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ABSTRACT

This study examined the characteristics of the child's social network as it changes within the preschool period. Of particular interest is how the social network changes as the child moves from a more home-centered existence at 3 years to a more school-centered existence at 6 years of age. Also of concern is the effect of sex and socioeconomic status on the nature of the child's social network. A total of 85 children and their mothers were studied as part of a longitudinal research project. Each mother reported on their child's contacts with relatives, adults, and peers when the child was 3 and 6 years old. The results show that the child's social network composition and contacts change with age and vary as a function of the child's sex and socioeconomic status. For example, from 3 to 6 years children decrease contact with relatives and increase contact with peers and non-relative adults. Across age, but especially at 6 years of age, male subjects have more contact with male than female friends and female subjects have more contact with female than male friends. These findings illustrate how sex role socialization patterns are reflected in contact with same sex peers compared to opposite sex peers in the social network. In general, the findings suggest that the social network structure provides different types of interaction opportunities according to developmental level as well as sex and socioeconomic status of the child. (Author/RH)

THE CHILD'S SOCIAL NETWORK: THE EFFECTS OF AGE, SEX AND SOCIOECONOMIC STATUS FROM 3 TO 6 YEARS

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Abstract

This study examined the characteristics of the child's social network as it changes over age within the preschool period. Of particular interest is how the social network changes as the child moves from a more home-centered existence at three years of age to a more school-centered existence at six years. Also of concern is the effect of sex and socioeconomic status on the nature of the child's social network. Eighty five children and their mothers were studied as part of a longitudinal research project. Mother reports of the child's contacts with relatives, adults and peers were recorded when the child was 3 and 6 years old. The results show that the child's social network composition and contacts change with age and vary as a function of the child's sex and socioeconomic status. For example, from 3 to 6 years children decrease contact with relatives and increase contact with peers and non-relative adults. Across age, but especially at six years of age, male subjects have more contact with male than female friends and female subjects have more contact with female than male friends. These findings illustrate how sex role socialization patterns are reflected in contact with same sex peers compared to opposite sex peers in the social network. In general, the findings suggest that the social network structure provides different types of interaction opportunities according to developmental level as well as sex and socioeconomic status of the child.

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Introduction

While the importance of the social network of the human infant has been well recognized, most attention has been paid to the mother as the single critical person in the child's social environment. Recently, attention has been broadened to include other members of the nuclear family, such as fathers and siblings (e.g. Dunn, 1983; Lamb, 1981; Lewis & Rosenblum, 1979). Some work has even considered the influence of grandparents (Cicirelli, 1975; Tinsley & Parke, 1984; Troll, 1980). However, little empirical information is available regarding the nature of the child's extended social network (Bronfenbrenner, 1977; Cochran & Brossard, 1979; Lewis & Feiring, 1979). A few studies on the influence of individuals other than nuclear family members suggest the importance of peers and adults such as teachers. Peer contact has been shown to be related to the child's social adjustment (Hartup, 1982). Children with more peers in their networks may be less likely to develop behavior problems (Lewis, Feiring, McGuffog & Jaskir, 1984a) and opportunity for peer contact can ameliorate some of the negative effects of a poor mother-child relationship (Hartup, 1982; Lewis & Schaeffer, 1980; Main, 1977). The child's contact with adults other than its parents has been shown to be important for its cognitive development (Feiring & Lewis, note 1) and social growth (Howes, 1983; Strayer, 1979).

Social network theory and research has received the most study and attention in the field of sociology. Attributes of the social network including size, variety of membership and density have been often studied in regard to the nature of the marital relationship, and social and geographic mobility (e.g., Lee, 1979). Within the field of child development Bronfenbrenner's (1977) work on support systems stimulated interest in social networks. A network framework has been proposed by Cochran and Brassard (1979)

as a means for exploring the social ecology of the child and parent. They stipulated important attributes of social networks such as structural properties, relational characteristics and location in time and space. Examination of the social network that focused on persons other than household members, that is, on friends, schoolmates, workmates and kin not residing at home was advocated. Social networks are said to influence the child either directly through the number and nature of persons with whom the child has contact or indirectly through the mediation of the parents.

