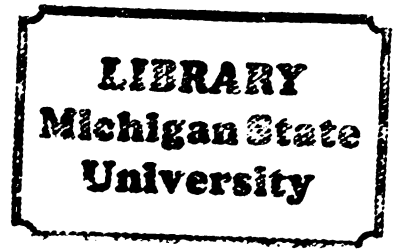




114
630
THS



This is to certify that the
thesis entitled

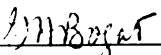
THE DEVELOPMENTAL ASPECTS OF SOCIAL SUPPORT:
A MULTIDIMENSIONAL ANALYSIS OF
CHILDREN'S SOCIAL NETWORKS

presented by

Julie Ann Kriegler

has been accepted towards fulfillment
of the requirements for

M.A. degree in Psychology



Major professor
G. Anne Bogat

Date 2/7/85



RETURNING MATERIALS:
Place in book drop to
remove this checkout from
your record. FINES will
be charged if book is
returned after the date
stamped below.

12-02-07		
----------	--	--

THE DEVELOPMENTAL ASPECTS OF SOCIAL SUPPORT:
A MULTIDIMENSIONAL ANALYSIS OF
CHILDREN'S SOCIAL NETWORKS

By

Julie Ann Kriegler

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Psychology

1985

ABSTRACT

THE DEVELOPMENTAL ASPECTS OF SOCIAL SUPPORT: A MULTIDIMENSIONAL ANALYSIS OF CHILDREN'S SOCIAL NETWORKS

By

Julie Ann Kriegler

Social support networks are important influences on both physical and emotional health. Unfortunately, investigators have usually not sufficiently addressed the complex qualitative dimensions of social support, nor considered its developmental aspects. This investigation addresses these issues by providing an in-depth examination of children's social networks. One hundred and sixty-nine elementary school children, ages eight through thirteen, of varying races participated in the study. Preliminary data on the Children's Social Support Questionnaire (CSSQ) demonstrate this new instrument's utility in assessing social support. Major findings indicates that significant differences exist between family/relatives and other potential sources of support regarding the specific types of support they provide for children. Family members act as support generalists, whereas peers and professionals provide more specialized support. Furthermore, the structure and quality of children's networks differed as a function of both gender and age.

To G. Anne Bogat who believed in
me before I knew how to believe in myself;
to Robert A. Zucker for his consistent
faith and support; and to Al Aniskiewicz
without whom this would not have been possible.

ACKNOWLEDGEMENTS

I would like to thank Robert Caldwell for his aid in the development and analysis of this research, and Gary Stollak for his support of the project.

My sincere appreciation to Thomas Packard, Nick Ialongo, and Jane Pearson for their seemingly endless patience and assistance as I struggled through my analyses.

TABLE OF CONTENTS

	Page
LIST OF TABLES.	vi
LIST OF FIGURES	vii
INTRODUCTION	1
Social Support and Health.	2
Methodological Difficulties.	4
Definitional Issues	4
Measurement Issues.	7
Children's Social Support.	9
Rationale for Current Study.	13
Hypotheses	14
METHOD.	19
Subjects	19
Procedure.	19
Informed consent.	19
Testing procedures/data collection.	20
Tests and Measures	20
The Children's Social Support	
Questionnaire	20
Perceived Competence Scale for Children	21
Class-List Sociometric.	23
Participation in Community Groups Checklist	23
RESULTS	24
Comparative Analyses Of and Between Measures	24
Hypothesis 1.	24
Hypothesis 2.	26
Hypothesis 3.	26
Hypothesis 4.	27
Network Characteristics.	27
Hypothesis 5.	29
Hypothesis 6.	34
Hypothesis 7.	34
Hypothesis 8.	34

	Page
DISCUSSION.	39
Relationships Among Measures	40
Network Characteristics.	44
Sex differences	46
SUMMARY AND CONCLUSIONS	47
APPENDIX A.	49
APPENDIX B.	50
APPENDIX C.	54
APPENDIX D.	57
REFERENCES.	58

LIST OF TABLES

Table	Page
1 Structure of the Children's Social Support Questionnaire.	25
2 Participation in Community Groups by Grade, Age, and Sex	28
3 Number of Supporters by Grade, Age, and Sex.	30
4 Comparison of Four Types of Support by Grade, Age, and Sex	31
5 Interaction of Type and Source of Social Support . . .	32
6 Means Contributing to the Type by Source Interaction	35
7 Gender and Age Differences in Emotional Support. . .	38

LIST OF FIGURES

Figure	Page
1 The interaction of type and source of social support in children's networks.	36

INTRODUCTION

A central premise underlying both the philosophy and practice of community psychology is the belief that adjustment is linked to the characteristics of the social environment within which individuals function (Holahan & Moos, 1982). In their study of these person-environment interactions, community psychologists have begun to focus on the salutary properties of natural support systems. An early theory regarding the place of social networks in the development and maintenance of health was proposed by Smith and Hobbs (1966). These theorists suggested that mental illness is not the private misery of an individual, but is directly tied to the unavailability and/or dysfunction of natural sources of social support in the individual's life. More recently, social support has been conceived of as a moderator variable which helps to explain why some people under stress remain healthy and others become ill (Cobb, 1976; Erickson, 1977; Johnson & Sarason, 1979; Leavy, 1983). This theoretical stance holds that interventions which increase available social support facilitate people's ability to cope by buffering or lessening the effects of stress.

The standard research paradigm used to investigate this stress and coping model of social support assesses stressful life events and/or other forms of stress and their negative effect(s) on physical

and mental health indices; then goes on to demonstrate the buffering effects social support has on those results. This idea, that an increase in social interaction will bring about beneficial change, in either or both mental and physical health has been investigated in populations across the life span. For example, Cobb (1976) has demonstrated increased weight gain in low birth weight infants and Blazer (1972) has found reduced mortality among the elderly, both ostensibly due to an increase in supportive social relationships.

Social Support and Health

Some of the earliest investigations elucidating the impact of social support networks on mental health were studies conducted with subjects suffering from schizophrenia. For example, Pattison et al. (1975) found that the networks of psychotic patients were smaller and denser than those of normals and neurotics, and Tolsdorf (1976) found that changes in network size and function began at or before the time of first hospitalization for individuals suffering from schizophrenia. A common interpretation made from these findings, and others like them, is that persons suffering from schizophrenia can be aided by the provision of more adequate social networks (e.g., President's Commission on Mental Health, 1978; Test, 1981). However, it is currently recognized that difficulty with social interactions is as much a symptom as a cause of mental health problems (Shinn, Lehmann, & Wong, 1983) and that an increase in intimate social relations may not in fact be a productive intervention with this particular subpopulation (Beels, 1981).

Research on social support networks and their effects has greatly expanded over the last eight to ten years. As described by Leavy

(1983), the research in this area has been of five basic types. First, there has been a substantial amount of global research comparing clinical with nonclinical populations. These studies have yielded consistent findings that "normals" have more support available to them than individuals with psychological disturbances. Second, other research has examined populations with specific disorders (e.g., depression) and found clear indications of a relationship between a lack of support and serious disorders. However, contrary to the unidirectional causal hypothesis emanating from the early studies of schizophrenia, recent studies indicate that the best model for the relationship between social support and disorder may be a cyclical one with both factors acting synergistically. The third type of research on social support is focused on the interactional effects of support and life stress in general populations. Findings from these investigations indicate that maintenance of an intimate relationship is a variable closely tied to good mental health, and that social support appears to act as a buffer to stress. The fourth type of investigation has conducted comparisons of individual coping strategies in the face of stress. Instead of focusing on the characteristics of the population, this type of study assesses the responses of groups of people who are all attempting to cope with the same stressful life event. The researcher can then determine whether those individuals with more and/or better support networks manifest fewer psychological symptoms. Results of these studies indicate that depending on the life situation and the person(s) involved, "better" support may take different forms. That is, for middle aged women

returning to college low-density networks seem to be most satisfying (Hirsch, 1980) while high-density networks seem to be most satisfying for freshman women (Leavy, 1979). The fifth, and final, area of social support research has examined personal (personality) or demographic (e.g., socioeconomic status) characteristics which differentiate supported from unsupported people. Among the findings from this body of literature are results indicating substantial sex differences in type and amount of support received by men and women (e.g., Hirsch, 1979).

While recent studies have tended to confirm the proposition that deficiencies in primary group ties are associated with increased vulnerability to both physical and mental health problems [e.g., reduced levels of social support are related to various indices of psychological distress and psychiatric symptomatology (Eaton, 1978; Hirsch, 1979) and low levels of social support are related to psychosomatic complaints and physical ailments (e.g., Gore, 1978)], the research contributing to these findings has been subject to a number of limitations (Holahan & Moos, 1982; Leavy, 1983; Nair & Jason, 1984).

Methodological Difficulties

Definitional Issues

The concept of social support is frequently introduced in conversations with its meaning usually taken for granted. However, this seemingly simple and well understood concept is actually a complex multidimensional construct for which a universal definition has yet to be developed. In fact, the definitions offered for this concept have been so diverse, over-simplified, and idiosyncratic

that some theorists have been prompted to liken an attempt at developing a taxonomy of social support to "disentangling a conceptual morass" (Shumaker & Brownell, 1983).

