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A DEVELOPMENTAL ANALYSIS OF CHILDREN'S USE OF SOCIAL SUPPORT

By

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ABSTRACT

A DEVELOPMENTAL ANALYSIS OF
CHILDREN'S USE OF SOCIAL SUPPORT

By

Karen Ann Cruise

The relationship between developmental variables and children's use of social support has not yet been carefully examined. This study examines the relationship between two developmental variables; age and interpersonal understanding, and four features of the social support network; relationship composition, function, quality, and satisfaction. Subjects were one hundred and forty-one children, ages 8 through 14, enrolled in a local public school district. Questionnaires were group administered during two separate testing periods.

Both age and interpersonal understanding were positively correlated with number of peers elected as supporters, number of emotional supporters, and number of supporters providing mutual support. Children scoring lower in interpersonal understanding had social support

networks containing a higher ratio of parents to other supporters. Girls scored higher in interpersonal understanding, had larger networks, and elected more emotional supporters. Satisfaction with social support was positively correlated with number of supporters providing emotional support.

To my children -
Carolyn, Ken, Steve, Patrick, and Katie -
who have taught me much of what I know
about how children develop, and
who have been lovingly supportive
of my own growth and development.

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INTRODUCTION

Although social support has become a major research focus over the past few years, little attention has been paid to the way in which social support functions during childhood. Children's social skills and relationships have been the subject of research on peers, friendships, and social cognition. Much is therefore known about the development of social skills and the nature of children's social relationships. Little has been done to explore the ways in which these social relationships function to support the child, and how various features of this support change as the child develops. This study examines the relationship between two developmental variables; age and interpersonal understanding, and four features of the social support network; relationship composition, function, quality, and satisfaction. The period of middle childhood through early adolescence has been selected as a time when the nature and function of social relationships, as well as the child's social skills, undergo considerable developmental change. Research within

this population also allows for replication and/or expansion of related research findings.

In order to provide relevant background for this exploration, it is necessary to examine what we know about social support, the function of children's relationships with peers, friends, and family, and the growth of social cognition.

During childhood and adolescence, social relationships are major facilitators of development. In interaction with the social environment, the child accomplishes tasks relevant to his/her current developmental level and builds skills and abilities with which to approach the tasks ahead.

The growing literature on social support addresses the supportive functions of social relationships. The individual's social support network functions to mediate stress (Gottlieb, 1981, 1983) and is an important variable in both physiological and psychological well-being (Broadhead et al., 1983; DiMatteo & Hays, 1981; Leavy, 1983). Research has examined types of support, size of social support network, and the relationship of these variables to the individual's satisfaction with support received (e.g., Barrera & Ainlay, 1983; Caldwell, Bogat, Kriegler, & Rogosch, 1984). The literature addresses the importance of examining the impact of developmental variables on the structure,

substance, building, and maintenance of support systems (Cochran & Brassard, 1979; Leavy, 1983). Some general age-related factors have been considered in recent studies. The relationship between developmental variables and social support has not yet been carefully examined.

A perspective which considers developmental level in the function of social relationships would anticipate differences over time in the relevance of various types of support, in network size and/or composition (i.e., ratio of family or peers in the total network) and in the nature or quality of the helping relationships. Satisfaction with support received could be expected to co-vary with the presence or absence of developmentally salient aspects of that support. The following review of the literature forms the basis for specific hypotheses, based on these broad assumptions, to be explored in this research.

The Nature And Function Of Social Support

Social support has been defined as "the manner in which human attachments are structured as systems of support and the resources that are exchanged among the members of these systems" (Gottlieb, 1981, p. 11). Descriptions of types of social support have varied across studies (Barrera & Ainlay, 1983; Leavy, 1983). Research has identified four broad types (Barrera &

Ainlay, 1983; House in Leavy, 1983). These are emotional (caring, trust, and empathy, or nondirective types of support), instrumental or tangible assistance (helping others do their work, accompanying them on difficult tasks, loaning money), informational or directive guidance (giving information or teaching potential problem-solving skills, giving feedback, providing advice), and appraisal or positive social interaction (including providing information or feedback about personal performance, and talking about interests). Recent research provides further validation for these four broad types of support for adolescents (Caldwell, Bogat, Kriegler & Rogosch, 1984) and extends their applicability to children (Kriegler, 1985).

Although there is evidence about the ways in which social support functions for adults, there is a paucity of similar evidence for children. Leavy (1983) observed that the type of support people receive is a central factor related to psychological adaptation. In the literature, emotional support is consistently correlated with emotional health. Caplan (1976) pointed to ongoing exchanges between individuals and their social supporters as a factor in the maintenance of psychological health. Positive outcomes during periods of stress or life transition have been related to having a confidant; instrumental, informational, and

appraisal supports play roles in this process as well (Leavy, 1983). Social support might be expected to function in a similar manner for children.

The Function Of Social Relationships In Middle Childhood

The role of social relationships as a rich, interactional context is a common thread in theories of cognitive, personality, and social development. The proposition that a child's interactions with the environment are reciprocal is widely held (Turiel, 1983). Social and cognitive development have been described as "inseparable and parallel" (Piaget & Inhelder, 1969), and it has been observed that "a personality can never be isolated from the complex of interpersonal relations in which the person lives and has his being" (Sullivan, 1953, p. 10).

The child achieves developmental organization through assimilation of the world around him/her (Piaget, 1956). Social interaction and reciprocity are critical ingredients in this organization. During the concrete operational period, new, cooperative, interpersonal relations are established (Piaget & Inhelder, 1969). When the child reaches the stage of formal operations, typically as a young adolescent (ages 12 to 15), social factors become important facilitators of socialization and transmitters of culture. The nature

and function of social interaction, then, changes as the child develops.

This developmental progression has been conceptualized in terms of acquisition of various role-taking skills, or the ability to attribute cognitions, in a broad sense, to another individual (Flavell, Botkin, Fry, Wright & Jarvis, 1968). More advanced social activity, appearing first in the 8 to 10 year old child, makes it possible for the child to utilize more complex role-taking strategies. This activity is characterized by efforts at cooperation, compromise, real argument, and other characteristics which reflect an ability to take the other's point of view. The child learns how to perceive other people's perspectives, and can empathize or share how another person feels.

Exploration of the function of social relationships in the development of personality adds to our understanding of the child's interaction with his/her social environment. During preadolescence (ages 8-1/2 to 12), the child develops the capacity to love (Sullivan, 1953). "Affectional rapport" in relationships requires as preconditions such things as obvious likeness, parallel impulse, and parallel physical development. Children feel most at ease with other children of the same sex. The same-sex chumships typical of this stage provide self-validation as well as

information about life and the world. The competition typical of friends and nonfriends during middle childhood is replaced by mutually responsive friendships at about the time of puberty, as the development of intimate friendships facilitates awareness of the friends' needs.

The developmental progression through middle childhood and early adolescence involves an increase in cooperation, perspective-taking, and empathy, and a move from reciprocity to mutuality in friendships. Social-cognitive research on features of children's friendships and age-related changes in these features points to general agreement that concerns with intimacy and loyalty increase as children approach adolescence (Berndt, 1983). Girls, however, appear to stress intimacy more than boys. During middle childhood, boys tend to play in groups of three or more and girls tend to prefer dyadic interactions, which provide a greater potential for intimacy (Pitcher & Schultz, 1983; Tietjen, 1982). This gender difference is also apparent in research exploring the use of confidants by children aged 5 through 12 (Belle & Longfellow, 1984). Boys in this study were significantly more likely than girls to report confiding in no one.

Despite agreement on the increasing importance of intimacy and loyalty in children's friendship

expectations, the research fails to provide specific information about many aspects of friendship. Questions regarding important functions which might relate to children's use of social support (i.e., how much children expect friends to help and share with each other, how this may vary with age, and differing expectations of sharing from close friends vs. children who are not close friends) have yet to be answered (Berndt, 1983).

It does appear that in middle childhood, we might expect the social support network to consist of members who provide primarily practical (concrete) and socialization types of support. We might also expect to see the beginning of sex differences in salience of emotional support as girls experience more intimacy in relationships. The value of emotional support and mutuality, indicative of a growing appreciation of greater responsiveness in relationships, could be expected to increase as the child enters adolescence.

The Function of Social Relationships in Adolescence

Adolescence has been described as a time when the child begins to appreciate mutuality in relationships and to struggle with his/her own egocentricity or self-consciousness. Social relationships play a major role in the resolution of this struggle.

It has been theorized that the entrance into formal operations in cognition, which coincides with the beginning of adolescence, results in a temporary heightening of egocentrism (Elkind, 1967). The adolescent becomes preoccupied with his/her own appearance and behavior, and assumes that others share this preoccupation. Anticipations based on these assumptions are altered through social interaction. The realization that others have feelings similar to their own paves the way for the adolescent to begin establishing true interpersonal relationships.

Subsequent studies (Enright, Lapsley, & Shukla, 1979, 1980) have suggested that the construct of adolescent egocentrism is multidimensional. Assessment of 6th grade through college age students revealed significant decreases in some of the aspects of egocentrism theorized by Elkind (1967). These were the assumption that others are preoccupied with the adolescent's appearance and behavior, and an exaggerated perception of the adolescent's importance to others. Conversely, self-focus and self-consciousness were higher in older subjects.

