

Personal networks and social support in a multiethnic community of southern California

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Abstract

This paper presents observations on the personal networks of 91 randomly selected inhabitants of a community in southern California who are linked to 941 associates by social and economic interactions. Over 40% of these relations are with individuals in the same locality, and almost 50% refer to kin. Kin act as trouble-shooters; friends are social companions; and neighbors are less significant. The pattern is similar for Anglos and Hispanic immigrants, but kin and local ties are more important among Hispanics (over 70%).
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1. Introduction

In this paper we present the main results of an anthropological study of personal networks and social support in Costa Mesa, an ethnically mixed community in southern California. Field research was conducted by students of the University of Cologne and of the University of California, Irvine, in February and March 1995.²

Popular opinion and some social science literature tends to regard California, especially southern California and the Los Angeles area, as a highly mobile, atomistic,

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² Douglas R. White and the senior author directed the project; Silvia Casasola and Sandra Liebscher organized the data collection. In addition to the junior authors, the following students of Cologne University participated in gathering, coding, and processing the data: Klaus Auer, Dietmar Kappe, Frank Krönke, Wolfram Laube, Annegret Scholz, Kirsten Schulte, Friederike Stolleis, and Tatjana Thelen. Anne Leyretana, Allison McDougall, Phil Noetzel, Jay O'Balles, Edith Regua, Eduardo Schoenborn, Nguyet Tran, and Anna Yeghiasarian participated on the American side. Berzborn (1996) presents additional findings of our research.

and culturally diverse postindustrialized society, but there is an astonishing lack of data on this type of social structure. (A survey of personal networks in the Bay area of northern California (Fischer, 1982) is an early exception.) In her case studies of "postmodern families" and "postindustrial living" in the Silicon Valley, Stacey (1990, p. 17) comes close to this image when she states that "contemporary family arrangements are diverse, fluid, and unresolved". In our field research, which is grounded in social network thinking (Wellman and Berkowitz, 1988; Wasserman and Faust, 1994; Wasserman and Galaskiewicz, 1994), we pursued a systematic empirical study of what southern Californian personal networks are really like. We were especially interested in the roles played by kin, friends, neighbors, and ethnic groups.

In our study the focal points are randomly selected inhabitants of Costa Mesa who were questioned as to the members in their immediate social environment—those people our respondents socialize with, exchange help with, and consult. Hence, our approach mainly centers on *personal networks* in an urban population. Klov Dahl (1994, p. 5555) defines a personal network as "a focal individual and the other persons (associates) linked directly to this individual by various kinds of social relationships". This contrasts with the concept of a social network (in a narrow sense), which "consists of a whole set of nodes and the social relationships connecting them" (Klov Dahl, 1994, p. 5555; also Wasserman and Faust, 1994, ch. 2). Only at the second step and in the conclusion of our study can we assess what the links between people mentioned in the different egocentered personal networks tell us about the whole social network of all inhabitants in the area.

In the literature, personal networks are closely connected with *social support*—the everyday flow of social and economic interaction and the help given for coping with crises—a view that we endorse (Wellman et al., 1988; Walker et al., 1994). Wellman and Wortley (1990, p. 583) summarize the findings of their network study of a community in Toronto: "The [personal] networks are important to the routine operations of households, crucial to the management of crises, and sometimes instrumental in helping respondents change their situations." In the following we first introduce the community and the methods of data collection that we applied in our study. Then we present empirical observations on the personal networks of urban southern Californians.

2. The Costa Mesa study

2.1. Ethnographic background

Occupying 16 square miles, the city of Costa Mesa is located in Orange County, almost 40 miles southeast of the urban sprawl of Los Angeles. It borders on the oceanside recreational community of Newport Beach. "Newport Beach is where you have your boat, Costa Mesa is where you get it fixed," as one inhabitant of the area put it, stressing the working-class character of this site. Trade, manufacturing, and services are the main sectors of economic activity today. Costa Mesa is an ancient site by

southern Californian standards, reaching back to its railroad “boom town” days of 1887, when it was a farming community and a market place. In 1994 Costa Mesa had 102,000 inhabitants. Seventy-two percent are Anglos, 20% are Hispanics, 6% are Asians, and 2% are Blacks or other ethnic groups.³ Costa Mesa can be considered an ethnically mixed working-class and professional site in the larger Los Angeles area.

2.2. Methods

We selected Costa Mesa because of its manageable size and its ethnic heterogeneity. From the beginning we considered Costa Mesa as our unit of data collection, but not as our unit of analysis. For practical reasons we had to restrict our sample of respondents to inhabitants of this site, but given the unbounded nature of the urban field we also wanted to capture the links of our respondents from Costa Mesa to the outside world. Systematic interviews would provide the main data for the study, with additional qualitative information to be gathered in open-ended parts of these or additional interviews.