The actual definitions offered have ranged from vague (e.g., whatever factors in the environment that promote a favorable course of illness; Beels, 1981), to circular (the support accessible to an individual through societal ties to other individuals, groups, and the larger community; Lin, Simeone, Ensel, & Kuo, 1979). Others have stressed the cognitive aspects of social support and offered definitions which emphasize a subject's belief that s/he is cared for, esteemed, and a member of a network of communication and mutual obligation (Cobb, 1976). Kahn and Antonucci (1980) conceptualized social support in terms of the three "A's": Affirmation (provision of information about the appropriateness of one's actions and/or thoughts), (b) Affect (expression of caring and emotional intimacy), and (c) Aid (the availability and use of direct help). Although still relatively simplistic, this definition begins to capture the full meaning and complexity of social support. Given these (and many other) definitions, House (1981) proposed an integrative model of support based on four types of behaviors: (a) emotional support, which includes behaviors such as caring, trust and empathy; (b) instrumental support which includes helping others with work and loaning money; (c) informational support, which is accomplished through giving information or teaching a skill which can provide a solution to a problem; and (d) appraisal support or information, which helps evaluate personal performance. This definition or model more than adequately integrates the types of supportive action

provided by social networks; however as Leavy (1983) is quick to point out, in addition to these behaviors the structure (existence and availability of the social ties themselves), and the content (the quality of the relations) are equally important variables.

The majority of elements delineated in definitions of social support fit into three general categories: (a) function (the gratification of specific needs, (b) content (the commodity provided by or within a supportive interaction), and (c) structure (the number of friends, source of relationships, and the frequency of interactions). However, recent theorists (Shumaker & Brownell, 1983) have suggested that these three categories still do not present an accurate conception of social support. They argue that a group of "key constructs" including bidirectionality (the idea that social support involves exchange between people), social support as a dynamic, ongoing process, contextual variables, and multiple levels of analysis, must be included in a complete description of social support.

Further, as Hirsch (1981) has pointed out, it is important to study the specific types of support which arise out of different types of relationships within a social network (and the types of support provided by each). Many researchers and theorists alike have treated social support as a unidimensional construct and as such have considered it to be synonymous with emotional support, which in actuality is but one part of the totality called social support. In fact a support network may provide cognitive guidance, social reinforcement, material aid, physical assistance, socializing experiences, and emotional support (Caldwell, Bogat,

Kriegler, & Rogosch, 1984; Hirsch, 1981; Nair & Jason, 1984). Thus, conclusions based on measures tapping only the gross number of supporters and overall satisfaction are to be judged premature at best. While the total number of individuals fulfilling one or more supportive function is equivalent to the size of an individual's network, other important dimensions must be included in the classification and/or analysis of social support networks.

Measurement Issues

Even though investigators have distinguished different types of support there have been very few efforts to empirically validate these conceptual distinctions. Thus a major difficulty in interpreting the social support literature is due to the fact that the available social support measures utilized in these investigations have been developed in an "ad hoc fashion" (Holahan & Moos, 1982) in order to meet the needs of particular studies, resulting in many idiosyncratic indices without established reliability and validity (Holahan & Moos, 1982; Leavy, 1983). In addition, instruments of social support have typically been limited to exclusively quantitative measures (the total number of individuals available and/or the number of contacts with these individuals), although the literature has simultaneously suggested that the health enhancing aspects of social support may in fact be a function of the quality of social support rather than its absolute quantity.

Another measurement difficulty stems from the lack of data demonstrating the independence of the social support measures and the measures of adjustment utilized to document the positive relationship between adequate social support and positive health.

The capacity to elicit social support may be a measure of strong ego functioning which would in turn lead to relatively high scores on social support measures and better adaptation or adjustment.

Certainly when broadly conceived the perception of being loved and esteemed and able to count on others is an integral part of emotional well being (Turner, 1981). Therefore, without statistical procedures to empirically differentiate the measures used, investigators may be measuring the same thing in a slightly different way.

Furthermore, there is an absence of empirical instruments available for measuring relative levels of adjustment, well being, and other terms connoting positive health states (McGuire & Gottlieb, 1979). Thus, "normal" samples at pre-test may be skewed to the positive end of existing scales creating a ceiling effect and disallowing accurate assessment of change resulting from preventive network interventions employed with these populations.

In addition to the adequacy of dependent measures, the ability to find improvement in the mental health of participants in primary preventive programs who are not at-risk may be due to the time at which these measures are given. Early inoculation may only show its effects on health maintenance at a later date, unmeasurable within the confines of typically employed research designs (McGuire & Gottlieb, 1979).

The majority of studies in the area of social support have been retrospective designs within which both support ratings and disturbance measures have been assessed simultaneously. The data from these studies are restricted to correlational findings which disallow interpretations beyond a relational level. In general the

prospective studies that have been done (e.g., Caldwell & Bloom, 1982; Holahan & Moos, 1981; Norbeck & Tilden, 1983) continue to support the idea of a positive relationship between high levels of support and good health. However, there is also some reason to believe that this relationship between support and disorder (or health) may vary as a function of a particular research design (Monroe, 1983). Therefore, further prospective, longitudinal data are needed to continue to clarify and substantiate the body of existing empirical evidence.

Additionally, most findings which have demonstrated a correlation between social and community ties and health status have been derived from observations of atypical populations such as psychiatric patients and college freshmen. The results based on these samples of convenience may not be generalizable (Berkman & Syme, 1979; McFarlane et al., 1980); yet relatively few studies have investigated the relationship between social network status and health indicators in substantial samples of the general population.

Finally, little information has been provided as to how alternative sources of support relate to the health of different groups of people (Leavy, 1983), particularly to different age groups and developmental stages of life.

Children's Social Support

Although the importance of peer relations in childhood has been extensively documented (see Hartup, 1983 for a thorough review of this literature), very little research has been conducted on the nature of children's social support systems. This dearth of research on children's social support stands in sharp contrast to

the burgeoning literature on the characteristics of adults' social support relations. Although progress has been, and continues to be, made in identifying the characteristics of supportive relationships which actively mediate the effects of stress, we cannot simply assume that the social networks of adults and children provide similar types of support or are utilized in the same ways.

If mental health professionals wish to successfully intervene within social networks it is important to gain knowledge about the developmental aspects of social networks (Nair & Jason, 1984). This knowledge becomes crucial if professionals are going to work effectively with natural social relations in primary prevention programs. A preventive approach requires one to know which stages, qualities, or structures of social support development lead to later difficulties and how to intervene at or before these critical points. The study of children's social networks and the type of support they receive is an important step in gaining the developmental knowledge necessary to achieve the goals of prevention.

Developmental considerations in the evolution and utilization of support networks were addressed by Cochran and Brassard (1979) in their network analysis of both parental and child relationships, and the effects of these relationships on/for child development. These authors illustrated the direct influence parental networks may have on children. These adult relationships are said to provide cognitive and social stimulation stemming from different activities engaged in a variety of settings. Furthermore, direct support, observational models, and opportunities for active participation are all provided for the child by these adult relationships (Cochran & Brassard, 1979, p. 605).

For children to go on to develop and then maintain their own network relationships they must be capable of certain cognitive and social skills. Along with the development of basic trust and empathy, they must achieve some mastery of the concept of reciprocity, and thus become capable of reciprocal exchange (Cochran & Brassard, 1979). According to Piagetian theory preoperational children's understanding and/or grasp of exchange principles may be limited in time and highly specific in content. As a child matures, s/he may begin to understand equivalence and exchange as their definition of value (worth) becomes less egocentric. Furthermore, immediacy of reciprocal response decreases in importance as one grows older, and therefore different forms of support may be exchanged (e.g., emotional support for material aid) at different points in a relationship. Thus, Cochran & Brassard argue that the ability to engaged in exchanges of goods and services, information, and emotional support at increasingly sophisticated levels is integral to successful participation in social groups across the life span. Therefore, to fully understand the development and structure of social support networks we must begin with the study of elementary aged (concrete-operational) children.

In one of the only studies investigating children's support systems, Sandler (1980) found that the effects of stress on the adjustment of elementary school children were reduced by living with two parents and older siblings. However, this study fails to provide information about the important aspects of these relationships which actively mediate the effects of those stressors.

In another of the few studies investigating elementary school children's networks directly, Nair and Jason (1984) found that the relative influence of specific dimensions of social support was different for their 5th through 8th grade subjects than previous findings with adult populations. For these school-aged children the support functions of cognitive guidance, material aid, and emotional support tended to be provided primarily by family members. In fact, networks predominated by family members appeared to be the most satisfying to children (a finding similar to that found in studies of adult clinical populations where increasing numbers of family members has correlated with decreasing severity of disorder (see Leavy, 1983 for complete discussion). In general, children appeared to be the most satisfied with networks which consisted of supporters they had known a long time, who provided them with large amounts of material aid, physical assistance and emotional support, and in which a small number of their total relationships consisted of friends (a finding which appears to be contradictory to the importance placed on peer relations by developmental theorists and as such demands further investigation). Further findings of this study indicate that the two variables of physical assistance and homogeneity (how similar the individual was to his/her social network in terms of age, sex, race, and grade) accounted for the most variance related to the adjustment (determined by teacher rating) of these children. Thus the conclusions were that a network containing large numbers of supporters who provide physical assistance, is predictive of adjustment in school-aged children (Nair & Jason, 1984). These findings are contrary to the results

based on some adult subpopulations wherein homogeneous networks providing cognitive guidance were the most important in facilitating adjustment (e.g., Hirsch, 1980). As Nair and Jason point out, it does seem likely that school-aged children, with less developed cognitive skills, would depend on more physical or instrumental forms of support. Given that the sample these conclusions were based on was quite small ($N = 38$) and the findings have yet to be replicated, further work is needed to explore these issues in greater detail. However, this investigation does highlight the importance of developmental differences and their relation to social support dimensions.