Other researchers (Adams & Jones, 1982) found that perceived rejection and control by parents was associated with heightened self-consciousness in adolescent girls. They proposed that in the young adolescent,

egocentrism and self-conscious reactions are diminished by parental support and affection, and enhanced by parental rejection. The resulting hypothesis that adolescent egocentrism is the by-product of social experiences that parallel cognitive maturation, rather than an effect of movement to formal operational thought, was subsequently explored (Riley, Adams, & Nielsen, 1984). Analysis of responses from young adolescents on measures of cognitive development and perceived parental support suggested that development of formal operations was related to diminished adolescent egocentrism. Perceived quality of relationships with parents was predictive of self-consciousness.

Most recently, research using the Adolescent Egocentrism Scale and a battery of formal reasoning tasks with subjects aged 11 to 21 (Lapsley, Milstead, Quintana, Flannery, & Buss, 1986) yielded little theoretical support for the basic assumption that the emergence of adolescent egocentrism is correlated with the onset of formal operations in early adolescence. These authors suggested that their findings support the notion that some features of adolescent egocentrism may be the result of problems in interpersonal understanding (Lapsley & Murphy, 1985; Lapsley, 1985). More specifically, since there are known developmental sequences in the growth of this construct (e.g.,

Selman, 1980), perspective-taking development may provide a more appropriate framework for understanding adolescent egocentrism.

It may be, then, that a major function of social relationships during adolescence is to facilitate the development of social cognition rather than to mediate the effect of formal operations.

The social interaction which facilitates the adolescent's progress toward mature social relations coincides with an increased focus on peer group belongingness (Weiner & Elkind, 1972). Unlike the preadolescent, who moves from several friendships among a group of peers to special chumships between dyads or triads of peers, the adolescent moves from socialization within these smaller groups to focus on the peer group at large. The teenager is neither child nor adult. He/she derives a sense of belongingness and well-being from popularity within the adolescent culture. Early adolescent friendships have a special significance in the transition between childhood and adulthood (Berndt, 1982). Close friends and other peers become the primary partners in adolescents' social interactions.

We would expect that the young adolescent's social support network would contain greater numbers of peers than that of the preadolescent. The adolescent could

also be expected to report greater numbers of relationships involving mutuality and providing emotional support than his/her younger counterpart. Further, satisfaction with support should be related to the presence of mutuality and emotional support. The potential effects of parental support are addressed further in a subsequent section.

Interpersonal Understanding as an Underlying Developmental Process

The primary developmental variable discussed thus far has been age. Since not all children develop at an equal pace, however, it could be anticipated that a developmental variable more directly related to social interaction would correlate more closely with the child's use of social support.

Interpersonal understanding, mentioned in the research on adolescent egocentrism (Lapsley et al., 1986), is such a variable. The growth of interpersonal understanding is defined as an underlying process of social perspective-taking or interpersonal awareness measurable at five broad, overlapping developmental levels (Selman, 1980). The levels most relevant to the current discussion are descriptive of ages 5 to 9, 7 to 12, 10 to 15, and 12 to adult, or Levels 1, 2, 3, and 4, respectively. At Level 1, the relating of perspectives is conceived of in one-way, unilateral terms.

The child at Level 2 can take a self-reflective or second person perspective on his/her own thoughts and actions, and is able to realize that others can do so as well. The child has a concept of two-way, reciprocal relationships; that is, he/she conceives of two single individuals seeing self and other, but not the relationship system between them. At Level 3, the child is able to take a true third-person perspective. Selman refers to the "observational ego" of the adolescent, who, consistent with Elkind's (1967) description, simultaneously sees him/herself as both actor and object. The third-person perspective permits the taking of another's perspective of the self, and simultaneously includes and coordinates the perspectives of self and other. At this level, children see the need to coordinate reciprocal perspectives, and believe social satisfaction, understanding, and resolution must be mutual and coordinated to be genuine and effective. In the most advanced level, actions, thoughts, motives, and feelings are understood to be psychologically determined. The child conceptualizes mutuality as existing not only on the plane of common expectations or awareness but simultaneously at multidimensional or deeper levels of communication. In a dyad, superficial information, common interests, or deeper unverbalized

feelings and communication can be shared. The lower age range of this level closely corresponds to that at which subjects in other studies (e.g., Berndt, 1982) demonstrated mutually responsive friendship.

A developmental analysis of the relationship between peer acceptance and interpersonal understanding in children in grades 3 through 8 (Kurdek & Krile, 1982) revealed that interpersonal understanding, as defined by Selman, showed significant developmental increases. Girls scored significantly higher in interpersonal understanding than did boys. Exploration of the relationship between social skills and peer acceptance demonstrated that older children's peer acceptance was more closely linked to level of interpersonal understanding than was that of younger children. Further, mutual friends (as opposed to unilateral friends and non-friends) were more similar in interpersonal understanding. Thus, not only was support provided for Selman's hypotheses, but also for a developmental progression wherein mutuality increases in salience, and the perception of similar interests and abilities facilitates the formation of intimate relationships (Sullivan, 1953). Gender differences in the study are also consistent with greater opportunities for girls to experience intimacy in dyadic relationships.

Since social perspective-taking ability specifically describes the child's level of social interaction and is not directly translatable to age, it would be important to assess this ability as an independent variable in the development of social support.

Summarization of Developmental Features in Social Relationships

In a broad overview of the development of social relationships, the child can be seen as moving from an initially egocentric position to one of increasing differentiation, perspective taking, reciprocity, and mutuality. With the advent of school, the child's arena of social interaction expands to include not only family but a broader community of family, teachers, and peers. He/she is able to take a second person perspective, and is capable of two-way reciprocity, cooperation, and the beginning of empathy. Thinking is concrete; games are played by the rules. Boys in particular tend to view both friends and nonfriends competitively. As the child moves through latency toward adolescence, the composition of important social relationships typically changes from small groups of peers to same-sex chumships, based on perceived similarities. Although these chumships provide a greater potential for intimacy, this potential may be more fully realized by girls, whose chumships are more likely to involve

two people, while boys tend to favor groups of three or more. At about this same time, the child becomes capable of taking a third person perspective and moves toward an appreciation of mutuality in relationships.

The adolescent is no longer bound by concrete thought, but can conceive of many interpersonal possibilities in his/her relationships. He/she becomes more aware of the views of others and highly sensitive to their evaluation. Although intimate friendships are still important, the importance of acceptance by a broader group of peers increases, with belongingness and well-being related to this acceptance.

One would expect the child's use of social support to reflect these broad developmental changes; that is, to demonstrate increases in number of peers, mutuality of support, and number of persons providing emotional support. Developmental variables which would be expected to co-vary with these changes are age and level of social perspective-taking ability. Satisfaction with support received should correspond with these anticipated trends. It would also be expected that girls report greater numbers of emotional supporters than boys.

The Social Support Network of the Child

Although much of what is written about the social environment of the child addresses an ever-expanding

network of peers and friends, family members continue to perform important functions. Sandler (1980) found that living with two parents and older siblings reduced the effects of stress on adjustment in elementary school children. Factors within these relationships which may mediate the effects of stress were not identified. Research has begun to yield more information regarding relationship composition and function in children's social environments.

Mothers were primary confidants in a study of boys and girls aged 5 through 12 (Belle & Longfellow, 1984). With increasing age, children reported confiding more frequently in siblings and friends than in fathers. Higher self-esteem and a more internal locus of control were associated with greater confiding in mothers.

There is evidence that children continue to list parents and other family members as significant others through adolescence (Blyth, Hill, & Thiel, 1982). In response to a Social Relations Questionnaire, over ninety percent of a sample of seventh through tenth grade children listed both parents as significant others. Nearly all listed siblings and extended family adults. Approximately seventy percent listed nonrelated, same-sex adults. Nonrelated young people were the most frequently listed type of significant other; females listed a significantly higher number of peers

than did males. An increasing number of peers vs. adults were listed as significant others with increasing age of the adolescent. Parents and other adults continued to be listed by both boys and girls at all grade levels, however, and no apparent trade-off of adults for peers occurred as grade level increased. A trend toward reporting smaller numbers of important adults as the child moves from puberty to adolescence, found in an earlier study (Garbarino, Burston, Raber, Russell, & Cronter, 1978) was attributed by Blyth et al. to limitations imposed on the number of significant others reported in this study.

Earlier studies (Burke & Weir, 1977, 1979) provided similar findings regarding the function of parents and peers as helpers during adolescence. For the majority of adolescents, peers were the first choice of helper. Mothers were next in order of preference, followed by fathers. Examination of the experiences of adolescents seeking help from parents and peers revealed a significant relationship between the adolescents' perceptions of the responses of these helpers and their willingness to disclose their difficulties and problems. There was also a significant relationship between helpers' response patterns and adolescents' well-being. In particular, responses representing emotional and concrete support were positively

related to satisfaction with help received, disclosure of problems, and well-being. Helping responses of parents were particularly vital. Peers were more prepared than parents to communicate on an affective level. This finding apparently accounted for increased willingness to disclose to peers and greater expressed satisfaction with help from peers. Although parents continued to be considered "significant others", their responses were not necessarily positive, supportive, or helpful. Research examining the relative influence during adolescence of relations with peers and parents on measures of self-esteem and life satisfaction (Greenberg, Siegel, & Leitch, 1983) supported a prediction that quality of perceived attachments to parents would be a more powerful predictor of well-being than quality of peer relationships. These authors also found that adolescents continue to turn to parents frequently, even when they perceive their relationsips as non-satisfying.