Lewis and Feiring (1979) have proposed a model of the child's social network which highlights factors influencing the nature both of the persons comprising the network and of the possible social functions they could perform in the child's life. It is suggested that the social network changes substantially over time, that the structure of the family will influence the patterns of contact available to the child, and that socio-cultural differences will have an impact on social networks. Research based on this conceptualization has begun to elucidate the nature of the child's social network. A study of the social network of three year olds has shown that young children have considerable contact with peers, adults and relatives, that is, with persons other than nuclear family members (Lewis, Feiring & Kotsonis, 1984b). Further, the number and frequency of contact with extended network members varies with the child's sex as well as the family's socioeconomic status.

The present study is interested in describing the attributes of the child's social network as it changes over age within the preschool period and as it relates to the child's sex and the socioeconomic status of its family. As Lewis and Feiring (1979) have suggested, the nature of the child's social network should change with age reflecting the changes in developmental tasks. Of particular interest is how the social network changes as the child moves from a more

home-centered existence at three years of age to a more school centered existence when the child is six years old. Developmental tasks require a shift from a family orientation to a more non-kin, peer orientation. Consequently, we expected an increase in the child's contact with peers and nonrelatives over the three to six age period.

In addition, Lewis and Feiring (1979), as well as Jacklin and Maccoby (1978), have suggested that the distribution of the social network is related to sex role development. Thus it was hypothesized that the children at six years would have more same-sex peer contact and less opposite sex peer contact than they had when they were three years of age. Finally, socioeconomic status should constrain the nature of the social network. Based on our work (Lewis et al., 1984) and that of others (Bott, 1957, 1971; Komarovsky, 1967; Troll, 1971) we expected contact with relatives to be greater for the lower socioeconomic compared to the middle socioeconomic group.

Method

Subjects

The subjects were 85 children and their mothers who participated in a longitudinal study from infancy into childhood. The social network data was collected when the children were three and six years of age. Of the 85 children, 43 were male and 42 were female. Forty families were high middle SES and forty five were lower middle SES.[2] Socioeconomic status was determined by education and occupation of both parents in an adaptation of the Hollingshead Scale. The distribution of the sample by sex and SES was as follows: middle SES males = 20 middle SES females = 20; lower SES males = 22; lower SES females = 23.

Measuring the Social Network

Mothers were asked to complete an adapted version of the Pattison Psycho-Social Network Inventory (Pattison, 1975) when the child was three and then again at six years.[3] In questionnaire form, the mother was asked to list the persons in the child's social network in the categories of family, relatives, friends of parents and friends of the child. The mother was asked to specify each person's age, sex, the relationship of each person listed to the child (e.g., for the relatives category: cousin, grandparent, etc.) and to indicate the amount of contact the person had with the child. Contact could be made on a daily, weekly, monthly, bi-yearly or yearly basis (contact was defined as including face-to-face, by phone or letter). From the mother's report we were thus able to obtain (1) the number of people and the kinds of people who comprised the child's network as well as (2) the daily frequency of contact with these people.

Specific Measures. Having collected data on the kinds of people and contact children experienced in their social network, these people were grouped by categories that have been proposed to represent the young child's social world. These included the categories of age, gender and kinship, attributes of the social world that the child acquires early (Lewis & Feiring, 1978; 1979). In the analyses to follow people were divided into: 1. Kin - Relatives (all kin except nuclear family) and Nonrelatives (all nonkin adults and peers);

2. Age - Adults (i.e., all network members of age 18 or older, excluding the subjects' parents) and Peers (i.e., all persons under age 18, excluding the subjects' siblings); and 3. Gender - Males (all male adults and peers excluding the subjects' father and brothers) and Females (all female adults and peers, excluding the subjects' mother and sisters).

The data also were coded to obtain number and frequency of contact with Male Peers (all male children excluding brothers) and Female Peers (all female

children excluding sisters). It was felt important to break down the peer catagory by sex because research suggests that contact with same sex versus opposite sex peers has importance for social development and role identify.