Rationale for Current Study

It is apparent that there is a substantial amount of empirical work yet to be done in the area of social support, particularly regarding the characteristics and functions of children's social networks. To date there is a dearth of knowledge regarding the developmental aspects of people's social systems, and an absence of research measures from which to gain this knowledge. It can not be taken for granted that children's social support networks are similar in structure and/or function to adult's networks. Information about the developmental aspects of social support is crucial for understanding, and effectively working with, natural social relations.

The purpose of this particular investigation was to begin to fill the gap in our knowledge of children's social support; in doing so, this study utilized a new instrument designed to measure children's social support, The Children's Social Support Questionnaire

(CSSQ, Bogat, Chin, Sabbath, & Schwartz, 1983a). Simultaneous completion of The Perceived Competence Scale (Harter, 1982), a peer sociometric measure, and the Participation in Community Groups Checklist (Bogat, Chin, Sabbath, & Schwartz, 1983b) was carried out. The CSSQ allows for both qualitative as well as quantitative analysis of social networks. Thus, this investigation was designed to provide an in-depth analysis and understanding of the multidimensional nature of children's support, and its relationship to other important variables.

Hypotheses

Given the goals of this research project, the following hypotheses are proposed.

Hypothesis 1: It is predicted that a content analysis, using a Q-sort method, of the CSSQ, by thirty individuals in the mental health disciplines will yield four factors: (a) socialization, (b) advice and information, (c) physical assistance, and (d) emotional support. An acceptable level of agreement will be reached across all raters, thus establishing the face validity of this measure.

Hypothesis 2: Both the qualitative and quantitative areas of the CSSQ (Bogat et al., 1983a) will correlate positively with the PCS (Perceived Competence Scale; Harter, 1982). Specifically, the following relationships will be observed:

(a) Children with larger and more satisfying (high average happiness rating) networks will have higher self-esteem (as measured by the General Self-Worth Subscale of the PCS) than those children with smaller and less satisfying networks.

(b) Children who have a high number of nominees on the socialization section of the CSSQ will score higher on the Social Competence Subscale (of the PCS) than those children who have a low number of nominees on the socialization questions.

(c) Children who have a high number of nominees on the information and advice section of the CSSQ will score higher on the Cognitive Subscale (of the PCS) than those children with a low number of nominees on the information and advice questions.

Hypothesis 3: There will be several significant relationships found between the data from the CSSQ and the Class-List Sociometric. In general, children with a larger (greater number of nominees) and more satisfying (high average happiness) peer component in their networks are expected to receive more positive peer nominations on the sociometric than those children who have smaller and less satisfying peer networks.

Thus, analysis of this data subset is expected to yield three significant correlations: (a) a positive

correlation between the number of positive nominations on the sociometric and the number of peers nominated on the CSSQ, (b) a negative correlation between the number of peers nominated on the CSSQ and the number of negative nominations on the sociometric, and (c) a positive correlation between average happiness with peers in one's network and the number of positive nominations on the sociometric.

Hypothesis 4: There will be a positive correlation between the socialization area on the CSSQ and the children's participation in community groups (as measured by the Participation in Community Groups Checklist). Specifically, the number of groups a child belongs to will be positively related to the number of people nominated on the socialization section of the CSSQ.

The following network characteristics of children's social support are postulated:

Hypothesis 5: The following relationships between source and type of social support are predicted:

- (a) Family/relatives will provide significantly more advice and information, physical assistance, and emotional support than other possible sources of support (e.g., peers).
- (b) The primary type of support provided by peers will be that of socialization. That is, there will

be relatively more peers nominated on the four socialization questions than on any of the other three areas of support represented on the CSSQ.

(c) The primary type of support provided by professionals will be information and advice. Thus professionals will be nominated on the four information and advice questions more often than on any of the other three areas of support.

- Hypothesis 6: It is hypothesized that children's overall social network satisfaction (happiness) will be positively correlated with the percent of family/relative members in their overall network. That is, a positive Pearson Product Moment Correlation between kin-ratio $\left(\frac{\# \text{ of family}}{\text{total } \# \text{ of nominees}} \right)$ and overall satisfaction (happiness) is predicted.
- Hypothesis 7: It is predicted that family/relatives will remain as the support source most highly correlated with children's overall satisfaction (happiness) across the ages/grade levels assessed. However, as indicated by increasingly higher correlations between peer ratio $\left(\frac{\# \text{ of peers}}{\text{total } \# \text{ of nominees}} \right)$ and satisfaction (happiness) peers will become increasingly more important sources of support with increases in age.
- Hypothesis 8: It is predicted that girls will have/nominate more people providing emotional support than will

boys. The absolute difference observed between the sexes will be larger in the oldest age group than in the younger three age groups. Thus, analysis of the emotional support factor/subscale will yield a significant main effect for sex and a significant sex by age interaction. No hypothesis is postulated regarding a main effect for age.

METHOD

Subjects

The subjects participating in this study were one-hundred and sixty-nine children, ages eight through thirteen, who were attending two elementary schools in the Flint, Michigan public school system. These children were enrolled in the third ($n = 46$), fourth ($n = 39$), fifth ($n = 40$), and sixth ($n = 44$) grades. All of the children were members of lower socioeconomic status families. Ninety-five (56%) of the children were black, sixty-six (39%) were white, two (1%) were Hispanic, and six (4%) were of other or undetermined racial backgrounds. Fifty-six percent ($n = 94$) of the children were female, and forty-four percent ($n = 75$) were male.

Procedure

Informed consent. A letter describing the general purpose and procedures of this study was sent home with all children in several third, fourth, fifth, and sixth grade classes in two elementary schools. Those parents/guardians who wanted their child to participate in the study returned a permission slip indicating their consent to the child's teacher (see Appendix A for a copy of these forms). Only those children whose parents/guardians had given their informed consent were allowed to participate in this study. Children whose parents/guardians objected to their participation were taken to

another room and/or engaged in an alternate activity during the administration of the questionnaire.

Testing procedures/data collection. Data was collected during two separate testing periods within a one-week period of time. Each data collection period lasted approximately forty-five minutes.

Tests and Measurements

A total of four assessment instruments were used in this study: (a) The Children's Social Support Questionnaire (CSSQ, Bogat et al., 1983a), (b) The Perceived Competence Scale for Children (Harter, 1982), (c) a Class-List Sociometric, and (d) the Participation in Community Groups Checklist (Bogat et al., 1983b). These measures were administered verbally, question by question, to each group of children participating in the research in their respective classrooms.

The Children's Social Support Questionnaire. The Children's Social Support Questionnaire (CSSQ, Bogat et al., 1983a) is designed to measure school-aged children's perceived social support. Children are asked sixteen questions which measure who fulfills specific supportive roles and/or functions in their lives. Each question has space for the child to list ten different names of supporters. The sixteen questions are divided into four subareas or types of social support each of which contains four questions: (a) socialization (e.g., who do you 'hangout' 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?). The scale provides both quantitative (amount of people overall and within each

subarea) and qualitative indices of the children's perceived social network. The latter data is collected on the final page of the questionnaire which is administered separately. On this sheet the investigator compiles a list of the unique names in the child's overall network, gathered from his/her answers to the original sixteen questions. Then the child is asked to complete a series of questions about each person listed, specifying the following: the sex of the support person, the race of the support person, their relationship to/with the target child (family, neighbor, school-mate, friend, professional and/or other), the frequency of contact between the child and supporter, and how happy the child is with the relationship. Aggregate scores from these indices allow for analysis of the children's networks in terms of source (race, sex, and role of support person), content (type of support received), frequency of, and satisfaction (happiness) with, the support they receive (see Appendix B for a copy of this scale).

Perceived Competence Scale for Children. The Perceived Competence Scale for Children (Harter, 1982) is a self-report measure of children's perceptions of their own competence. Based on the idea that children do not feel equally competent in every skill domain, an attempt was made to identify the major competence domains relevant to elementary school children (Harter, 1982). As a result, the scale is made up of four competence subscales: (a) cognitive competence emphasizing academic performance (e.g., being smart, doing well on class work; (b) social competence vis-a-vis one's peers (e.g., having a lot of

friends); (c) physical competence emphasizing sports and outdoor games (e.g., doing well at sports); and (d) general self-worth (e.g., being happy with the way one is).

A 'structure alternative format' (Harter, 1982, p. 89) is utilized on this scale. The child is presented with a series of statements describing two types of children one to the right of the page the other to the left (e.g., some kids often forget what they learn but other kids can remember things easily). The subject is first asked to decide which kind of child s/he is most like--the children described on the right or the left. Once having made the decision, the child decides whether the description on that side is "sort of true" or "really true" for him or her. Each item is scored from one to four, where one is equivalent to low perceived competence, and four indicates high perceived competence. Scores are summed and then averaged for each subscale, resulting in four separate subscale means.