The data from the above-cited studies are consistent with the developmental literature, which addresses the increasing importance of peer relationships during adolescence. The continuing significance of relationships with parents and other adults is also substantiated. The relationship between parental support and children's well-being emphasizes the importance of this

specific source of support. Parental support may function in a number of ways. Parents provide varying amounts of direct support to their children throughout the life span. The parent's social system may also influence the child (Cochran & Brassard, 1979). That is, the parent's social support system can provide cognitive and social stimulation, direct support, and observational models. Active participation in the parents' social support network can provide a foundation for the development of the child's own social network.

Nair and Jason (1984) investigated dimensions of children's social networks in a sample of fifth through eighth grade children. This age range represents children at more than one developmental level. All of the children had been identified as having academic problems. In terms of quality, children were most satisfied with networks consisting of a high number of multidimensional relationships (persons providing more than one type of support), which provided them with large amounts of material support, physical assistance, and emotional support, and in which a small percentage of their total relationships consisted of friends. Children with a large number of family relationships had small, multidimensional networks, which provided them with high percentages of cognitive guidance, material aid, and emotional support. Children whose social

support networks consisted mostly of friends had larger networks, and relationships that provided smaller amounts of support. They also tended to be less satisfied with these relationships. Two functions, material aid and emotional support, were related to overall satisfaction with the social support network. Networks dominated by family members appeared to be the most satisfying and to provide the greatest amount of support. The age range in this study included younger children, for whom family-dominated networks are more typical, and older children, whose networks would probably be more friend or peer dominated. Age therefore represents a potential confound in this study.

It is also impossible to determine in what way having academic problems may have affected these children's use of or access to social support. The authors attempted to determine the relationship of social networks to adjustment of children by comparing these children with others described by their teachers as doing well academically. They found that a heterogeneous network containing a large number of members who provide physical assistance is predictive of adjustment in school age children. It is probable that family members would be the source of physical assistance for many of the children, although younger children would be expected to have a proportionately higher

number of family members in their social network. No ages are given for either the children described as doing well in school or those having problems. There is reason to believe that consideration of developmental variables would have clarified or altered interpretation of the findings.

A recent investigation by Kriegler (1985) addressed some of these issues. Ages of the children in this study were 8 through 13. Using the Children's Social Support Questionnaire (CSSQ, Bogat, Chin, Sabbath, & Schwartz, 1983), Kriegler found that kin (a broad category including parents, grandparents, siblings, etc.) provided more advice and information, physical assistance, and emotional support than did friends. Friends (peers) provided more socialization support. Further, more emotional supporters were listed by the older children in the sample, and girls reported a higher number of emotional supporters than did boys. The increase in emotional support at an age roughly representative of puberty is consistent with the child's newly developed ability to conceptualize mutually responsive friendships (Berndt, 1982; Selman, 1980; Sullivan, 1953). The difference in number of emotional supporters for boys vs. girls is also consistent with the literature (Pitcher & Schultz, 1983; Tietjen, 1982).

Kriegler (1985) hypothesized that children with larger networks would have higher self-esteem than those with smaller networks. This hypothesis was not supported. Developmentally, however, many of these children may have been at a point where small networks, composed of family members and a limited number of same-sex friends, would have been expected. It is also possible that the presence of mutually supportive relationships, or greater numbers of emotional supporters, might be more closely correlated with self-esteem than would size of network. Kriegler found that average number of supporters increased with age, a finding consistent with the developmental literature (e.g., Weiner & Elkind, 1972).

Kriegler's hypothesis that kin ratio would be positively correlated with satisfaction with overall network was not supported. The literature reviewed above would suggest that kin ratio decreases over time as a developmental phenomenon. It is interesting to note that Kriegler's study revealed no significant relationship between peer-ratio, or number of peers in the social support network, and happiness with one's network, either within or between each of the four grade levels represented. Satisfaction with social support, as Kriegler suggested, may indeed be more a feature of

quality than quantity of particular relationships. It may also be more readily measured in relationship to type of support received (e.g., emotional) than to support provider.

Rationale for Current Study

It is clear from the review of the literature that developmental level influences the manner in which the child interacts with his/her social environment. Developmental variables would therefore be expected to correlate with certain features of children's social support relationship composition, function, quality, and satisfaction. This study will examine social support in children aged 8 through 14. Ages of these children correspond with subjects in previous studies (Kriegler, 1985; Nair & Jason, 1984) of children's social support networks. Potential replication of findings and greater understanding of the effects of developmental variables in these two studies will thereby be facilitated. Developmental variables in this study will be age and level of interpersonal understanding.

Hypotheses

In relationship to the developmental variable of age, the following hypotheses are proposed:

Hypothesis 1: Children's age will be positively correlated with size of social support network. That is, older children will elect greater numbers of supporters.

Hypothesis 2: Children's age will be positively correlated with number of peers in the social support network. That is, older children will elect greater numbers of peers.

Hypothesis 3: Children's age will be positively correlated with number of emotional supporters. That is, greater numbers of persons providing emotional support will be elected by older children.

Hypothesis 4: Children's age will be positively correlated with number of supporters providing the same amount of support as they receive in relationship to the child (hereinafter referred to as mutual supporters). That is, older children will have more mutual supporters.

Hypothesis 5: Children's age will be negatively correlated with parent-ratio

(number of parents divided by total number of supporters). The networks of younger children will contain a greater parent-ratio than will the networks of older children.

In relationship to the developmental variable of interpersonal understanding, the following hypotheses are proposed:

Hypothesis 6: Interpersonal understanding will be positively correlated with size of social support network.

Hypothesis 7: Interpersonal understanding will be positively correlated number of peers in the social support network.

Hypothesis 8: Interpersonal understanding will be positively correlated with number of emotional supporters.

Hypothesis 9: Interpersonal understanding will be positively correlated with number of mutual supporters. That is, children scoring higher in interpersonal understanding will have greater numbers of mutual supporters.

Hypothesis 10: Interpersonal understanding will be negatively correlated with parent-ratio.

The following hypotheses are proposed based on the relationship between age and interpersonal understanding:

Hypothesis 11: Age and interpersonal understanding will be positively correlated.

Hypothesis 12: Interpersonal understanding will be more highly correlated with number of supporters providing emotional support than will age.

Hypothesis 13: Interpersonal understanding will be more highly correlated with number of mutual supporters than will age.

The following sex differences are proposed:

Hypothesis 14: Girls will demonstrate higher interpersonal understanding than will boys.

Hypothesis 15: Girls will elect greater numbers of emotional supporters than will boys.

The following hypotheses are proposed in relationship to satisfaction with support received:

Hypothesis 16: Satisfaction with social support will be positively correlated with

number of supporters providing emotional support.

Hypothesis 17: For children rated higher on interpersonal understanding, satisfaction with social support network will be more highly correlated with number of supporters providing emotional support than for children rated lower in interpersonal understanding.

Hypothesis 18: For children rated higher on interpersonal understanding, satisfaction with social support network will be more positively correlated with number of mutual supporters than for children rated lower in interpersonal understanding.

METHOD

Subjects

The subjects participating in this study were one-hundred and forty-one children, ages eight through fourteen, who were attending two elementary schools, one middle school, and one junior high school in the Holt, Michigan public school system. They were enrolled in the third (n = 24), fourth (n = 24), fifth (n = 27), seventh (n = 34), and eighth (n = 32) grades. Although there was an initial attempt to isolate younger and older age groups (i.e., ages 8 through 10 and 12 through 14), ages of actual respondents were fairly evenly distributed across the broader age span, and a decision was made against division into "older" and "younger" groups for purposes of data analysis. The children were not requested to supply information regarding socioeconomic status or race. The school district, however, consists predominantly of white, middle socioeconomic status families, and the sample in this research should be considered to represent this population. Seventy-eight (55.3%) of the children

were female, and sixty-three (44.7%) of the children were male.

Procedure

Informed consent. Following approval of the proposed research by the University Committee on Research Involving Human Subjects, a letter describing the general purpose and procedures of this study was sent home with all children in several third, fourth, fifth, seventh, and eighth grade classes in two elementary schools, one middle school, and one junior high school. Those parents/guardians who wanted their child to participate in the study returned a permission slip to their child's teacher (see Appendix A for a copy of these forms). Only children whose parents/guardians gave their consent, and who themselves assented to do so, were allowed to participate in this study. Participating children were taken in groups to rooms in each school building designated by the principal of the school for use in this study. Children not participating in the study remained in their classroom and continued their regular classwork.

Testing procedures/data collection. Data was collected during two separate testing periods within a one week period of time for each school, based on minimum disruption of school and class schedules. Each of these periods conformed with normal class time. For

the older children (grades seven and eight, ages 12 through 14), the researcher and one proctor were present during each data collection period. For the younger children (grades three, four, and five, ages 8 through 11) the ratio of children to proctors ranged from 5:1 to 9:1. Proctors were thereby able to provide individual assistance, as necessary, in clarifying instructions, reading questions, and writing responses.

