ABSTRACT
        A set of instruments was developed to study
children's social networks. Mothers and their preschool-age children
were interviewed with regard to (1) the composition of each child's
social network and (2) the performance of support functions by
network members. To determine the reliability of measures, a pilot
sample of mothers and children was interviewed again after 1 to 2
months. Both maternal and child reports of network functioning
exhibited considerable stability. Data from the study sample of 60
preschoolers and their mothers were analyzed to evaluate the internal
consistency of the measures and the relationship between maternal and
child reports of functions performed by network members. Scales
derived from the interview data showed good internal consistency.
Considerable correspondence also existed between maternal and child
reports regarding members of the child's social network. Findings
suggested that mothers provide reliable information about the support
provided by members of their children's social networks.
(Author/RH)

COMPARING MATERNAL AND CHILD REPORTS OF

CHILDREN'S SOCIAL NETWORKS

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Abstract

A set of instruments were developed to study children's social networks. Mothers and their preschool-aged children were interviewed with regard to the composition of each child's social network, as well as the performance of support functions by network members. To determine the reliability of the measures a pilot sample of mothers and children were re-interviewed after an interval of one to two months. Both maternal and child reports of network functioning exhibited considerable stability. Data from study sample of 60 preschoolers and their mothers were analyzed to evaluate the internal consistency of the measures, as well as the relationship between maternal and child reports of the functions performed by network members. Scales derived from the interview data showed good internal consistency. There was also considerable correspondence between maternal and child reports regarding members of the child's social network.

Comparing Maternal and Child Reports of

Children's Social Networks.

Research on the child's social relationships has shifted away from an exclusive focus on the mother-child relationship to a consideration of the child's contacts with other people. While father-child interaction has been the subject of increasing research attention (cf. Parke, 1981), our knowledge of the role of other family members, relatives, neighbors, and friends in the life of the child is limited (Cochran and Brassard, 1979; Lewis, 1982). These people may be termed members of the child's social network.

Lewis and Feiring (1978, 1979) have proposed a model for the study of children's social networks. They view the social network as consisting of a variety of people (termed social objects), including parents, siblings, other relatives and friends, who perform several functions for the child. Functions are those activities which take place within the context of the social network and which serve to promote the child's survival and well-being.

The few studies of children's social networks have examined their composition in relationship to demographic variables, including the child's age (Garbarino et al., 1978); the marital status of the parents (Tietjen, 1979), and socioeconomic status (Feiring and Lewis, 1981). However, research methods in this area need to go beyond the enumeration of network members to an exploration of the relationship between the child and each

network member. This paper reports on instruments designed to study the social networks of preschool-aged children, adopting a functional approach similar to that proposed by Lewis and Feiring (1979). Data will be presented regarding the reliability of the instruments, as well as the correspondence between maternal and child reports of the functioning of the network.

Methods

Sample

A pilot sample of twelve mothers and fourteen children (8 boys and 6 girls) of 4 to 5 years of age were administered the social network measures on two occasions, at an interval of one to two months. The study sample of 68 mothers and their four to five year old children was recruited at nursery schools and day care centres in two middle class neighborhoods. This sample includes 31 girls and 29 boys. All interviews took place on an individual basis in the homes of the participating families.

Measures

A set of instruments were designed to assess the structure and functioning of children's social networks. Both the mother and the child are interviewed with regard to the composition and task performance of the child's social network. The mother's form of the interview has two parts. In the first part, the composition of the child's network is elicited by asking about household residents (parents, siblings, extended family members, etc.), substitute caregivers, relatives residing in town, family friends and neighbors with whom the child has a relationship, and the child's own friends. In the second part of the interview, mothers are asked to complete a series of support scales for each network member. The support scales document the performance of social functions by network members:

Scale I: the frequency with which network members perform daily maintenance tasks (e.g. meal preparation, supervision, putting the child to bed), on a scale from "daily" to "never";

Scale II: the frequency with which network members performed maintenance tasks which are not generally required on a daily basis, such as shopping for supplies, or transportation to extracurricular activities (on a scale from "always" to "never");

Scale III (adapted from Saunders, 1977): the frequency with which the target child would turn to each network member for nurturance or emotional support under different circumstances - e.g., to talk about problems or fears (on a scale from "always" to "never");

Scale IV: the frequency with which network members engaged in recreational activities with the child - e.g., playing games, reading books, or going out to eat (on a scale from "daily" to "never").

Mothers are also asked to indicate the frequency with which network members disciplined the child, as well as the disciplinary techniques which each network member would employ under different circumstances - e.g., if the child broke an object or repeatedly disobeyed a request. The disciplinary options included spanking, yelling, letting it go, removing a privilege, and reasoning. Finally, mothers are asked to make a global rating (on a scale of one to seven) of the closeness of the child's relationship with each network member. Means and standard deviations of the scale scores are presented in Table 1.