Psychometric work on the perceived competence scale was conducted with four different samples, across four states, and totalling over 2,000 children in all. Subscale reliabilities across all samples range from .75 to .83, .75 to .84, .77 to .86, and .73 to .82 for the cognitive, social physical, and general subscales, respectively. Test-retest reliability on a subsample was found to be .78, .75, .80, and .69 for the four subscales. Convergent validity has been established with teacher ratings for the cognitive and physical domains and with sociometric scores for the social domain (see Appendix C for a copy of this scale).

Class-List Sociometric. The Class-List Sociometric consists of a typed list of the names of all of the children enrolled in a particular classroom. The presentation of an entire class list is said to reduce the effect that memory alone may have on the children's nominations (Asher, Singleton, Tinsely, & Hymel, 1979). First the children were asked to select (by placing a smiling face by the names) the three children they would most like to play and do something with. Then the children were asked to select (by placing a frowning face by the names) the three children they would least like to play or do something with. This procedure yields a positive nomination score and a negative nomination score for each child participating in the study.

Participation in Community Groups Checklist. The participation checklist asks children to list all social groups (e.g., 4-H, Boy/Girl Scouts) to which they belong. Then for each group the child lists, s/he indicates (a) whether they are a member or a leader in the group and (b) how often they participated in each group during the last year (see Appendix D for a copy of this measure).

RESULTS

Comparative Analyses Of and Between Measures

Hypothesis 1. It was predicted that a content analysis of the CSSQ using a Q-sort technique would result in four separate factors (subareas). Thirty-three graduate students in Clinical Psychology and other related disciplines (e.g., Counseling and Educational Psychology) completed a Q-sort of the sixteen questions appearing on the Children's Social Support Questionnaire (CSSQ). They sorted the questions into four categories representing the four types of support assessed on the CSSQ: socialization, advice and information, physical assistance, and emotional support. Placement of the questions was based on definitions of each type of support. Definitions for all types of support except socialization were based on House (1981) and provided at the beginning of the task. (See Table 1 for definition and item content of each subtype.) This content analysis of the CSSQ yielded acceptable levels of interrater agreement on all sixteen questions. (Range: 72.5% - 100%; $\bar{x}$ = 89.5%.) Furthermore, the concept of four subtypes of social support (each made up of four questions) was also upheld. Specifically, the average interrater agreement for the four types of support on the CSSQ were as follows: socialization 94.6%, advice and information 77.13%, physical assistance 83.38%, and emotional support 99.16%.

Table 1

Structure of the Children's Social Support Questionnaire

-
- A. Socialization: Spending social time with people on a planned for and/or causal basis.
1. Who do you hang out with?
 2. Who are fun people to talk to?
 3. Who do you go out with?
 4. Who are your friends at organized activities?
- B. Advice and Information: Giving information, teaching a skill which can provide a solution to a problem or be utilized in some other manner.
5. Who gives you information or advice about religious things?
 6. Who gives you information or advice about personal things?
 7. Who teaches you how to do things?
 8. Who gives you information or advice about fun things to do?
- C. Physical Assistance: Aiding another person, helping others to do their work, helping on tasks.
9. Who can you count on to help you do things that need to get done?
 10. Who takes you places you need to go?
 11. Who lets you borrow a little bit of money when you need it?
 12. Who lets you borrow something from them if you need it?
- D. Emotional Support: Involving caring, trust, and empathy.
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?
-

Hypothesis 2. It was predicted that the subareas (categories) on the CSSQ would be positively related to specific subscales on the Perceived Competence Scale for Children. Of the four relationships tested, only two were found to be statistically significant.

General self-worth on the Perceived Competence Scale and total support (size of overall network) on the CSSQ were found to be unrelated ($r = -.0047$, $p < .48$). However, the relationship between general self-worth and total satisfaction (average happiness) was low but statistically significant as predicted ($r = .14$, $p < .04$).

The positive correlation found between the social competence subscale on the Perceived Competence Scale and the socialization area on the CSSQ was also statistically significant ($r = .20$, $p < .007$). However the scores on the cognitive subscale on the self-competence measure and the information and advice area of the CSSQ were found to be unrelated ($r = .09$, $p < .13$).

Hypothesis 3. It was postulated that there would be a significant positive correlation between the number of positive sociometric nominations received and the peer component on the CSSQ and a significant negative correlation between the latter and the number of negative nominations on the sociometric. Pearson Product Moment coefficients showed no significant relationships between the class sociometric measure and the CSSQ. The correlations were in the predicted direction for both the relationship between the number of peers nominated on the CSSQ and the number of positive nominations on the sociometric ($r = .10$, $p < .10$), and the number of negative nominations on the sociometric ($r = -.05$, $p < .26$). However, the coefficients were quite small and nonsignificant. Furthermore, there

was no relationship found between an individual's happiness with his/her peers and the number of positive nominations received on the peer sociometric ($r = .09$, $p < .11$).

Hypothesis 4. A positive relationship between the socialization area on the CSSQ and the children's participation in community groups was predicted. The ecological validity of the CSSQ, specifically the socialization area of this questionnaire, was supported by the finding that the Pearson Product Moment Correlation between children's participation in community groups (number of groups belonged to) and the socialization area of the CSSQ was a statistically significant and positive one ($r = .23$, $p < .002$). Further, findings regarding participation in community groups indicated that girls participate in more of these activities than do boys ($\bar{x} = 2.27$ vs. 1.69 , respectively) and that older children participate more frequently than do younger children (see Table 2 for a specific breakdown of this data).

Network Characteristics

When analyzing total network size across the entire population/sample (collapsed across school, age/grade, and gender) the number of supporters nominated by the children ranged from three to forty, with a mean of 16.98 supporters. The average number of supporters nominated increased as the subjects became older. The mean number of supporters in sixth graders' networks was 21.95 while for third, fourth and fifth graders the means were 13.10, 16.41, and 16.55, respectively. The average network size (total support) was basically equivalent for girls and boys. Boys nominated an average of 16.10

Table 2

Participation in Community Groups by Grade, Age, and Sex

Grade	N	$\bar{X}$ Number Groups	Std. Dev.
Third ($\underline{n}$ = 46)	52	1.13	.91
Fourth ($\underline{n}$ = 39)	69	1.77	1.77
Fifth ($\underline{n}$ = 40)	95	2.38	2.18
Sixth ($\underline{n}$ = 44)	124	2.82	2.08
Age in Years			
8 ($\underline{n}$ = 14)	22	1.57	.94
9 ($\underline{n}$ = 36)	44	1.22	1.15
10 ($\underline{n}$ = 37)	73	1.97	2.15
11 ($\underline{n}$ = 32)	80	2.50	2.06
12 ($\underline{n}$ = 39)	93	2.39	1.99
13 ($\underline{n}$ = 11)	28	2.55	2.25
Sex			
Male/Boy ($\underline{n}$ = 75)	127	1.69	1.16
Female/Girl ($\underline{n}$ = 94)	213	2.27	2.06
Σ	340	2.01	1.89

supporters whereas girls nominated an average of 17.71 supporters. (See Table 3 for breakdown of total support.)

When the four subtypes of support were examined separately some sex differences were found. The most striking of these was in the area of emotional support where the mean number of supporters nominated by boys was 13.66 compared to a mean of 18.25 for girls (this finding is discussed in detail below). There also appeared to be a difference in the area of advice and information where boys again nominated less supporters than did the girls ($\bar{x} = 10.93$ and 14.48, respectively). (See Table 4 for breakdown of the four types of support by children's grade, age, and sex.)

Hypothesis 5. Several relationships between source and type of social support within children's networks were predicted. When a MANOVA procedure was conducted on the relationship between type of support (socialization, advice and information, etc.) and source of support (family, friend, neighbor, schoolmate or professional), the results were significant in the areas and direction hypothesized. While there was no main effect for type of support ($F(3, 7631) = 2.09$, $p > .01$), a highly significant main effect for source of support ($F(5, 2850) = 48.50$, $p < .0001$), and for the type-by-source interaction was found ($F(15, 7862) = 81.03$, $p < .0001$; Greenhouse-Geisser Adjusted $F(13, 7631) = 132.43$, $p < .0001$). The complete MANOVA table is presented in Table 5.