During the first period, the Children's Social Support Questionnaire (CSSQ, Bogat et al., 1983) was administered. In the subsequent session, children were asked to complete the back page of that questionnaire and to fill out The Understanding Friendship Measure (Kurdek & Krile, 1982; Walsh & Kurdek, 1984).

Tests and Measurements

Two assessment instruments were used in this study: (a) The Children's Social Support Questionnaire (CSSQ, Bogat et al., 1983), and (b) The Understanding Friendship Measure (Kurdek & Krile, 1982; Walsh & Kurdek, 1984). These measures were administered verbally, question by question, to each group of children participating in the research.

The Children's Social Support Questionnaire. The Children's Social Support Questionnaire (CSSQ, Bogat et al., 1983) is designed to measure school-aged children's perceived social support. The questionnaire

consists of sixteen questions measuring four subareas or types of social support. Each subarea contains four questions: (a) socialization (e.g., who do you 'hang out' with?), (b) advice and information (e.g., who gives you information or advice about personal things?), (c) physical assistance (e.g., who takes you places you need to go?), and (d) emotional support (e.g., who cares about you?). Each question has space for the child to list the names of ten unique supporters. These sixteen questions provide a quantitative (amount of people overall and within each subarea) index of the child's perceived social network. For example, number of emotional supporters, utilized in later data analysis, was derived by counting unique supporters elected on any or all of the four questions related to emotional support. Qualitative indices are provided by data collected on the final page of the questionnaire, which is administered separately. On this sheet, the investigator compiles a list of the unique names nominated by the child in response to the first sixteen questions. The child is then asked to complete a series of questions about each person listed, specifying the following: the sex of the support person, their relationship to/with the target child, whether the supporter provides the child with more, less, or the same amount of support as the child

provides the supporter, and how happy the child is with the relationship. Aggregate scores from these indices allow for analysis of the child's network in terms of source (sex and relationship of support person), content (type of support received), mutuality (supporters providing the child with the same amount of support as they receive from the child), and satisfaction (happiness with the support they receive).

Face validity of the four types of support measured by this questionnaire was established by Kriegler (1985). The content analysis, utilizing a Q-sort technique, yielded acceptable levels of interrater agreement (range: 72.5% - 100%; mean = 89.5%).

Changes in the relationship category, consistent with those suggested by Kriegler (1985) were incorporated in this study. Specifically, the "family/relative" category was divided into parent, brother/sister, grandparent, and other family/relative. Other categories (i.e., friend, neighbor, classmate/schoolmate, professional, and other) remained unchanged (see Appendix B for a copy of this questionnaire).

Each subject's responses to this questionnaire were coded on two separate occasions by independent coders. Codings were then compared and all discrepancies traced back to the original data and corrected.

The Understanding Friendship Measure. The Understanding Friendship measure is a group-administered version of Selman's (1980) Friendship Domain Interview. The measure was originally developed by Kurdek and Krile (1982) and subsequently used in a revised version by Walsh and Kurdek (1984). The latter version was utilized in this study. Children were asked to write responses to two questions for each of six dimensions of friendship relations: formation, intimacy, trust, jealousy, conflict resolution, and termination. (See Appendix C). They were told that there were no right or wrong answers, and encouraged to answer all questions. When "Yes" or "No" answers were given, children were asked for more information. Each answer was then rated for level of interpersonal understanding. At Level 1, close friendships are viewed as momentary physical interactions. At Level 2, they are described in terms of one-way assistance. At Level 3, conceptions refer to fair-weather, context-specific cooperation and reciprocity. At Level 4, conceptions refer to intimate and mutual sharing, and, at Level 5, close friendships are described in terms of autonomous interdependence. Consistent with prior analysis of scores derived through the use of this measure, interpersonal understanding is analyzed in this research as a continuous variable.

Interrater reliability (percent of exact agreement) calculated by Walsh and Kurdek (1984) for two independent codings of all protocols was .88. Similar reliability was reported by Kurdek and Krile (1982). Subjects in these studies were third- through eighth-graders. Composite Understanding Friendship scores in both studies were derived by summing the scores for the 12 items and dividing by twelve.

Coding of responses to the Understanding Friendship Measure in the present study was done by two teams, consisting of two independent coders each. Each team coded either odd or even numbered questions (i.e., one question from each of the six friendship domains represented on the questionnaire). Coders were trained in the coding system used by Walsh and Kurdek (1984; see Appendix D). Interrater reliability, based on percentage of exact agreement, was .81 overall. While this is somewhat lower than that obtained by Walsh and Kurdek (1984) and Kurdek and Krile (1982), differences in test administration in the present study may account for the lower interrater reliability. In the two prior studies, the test was group administered and no individual instruction was given beyond the initial request that Yes/No answers be justified. Subsequent responses of "Yes", "No", and "I don't know" were considered unscorable and given a rating of 0. In the present

study, the ratio of proctors to subjects was sufficient that each child was queried on responses of "Yes", "No", or "I don't know". In the few instances where these responses were final, they were considered to represent the child's best effort, and were scored as Level 1 responses. All responses were thus considered scorable. The greater variability in responses subsumed within the original scoring criteria can reasonably be expected to have contributed to greater inter-rater variability.

RESULTS

In the following section, results of analyses pertaining to specific hypotheses are followed by post hoc analyses and then descriptive statistics. Tables are provided for the results of hypotheses related to developmental variables (Hypotheses 1 through 10), breakdown of interpersonal understanding scores by age and sex, and statistics descriptive of various social support network variables.

Developmental Variable Age

Hypothesis 1. It was predicted that children's age would be positively correlated with size of social support network. Pearson Product-Moment Correlation Coefficient was not significant (r = .11, p < .107). This hypothesis was not supported. (See Table 1 for correlations of social support network characteristics with age; Hypotheses 1 through 5).

Hypothesis 2. It was predicted that children's age would be positively correlated with number of peers in the social support network. Pearson Product-Moment Correlation Coefficient showed a significant positive relationship (r = .24, p < .01) between age and number of peers. The variable "Peers" was derived from a

Table 1

Correlations of Social Support Network Characteristics with Age and Interpersonal Understanding

	Age (n=141)	Interpersonal Understanding (n=141)
Size of network	.11	.21 *
Number of peers in network	.24 *	.30 **
Number of emotional supporters	.25 *	.34 **
Number of mutual supporters	.34 **	.44 **
Proportion of parents in network	-.13	-.23 *

* $p < .01$

** $p < .001$

combination of relationship categories "friend" and "classmate/schoolmate".

Hypothesis 3. It was predicted that children's age would be positively correlated with number of emotional supporters (derived by counting unique supporters listed on one of more of four questions pertaining to emotional support). A significant positive correlation (r = .25, p < .01) was found between age and number of emotional supporters.

Hypothesis 4. It was predicted that children's age would be positively correlated with number of mutual supporters. Older children would have more mutual supporters. A significant positive correlation (r = .34, p < .001) was found between age and number of mutual supporters.

Hypothesis 5. It was predicted that children's age would be negatively correlated with parent-ratio. That is, networks of younger children would contain a greater ratio of parents to total number of supporters than would the networks of older children. Although a small correlation in the predicted direction approached significance (r = -.13, p < .06), this hypothesis was not supported.

Developmental Variable Interpersonal Understanding

Hypothesis 6. Interpersonal understanding was expected to correlate positively with size of social

support network (total number of individual supporters elected). A significant correlation (r = .21, p < .01) was found between interpersonal understanding and network size. (See Table 1 for correlations of social support network characteristics with interpersonal understanding; Hypotheses 6 through 10).

Hypothesis 7. Interpersonal understanding was expected to correlated positively with number of peers in the social support network. A significant correlation (r = .30, p < .001) was found between interpersonal understanding and peers.

Hypothesis 8. It was predicted that interpersonal understanding would be positively correlated with number of emotional supporters. A significant correlation (r = .34, p < .001) was found between interpersonal understanding and total number of emotional supporters elected.

Hypothesis 9. Interpersonal understanding was expected to correlate positively with the number of mutual supporters. This hypothesis was supported (r = .44, p < .001).

Hypothesis 10. It was predicted that interpersonal understanding would be negatively correlated with parent-ratio. A significant correlation was found in the predicted direction (r = -.23, p < .01).

Relationship Between Developmental Variables

Hypothesis 11. It was hypothesized that age and interpersonal understanding would be positively correlated. The correlation between these two variables was positive and significant (r = .66, p < .001).

Interpersonal understanding scores in the present sample ranged from 1.50 to 3.38 (mean = 2.56, standard deviation = .40). These scores roughly correspond with those reported by Walsh and Kurdek (1984) in a sample of children aged 9 through 17, and with responses described by Selman (1980) as representative of children aged 5 through 12. Walsh and Kurdek attributed the relatively lower scores in their sample to differences in group vs. individual task administration. In the present study, with an age range of 8 through 14, less of a discrepancy between scores obtained during group vs. individual administration seems to exist. (See Table 2 for a breakdown of interpersonal understanding by age and gender).