The child's interview is comprised of open-ended questions, covering the various functions of the childs social network. The children's interview data were analysed in terms of scales which were conceptually related to those of the mother's interview. While many of the items on both interviews were the same, the child's version would be phrased in a open-ended fashion. Thus, the child would be asked, "Who puts you to bed?" The mother would be asked to indicate how often each network member she mentioned would put the child to bed. Thus, in the children's data, scale scores were not available for each individual, as they were from the mother's interview data. The following scales were derived from the children's data:

Maintenance Scale: Children were asked to name the people who performed several daily tasks - making breakfast and supper, taking the child to and from school, supervising the child after school, bathing the child, and putting him or her to bed. The number of mentions for each person comprised the maintenance scale score.

Nurturance Scale: The children were asked to name the people to whom they would turn for nurturance and emotional support in different situations, with the number of mentions comprising the network member's nurturance scale score.

Recreation Scale: Children were asked to rate the frequency with which each adult, non-parental network member performed various activities - e.g., reading books, playing games, and taking on outings. (The child was first asked whether a given network

member ever engaged in each activity; if the child said yes, she
or he was asked to say whether the network member did it "a lot",
"sometimes", or "a little bit".)

The means and standard deviations of the children's scale scores
can be found in Table 1.

Results

Reliability of the scales

Internal consistency of the scales. Both the maternal and child scales exhibited/a high degree of internal consistency, as measured by Cronbach's alpha (Cronbach, 1951). (See Table 2)

Consistency of reporting over time. Comparisons were made between the mother's, ratings of each network member on two occasions. The pilot sample included a total of 79 network members. Maternal reports were very stable from Time 1 to Time 2, as can be seen in Table 3. In terms of the disciplinary techniques used, comparison of the two maternal reports of the use of the five different strategies by network members yielded a contingency coefficient of .69.

Comparison of the children's scale scores at Time 1 and Time 2 also indicates considerable stability in reporting (see Table 3).

Comparison of maternal and child reports

The sample of 69 families had a total of 854 network members. Comparison of ratings made by mothers and children will utilize the total number of network members on whom there are complete data for each scale.

Intercorrelations of scale scores. Table 4 shows the correlations between mother's and child's reports concerning the performance of the various support functions by network members. (Discipline is not included as children were not asked to provide

information on this function.) The correspondence between maternal and child reports with regard to maintenance is high, because, according to both the mothers and the children, it is generally mothers and fathers who perform this function. The other functions are performed by a broader range of people, and thus there is greater possibility for disagreement. There is also greater similarity of items between the two maintenance and nurturance scales, with less overlap for the two recreation scales, which may account for the lower correlation between the latter.

Comparison of specific items from the scales. We can compare the mother and child reports on two specific recreation items - playing games and reading stories. An analysis of variance was performed using the child's rating of "never", "a little bit", "sometimes" and "a lot" as the independent variable, and the mother's frequency rating as the dependent variable. For both items there were significant differences between the means [F(3,427) = 8.40 for games; F(3,427) = 21.80 for reading, p<.001 in both cases]. Post hoc comparisons indicate that it was the group rated "never" which was different from the other groups. In other words, children could draw the distinction between people who never did something versus people who ever did it, but may have difficulty distinguishing between "a lot", "sometimes" and "a little bit".

Maternal and child reports were compared on specific items which comprised the maintenance and nurturance scales. Tables 5

and 6 show the numbers of people named by the children as performing various maintenance and nurturance tasks, as a function of the mothers' ratings of their task performance. These data illustrate that while there is not perfect agreement between mothers and children, children were more likely to mention people whom the mother rated as performing a task more frequently. If we dichotomize the maternal report data, into network members who were said never to perform a certain task versus those who ever performed that task, we can see that there is good agreement between mothers and children as to the performance of maintenance and nurturance tasks (see Tables 5 and 6). For example, of the 98 people named by the children as those who put them to bed, 91 (or 93%) were rated by the mothers as ever performing this task. Only in seven instances did children name people whom the mother said never performed this task.

Comparison of conceptually related items. As a further test of the correspondence between mother's and child's reports, a number of conceptually related items were compared. Mothers were asked to rate, on a scale from one to seven, the closeness of each network member's relationship with the target child. This closeness rating was correlated .39 with the children's maintenance scale, .43 with the children's nurturance scale, and .25 with the children's recreation scale (all correlations are significant at $p < .001$). These correlations indicate that individuals rated by the mother as closer to the child were also perceived as more supportive by the child.

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Similarly, comparing the individuals named by the child as people with whom they had a special relationship to all network members not so named, the former group received higher nurturance and recreation ratings by the mother than did the latter group (see Table 7).