A priori planned comparisons were then completed to identify the nature of this interaction. Results of these tests-after-ANOVA indicate that significant critical differences do exist between the

Table 3

Number of Supporters by Grade, Age, and Sex

Total Population		Total Supporters	$\bar{X}$ Supporters	Std. Dev.
Σ	($\underline{N}$ = 169)	(2870)	(16.98)	(7.29)
School 1	($\underline{n}$ = 74)	1208.00	16.32	6.78
School 2	($\underline{n}$ = 95)	1662.00	17.49	7.66
Grade				
Third	($\underline{n}$ = 46)	602.00	13.09	6.26
Fourth	($\underline{n}$ = 39)	640.00	16.41	5.68
Fifth	($\underline{n}$ = 40)	662.00	16.55	5.17
Sixth	($\underline{n}$ = 44)	966.00	21.96	8.47
Age in Years				
8	($\underline{n}$ = 14)	180.00	12.86	6.35
9	($\underline{n}$ = 36)	515.00	14.31	5.58
10	($\underline{n}$ = 37)	584.00	15.78	6.18
11	($\underline{n}$ = 32)	595.00	18.59	7.52
12	($\underline{n}$ = 39)	768.00	19.69	7.72
13	($\underline{n}$ = 11)	228.00	20.73	9.21
Sex				
Male/Boy	($\underline{n}$ = 75)	1205.00	16.07	7.64
Female/Girl	($\underline{n}$ = 94)	1665.00	17.71	6.95

Table 4

Comparison of Four Types of Support by Grade, Age, and Sex

	Socialization			Advice and Information			Physical Assistance			Emotional Support		
	N	Supporters	$\bar{x}$	N	Supporters	$\bar{x}$	N	Supporters	Total	N	Supporters	$\bar{x}$
<u>Grade</u>												
Σ	(156)	(2377)	(15.24)	(163)	(2101)	(12.89)	(162)	(2110)	(13.03)	(153)	(2471)	(16.15)
Third (3)	42	515	12.26	45	472	10.49	46	558	12.13	46	638	13.87
Fourth (4)	36	514	14.28	38	468	12.32	38	446	11.74	34	513	15.09
Fifth (5)	39	635	16.28	39	531	13.62	37	516	13.95	36	616	17.11
Sixth (6)	39	713	18.28	41	630	15.37	41	590	14.39	37	704	19.03
<u>Age</u>												
8	13	135	10.39	13	114	8.77	14	175	12.50	14	185	13.21
9	32	394	12.31	36	378	10.50	36	396	11.00	35	471	13.46
10	37	613	16.57	36	512	14.22	35	481	13.74	33	562	17.03
11	31	509	16.42	30	382	12.73	29	373	12.86	30	518	17.27
12	32	527	16.47	37	554	14.97	38	540	14.21	32	574	17.94
13	11	199	18.09	11	161	14.64	10	145	14.50	9	161	17.89
<u>Sex</u>												
Male/Boy (1)	71	1010	14.23	73	798	10.93	73	828	11.34	70	956	13.66
Female/Girl (2)	85	1367	16.08	90	1303	14.48	89	1282	14.40	83	1515	18.25

Table 5

Interaction of Type and Source of Social Support

Variable	Sum of Squares	DF	Mean Square	F
Between Effect				
Source	593.00	5	118.69	48.50*
Error	6975.03	2850	2.45	
Within Effect				
Type	4.22	3	1.41	2.09
Type x source	1338.33	13.39	89.22	132.43*
Error	5760.00	7631.00	00.67	

* $p < .0001$.

source groups predicted originally. Family/relatives were found to provide significantly more physical assistance, emotional support and advice and information than any other sources of support nominated. Specifically, there were significant differences on advice and information between family/relatives and friends ($p < .001$), and neighbors ($p < .001$). The t-tests between family/relatives and professionals and family/relatives and "others" (those not belonging to any identified source category) were not statistically significant, although they showed trends in the correct direction ($p < .10$). Comparisons between family/relatives and all other sources except "other" on both physical support and emotional support were highly significant ($p < .001$). The comparison of "other" and family/relatives on physical assistance only approached statistical significance ($p < .10$), while the comparison between these two groups on emotional support was statistically significant ($p < .01$).

Furthermore, t-tests for related measures indicated that peers (friends or classmates) were nominated on the four socialization questions significantly more often than on any of the other three types of support. (Socialization vs. advice and information $t = 24.10$, $p < .001$; socialization vs. physical assistance $t = 23.26$, $p < .001$; and socialization vs. emotional support $t = 22.43$, $p < .001$).

In the final analysis of the type-by-source interaction, the hypothesis that the primary type of support provided by professionals would be advice and information was also upheld. Comparisons between advice and information and each of the three other types of support were all highly significant for this source group ($p < .001$).

Table 6 is a table of means illustrating the differences found to contribute to the type-by-source interaction in children's social support networks, and Figure 1 is a graphic display of these data.

Hypothesis 6. It was predicted that there would be a significant positive relationship between the kin-ratio within a support system and satisfaction (happiness) with overall network. A Pearson Product Moment Correlation between average overall satisfaction and the kin-ratio (the number of family/relatives nominated relative to total network size) found no statistically significant relationship between the two variables ($r = .063$, $p < .20$).

Hypothesis 7. It was predicted that peers would become increasingly important and satisfying sources of support as a child grows older. Further analyses focused on the peer-ratio (number of peers nominated relative to total network size) and its relationship to age/grade and happiness with one's network. The number of peers did increase across grade levels, with the mean number of peers nominated being 5.91, 7.45, 9.12, and 11.30 for third, fourth, fifth, and sixth graders, respectively. Relatedly, a significant positive relationship between peer-ratio and age was found ($r = .18$, $p < .01$). However, no relationship was found between peer-ratio and average happiness with one's network within or between each of the four grade levels.

Hypothesis 8. It was predicted that girls would nominate more supporters in the area of emotional support than would boys. As a preliminary step, a Pearson Product Moment Correlation between the two variables of age and grade was calculated to ascertain whether or not grade could be used as a reliable equivalent of age. This

Table 6

Means Contributing to the Type by Score Interaction

<u>n</u> =	(1325)	(1389)	(36)	(35)	(57)	(14)
	Family	Friend	Neighbor	Classmate	Professional	Other
Socialization	.5902	1.317**	.9167	1.286**	.701	.5
Advice/Information	1.097*	.4795	.4444	.4571	.8596***	.71
Physical Assistance	1.213*	.4284	.3056	.4857	.2807	.85
Emotional Support	1.555*	.4939	.3611	.5143	.3509	.85

*Support Hypothesis A stating that family/relatives will provide more physical assistance, emotional support, and advice and information giving than other sources.

**Support of Hypothesis B stating peers (friends and/or classmates) would be nominated on socialization more than any other area/type of support.

***Support of Hypothesis C stating that primary type of support provided by professionals would be advice/information.

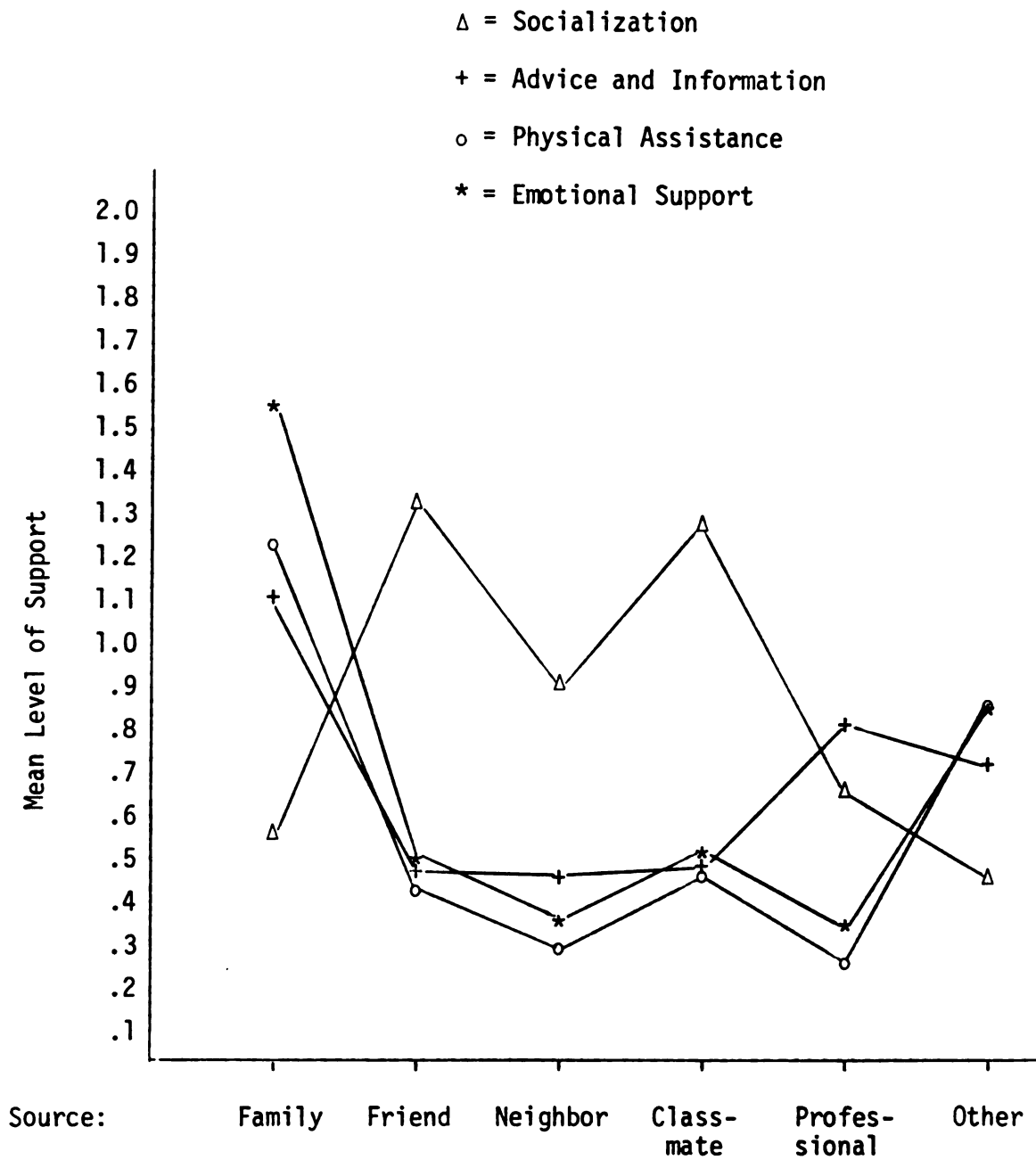


Figure 1. The interaction of type and source of social support in children's networks.

was necessary due to the extremely small sample size in the cells at either end of the age distribution, making them inappropriate for inclusion in an ANOVA procedure. The results of this correlational analysis indicated that the two variables were highly correlated ($r = .83$, $p < .001$), thus, all further analyses in this series used grade as an age equivalent.