Results

Repeated measures analysis of variance with Sex and SES as the between subject factors and Age as the within subject factors were performed on the general network groups, i.e., Adult and Peer, Relative and Nonrelative, Male and Female, Male Peer and Female Peer measures. Repeated measures were used to determine whether there were effects across the three to six year period in network variables for Sex and SES. In order to locate differences within Age for SES and Sex, post hoc F tests were performed on each network variable at each age point. Ratio measures were also examined since they allow for the observation of the interplay between two classes of people within a given category (e.g., the ratio of relatives to nonrelatives for the kin category). Results are presented by the network categories of Kin, Age, Gender, and Sex of Peer. Within each of these categories the main effects of Age, Sex, and SES of subjects are presented.

Insert Tables 1 and 2 about here

Table 1 presents the mean number of people in the network while Table 2 presents the mean daily contact with network members by Age, Sex and SES of subject.

Kin and Nonkin Category

Overall, children have more contact with nonkin than kin at both three and six years (at three years, $F_{1,81}=26.72$, $p \leq .0001$ for number; $F_{1,81}=26.62$,

p .0001 for daily contact; at six years, $F_{1,81}=21.67$, p .0001 for number; $F_{1,81}=109.47$, p .0001 for daily contact).

Age of Subject. Examination of age effects for number of people shows no significant differences for relatives, nonrelatives or the relatives to nonrelatives ratio. Daily contact, however, does show significant results. The relatives to nonrelatives ratio shows a significant interaction ($F_{1,81}=7.24$, $p \leq .01$) such that there is a decrease in daily contact with relatives to nonrelatives across the three to six year period. In other words, the proportion of relatives to nonrelatives decreases with age.

Sex of Subject: There are no significant main effects across age for sex of child in kin and nonkin contact. However, the ratio of relatives to nonrelatives for daily contact reveals an interaction of age with sex of child ($F_{1,21}=3.83$, $p \leq .05$). While females at three years see approximately three times more relatives to nonrelatives than they do at six years ($\bar{X}_3=.19$, $\bar{X}_6=.04$), males show no age changes in relative to nonrelative contact ($\bar{X}_3=.07$, $\bar{X}_6=.05$). Moreover, females see more relatives to nonrelatives at three years than do males.

SES of Subject: While number of people in the social network showed no significant differences, the daily contact measures showed both a main effect of SES as well as a SES by Age interaction. Across age, lower SES subjects have more daily contact with relatives than middle SES subjects ($F_{1,81}=5.54$, $p \leq .02$). This finding is observable as a trend at each age as well (3 years $F_{1,83}=2.64$, $p \leq .10$; 6 years $F_{1,83}=3.74$, $p \leq .06$). There is a significant SES x Age interaction ($F_{1,81}=11.58$, $p \leq .001$). At three years middle SES subjects see more nonrelatives than lower SES subjects ($F_{1,83}=4.42$, p .04) while at six years there are no significant differences.

The relatives to nonrelatives ratio measure reflects the SES, and SES by Age findings. First across age, lower SES subjects have a higher ratio of

relatives to nonrelatives than middle SES subjects ($F_{1,81}$=6.09, p≤.001). The SES x Age effect shows a trend ($F_{1,81}$=3.83, p .06) such that lower SES subjects appear to decrease the contact with relatives to nonrelatives ($\bar{X}_3$=.21, $\bar{X}_6$=.07) while the middle SES ratio remains the same ($\bar{X}_3$=.05, $\bar{X}_6$=.02).

Adult and Peer Category

Overall, children have more adults than peers in their network at three ($F_{1,81}$=90.27, p≤.0001) and six years ($F_{1,81}$=165.74, p≤.0001). At three years children see about the same number of peers and adults on a daily basis; however, at six years more peers are seen daily than adults ($F_{1,81}$=19.84, p≤.0001).

Age of Subjects. While the composition of the adult network does not change over the three to six year period, peer contact changes considerably. Daily contact with peers increases with age ($F_{1,81}$=9.85, p≤.002). This increased daily contact with peers over age is seen in both male ($F_{1,81}$=4.56, p≤.04) and female ($F_{1,81}$=8.34, p≤.01) friends of the child. Further, the peer to adult ratio increases from three to six years ($F_{1,81}$=12.60, p≤.001).

