telephone (406) 994-3240

Dear

As a follow-up to the informational letter regarding the Parental Interactions Study, we hope you will be willing to participate by filling out the attached survey. The purposes of this study are to identify (a) those behaviors that are important to you as you interact with your young child and (b) your views regarding family interactions. We hope to include many parents in the Bozeman community in this study.

Our goal is to have 100% of the families in the preschool participate. It should take you about 15 minutes to complete the questionnaire. We think you will enjoy participating in the study. Included are two versions of the survey; the yellow is the mother form, while the green is the father form. Please return the completed surveys to the box located in your school. If you have any questions concerning this project, please contact Janis Bullock at 994-5006. Thank you for your time and cooperation.

Sincerely,

Janis Bullock, Ph.D.
Assistant Professor
Child Development and
Family Science

Susan Johnston
Master's Student and
CDC Teacher

JB/hj



Montana State University
Bozeman, Montana 59717

Unit of Human Development and Counseling
Department of Health and Human Development
Herrick Hall

Telephone (406) 994-3240

Dear Methodist Preschool Parents:

We are writing to inform you of a study that will be conducted in the preschool and other preschools in the Bozeman Community. The purpose of this study is to identify certain parental perceptions of the home environment and outcome behaviors in children as they interact with their peers and teachers.

This study will involve two procedures. The first part will consist of a parent survey asking you to respond to questions concerning family interactions. The survey will be sent out in the next few weeks. Your responses will be absolutely anonymous, treated confidentially, and used for research purposes only. The second part of the study will involve observing children's behaviors and assessing their interaction in the school.

Our goal is to have all families in the preschool involved in this study, therefore, we look forward to your participation. If you have any questions concerning this project, please contact me at 994-5006.

Sincerely,

Dr. Janis Bullock
Assistant Professor
Child Development and
Family Science

Susan Johnston
Master's Student, Child Development
Teacher, Child Development Center

JB/hj

February 22, 1990

Consulting Psychologists Press, Inc.
577 College Avenue
Palo Alto, CA 94306

Attention: Permissions Editor,

I am currently an Adjunct Professor of Health and Human Development at Montana State University, Bozeman, Montana. Dr. Janis Bullock, Unit Director of Child Development and Family Science, MSU Department of Health and Human Development and I ordered copies of the California Preschool Social Competency Scale (Levine, Elzey, & Lewis, 1969) which were used in a study on social competence involving the university laboratory preschool and the Methodist preschool in Bozeman during Spring Quarter of 1989.

I am requesting permission to reproduce that thirty-item scale in the appendix of my unpublished thesis which will be submitted to complete the requirements for a degree of Master of Science in Child Development/Early Childhood Education. There will be a total of approximately ten (10) copies of this thesis, one of which will remain in the university library according to the regulations governing theses at Montana State University.

Your cooperation in this matter will be greatly appreciated. I look forward to hearing from you.

Sincerely,

Susan C. Johnston
Department of Health and Human Development
Montana State University
Bozeman, Montana 59717

February 22, 1990

Department of Child Development Research Laboratories
Iowa State University
Ames, Iowa 50010

Attention: Permissions Editor,

I am currently an Adjunct Professor of Health and Human Development at Montana State University, Bozeman, Montana. Dr. Janis Bullock, Unit Director of Child Development and Family Science, MSU Department of Health and Human Development and I ordered copies of the Iowa Parent Behavior Inventory (Crase, Clark, & Pease, 1979) which were then administered to mothers and fathers of preschool children enrolled in the university laboratory preschool and in the Methodist preschool in Bozeman as part of a study conducted during the Spring Quarter of 1989 on parental factors which may influence children's social competence.

I am requesting permission to reproduce both the mother form and the father form of the Iowa Parent Behavior Inventory for parents of preschool children in the appendix of my unpublished thesis which will be submitted to complete the requirements for a degree of Master of Science in Child Development/Early Childhood Education. There will be a total of approximately ten (10) copies of this thesis, one of which will remain in the university library according to the regulations governing theses at Montana State University.

Your cooperation in this matter will be greatly appreciated. I look forward to hearing from you.

Sincerely,

Susan C. Johnston
Department of Health and Human Development
Montana State University
Bozeman, Montana 59717

APPENDIX E
DEMOGRAPHIC INFORMATION

GENERAL INFORMATION

1. Subject Number _____
2. Please indicate your sex.
Male _____ Female _____
3. When is your birthday? _____
4. What are the ages of your children to their nearest birthday?
Ages of boys _____; _____; _____; _____;
Ages of girls _____; _____; _____; _____;
5. Please indicate your occupation. In a few words, please tell us what you do.

Husband's occupation _____

Wife's occupation _____

6. Draw a circle around the highest number of years of schooling you have completed.

1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	1	2	3	4
Grade School								Jr./Sr. High				College				Graduate			

7. Are you married? Yes _____ No _____

If so, how long have you been married? _____

If not, was your previous marriage ended because of:

_____ divorce
 _____ desertion
 _____ death