The ANOVA of grade and sex and emotional support yielded a main effect for grade ($F(3, 4) = 3.53$, $p < .02$) and a substantial main effect for sex ($F(1, 4) = 15.09$, $p < .001$). The overall two-way interaction between age and sex was also highly significant ($F(7, 145) = 4.95$, $p < .001$). The nature of this interaction was, in fact, identical to that proposed in Hypothesis 5 above. As indicated by a priori planned comparisons, the oldest age group (sixth grade) nominated significantly more individuals in the area of emotional support than did any of the other three age groups (third, fourth, and fifth grades, $p < .001$). Furthermore, girls had significantly more nominees in this area (emotional support) than did the boys ($p < .001$). The complete ANOVA table is presented in Table 7.

Table 7

Gender and Age Differences in Emotional Support

Variable	Sum of Squares	DF	Mean Square	F
Main Effects				
Grade/Age	435.69	3	145.23	3.53*
Gender	620.71	1	620.71	15.09**
Interactional Effect				
Grade/Age x Gender	1425.80	7	203.69	4.95**
Residual	5965.74	145	41.14	

* $p < .02$. ** $p < .001$.

DISCUSSION

Social support is a complex, multidimensional construct. In order to provide an accurate and useful characterization of this phenomenon, it is crucial that assessment take place on many levels. Sandler, Wolchick, and Braver (1984) have argued that "understanding social support in a situation requires an assessment of the sources of support, the actual helping transactions exchanged, and how these transactions are evaluated by the focal subject." (p. 3, emphasis added by current author). Data from the Children's Social Support Questionnaire provides information about the source and type/content of (the actual helping transaction), and the individual's happiness with (evaluation of), their support relationships.

Although more extensive work needs to be done on the psychometric properties of the CSSQ, the preliminary data provided by this investigation indicates that this questionnaire provides information about four specific areas or types of social support; socialization, advice and information, physical assistance, and emotional support; and also provides global measures of social support such as overall network size, composition and satisfaction. Specifically, the content analysis of the CSSQ yielded acceptable levels of agreement on all of the questions and the four areas of social support. In fact, if the Q-sort method used had been a forced-choice format, within which people were asked to sort exactly

four questions into each of the four areas of support represented, it is quite likely that the level of agreement would have been substantially greater.

Relationships Among Measures

While the results of the content analysis of the CSSQ were encouraging, the relative lack of statistically significant relationships between this measure and the other measures utilized in this investigation were unexpected. The relatively negative results of the comparative analyses may have been due to one or more different factors; including measurement issues involved in utilizing global scales, issues of administration (procedural difficulties), or the possibility that these scales are, in fact, measuring different and separate constructs.

A large literature has been devoted to the ameliorating effects of perceived social support. It has been concluded that, broadly conceived, the perception of being loved and esteemed and able to count on others is an integral part of emotional well-being (Turner, 1981) and positive self-concept. Thus, it followed that overall self-worth on the Perceived Competence scale and total support as measured by the CSSQ would be positively related. However these constructs were found to be statistically unrelated. A possible explanation of these results could lie in the nature of the constructs themselves. That is, total support is a purely quantitative index and while quantitative assessments have been found to be productive, the literature has simultaneously suggested that the health enhancing aspects of social support may, in fact,

be a function of the quality of support rather than its absolute quantity. This distinction between quantity and quality of network relations may also explain the significant relationship found between overall self-worth (on the PCS) and children's satisfaction (average happiness) with their network; the latter being a qualitative index of children's perceived support.

The analyses of the relationships between the specific subscales on the competence measure and the types of support on the CSSQ were based on the premise that if a child felt supported in a particular realm of her/his life, this support would enable the child to feel more positive about her/himself and/or his/her abilities in that area. The data support this contention in the realm of social functioning. Children who had higher numbers of nominees on the socialization area of the CSSQ also endorsed higher levels of competence on the Social Subscale on the PCS. However, no relationship was found between the Cognitive Subscale on the competence measure and the number of supporters nominated on the advice and information area of the support measure. Perhaps the cognitively based supportive action of giving information is too disparate from children's own cognitive abilities and performance to have an impact in this area.

In addition to the theoretical explanations offered above, there are several procedural issues which may have influenced these particular results. First, it should be noted that the group-administration method utilized in this investigation may have had an impact on the resultant data. The format of the Perceived Competence Scale was difficult for the children to understand. Although

attempts were made to monitor the children's work, with an entire class of respondents working at one time, this task was a difficult one.

Secondly, the use of global instruments, such as the Harter and the CSSQ may preclude the possibility of measuring the intricate precise patterns of support relationships and related variables needed to fully clarify and understand these phenomena. One way to further elucidate important issues/constructs would be to make the instrument (the CSSQ) that much more sensitive. In accordance with this need to facilitate a "finer-grain" analysis, a revision of the relationship categories represented on the CSSQ has already been proposed. This revision centered on the expansion of the family/relative category. Given that this is such an important and potent source group for young children; it is important to understand/determine precisely who the actual members of this group of supporters are.

The rather global nature of this category, as it was used in this research, may, in fact, be a contributing factor in the results regarding the relationship (or lack thereof) between the ratio of family/relatives within a child's network and satisfaction with his/her support, reported above. Perhaps a relationship as reported by Nair and Jason (1984) exists between the supportive presence of a specific familial individual or unit and children's satisfaction with their support relationships. These hypotheses cannot be tested without instruments designed to provide the precise data necessary. Therefore, the following relationship categories are suggested for the CSSQ: (a) parents (mother, father, stepfather, stepmother),

(b) siblings (brother, sister), (c) grandparents, (d) other relatives (aunts, uncles, cousins, nieces, nephews, etc.), (e) friend, (f) neighbor, (g) classmate, and (h) professional. This would greatly facilitate the identification of specific relationships within the network, and the types of support provided by each, which is needed in investigation of social support within any population (Hirsch, 1981; Nair & Jason, 1984).

The lack of relationship between the CSSQ and the Class-List Sociometric may be due to the differences between self-report (CSSQ) and other-report (Sociometric). Numerous studies have documented the differences between subject or participant and observer perceptions (e.g., Jones & Nisbett, 1971). While a child may nominate numerous others as friends these individuals may not view her/him as a friend and thus not nominate her/him on the sociometric. Relatedly, children may be creating overly extensive lists of "friends" on the CSSQ in order to appear more socially desirable. Furthermore, the CSSQ is a much more inclusive measure than the Class-List Sociometric. A person's close friends (those who would nominate them on a sociometric-type measure) may not be members of their class but rather people in their neighborhood or members of other social/community organizations of which the child is a member. However, when follow-up correlational analyses were run on the sociometric data and the data from the Participation in Community Groups Checklist to investigate this possibility, no relationships were found. Finally, it is possible that the lack of relatedness between these two measures is indicative of the underlying difference between the rate of social interaction (CSSQ) and actual social acceptance as indicated by a

child's sociometric standing with her/his peers. Further analyses of these dimensions is necessary in order to clarify the relationship(s) between them.

Network Characteristics

Although the lack of a significant correlation between networks predominated by family members and overall satisfaction with one's network appears to contradict the results obtained by Nair and Jason (1984), the type of support provided by family/relatives parallels the results of these previous investigators. Specifically, these findings indicate that family members provide children with a high percentage of cognitive guidance (advice and information), material aid (related to physical assistance), and emotional support. In addition, the current study found that peers were nominated significantly more often as sources of socialization than as sources of any other type of support measured. Furthermore, professionals were found to provide children with significantly more advice and information than any other type of supportive action. These results indicate that while family/relatives function as support generalists (providing a multitude of services) for elementary school children, peers and professionals serve a more specialized function within these children's support networks.

In reference to these and the preceding findings, it should be noted that the distribution of happiness ratings (upon which average satisfaction was based) was positively skewed. The highest rating ("very happy," $n = 1657$) was utilized more often than all of the other four ratings combined ("happy," $n = 914$, "not happy or

unhappy," $n = 170$, "unhappy," $n = 66$, and "very unhappy," $n = 51$). Furthermore, no attempt was made to analyze the findings according to specific roles of individual family members nor by the specific type of support they provide or both. This type of fine-grained analysis may provide investigators with a greater understanding of these phenomena.

While their exact quality(ies) has been the subject of some debate, it has long been accepted that peer relations become increasingly important components of a child's world as s/he gets older. In a study of children's use of confidants, Belle and Longfellow (1984) found that as children got older they turned to other children (both siblings and friends) more frequently and to fathers less frequently. There was no change in the frequency with which children turned to mothers. In the current investigation the absolute number of peers in the children's networks increased as the subject's age increased, yet a significantly different level of satisfaction was not found between the age groups. No significant increases in satisfaction with peers relative to family member supporters was found either. Thus, more peer support was not necessarily more satisfying (cf. Nair & Jason, 1984). The reason(s) for this finding are not entirely clear. Given that the increase in number of peers within a child's network is a natural developmental phenomenon, one might expect general satisfaction with the network to remain relatively stable. If this is so, it is conceivable that a comparison of networks with a high peer component versus those with a small peer component within the various age groups, would find a relationship

with satisfaction. An alternative hypothesis is simply that children with fewer peer supporters are satisfied with those relationships and have no need to seek out more, while some others who remain dissatisfied may keep searching for more and happier relations.