Sex of Subjects. There were no significant effects for sex of child for peer and adult measures. Although not significant, the peer to adult ratio of daily contact shows a larger increase for female subjects from three to six years ($\bar{X}_3$=.29, $\bar{X}_6$=.56) than for male subjects ($\bar{X}_3$=.41, $\bar{X}_6$=.54).

SES of Subjects. The findings for SES of child are complex. For contact with peers there is a significant SES x Age effect ($F_{1,81}$=7.14, p≤.01) such that lower SES subjects increase their daily contacts while middle SES subjects remain the same. There is a significant SES difference at three years ($F_{1,83}$=3.65, p .05) with middle SES subjects having more daily peer contact but this does not hold true at six years. For contact with adults there is an SES xAge interaction ($F_{1,81}$=5.8, p ≤ .02). The ratio scores clarify this interaction. While both groups show an increase in peer contact with age, the lower SES group shows relatively

fewer peer contacts at three years ($F_{1,83}$=3.38, p≤.05, $\bar{X}_3$=.44 middle, $\bar{X}_3$=.27 lower). This suggests that it is the lower SES group which shows the greatest increase in proportion of peer to adult contact.

Male and Female Category

Overall, children have more females than males in their networks at both ages (three years $F_{1,81}$=91.54, p≤.0001; six years $F_{1,81}$=75.57, p≤.0001). Children's networks show more females than males and this finding does not change with age of subject.

Sex of Subject. Across age there is a significant Sex of child by Sex of person effect on the ratio of males to females. Male, as compared to female subjects, have a greater propotion of males in their networks ($F_{1,81}$=27.70, p≤.0001) This is true at both ages (three years $F_{1,83}$=9.80, p≤.002; $\bar{X}_3♂$=.43, $\bar{X}_3♀$=.37; six years $F_{1,83}$=27.64; p<.001; $\bar{X}_6♂$=.46, $\bar{X}_6♀$=.33). Finally, there is a significant Sex by Age interaction ($F_{1,81}$=6.03, p≤.02) indicating that the proportion of males in the network of male subjects is increasing with age while it is decreasing for female subjects.

Sex of Peer Category

Overall, children have contact with about the same number of male and female friends at three and six years of age. Also, there are no significant effects of Age or SES on the sex of peer measures. However, there were significant effects of Sex of child on Sex of peer contact measures.

Sex of Subject. Across age, there is a significant effect of sex of child on sex of peer contact ($F_{1,83}$=17.58, p≤.001). Male subjects have more contact with male friends than female subjects ($F_{1,81}$=10.54, p≤.01) and female subjects have more contact with female friends than male subjects ($F_{1,81}$=14.79,

$p \leq .0001$). The data also indicate that as the children get older the tendency to see same sex peers rather than opposite sex peers becomes more pronounced ($F_{1,83}=14.97$, $p \leq .0001$). From three to six years male subjects see increasingly more male peers ($F_{1,81}=15.69$, $p=.001$) and female subjects see increasingly more female peers ($F_{1,81}=15.69$, $p \leq .001$). These findings are reflected also in the ratio of male to female peers. Across age male subjects have a larger ratio of males to female peers ($F_{1,81}=17.77$, $p \leq .01$); while this difference is not significant at three years ($\bar{X}\sigma^{\prime}=.30$, $\bar{X}\varphi=.19$) it is significant at six years ($F_{1,81}=58.22$, p .0001; $\bar{X}\sigma^{\prime}=.53$, $\bar{X}\varphi=.17$). Further, the difference in the male ratio score between male and female subjects tends to increase with age (sex x age interaction $F_{1,81}=3.55$, $p=.06$).

Discussion

In considering the findings concerning the change in children's social networks it is first necessary to discuss two methodological issues associated with the study of networks: maternal report bias and network measurement.