Hypothesis 12. It was predicted that interpersonal understanding would be more highly correlated with number of supporters providing emotional support than would age. Although the Pearson correlation coefficient for number of emotional supporters was stronger with interpersonal understanding (r = .34, p < .001) than with age (r = .25, p < .01), Fisher r-z

Table 2

Interpersonal Understanding by Age and Sex

Age	Sex	N	Mean	Standard Deviation
8		11	1.79	.15
	M	7	1.77	.11
	F	4	1.82	.23
9		22	1.96	.23
	M	12	1.94	.22
	F	10	1.99	.24
10		22	2.06	.20
	M	11	1.96	.19
	F	11	2.16	.18
11		20	2.10	.29
	M	10	1.99	.34
	F	10	2.21	.18
12		20	2.57	.33
	M	5	2.37	.31
	F	15	2.64	.32
13		32	2.49	.11
	M	15	2.37	.26
	F	17	2.60	.35
14		14	2.61	.43
	M	3	2.14	.42
	F	11	2.75	.34

Total n = 141

transformations yielded no significant difference (z = .78).

Hypothesis 13. It was predicted that interpersonal understanding would be more highly correlated with number of mutual supporters than would age. Both interpersonal understanding and age were positively correlated with number of mutual supporters (r = .44 and .34, respectively). Each of these correlations were significant at $p < .001$. However, Fisher r-z transformations yielded no significant difference between the correlations (z = .98).

Sex Differences

Hypothesis 14. It was hypothesized that girls would demonstrate higher interpersonal understanding than would boys. The means (and standard deviations) of interpersonal understanding for girls (n = 78) and boys (n = 63) were 2.40 (.41) and 2.08 (.32), respectively. This difference was statistically significant (t = 5.03, $p < .001$). The finding that girls score higher than boys in interpersonal understanding is consistent with previous research (Kurdek & Krile, 1982; Walsh & Kurdek, 1984).

Hypothesis 15. It was hypothesized that girls would elect greater numbers of emotional supporters than would boys. The means (and standard deviations) of total emotional supporters elected by girls (n = 78)

and boys (n = 63) were 11.13 (3.21) and 8.41 (2.74), respectively. This difference was statistically significant (t = 5.32, p < .001).

Satisfaction with Support Received

Hypothesis 16. It was predicted that satisfaction with social support would be positively correlated with number of supporters providing emotional support. A mean satisfaction score was calculated by adding the satisfaction ratings for each individual supporter and dividing this sum by the size of the network. The correlation between mean satisfaction and number of supporters providing emotional support was small but significant (r = .17, p < .05). Correlations between numbers of supporters providing other types of support (socialization, information/advice, and practical support) and mean satisfaction were not significant. These correlations were r = .03, p < .35; r = .06, p < .24; and r = .11, p < .10, respectively.

Hypothesis 17. It was further hypothesized that for children rated higher on interpersonal understanding, satisfaction with social support network would be more highly correlated with number of supporters providing emotional support than for children rated lower in interpersonal understanding. That is, there would be an interaction effect of interpersonal understanding and emotional support on mean satisfaction. This was

analyzed through the use of regression analysis (Cohen, 1978), entering the interaction as the last step in the regression equation. The interaction was nonsignificant ($F(1,137) = .04$, $p < .85$).

Hypothesis 18. It was predicted that for children rated higher on interpersonal understanding, satisfaction with social support network would be more positively related to the presence of mutuality in relationships than for children rated lower on interpersonal understanding. Multiple regression analysis of the interaction effect of interpersonal understanding and mutual supporters on mean satisfaction was nonsignificant ($F(1,137) = 1.63$, $p < .20$).

Post hoc Analyses

An examination of the distribution of interpersonal understanding scores by age and sex (Table 2) reveals that girls outnumber boys in two of the older age groups. That is, at age 12 the ratio of girls to boys is 3:1, and at age 14, 3.6:1. Given the significant sex difference in interpersonal understanding (Hypothesis 14), and the significant correlation of interpersonal understanding, but not age, with size of network (Hypotheses 6 and 1, respectively), it was decided to do post hoc analysis of sex by size of network. The means (and standard deviations) of network size for girls (n = 78) and boys (n = 63) were

21.74 (7.22) and 18.54 (5.88), respectively. This difference was statistically significant (t = 2.84, p < .01).

One could reasonably expect that an inverse effect of larger overall networks would be a smaller parent-ratio, as parents form a relationship category that remains relatively stable in size over time. It is possible, therefore, that the correlations between interpersonal understanding and network size, and interpersonal understanding and parent-ratio, are spurious; that is, that they are the result of the relationship of sex with interpersonal understanding. This effect would not be seen in relationship to age, which was fairly evenly distributed, irrespective of sex, in this sample. Partial-correlation analyses of the relationship between interpersonal understanding and size of network, and interpersonal understanding and parent-ratio, were performed, controlling for the effect of sex. The resulting partial-correlation coefficient for interpersonal understanding and network size was not significant (r = .13, p < .06). The partial-correlation coefficient for interpersonal understanding and parent-ratio, controlling for the effect of sex, was smaller than the original zero-order coefficient but remained significant (r = -.18, p < .05).

Based on this analysis, it would appear that the relationship between interpersonal understanding and size of network was indeed spurious. In contrast, the correlation between interpersonal understanding and parent-ratio was smaller than the original correlation without controlling for the effect of sex, but remained significant.

Given the significant sex difference in number of emotional supporters (Hypothesis 15), post hoc analysis by sex was performed on the difference in relationship between interpersonal understanding and number of emotional supporters, and age and number of emotional supporters (see Hypothesis 12). The correlations between age and emotional support, and interpersonal understanding and emotional support, for girls ($n = 78$), were $\underline{r} = .20$, $\underline{p} < .04$, and $\underline{r} = .17$, $\underline{p} < .06$, respectively. Similar correlations with age and interpersonal understanding for boys ($n = 63$) were $\underline{r} = .19$, $\underline{p} < .07$, and $\underline{r} = .27$, $\underline{p} < .02$, respectively. Fisher r-z transformations failed to yield significant differences. Transformed scores for girls were $\underline{z} = .13$ and for boys, $\underline{z} = .47$.

Descriptive Statistics

Because of the normative nature of this sample, means and standard deviations of social support network characteristics are provided in Table 3. These include

Table 3

Means (and Standard Deviations) of Social Support Network Characteristics by Age of Subject

Age	Network Size	Number of Supporters by Type: Socialization	Information/ Advice	Practical	Emotional
8	16.45 (4.37)	11.36 (3.64)	7.09 (3.15)	5.55 (1.92)	8.18 (3.54)
9	20.73 (5.70)	13.09 (3.70)	8.95 (3.79)	8.18 (3.71)	9.41 (2.68)
10	20.14 (6.77)	13.00 (4.32)	9.59 (4.56)	9.27 (3.87)	9.00 (3.10)
11	20.85 (7.90)	12.75 (4.99)	9.60 (4.88)	8.70 (4.46)	9.95 (4.15)
12	20.30 (7.77)	12.00 (4.62)	9.85 (4.68)	8.75 (3.84)	10.05 (3.46)
13	20.53 (6.59)	13.91 (4.18)	9.84 (3.68)	10.00 (3.89)	10.91 (2.62)
14	21.71 (7.36)	13.14 (4.72)	11.36 (5.27)	10.36 (4.53)	11.00 (3.57)

Total n = 141

size of network, and total numbers of supporters providing emotional, practical, socialization, and information/advice support, by age and sex of subject. Overall network size represents total number of unique supporters. Number of supporters in each support category was derived by counting unique supporters named in response to one or more of four questions representing each type of support.

Table 4 contains ranges, means and standard deviations of number of supporters elected in each relationship category. These numbers were derived by counting supporters assigned to each category by the subject. Supporters were coded as belonging to one category only. Means and standard deviations are based on number of unique supporters in each relationship category. For example, in the "parent" category, 3 children elected no parents; 10 children elected one parent; 106, two parents; 13, three parents; and 9, four parents. Mean number of parents elected per child was 2.11; standard deviation, .70.

Table 4

Number of Supporters Elected in Each Relationship Category

Relationship	Range	Mean	Standard Deviation
Parent	0 - 4	2.11	.70
Brother/Sister	0 - 7	1.45	1.26
Grandparent	0 - 7	1.52	1.54
Other Family/ Relative	0 - 13	2.20	2.56
Friend	1 - 23	9.83	4.71
Neighbor	0 - 6	.66	1.35
Classmate/ Schoolmate	0 - 11	.98	1.70
Professional (e.g., teacher doctor,minister, social worker	0 - 6	.99	1.32
Other	0 - 5	.40	1.00

Total n = 141

DISCUSSION

This study explored social support in a sample of children aged 8 through 14. Features of social support structure and function, and overall satisfaction with social support, were examined in relationship to age and interpersonal understanding.

Social support network structure. Older children, and those who scored higher in interpersonal understanding, elected greater numbers of peers as support providers. This finding is consistent with the increasing importance of friendships and membership in the larger peer group as the child approaches and enters adolescence. Overall network size, however, did not show increases with development. Thus, these findings only partially replicate earlier research (cf. Kriegler, 1985). For the children in the present study, it would appear that while anticipated increases in number of peers elected as supporters occurred over time, sufficient numbers of supporters in other relationship categories were nominated by children in earlier stages of development such that overall network size remained relatively unchanged. One possible

explanation for this discrepancy between studies may be that community differences (i.e., a largely urban sample in Kriegler's study vs. a primarily rural sample in the present research) effect access to certain network members for children at various levels of development. Future research should explore potential community differences.