Sex differences. Adolescent girls tend to report more intimacy in friendships than do boys (e.g., Hunter & Youniss, 1982). Younger girls also prefer to interact in dyads rather than in the larger groups the boys tend to prefer facilitating more intimate interactions (Belle, 1984). Since emotional support is the most personal/intimate form of support measured by the CSSQ, the significantly greater amount of this type of support in girls' versus boys' networks stands to reason. Furthermore, while females are socialized to view themselves in terms of the relationships they are a part of (e.g., Gilligan, 1982), boys are encouraged to be self-reliant and autonomous and not encouraged to engage in self-disclosure and help-seeking behaviors (Belle & Longfellow, 1984; Jourard, 1971).

SUMMARY AND CONCLUSIONS

The preliminary data provided by this investigation indicates consensual validation for the four types of social support the CSSQ was designed to measure. The scale also provides important quantitative and qualitative data about children's social support networks.

Although the results of the content analysis of the CSSQ were encouraging, the relative lack of statistical relationship between this measure and the other measures used in this study was not as predicted. Further validation studies are clearly indicated.

While the insignificant correlation between networks predominated by family/relatives and overall satisfaction with one's network appear to contradict prior research findings, the type of support provided by family members parallels the results of previous investigations. Furthermore, this study found that families act as support generalists (that is, they provide more than one type of support), whereas peers and professionals provide more specialized support functions for school-aged children.

Further results demonstrated a clear difference between boys' and girls' networks in the area of emotional support. This difference was found to be a function of both the sex and the age of the children involved in the study.

While some development and revision of the Children's Social Support Questionnaire is indicated, the current results demonstrate this instrument's ability as a support measure. With the use of such a measure a truly multidimensional approach to the assessment of school-aged children's social support is possible. Thus, investigators can now begin to specify the types of support which may be predictive of adjustment in this population. In turn, these advances have clear implications for the design and implementation of future intervention and prevention programs in the area of social relations.

APPENDICES

APPENDIX A
Letter of Explanation
and
Consent Form

April 1, 1984

Dear Parents:

The Elementary Office of the Flint school district, along with Michigan State University, is gathering information on children's friendships. We are asking for your help in this process. We will be asking all participating children questions about their friendships (who they like to do things with), their social activities (clubs they belong to), and about themselves (how they feel about their friends and themselves). All questions will be given in the classroom, and will not interfere with important classwork.

Participation in this project is completely voluntary. If you choose to let your child participate, any information collected will be kept strictly confidential. 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 your principal. Thanks very much for your cooperation, it is greatly appreciated.

Mrs. Anne Gregory
Director of Ele. Ed.
Flint School District

Karen Williams, M.A.
Michigan State University

Julie Kriegler, B.A.
Michigan State University

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 feely give my consent for
_____ to participate.
write child's name here

Parent/Guardian Signature Date

APPENDIX B

Children's Social Support Questionnaire

SOCIAL SUPPORT QUESTIONNAIRE
CHILD'S FORM

Code No. _____

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

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

QUESTION 3: WHO DO YOU GOT OUT WITH (FOR EXAMPLE, TO MOVIES, PARTIES, VIDEO ARCADES, ETC.)?

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

QUESTION 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 TEAM, SCOUTS, ETC.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

QUESTION 5: WHO GIVES YOU INFORMATION OR ADVICE ABOUT RELIGIOUS THINGS?

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Your age: _____

Your sex: Male Female

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

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

QUESTION 10: WHO TAKES YOU PLACES YOU NEED TO GO?

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

QUESTION 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.)?

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

QUESTION 13: WHO LISTENS TO YOU WHEN YOU NEED TO TALK ABOUT SOMETHING PERSONAL?

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

QUESTION 14: WHO MAKES YOU FEEL BETTER WHEN YOU'RE UPSET?

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

QUESTION 15: WHO CARES ABOUT YOU?

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

QUESTION 16: WHO CAN YOU REALLY COUNT ON TO ALWAYS BE THERE FOR YOU?

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

APPENDIX C

Perceived Competence Scale for Children

WHAT I AM LIKE

Boy or girl
(circle which)

Age _____

Sample Sentences

REALLY TRUE	SORT OF TRUE	Sample Sentences		SORT OF TRUE	REALLY TRUE
for me	for me			for me	for me
a. ☐	☐	Some kids would rather play outdoors in their spare time	BUT Other kids would rather watch T.V.	☐	☐
b. ☐	☐	Some kids never worry about anything	BUT Other kids sometimes worry about certain things.	☐	☐
1. ☐	☐	Some kids feel that they are very good at their school work	BUT Other kids worry about whether they can do the school work assigned to them.	☐	☐
2. ☐	☐	Some kids find it hard to make friends	BUT For other kids it's pretty easy.	☐	☐
3. ☐	☐	Some kids do very well at all kinds of sports	BUT Others don't feel that they are very good when it comes to sports.	☐	☐
4. ☐	☐	Some kids feel that there are a lot of things about themselves that they would change if they could	BUT Other kids would like to stay pretty much the same.	☐	☐
5. ☐	☐	Some kids feel like they are just as smart as other kids their age	BUT Other kids aren't so sure and wonder if they are as smart.	☐	☐
6. ☐	☐	Some kids have a lot of friends	BUT Other kids don't have very many friends.	☐	☐
7. ☐	☐	Some kids wish they could be a ;pt better at sports	BUT Other kids feel they are good enough.	☐	☐
8. ☐	☐	Some kids are pretty sure of themselves	BUT Other kids are not very sure of themselves	☐	☐
9. ☐	☐	Some kids are pretty slow in finishing their school work	BUT Other kids can do their school work quickly.	☐	☐
10. ☐	☐	Some kids don't think they are a very important member of their class	BUT Other kids think they are pretty important to their classmates.	☐	☐

WHAT I AM LIKE

 Boy or girl
(circle which)

Age _____

Sample Sentences

	REALLY TRUE	SORT OF TRUE				SORT OF TRUE	REALLY TRUE
	for me	for me				for me	for me
a.	☐	☐	Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch T.V.	☐	☐
b.	☐	☐	Some kids never worry about anything	BUT	Other kids sometimes worry about certain things.	☐	☐
1.	☐	☐	Some kids feel that they are very good at their school work	BUT	Other kids worry about whether they can do the school work assigned to them.	☐	☐
2.	☐	☐	Some kids find it hard to make friends	BUT	For other kids it's pretty easy.	☐	☐
3.	☐	☐	Some kids do very well at all kinds of sports	BUT	Others don't feel that they are very good when it comes to sports.	☐	☐
4.	☐	☐	Some kids feel that there are a lot of things about themselves that they would change if they could	BUT	Other kids would like to stay pretty much the same.	☐	☐
5.	☐	☐	Some kids feel like they are just as smart as other kids their age	BUT	Other kids aren't so sure and wonder if they are as smart.	☐	☐
6.	☐	☐	Some kids have a lot of friends	BUT	Other kids don't have very many friends.	☐	☐
7.	☐	☐	Some kids wish they could be a ;pt better at sports	BUT	Other kids feel they are good enough.	☐	☐
8.	☐	☐	Some kids are pretty sure of themselves	BUT	Other kids are not very sure of themselves	☐	☐
9.	☐	☐	Some kids are pretty slow in finishing their school work	BUT	Other kids can do their school work quickly.	☐	☐
10.	☐	☐	Some kids don't think they are a very important member of their class	BUT	Other kids think they are pretty important to their classmates.	☐	☐

REALLY TRUE		SORT OF TRUE				SORT OF TRUE		REALLY TRUE	
for me		for me				for me		for me	
11.	☐	☐	Some kids think they could do well at just about any new outdoor activity they haven't tried before	BUT	other kids are afraid they might not do well at outdoor things they haven't ever tried.	☐	☐		
12.	☐	☐	Some kids feel good about the way they act	BUT	Other kids wish they acted differently.	☐	☐		
13.	☐	☐	Some kids often forget what they learn	BUT	Other kids can remember things easily.	☐	☐		
14.	☐	☐	Some kids are always doing with a lot of kids	BUT	Other kids usually do things by themselves.	☐	☐		
15.	☐	☐	Some kids feel that they are better than others their age at sports	BUT	Other kids don't feel they can play as well.	☐	☐		
16.	☐	☐	Some kids think that maybe they are not a very good person	BUT	Other kids are pretty sure that they are a good person.	☐	☐		
17.	☐	☐	Some kids like school because they do well in class	BUT	Other kids don't like school because they aren't doing very well	☐	☐		
18.	☐	☐	Some kids wish that more kids liked them	BUT	Others feel that most kids do like them.	☐	☐		
19.	☐	☐	In games and sports some kids usually watch instead of play	BUT	Other kids usually play rather than just watch.	☐	☐		
20.	☐	☐	Some kids are very happy being the way they are	BUT	Other kids wish they were different.	☐	☐		
21.	☐	☐	Some kids wish it was easier to understand what they read	BUT	Other kids don't have any trouble understanding what they read.	☐	☐		
22.	☐	☐	Some kids are popular with others their age	BUT	Other kids are not very popular.	☐	☐		
23.	☐	☐	Some kids don't do well at new outdoor games	BUT	Other kids are good at new games right away.	☐	☐		

	REALLY TRUE	SORT OF TRUE				SORT OF TRUE	REALLY TRUE
	for me	for me				for me	for me
24.	☐	☐	Some kids aren't very happy with the way they do a lot of things	BUT	Other kids think the way they do things is fine.	☐	☐
25.	☐	☐	Some kids have trouble figuring out the answers in school	BUT	Other kids almost always can figure out the answers.	☐	☐
26.	☐	☐	Some kids are really easy to like	BUT	Other kids are kind of hard to like	☐	☐
27.	☐	☐	Some kids are among the last to be chosen for games	BUT	Other kids are usually picked first.	☐	☐
28.	☐	☐	Some kids are usually sure that what they are doing is the right thing	BUT	Other kids aren't so sure whether or not they are doing the right thing.	☐	☐

APPENDIX D

Participation in Community Groups Checklist

NAME _____

BIRTHDATE _____

Your age: _____

Code No. _____

Your sex: Male Female

Child Form
PARTICIPATION IN NEIGHBORHOOD/COMMUNITY GROUPS

Please list all of the groups to which you belong. These groups might include things such as bowling leagues, church groups, scouts, or a special club of friends. For each group that you list, circle whether you are just a member of the group or whether you have a special, leader role in that group. Then, circle the number which shows how much you participated in each group during the last year.