Maternal Bias in Social Network Report. Maternal reports are generally suspect although investigators have found some types of reporting more accurate than others. For example, when mothers are asked specific questions about specific behaviors their report may be more accurate than when asked about more general behaviors (Bates, 1980; Carey et al., 1977). Clearly maternal report about the total number of peers is an example of a suspect measure since by six years of age children already spend a good portion of the day in school outside the mother's observation. Friends who the child sees only at school may go unreported. Interest in social networks necessitates either maternal and/or child report (something difficult for children of these ages) or direct observation. Observation of the child's network would be enormously time

consuming as well as intrusive; the observer's presence itself is a biasing factor. The report method used here represents the procedure commonly used to examine networks (e.g., Bott, 1971).

While our data does not allow us to determine the exact nature of maternal report bias, there is no reason to believe that maternal report should vary as a function of the child characteristics of Sex or SES. As indicated previously, it is possible that age of child influences maternal report in that mothers may be more aware of their child's peer contacts at three years when the child is primarily at home as compared to six years when the child is spending a good deal of time at school. However, that the reported social network composition for this sample appears to correspond to data using other techniques serves to partially validate the maternal report. For example, Jacklin and Maccoby (1978) found that in a nursery school setting there is more same than opposite sex peer play. This observation corresponds to our maternal report data on the predominance of same-sex peer contact in the child's network.

Measures of the Social Network. In the study of the social network a wide variety of potentially useful measures can be obtained, for example, absolute number of people, frequency of contact, or some combination of these measures. Moreover, one can determine number, frequency of contact with individuals of a particular group (kin, for example), or look at the relationship between groups either as a ratio score, a difference score, or the number of interconnections between members of different groups or the same group. The potential array of possible parameters of the social network is large and the impact of any particular measure still to be determined. Investigators have most commonly used measures of network size, variety of membership, density, connectedness, reciprocity and frequency of contact (e.g., Lee, 1979). One's theoretical position on the nature of the social network has to be the guiding principle for selection of measures. Our position on the central role of particular categories

of people determines how we constructed measures of the network.

Kin-NonKin Contacts. The kin-nonkin differences we observe are the same whether or not nuclear family members are considered. That children have contact with people other than their family members is common knowledge although few studies and little theory has considered how these potentially significant others impact on the child's life. What these data make clear is that even by three years of life the child's network is made up of many other people besides mother, father, and siblings.

Significant changes in the retwork composition occur with children having less contact with kin relative to non-kin as they grow older. Between three and six years children show an approximately 10% drop in the proportion of kin to nonkin contact. The movement away from family contact has been documented by others (Konner, 1975).

Also of interest were group differences in this pattern. The sex differences suggest that the developmental trend away from kin contact takes place more quickly for male than for female children. The earlier exposure of males to nonkin is consistent with the view of the male child as more independent, less restricted, and less tied to family (Mitchell, 1969; Newson & Newson 1975). The social class difference showing less kin contact for middle class children is supported in the sociological literature (Adams, 1968). That lower-SES families have more kin contact than middle SES families can be a function of many factors, including mobility and geogrpahic distance (Lee, 1979).

Adult and Peer Contact. It is well known that peer contact increases as children get older, especially during the early to middle childhood period (Hartup, 1983). The social network peer data also shows this effect. While peer contact relative to adult contact is only 35% at three years, it increases to 58% at six years, a 20% increase in the proportion of peer contact. This change

is not only caused by starting public school since many of the children in this study were either in play groups or day care at three years. Increases in peer contact are accompanied by an increase in peer orientation (Hartup, 1982; Edwards & Lewis, 1979) as well as an increase in the ability to make peer contacts independent of the parent (Lee, 1975). Both of these factors reflect important changes in the young child's social life.

The change toward increased peer orientation is affected by child characteristics other than age. Sex differences are apparent. While at two years 41% of male subject contacts are peer oriented, only 29% of female subject contacts are so oriented. Males appear to be moving toward greater peer contact earlier than females. This may explain why males appear to be moving toward greater non-kin contact earlier than females, since movement toward peers also is movement away from kin.[5] Clearly, male children are being socialized away from family earlier. It may also be the case that males are being socialized to play with larger groups of children. Previous research suggests that males play in larger groups of children while females tend to play with one or two friends (Laosa & Brophy, 1972; Waldrop & Halverson, 1973).