To elicit the names of alters from respondents we added some questions to the social support survey that was used in the 1986 International Social Survey Program (ISSP) in several countries (Zentralarchiv, 1986; Höllinger and Haller, 1990; Ruan et al., 1995; for a comparative analysis of these data see Freeman and Ruan, 1996).

These twelve questions (Table 1) pose hypothetical situations and focus on issues of social, economic, and emotional support. They mainly tap the inner core of an ego’s personal network—the circle of relatives and friends closest to her or him—and some additional acquaintances, like neighbors. The questions tend to disregard weak ties. Administering these questions posed no special problems in our research. We conducted personal interviews (in English or Spanish) with respondents and generated for each respondent an unlimited list of *concrete persons* whom respondents considered close or important. (This contrasts with the procedures of the ISSP in which the data on personal networks were elicited for *roles* like friend, relative, or neighbor.) These alters, living within or outside Costa Mesa, were then taken as a focus for more specific and open-ended questions about their backgrounds and relationships to ego.

In selecting our sample we planned to apply a two-step, three-node *random walk design* of 50×3 (= 150) interviews (Klov Dahl, 1989, Klov Dahl, 1990; Liebow et al., 1995; McGrady et al., 1995), that is three interviews per random walk: 50 initial interviews (first node), 50 first step (second node) and 50 second step (third node) interviews. Klov Dahl (1990, p. 6) explains “the basic idea of a random walk design” as follows:

An initial node in a network is randomly selected, information about the other nodes to which this node is directly linked is obtained, one of these nodes is

³ The official figures cited are based on the Costa Mesa Community Economic Profile of June 1994; the historical information is taken from Barr (1981). Place names in this paper are real; the names of respondents have been changed to ensure confidentiality.

Table 1

Name-generating questions used in the Costa Mesa study

-
- Q1 Suppose you need *sugar* or something like that and the shops are closed, or you need a piece of equipment. Who would you ask to lend you these sort of things?
- Q2 Suppose you need help with *jobs in or around the house*, for instance holding a ladder or moving furniture. Who would you ask for this kind of help?
- Q3 Suppose you have problems with *filling in forms*, for instance tax forms. Who would you ask for help with such problems?
- Q4 Most people from time to time *discuss important matters* with others. Looking back over the last six months, who are the people with whom you discussed matters important to you?
- Q5 Suppose you need advice with a *major change in your life*, for instance changing jobs or moving to another area. Who would you ask for advice if such a major change occurred in your life?
- Q6 Suppose you have the *flu* and must *stay in bed* for a couple of days. Who would you ask to take care of you or do some shopping?
- Q7 Suppose you need to *borrow a large sum of money*. Who would you ask?
- Q8 Suppose you have serious *problems with your partner* which you cannot discuss with him or her. With whom would you talk about such problems?
- Q9 Suppose you are *feeling depressed* and you want to talk to someone about it. With whom would you talk about such problems?
- Q10 With whom do you *go out* once in a while, for instance shopping, going for a walk, going to a restaurant, or to a movie?
- Q11 With whom do you have contact at least once a month, by *visiting* each other for a chat, a cup of coffee, a drink, or a game of cards?
- Q12 Is there anybody *else* who is *important* to you, not mentioned so far? In-laws, relatives, or co-workers who are important to you?
-

randomly selected to be the next visited on the random walk, and so on for a predetermined number of steps (or nodes), with the procedure repeated for the desired number of random walks through the network(s) connecting nodes in a large population.

The advantage of a random walk approach in a large urban population is that it provides the opportunity to detect connectedness among actors in the whole network with a reasonably small sample. The main practical drawback of the random walk design is that respondents must be willing to volunteer full names and identifying information of their alters. This information is used to contact the alters to be interviewed in the next step of the walk and to establish cross-connecting names in the overall database. With just five weeks of scheduled data gathering, we did not complete all interviews at steps one and two of this linked probability sampling design. We gained methodological experiences for further research, but our study cannot be considered a random walk through the whole urban system of Costa Mesa.