For children scoring lower in interpersonal understanding in the present study, parents appeared to be a particularly significant source of support. Although boys generally obtained lower interpersonal understanding scores than girls, children of both sexes who scored lower on this developmental variable appeared to be more "family-bound" in having their social support needs met. Kurdek and Krile (1982) reported that mutual friends are more similar to each other in interpersonal understanding and perceived social self-competence than are unilateral friends or nonfriends. Children whose abilities in this area are limited may be excluded from friendships with children whose abilities are more advanced. Considering the interactive nature of the development of social cognition and social relationships, one could anticipate that such children might continue to face limitations in social development by virtue of this exclusion criteria.

Social support function. Increasing age and developmentally higher levels of social perspective-taking ability were correlated with greater numbers of emotional supporters and more relationships involving mutuality of support. Additionally, girls were found to elect greater numbers of emotional supporters. The relationship between number of emotional supporters and both age and sex of the child is consistent with Kriegler's (1985) research. Additionally, the increase in mutually supportive relationships is consistent with the developmental literature, which describes greater salience of relationships involving mutuality as the child reaches adolescence.

Relationship between developmental variables. It was anticipated that interpersonal understanding would be more closely related than age to number of emotional supporters and supportive relationships involving mutuality. Although the correlations with interpersonal understanding are larger than those with age for each of these variables, the differences are not statistically significant. It is possible that the hypotheses in this study were not specific to areas where these differences might be most apparent. Further exploration of support received from various relationship categories, and/or of developmental similarities between children electing each other as supporters,

might more strongly support the usefulness of examining the relationship between interpersonal understanding and children's use of social support.

Satisfaction with social support. Several hypotheses based on the anticipated relationship between developmental variables and satisfaction with overall support were explored. In the present study, the single support variable significantly correlated with satisfaction was emotional support (i.e., number of emotional supporters). The salience of emotional support has been highlighted by recent research on children of divorce (Sandler, Walchek & Braver, 1985). These children reported the fewest resources and lowest satisfaction ratings in the area of emotional support.

Children's satisfaction with social support has largely eluded measurement. Such satisfaction is typically measured by asking the child's satisfaction with specific relationships, rather than with type of support received. There has been a general consensus among researchers that questions about satisfaction with specific types of support would be difficult for the child to answer. It may be more likely that, in fact, "satisfaction" is a developmental variable. The child who is just beginning to differentiate self from other in relationships is unlikely to have sufficient perspective on the relationship or the function it

serves to evaluate satisfaction. Utilizing Selman's (1980) model, a child would need to possess the "observational ego" typical of Level 3 interpersonal understanding in order to evaluate satisfaction.

What may be needed, then, are not better ways in which to measure satisfaction but examination of other variables in order to determine the adequacy or efficacy of a child's social support network. It has been demonstrated that social support is related to social-emotional functioning of children in low-stress situations (Bryant, 1985) and to the adjustment of children in stressful situations (Sandler, Walchek & Braver, 1985). Future research might base evaluations of children's social support on assessment of variables measuring adjustment and/or well-being of the child, such as social self-competence or self-esteem.

SUMMARY AND CONCLUSIONS

An examination of social support structure, function, quality, and satisfaction is a complex, multidimensional endeavor. This study demonstrates a relationship between certain features of social support structure (i.e., supporters in various relationship categories) and function (i.e., emotional and mutual support), and age of the child. It also demonstrates the potential for an examination of the development of social cognition to add to our understanding of how children use social support. Children in this study who scored lower in interpersonal understanding had social support networks containing a significantly greater ratio of parents to total number of supporters. The potential role of developmental level in selection of mutual friends and in determining the parameters of relationship categories providing support was discussed. It is possible that, for children who are developmentally lower in interpersonal understanding, network selection is limited and networks are more likely to contain a higher ratio of parents and/or other family or adult supporters.

Sex differences in network size, numbers of emotional supporters, and interpersonal understanding point to the importance of gender in analysis and interpretation of data on social support. Researchers often treat gender differences as interesting exceptions, but continue to elevate to primary importance findings which need no qualification by sex. One could contend, on the other hand, that these differences constitute the more important findings of this and related research, and that attending to them as such is long overdue.

The literature has begun to address ways in which the psychological development of men and women differ (Gilligan, 1982; Miller, 1976). The present findings remind us that remarkable differences are apparent from a very early age in the way boys and girls conceptualize and utilize their social environment. Sex differences in salient features of social support continue to be apparent and measurable throughout adolescence and into adulthood (Caldwell, Bogat, & Cruise, 1987). If we are to move toward a greater understanding of social support, we would therefore be well advised to not simply consider gender an important variable but to study social support in boys and girls, men and women, as related but uniquely different phenomena.

Finally, the relationship between social support and a child's social-emotional functioning and adjustment dictates that we find ways in which to measure satisfaction with social support. In the present study, number of emotional supporters was related to overall satisfaction. It is possible, however, that satisfaction is a developmental phenomena, and that children below a certain level of development may have insufficient perspective on social relationships to make this evaluation. For this reason, future research should focus on other ways in which to determine support adequacy and effectiveness in childhood.

APPENDICES

APPENDIX A

Letter of Explanation

and

Consent Form

Date:_____

Dear Parents:

Holt Public Schools and Michigan State University are gathering information on children's friendships and other social relationships. We are asking you to help by allowing your child to participate in this project. We will be asking all participating children questions about who they like to do things with (who is fun to talk with) and their general understanding of friendships (why are friends important, how do you make a friend). Participation in this research will not interfere with important classwork.

Participation in this project is completely voluntary. If you choose to allow your child to participate, and your child is willing to do so, any information collected will be kept strictly confidential. No individual names will be recorded on questionnaires.

Below is a consent form indicating your approval of your child's participation. Please fill out, sign, and return this form to your child's teacher as soon as possible.

If you have any questions, please contact either your principal or Karen Cruise. Your cooperation is deeply appreciated.

_____
(Principal's name)

Karen Cruise, B.A.
Michigan State University
(517) 355-9361

Consent Form

Given the information above, I agree to the following:

1. I understand that the results of my child's participation will be strictly confidential, and all information will be anonymous.

2. I am aware that I have the right to refuse or withdraw my child from participation at any time without penalty.

3. My signature below indicates that I freely give my consent for _____ to participate.
(Child's name)

_____
Parent/Guardian Signature
Date:_____

APPENDIX B

Children's Social Support Questionnaire

SOCIAL SUPPORT QUESTIONNAIRE
Children's Form

Code No._____

Your grade in school:_____

Your age:_____

Your sex: Boy Girl

1. WHO DO YOU HANG OUT WITH (FOR EXAMPLE, AT A FRIENDS HOUSE, YOUR HOUSE, AROUND THE NEIGHBORHOOD, SCHOOL, ETC.)?

2. WHO DO YOU THINK ARE FUN PEOPLE TO TALK WITH (FOR INSTANCE, ABOUT THINGS YOU LIKE TO DO, T.V. SHOWS, ETC.)?

3. WHO DO YOU GO OUT WITH (FOR EXAMPLE, TO MOVIES, PARTIES, TO PLAY VIDEO GAMES, ETC.)?

4. WHO ARE YOUR FRIENDS AT ORGANIZED ACTIVITIES? ORGANIZED ACTIVITIES ARE THINGS THAT YOU DO ONCE A WEEK OR ONCE A MONTH. FOR EXAMPLE, CLUBS, LITTLE LEAGUE, BOWLING TEAMS, SCOUTS, ETC.?

5. WHO GIVES YOU INFORMATION OR ADVICE ABOUT RELIGIOUS THINGS?

6. WHO GIVES YOU INFORMATION OR ADVICE ABOUT PERSONAL THINGS (FOR EXAMPLE, PROBLEMS BETWEEN YOU AND YOUR PARENTS, HOW TO MAKE FRIENDS, ETC.)?

7. WHO TEACHES YOU HOW TO DO THINGS (FOR EXAMPLE, FIX A BIKE, PLAY A GAME, COOK, MAKE EXTRA MONEY, ETC.)?

8. WHO GIVES YOU INFORMATION OR ADVICE ABOUT FUN THINGS TO DO (FOR EXAMPLE, WHAT IS A GOOD MOVIE TO SEE, WHAT IS A GOOD RECORD TO LISTEN TO, WHAT IS A GOOD BOOK TO READ, ETC.)?

9. WHO CAN YOU COUNT ON TO HELP YOU DO THINGS THAT YOU NEED TO GET DONE (FOR EXAMPLE, HOMEWORK, FIXING A TOY, CHORES, ETC.)?