Social class differences also appear to affect peer contact. Lower SES children are moving more slowly toward peer contact compared to the middle SES children. Although there are little data on peer contact by SES, it is generally assumed that lower SES children have more contact with peers relative to adults than middle class SES children (e.g., Hess, 1970). Since SES is often confounded with ethnic group it is difficult to know whether the reported differences are due to SES or ethnicity. Moreover, the reports of SES differences in peer contact usually apply to adolescence and may not hold for middle childhood. Since our subjects are all from similar ethnic backgrounds and

are preadolescent the SES differences reported by others may not be applicable to our sample. While there may be more contact, the nature of the adult or peer contact cannot be estimated from our data. It may be that it is the quality of contact rather than the amount which is important in SES differences.

Male and Female Peer Contact. It has been shown that same sex peer play is the norm by three years of age, at least in a preschool setting (Jacklin & Maccoby, 1979). Our data suggest that not only is same sex compared to opposite sex peer contact the rule as early as three years, but that by six years this pattern has become more pronounced. The social network structure, especially at six years, indicates that girls have the opportunity to interact with girls and boys with boys while opposite sex contact is limited. While this pattern may reflect in part the child's choice of friends according to sex appropriate role behavior, it also must reflect to some degree society's structuring of the social environment to provide "appropriate" contact opportunities (e.g., girls join Brownies and boys join Cub Scouts). Thus the structuring of the social environment as reflected in the social network may go beyond individual choices for playmate interaction.

Male and Female Contact. In our society females rather than males are the prinicpal caretakers of children. This is true for all functions including caregiving, nurturance and teaching. In our sample, 60% of the members of the child's network are females and this does not change over age. It does vary, however, by the sex of the child. Male children come in contact with relatively more males than do female children. This is apparent even by three years of age.

Sex role behavior is supported by sex contact differences in the network. This holds true for both peer as well as adult contact. That male children have proportionately more male contact while female children have proportionately more female contact illustrates how the social network structure provides a social environment which defines the nature and perhaps range of the child's sex role related experiences.

In general, the findings reported here concerning the nature of the child's social network are in substantial agreement with what we know about socialization patterns for young children. That these network results using maternal reports parallel findings using other techniques supports the use of such procedures to obtain an estimate of the composition of the child's social environment. Moreover, information on network structure considered in conjunction with data gathered from direct observation provides a more complete picture and understanding of development in early childhood.

Examining the data in terms of the network dimensions of age, kinship and gender has proved useful in describing the network structure. In particular, the results suggest that these dimensions, the groups of people they define, and the distribution of these groups of people relative to one another, provide a useful index of the child's social environment. The nature of the social network as defined by these dimensions varies as a function of the child's characteristics. Cultural rules reflect the patterning of the network's composition. Thus, for example, younger children, who require more caretaking and supervision, have more adult than peer contacts. As the child grows older the network structure changes, showing an increase in peer to adult contact, the network reflecting as well as shaping the move toward greater independence and the shift away from a home centered to a more school centered existence.

The structure of the social network as it varies as a function of sex of child and sex of peer is a dramatic example of how sex role socialization patterns are reflected in the number and contact with same sex peers compared to opposite sex peers in the social network. It is even possible to argue that cultural rules and conformity to these rules are established and maintained not only through direct reinforcement of role appropriate behavior but through creation of a network structure. As Rheingold and Cook (1975) point out, how parents provide "sex typed" toys in the home may be an important socialization factor independent of any direct reinforcement pattern. Just as parents structure the home environment (e.g., providing sex typed toys), so do they and other members of society structure the social network to reflect acceptable behavior patterns. Understanding and describing the social network of the child becomes critical once we are prepared to consider how network structure, in addition to parent-child interaction, constrains and shapes the child's development.

Footnotes

[2]For the sake of simplicity in discussion we will use the labels "lower" and "middle" class groups. However, it is important to remember that the sample is comprised of a middle middle class group and an upper middle class group in regard to education and occupation (see Feiring & Lewis, 1982).