Name of Group	Member (1)	Leader (2)	Attended no Meetings (1)	Attended a few Meetings (2)	Attended half the Meetings (3)	Attended most or all the Meetings (4)
1. _____	1	2	1	2	3	4
2. _____	1	2	1	2	3	4
3. _____	1	2	1	2	3	4
4. _____	1	2	1	2	3	4
5. _____	1	2	1	2	3	4
6. _____	1	2	1	2	3	4
7. _____	1	2	1	2	3	4
8. _____	1	2	1	2	3	4
9. _____	1	2	1	2	3	4
10. _____	1	2	1	2	3	4
11. _____	1	2	1	2	3	4
12. _____	1	2	1	2	3	4
13. _____	1	2	1	2	3	4
14. _____	1	2	1	2	3	4

REFERENCES

REFERENCES

- Asher, S.R., Singleton, L.C., Tinsely, B.R., & Hymel, S. (1979). The reliability of a rating scale sociometric with preschool children. Developmental Psychology, 15, 443-444.
- Beels, C.C. (1981). Social support and schizophrenia. Schizophrenia Bulletin, 7, 58-72.
- Belle, D., & Longfellow, C. (1984). Turning to others: Children's use of confidants. Paper presented at the 92nd Annual Convention of the American Psychological Association, Toronto, Canada.
- Berkman, L.F., & Syme, S.L. (1979). Social networks, host resistance, and mortality: A nine year follow-up of Alameda County residents. American Journal of Epidemiology, 109, 186-204.
- Bogat, G.A., Chin, R., Sabbath, W., & Schwartz, C. (1983a). The Children's Social Support Questionnaire (Tech. Rep. No. 1). East Lansing: Michigan State University.
- Bogat, G.A., Chin, R., Sabbath, W., & Schwartz, C. (1983b). Participation in Community Groups Checklist (Tech. Rep. No. 2). East Lansing: Michigan State University.
- Caldwell, R.A., & Bloom, B.L. (1982). Social support--its structure and impact on marital disruption. American Journal of Community Psychology, 10, 647-667.
- Caldwell, R.A., Bogat, G.A., Kriegler, J.A., & Rogosch, F. (1984). Social support: Interrelationships between type, source, and satisfaction. Paper presented at the 92nd Annual Convention of the American Psychological Association, Toronto, Canada.
- Cobb, S. (1976). Social support as a moderator of life stress. Psychosomatic Medicine, 38, 300-314.
- Cochran, M.M., & Brassard, J.A. (1979). Child development and personal social networks. Child Development, 50, 601-616.
- Eaton, W.W. (1978). Life events, social supports, and psychiatric symptoms: A reanalysis of the New Haven data. Journal of Health and Social Behavior, 19, 230-234.

- Erickson, G. (1977). The concept of personal network in clinical practice. Family Process, 14, 487-498.
- Gilligan, C. (1982). In a different voice. Cambridge: Harvard University Press.
- Gore, S. (1978). The effect of social support in moderating the health consequences of unemployment. Journal of Health and Social Behavior, 19, 157-165.
- Harter, S. (1982). The Perceived Competence Scale for Children. Child Development, 53, 87-97.
- Hartup, W.W. (1983). The peer system. In P.H. Mussen and E.M. Heatherington (Eds.), Charmichael's manual of child psychology (4th ed., Vol. 4). New York: Wiley.
- Hirsch, B.J. (1979). Psychological dimensions of social networks: A multidimensional analysis. American Journal of Community Psychology, 7, 263-277.
- Hirsch, B.J. (1980). Natural support systems and coping with major life changes. American Journal of Community Psychology, 8, 159-172.
- Hirsch, B.J. (1981). Social networks and the coping process: Creating personal communities. In B.J. Gottlieb (Ed.), Social networks and social support. Beverly Hills: Sage Publications.
- Holahan, C.J., & Moos, R.H. (1981). Social support and psychological distress: A longitudinal analysis. Journal of Abnormal Psychology, 90, 365-370.
- Holahan, C.J., & Moos, R.H. (1982). Social support and adjustment: Predictive benefits of social climate indices. American Journal of Community Psychology, 10, 403-415.
- House, J.S. (1981). Work stress and social support. Reading, MA: Addison-Wesley.
- Hunter, F.T., & Youniss, J. (1982). Changes in the functions of three relations during adolescence. Developmental Psychology, 18, 806-811.
- Johnson, J.H., & Sarason, I.G. (1979). Moderator variables in life stress research. In I.G. Sarason and C.D. Spielberger (Eds.), Stress and anxiety (Vol. 6). Washington, D.C.: Hemisphere Publishing.
- Jones, E.E., & Nisbett, R.E. (1971). The actor and the observer: Divergent perceptions of the causes of behavior. New York: General Learning Press.

- Jourard, S. (1971). Some lethal aspects of the male role. In J. Pleck & S. Sawyer (Eds.), Men and masculinity. Englewood Cliffs: Prentice Hall.
- Kahn, R.L., & Antonucci, T. (1980). Convoys over the life cycle: Attachment, roles, and social support. In P.B. Bates & O. Brim (Eds.), Lifespan development and behavior (Vol. 3). Boston: Lexington.
- Leavy, R.L. (1979). Support networks and coping in the freshman year. Paper presented at the annual meeting of the American Psychological Association, New York.
- Leavy, R.L. (1983). Social support and psychological disorder: A review. Journal of Community Psychology, 11, 3-21.
- Lin, L., Simeone, R.S., Ensel, W.M., & Kuo, W. (1979). Social support, stressful life events, and illness: A model and an empirical test. Journal of Health and Social Behavior, 20, 108-119.
- McFarlane, A.H., Norman, G.R., Streiner, D.L., Roy, R., & Scott, D.J. (1980). A longitudinal study of the influence of the psychosocial environment on health status: A preliminary report. Journal of Health and Social Behavior, 21, 124-133.
- McGuire, J.C., & Gottlieb, B.H. (1979). Social support groups among new parents: An experimental study in primary prevention. Journal of Clinical Child Psychology, 8, 111-116.
- Monroe, S.M. (1983). Social support and disorder--toward an untangling of cause and effect. American Journal of Community Psychology, 11, 81-97.
- 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.
- Norbeck, J.S., & Tilden, V.P. (1983). Life stress, social support, and emotional disequilibrium in complications of pregnancy--A prospective, multivariate study. Journal of Health and Social Behavior, 24, 30-46.
- Pattison, E.M., DeFrancisco, D., Wood, P., Frazier, H., & Crowder, J. (1975). A psychosocial kinship model for family therapy. American Journal of Psychiatry, 132, 1246-1251.
- President's Commission on Mental Health. (1978). Mental Health in America. Washington, D.C.: Government Printing Office.

- Sandler, I.N., & Ramsey, T.B. (1980). Dimensional analysis of children's stressful life events. American Journal of Community Psychology, 8, 285-302.
- Sandler, I.N., Wolchick, S., & Braver, S. (1984). Social support and children of divorce. In I.G. Sarason & B.R. Sarason (Eds.), Social support: Theory, research, and application. The Hague, Netherlands: Martinus Nijhoff.
- Shinn, M., Lehmann, S., & Wong, N. (1983, August). Social support as process. Paper presented at the annual convention of the American Psychological Association, Anaheim, California.
- Shumaker, S.A., & Brownell, A. (1983, August). A taxonomy of social support: Disentagling a conceptual morass. Paper presented at the annual meeting of the American Psychological Association, Anaheim, California.
- Smith, M.B., & Hobbs, N. (1966). The community and the community mental health center. American Psychologist, 21, 499-509.
- Test, M.A. (1981). Effective community treatment of the chronically mentally ill: What is necessary? Journal of Social Issues, 37, 71-86.
- Tolsdorf, C.C. (1976). Social networks, support, and coping: An exploratory study. Family Process, 15, 407-418.
- Turner, R.J. (1981, December). Social support as a contingency in psychological well-being. Journal of Health and Social Behavior, 22, 357-367.

MICHIGAN STATE UNIV. LIBRARIES



31293011063595