10. WHO TAKES YOU PLACES YOU NEED TO GO?

11. WHO LETS YOU BORROW A LITTLE BIT OF MONEY IF YOU NEED IT (FOR THINGS LIKE A COKE, SOME CANDY, A VIDEO GAME, ETC.)?

12. WHO LETS YOU BORROW SOMETHING IF YOU NEED IT (LIKE A SWEATER, A JACKET, A TOY, A RECORD, A BOOK, ETC.)?

13. **WHO LISTENS TO YOU WHEN YOU NEED TO TALK ABOUT SOMETHING PERSONAL?**

14. **WHO MAKES YOU FEEL BETTER WHEN YOU ARE UPSET?**

15. **WHO CARES ABOUT YOU?**

16. **WHO CAN YOU REALLY COUNT ON TO ALWAYS BE THERE FOR YOU?**

Your age:

Your grade in school:_____

Your sex: Boy Girl

Code No._____

What is your relationship with this person? (Circle one)

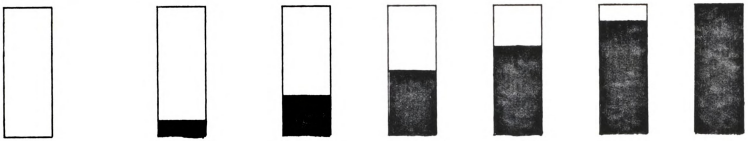
1. Parent
2. Brother/Sister
3. Grandparent
4. Other family/relative
5. Friend
6. Neighbor
7. Classmate/Schoolmate
8. Professional (e.g., teacher, doctor, minister, social worker)
9. Other (State relationship in the margin)

Does this person give you:

A. More help than you give him/her.
B. The same amount of help you give him/her.
C. Less help than you give him/her

	Boy or Girl? 1	2																	
1. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
2. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
3. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
4. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
5. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
6. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
7. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
8. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
9. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
10. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
11. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7
12. _____	1	2	1	2	3	4	5	6	7	8	9	A	B	C	1	2	3	4	5	6	7

How happy or satisfied are you with your relationship with this person? (See attached response scale)



1 2 3 4 5 6 7

As unhappy or dissatisfied as I could be

Happy some of the time

Happy much of the time

As happy or satisfied as I could be

APPENDIX C

The Understanding Friendship Measure

Understanding Friendship

1. Why are friends important?

2. How do you make a friend?

3. Are there different kinds of friendship?

4. How can you tell when two friends are really close?

5. What does it mean to really trust a friend?

6. Is trust important for a friendship?

7. What things make someone feel jealous?

8. Why might someone feel jealous about their friend's making a new friend?

9. What are some good ways to settle fights, arguments, or disagreements with a friend?

10. Can friends have an argument and still be friends?

11. What makes a friendship break up or end?

12. If you really broke up with a friend, could you get back together with that friend?

APPENDIX D

Understanding Friendship

Scoring Criteria

Understanding Friendship

Scoring Criteria

1. Why are friends important?

   Level 1: Reference to own experiences (Cause I have a lot of friends)
   Friends not separated from activity with self (So I have someone to play with/talk to/talk with)

   Level 2: Friends seen as serving needs of the self (They'd help me if I was in trouble; I'm lonely without a friend). Elaboration beyond identifying feature.

   Level 3: - Friends seen as engineers of psychological change (They cheer you up when you're sad; you have someone your age to talk to)
   - Friends seen as validating one's self value (You need people to think that you're good)

   Level 4: - Companionship and intimacy (You need someone to depend upon)
   - Mutual support (You need to help someone and get helped in return; you can have fun with each other)

   Level 5: - Sense of personal identity (through friends, people realize more about themselves, what they think and how they feel)
   - Support yet freedom (Friends allow you to be dependent yet independent at the same time; They don't tie you down, but they're there when needed)

2. How do you make a new friend?

   Level 1: - Proximity (Move next door)
   - Arbitrary decree (Just go up and say you want to be friends)

- Surface characteristics (Get to know where they live and go to school; Be nice)

Level 2:
- Awareness that the other must feel positively toward the self (Play nice with him so he'll like you; Give him a gift so he'll want to play with you)
- Elaborated "be nice"
- Strong inference of other being positive to self (He likes me, is nice to me)

Level 3:
- Revelation of own likes and dislikes (Let him know what you like to do and don't like to do)
- Consideration of two sides.
- Telling other about self.
- Inquiry into other's likes and dislikes (Find out what he likes to do)

Level 4:
- Try to figure out the other's "personality" (See how she acts and what she's like)
- Awareness of importance of first impressions (What she thinks about you at first might play a part in how she likes you later)

Level 5:
- Awareness of friendship as a process (You can't be friends right away, you have to share some common experiences and get to know them; There are stages of friendships that you have to go through over time)

3. Are there different kinds of friendship?

Level 1:
- Dichotomy (There are good ones and bad ones)
- Mere mention of difference
- Vague explanation

Level 2: Rank ordering of friends based on one's own needs (There's ... I like to play with them in that order)

Level 3: Ordering friendships on basis of mutual need satisfaction (Really great friendships are ones where you really like

each other and you know who each other is)

Level 4: Evaluation of friendships on the basis of degree of sharing, intimacy, and caring (Close friendships are ones in which you can share private problems with each other; You get worried and upset if a close friend is sick or having a problem)

Level 5: Evaluations based on uniqueness and degree of commitment (Sometimes there's just one special friend who isn't like the other ones at all; Close friends make sacrifices for each other and have obligations toward each other)

4. How can you tell when two friends are really close?

Level 1: Physical closeness (Live near each other, go to same school, in same class)

Level 2: - Reference only to length of time known (They know 'em a long time; they're together all the time)
- Reference to need satisfaction (They do what each other wants; shared activities and feelings; do things together; stick together; hang out together); implies seeing each other by preference.

Level 3: Sharing of true, real or inner attitudes and feelings (He lets you know what he's really thinking; He'll tell you all his secrets)

Level 4: - Reference to length of time known as an index of the quantity of mutual shared experiences (Over a long time they get to know and trust each other and do things together)
- Self/other fusion (A real close friend cares about you almost as much as she cares about herself)

Level 5: Understanding of each other as psychological beings (They understand each other's ambitions, insecurities, strengths, and weaknesses; they know

what the other one is thinking and feeling without expressing it)

5. What does it mean to really trust a friend?

Level 1: Physical activity (They hug each other; they play with your toys and won't break them)

Level 2: - One-way reciprocity (He does what I want; I give her candy so she'll play with me)
- Keeping a promise (If I said I'd go to the store with her, I would)

Level 3: - Two-way reciprocity (You play with each other a lot so you like each other)
- Focus on equality (You share things the same so no one is the boss)
- Keep secrets (You trust him not to say anything, and he trusts you)

Level 4: - Mutual support and admiration (You cheer each other up, you feel happy for each other)
- Shared intimacy (You help each other with very personal and private things)
- Ability to predict future behavior (You know what she's like and know how she'll act)

Level 5: - Emotional/psychological reciprocity (You're both tuned into each other's deep level; You know each other's needs and wants)
- Recognize the interdependence between support and autonomy (You trust your friend even if she's off on her own with someone else. You know she'll be loyal to you and needs to spend time away from you)

6. Is trust important for a friendship?

Level 1: Concrete self-references (It helps me play with someone better)

Level 2: One-way reciprocal actions (You know she'll do what you want; You know he'll play with you)

Level 3: Two-way reciprocity (If there was no trust, you wouldn't like him and he wouldn't like you back; No one gets pushed or bossed around)

Level 4: - Mutual confidence and confidentiality (Then you'd help each other out with personal problems; then you can give advice and not make fun of the problem)
- Predictability (It helps you know how someone will act or react to a situation)

Level 5: Interdependent reciprocity between dependency and autonomy (Trust lets you be yourself when you need to but it also lets you rely or depend on someone else when you need to)

7. What things makes someone feel jealous?

Level 1: Lack of access to objects (If someone has toys and they won't share them with you)

Level 2: - Hurt feelings from being excluded from an activity (They don't want you to play)
- Comparison between self and other on objects or activities (He has more toys than you)

Level 3: Hurt feelings from being slighted as a person (They make fun of you and reject you, then you feel real alone and hurt)

Level 4: - Possessiveness (You're afraid that he'll start playing with everyone else and not you)
- Recognition of jealousy as a trait (Some people just want you to be their one and only friend)

Level 5: - Jealousy as a natural admiration for what self doesn't have (It's natural to be jealous when you see a good relationship and you don't have one)
- Awareness of conflict between dependency and autonomy (It's not easy to say go and be friends with someone else. It

demands maturity and you have to grow up)

8. Why might someone be jealous about their friend's making a new friend?

(Codes are the same as #7)

9. What are some good ways to settle fights, arguments, or disagreements with a friend?

Level 1: - Noninteraction (Play with someone else; ignore him)
- Physical coercion (Punch her out)

Level 2: One-way solution: Negate the offending action (Take back what you said; Say you're sorry and didn't mean it; Let her have her way)

Level 3: - Cooperative solutions: Recognition that both person's needs have to be considered (Do it both ways; First do what she wanted to do, then do what you wanted to do)
- Recognize the value of psychological "distance" (Get away for a while and cool off; forget about it)
- Unelaborated mention of "Talk it over" or "Compromise"

Level 4: Mutual solution: Focus on both points of view (Talk about it so that each one understands how the other sees the issue)

Level 5: - Recognition that interpersonal conflict may reflect conflict within the individual (Try to understand how the fight might be caused by something within the person, their unhappiness)
- Recognize the need for continued open communication (The way to keep the friend is to keep the lines of communication open)

10. Can friends have arguments and still be friends?

Level 1: No. Damage is final (Once you have a fight it's all over; you play with someone else)