[3]Self-report data are problematic. Obviously, the mother's report will reflect her perception of the child's network and may not yield the most accurate picture of whom the child sees and how often. However, it is difficult to obtain reliable data from three-year-olds on their adult and peer contacts, and, practically speaking, it was not possible to observe the children over a long period to determine whom they saw and how often. Since the initial purpose was to get an idea of the child's social network, we decided to use the traditional questionnaire method, recognizing its problems but utilizing this procedure as the most efficient means of data collection to obtain a general mapping of the child's network. All problems considered, the mother is probably the person most likely to be aware of the people with whom her child comes in contact.

[4]Ratio scores were calculated as follows: 1) For the kin category, relatives divided by relatives plus non-relatives; 2) for the age category, peers divided by peers plus adults; 3) for the gender category, males divided by males plus females; and 4) for the sex of peer category, male peers divided by male plus female peers. Ratio measures for both number of people and daily contact were calculated. Ratio scores are calculated within subject and therefore overall means for groups cannot be used to estimate ratios.

[5]While each category, kin/nonkin and peer/adult were analyzed separately, it is likely that the effect of a change in one category is related to a change in the other. Clearly, if subjects have increasingly more peer contact they must therefore have increasingly more nonkin contact since peers are usually nonkin. This interdependence of categories does not allow for independent observation and is part of the interdependent nature of the social network.

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TABLE 1

MEAN NUMBER OF PEOPLE IN NETWORK
BY AGE, SEX AND SES OF SUBJECT

	RELATIVES		NON RELATIVES		REL REL + NON-REL		ADULTS		PEERS		PEERS ADULTS & PEERS		MALE PEERS		FEMALE PEERS		MALE		FEMALE		MALE MALE+FEMALE	
AGE	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6
	8.99	9.22	12.93	12.74	.42	.43	14.91	15.51	7.01	6.45	.34	.29	2.89	2.75	2.75	2.76	8.86	8.81	13.33	13.21	.40	.39
SEX:																						
MALE	8.53	8.90	12.67	12.49	.42	.42	14.47	14.95	6.74	6.44	.33	.29	3.42	4.00	2.19	1.60	9.30	9.86	12.47	11.47	.43	.46
FEMALE	9.45	9.55	13.19	13.00	.43	.43	15.36	16.07	7.29	6.45	.35	.30	2.36	1.48	3.33	4.17	8.40	7.74	14.21	15.00	.37	.33
SES:																						
MIDDLE	8.78	8.95	14.68	11.55	.39	.45	16.10	14.50	7.35	6.00	.33	.29	3.28	2.35	2.85	2.75	9.18	8.20	13.85	12.43	.40	.38
LOWER	9.18	9.47	11.38	13.80	.44	.41	13.84	16.40	6.71	6.84	.35	.30	2.56	3.11	2.67	2.78	8.58	9.36	12.87	13.91	.40	.41

TABLE 2

MEAN DAILY CONTACT WITH NETWORK MEMBERS
BY AGE, SEX, AND SES OF SUBJECT

	RELATIVES		NON-RELATIVES		RELATIVES REL+NON-REL		ADULT		PEER		PEER ADULT+PEER		MALE PEER		FEMALE PEER	
AGE	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6
SEX:	.31	.22	3.27	4.13	.13	.04	1.91	1.71	1.67	2.73	.35	.55	.82	1.29	.85	1.44
MALE	.26	.21	2.79	3.83	.07	.05	1.30	1.56	1.74	2.53	.41	.54	.98	1.93	.77	.60
FEMALE	.36	.24	3.76	4.52	.19	.04	2.52	1.86	1.60	2.93	.29	.56	.67	.64	.93	2.29
SES:																
MIDDLE	.18	.10	4.55	3.48	.05	.02	2.50	1.20	2.23	2.38	.44	.56	1.03	1.08	1.20	1.30
LOWER	.42	.33	2.13	4.80	.21	.07	1.38	2.15	1.18	3.04	.27	.55	.64	1.49	.53	1.55