Discussion

The data presented suggest that mothers can be interviewed reliably about the support provided by the members of their children's social networks. While the reliability coefficients from the children's interview data are lower than those of the mother's, nonetheless there was a fair amount of stability across time. There was also a considerable degree of correspondence between mothers and children's reports regarding the support provided by network members, in comparing both conceptually related items as well as items tapping the same content.

The use of frequency rating scales with preschoolers seems questionable, since children of this age are unlikely to have a concept of frequency that is not idiosyncratic. A grandparent may take the child out once or twice a week, but this may be perceived as "a little bit" by the child. However, preschoolers do seem able to report about the people who do or do not perform various support functions.

The degree of stability and inter-rater agreement which were attained suggest that these measures can be useful in assessing children's social networks. The next stage of analysis will examine the demographic correlates of such networks, as well as the relationship between network characteristics and children's behavior.

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Francisco.

Table 1

Means and Standard Deviations of the Support Scale Scores

Mother's Scales	Mean	Standard Deviation
Scale 1 (daily maintenance)	1.56	1.15
Scale II (occasional maintenance)	10.54	7.21
Scale III (nurturance)	16.20	8.50
Scale IV (recreation)	18.48	9.34

Children's Scales		
Maintenance	.59	1.49
Nurturance	.95	1.92
Recreation	9.30	4.58

Table 2

Internal Consistency of Maternal and Child Support Scales

Mother's Scales	alpha
Scale I (daily maintenance)	.96
Scale II (occasional maintenance)	.94
Scale III (nurturance)	.95
Scale IV (recreation)	.91

Children's Scales	
Maintenance	.92
Nurturance	.85
Recreation	.70

Table 3

Stability of Maternal and Child Reports Over Time

Mother's Scales	reliability coefficient
Scale I (daily maintenance)	.98
Scale II (occasional maintenance)	.83
Scale III (nurturance)	.91
Scale IV (recreation)	.90
Frequency of discipline	.87

Children's Scales	
Maintenance	.48
Nurturance	.57
Recreation	.76

Note.   p<.001   for all coefficients.

Table 4

Intercorrelations between maternal and child scale scores

	$\bar{x}$
Maintenance (n = 825)	.89
Nurturance (n = 792)	.54
Recreation (n = 426[a])	.30

[a] This number includes only adult, non-parental network members, about whom children were asked the recreation questions.

<u>Note</u>.   p<.001 for all correlations.

Table 5

Number of people mentioned by children on maintenance scale items as a function of maternal frequency ratings

Number of people mentioned by child as involved in task

Maternal frequency rating of task performance	give breakfast	take to school	pick up from school	supervise after school	give supper	bathe	put to bed
Never	5	10	14	19	6	9	7
Once a month or less	1	1	3	1	0	6	1
2 to 3 times a month	2	5	2	1	1	5	4
1 to 2 times a week	12	26	27	18	12	30	21
4 to 5 times a week	30	9	7	25	18	18	31
daily	25	20	18	28	37	21	34

Number of people mentioned by child

Maternal report of task performance	breakfast	to school	from school	after school	supper	bath	bed
Ever	70 (93.3%)	61 (85.9)	57 (80.3)	73 (79.3)	68 (91.9)	80 (89.9)	91 (92.9)
Never	5 (6.7%)	10 (14.1)	14 (19.7)	19 (20.7)	6 (8.1)	9 (10.1)	7 (7.1)

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Table 6

Number of people mentioned on nurturance scale items
as a function of maternal frequency ratings

Number of people mentioned by child for each item

Maternal frequency ratings	tell good news	tell about good product	tell about fight with friend	be with when sad	be with when afraid	talk about problems	talk about important things
Never	5	4	7	22	10	11	7
Rarely	2	0	1	6	5	7	2
Sometimes	6	8	15	3	6	14	9
Often	23	26	15	12	17	17	25
Never	50	50	18	27	39	29	45

Number of people mentioned by child

Maternal report of task performance	tell good news	tell about good product	tell about fight with friend	be with when sad	be with when afraid	talk about problems	talk about important thing
Ever	81 (94.2%)	84 (95.5)	49 (87.5)	48 (68.6)	67 (87.0)	67 (85.9)	81 (92.0)
Never	5 (5.8%)	4 (4.5)	7 (12.5)	22 (31.4)	10 (13.0)	11 (14.1)	7 (8.0)

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Table 7

**Maternal scale scores of network members named by children
as special relationships**

Maternal Scale Scores	special relationships (n = 62)	all other network members (n = 678)	significance
Scale I (daily maintenance)	1.30	1.28	n.s.
Scale II (occasional maintenance)	9.86	8.28	n.s.
Scale III (nurturance)	13.34	9.99	p<.85
Scale IV (recreation)	14.18	9.83	p<.81

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