Level 2: Yes, but explanation is one-sided (You should be nice to them and say you're sorry)

Level 3: Recognition that the breach in friendship could be temporary (Good friends will make up; They really didn't mean it; They'd forget about it)

Level 4: Recognition that close friendship involves inevitable conflict (Really good friends should expect to fight once in a while)

Level 5: Recognition that arguments might actually strengthen a relationship (Fights can really be good; they might make you better friends than before because you could get to understand each other better)

11. What makes a friendship break up or end?

Level 1: - Physical harm (Friend hits you)
- Physical separation (He lives too far away)

Level 2: - Unilateral decisions (You just don't like her anymore)
- Bad manners (She calls you names)

Level 3: Difference of opinion (If you can't decide on something you both want to do; Fights/arguing all the time)

Level 4: - Conflicts of basic trust (Someone tells you a secret, you promise not to tell and then you do)
- Conflicts of incompatability (Your interests and values change)

Level 5: - Communication breakdown (They're just not close enough to really talk about things)
- Personality issues affecting the relationship (His dependency needs were simply too great, they off-balanced the relationship)
- Growing apart (You just have nothing in common anymore; You're like two different people)

12. If you really broke up with a friend, could you get back together with that friend?

Level 1: No. Focus on irreparable concrete damage (He hit you once and might do it again)

Level 2: Focus on unilateral reconciliation (If she said she was really sorry)

Level 3: Recognition of temporary breach, need for mutual reconciliation (It was a temporary thing; you both said you were sorry; "depends")

Level 4: Recognition of possibility of permanent breach due to conflicts over trust and incompatability (See Code 4 for #11 above)

Level 5: Recognition of possibility of permanent breach due to communication breakdown, personality issues, and growing apart (See Code 5 for #11 above).

REFERENCES

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Adams, G. R., & Jones, R. M. (1982). Adolescent egocentrism: Exploration into possible contributions of parent-child relations. Journal of Youth and Adolescence, 11, 25-31.

Barrera, M., Jr., & Ainlay, S. L. (1983). The structure of social support: A conceptual and empirical analysis. Journal of Community Psychology, 11, 133-143.

Belle, D., & Longfellow, C. (1984, August). Turning to others: Children's use of confidants. Paper presented at the 92nd Annual Convention of the American Psychological Association, Toronto, Canada.

Berndt, T. J. (1982). The features and effects of friendship in early adolescence. Child Development, 53, 1447-1460.

Berndt, T. J. (1983). Social cognition, social behavior, and children's friendships. In E. G. Higgins, D. N. Ruble, & W. W. Hartup (Eds.) Social cognition and social development: A sociocultural perspective (pp. 158-189). Cambridge: Cambridge University Press.

Blyth, D. A., Hill, J. P., & Thiel, K. S. (1982). Early adolescents' significant others: Grade and general differences in perceived relationships with familial and nonfamilial adults and young people. Journal of Youth and Adolescence, 11, 425-450.

Bogat, G. A., Chin, R., Sabbath, W., & Schwartz, C. (1983). The Children's Social Support Questionnaire (Tech. Rep. No. 1). East Lansing: Michigan State University.

Broadhead, W. E., Kaplan, B. H., James S. A., Wagner, E. H., Schoenbach, V. J., Grimson, R., Heyden, S., Tibblin, G., & Gehlbach, S. H. (1983). The epidemiologic evidence for a relationship between social support and health. American Journal of Epidemiology, 117, 521-537.

Bryant, B. K. (1985). The neighborhood walk: Sources of support in middle childhood. Monographs of the Society for Research in Child Development, 50(3, Serial No. 210).

Burke, R. J., & Weir, T. (1977). Working men as fathers of adolescents. School Guidance Worker, 13, 1-11.

Burke, R. J., & Weir, T. (1979). Helping responses of parents and peers and adolescent well-being. Journal of Psychology, 102, 49-62.

Caldwell, R. A., Bogat, G. A., & Cruise, K. (1987). The study of social networks from a developmental perspective. Manuscript submitted for publication.

Caldwell, R. A., Bogat, G. A., Kriegler, J. A., & Rogosch, F. (1984, August). Social support: Interrelationships between type, source, and satisfaction. Paper presented at the 92nd Annual Convention of the American Psychological Association, Toronto, Canada.

Caplan, G. (1976). The family as support system. In G. Caplan, & M. Killilea (Eds.), Support systems and mutual help: Multidisciplinary explorations. New York: Grune & Stratton.

Cochran, M. M., & Brassard, J. A. (1979). Child development and personal social networks. Child Development, 50, 601-616.

Cohen, J. (1978). Partialed products are interactions; partialed powers are curve components. Psychological Bulletin, 85(4), 858-866.

DiMatteo, M. R., & Hays, R. (1981). Social support and serious illness. In B. H. Gottlieb (Ed.), Social networks and social support, (pp. 117-148). Beverly Hills, CA: Sage Publications.

Elkind, D. (1967). Egocentrism in adolescence. Child Development, 38, 1025-1034.

Enright, R. D., Lapsley, D. K., & Shukla, D. G. (1979). Adolescent egocentrism in early and late adolescence. Adolescence, 14, 687-695.

Enright, R. D., Lapsley, D. K., & Shukla, D. G. (1980). Adolescent egocentrism-sociocentrism and self-consciousness. Journal of Youth and Adolescence, 9, 101-116.

Flavell, J. H., Botkin, P. T., Fry, C. L., Jr., Wright, J. W., & Jarvis, P. E. (1968). The development of role-taking and communication skills in children. New York: John Wiley & Sons, Inc.

Garbarino, J., Burston, N., Raber, S., Russell, R., & Cronter, A. (1978). The social maps of children approaching adolescence: Studying the ecology of youth development. Journal of Youth and Adolescence, 7, 417-428.

Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Cambridge, MA: Harvard University Press.

Gottlieb, B. H. (1981). Preventive interventions involving social networks and social support. In B. H. Gottlieb (Ed.), Social networks and social support, (pp. 201-232). Beverly Hills, CA: Sage Publications.

Gottlieb, B. H. (1983). Social support strategies: Guidelines for mental health practice. Beverly Hills, CA: Sage Publications.

Greenbergh, M. T., Siegel, J. M., & Leitch, C. J. (1983). The nature and importance of attachment relationships to parents and peers during adolescence. Journal of Youth and Adolescence, 12, 373-386.

Kriegler, J. A. (1985). The developmental aspects of social support: A multidimensional analysis of children's social networks. Unpublished master's thesis, Michigan State University, E. Lansing, MI.

Kurdek, L. A., & Krile, D. (1982). A developmental analysis of the relationship between peer acceptance and both interpersonal understanding and perceived social self-competence. Child Development, 53, 1485-1491.

Lapsley, D. (1985). Elkind on egocentrism. Developmental Review, 5, 218-227.

Lapsley, D., Milstead, M., Quintana, S. M., Flannery, D., & Buss, R. R. (1986). Adolescent egocentrism and formal operations: Tests of a theoretical assumption. Developmental Psychology, 22(6), 800-807.

Lapsley, D., & Murphy, M. (1985). Another look at the theoretical assumptions of adolescent egocentrism. Developmental Review, 5, 201-217.

Leavy, R. L. (1983). Social support and psychological disorder: A review. Journal of Community Psychology, 11, 3-21.

Miller, J. B. (1976). Toward a new psychology of women. Boston, MA: Beacon Press.

Nair, D., & Jason, L. A. (1984, May). An investigation and analysis of social networks among children. Poster session presented at the annual convention of the Midwestern Psychological Association, Chicago.

Piaget, J. (1956). The origins of intelligence in children. New York: International Universities Press, Inc.

Piaget, J., & Inhelder, B. (1969). The psychology of the child. New York: Basic Books, Inc.

Pitcher, E. G., & Schultz, L. H. (1983). Boys and girls at play: The development of sex roles. New York: Bergin & Garvey Publishers, Inc.

Riley, T., Adams, G. R., & Nielsen, E. (1984). Adolescent egocentrism: The association among imaginary audience behavior, cognitive development, and parental support and rejection. Journal of Youth and Adolescence, 13, 401-417.

Sandler, I. N. (1980). Social support resources, stress and maladjustment of poor children. American Journal of Community Psychology, 8, 41-52.

Sandler, I., Wolchik, S., & Braver, S. (1985). Social support and children of divorce. In I. G. Sarason & B. R. Sarason (Eds.) Social support: Theory, research, and applications (pp. 371-389). Dordrecht, The Netherlands: Martinus Nijhoff Publishers.

Selman, R. L. (1980). The growth of interpersonal understanding: Developmental and clinical analyses. New York: Academic Press.

Sullivan, H. S. (1953). Conceptions of modern psychiatry. New York: W. W. Norton & Company, Inc.

Tietjen, A. (1982). The social networks of preadolescent children in Sweden. International Journal of Behavioral Development, 5, 111-130.

Turiel, E. (1983). The development of social knowledge. Cambridge: Cambridge University Press.

Walsh, L. M., & Kurdek, L. A. (1984). Developmental trends and gender differences in the relation between understanding of friendship and asociality. Journal of Youth and Adolescence, 13, 65-71.

Weiner, I. B., & Elkind, D. (1972). Child development: A core approach. New York: John Wiley & Sons, Inc.