The hard part of our fieldwork was finding respondents who lived at the addresses indicated in our random sampling frame and who would agree to be interviewed. For the random sample of 57 initial interviews of the random walk we had to contact 205 addresses, and our interviewers had to overcome a series of difficulties. These were mainly related to the high degree of mobility in the area—people moving in and out of Costa Mesa (with the result that we had many incorrect addresses)—as well as to work-related commuting, a large number of answering machines, and respondents'

Table 2
Residence of alters

	Overall sample (<i>n</i> = 932) (%)	Anglo subsample (<i>n</i> = 720) (%)	Hispanic subsample (<i>n</i> = 173) (%)
Costa Mesa	48.1	42.4	71.7
Orange County	24.1	28.2	8.7
California	14.9	17.5	1.7
Other states (US)	8.8	10.8	1.2
Latin America	3.2	0.1	16.8
Others	0.9	1.0	0.0
Total	100.0	100.0	100.1

unwillingness to participate in social science research because of the high frequency of commercial telephone interviews.⁴ To our surprise, though, once we found a willing respondent he or she would share the names of core network members as well as background data and some identifying information on the residence of the alters. In eliciting the names of alters we did not encourage respondents to name someone else in Costa Mesa, they were entirely free to name alters living in this city or elsewhere. Also, we did not tell respondents at steps one and two the names of the previous persons. When we analyze the data of the initial respondents only, the figures of the residence of alters in this subset are highly similar to the information for the total sample (shown in Table 2).

In sum, we have collected rich and systematic data on 91 personal networks of inhabitants of Costa Mesa containing links to 941 associates (alters) who do not necessarily live in the same area. Thus, our research is a case study that establishes the main patterns of variation of personal networks and social support in this southern Californian community. It is focused on, but not bound to, the community studied because internal as well as outgoing ties are captured. Our study is comparable to earlier studies of urban communities (e.g. the Wellman et al. (1988) East York/Toronto study and the Fischer (1982) survey of personal networks in northern California), and the Hispanic respondents in our sample provided some data on the communities created by the new immigration.⁵

⁴ The exact figures on the initial interviews of the random walk are as follows: of the 205 initially selected names and addresses 148 were not interviewed because 34 refused, 64 were out after one or two attempted contacts, 22 had moved to another area, in 14 cases we were unable to find the addresses, 2 were deceased, and 12 were business premises. These figures do not seem to be extreme for empirical social research in this area. Coping with these difficulties, we arrived at the slightly higher number of 57 initial interviews than we had originally planned.

⁵ A sample of the relevant literature is Fischer (1982); Sassen (1988, 1994), on the new immigration; Wellman et al. (1988); Portes et al. (1989); Bernard et al. (1990); Wellman and Wortley (1990) on urban community and social support; Chavez (1992, 1994); Lamphere (1992); Lamphere et al. (1993); Portes and Stepick (1993); Walker et al. (1994). We should add that the term "Hispanic" was used for self-identification by respondents; most of the Hispanics in our sample are from Mexico.

Although the proportion of ethnic groups in our sample matches the census figures for Costa Mesa mentioned above, more robust generalizations of our results would need survey-type replications.⁶ Given the case-study character of our investigation in the following analysis we are using the full data set on the initial round and the two sequential steps of the random walk. Apart from describing the overall picture of personal networks and social support emerging from the whole data set, we break down and compare the results for the main ethnic groups found in Costa Mesa and in our sample—Anglos and Hispanics. It is our proposition that these ethnic differences are the main sources of social and cultural variation in the community studied.

3. Analysis and results

We proceed as follows. (1) We report some descriptive findings on personal networks among all respondents. (2) We present an overview of the correlation of gender and social roles with social support. (3) We discuss ethnic affiliation and the similarities and differences between Anglos and Hispanics. (4) We integrate the information on gender, roles, and ethnic affiliation with types of social support in a more comprehensive model.

3.1. Background information on personal networks

On average our respondents had lived in Costa Mesa for 14 years. Fig. 1(a) shows that the overall sample consists of a large tail of long-run stayers and a mode toward the shorter-term movers. In the Anglo subsample (Fig. 1(b)) there is a lumpy distribution toward longer stays in Costa Mesa, whereas the Hispanic subpopulation (Fig. 1(c)) has a peaked duration for moves in the last 10 years.

Fifty-two of the interviewed people were women, 39 were men. The mean age across all informants is 42.0 (s.d. 15.7). The Hispanics are much younger (mean 28.5, s.d. 6.0, $n = 20$) than the Anglos (47.0, s.d. 17.8, $n = 65$).⁷ On average, the interviewees had lived in Costa Mesa for 14.0 years; the high standard deviation of 12.1 indicates a certain heterogeneity. Some of them moved into the city more than 40 years ago, others had lived there for only a few months. Most respondents were married (53.8%), with singles being the second-largest group (27.5%). Of the two main ethnic groups, 75% of the Hispanics and 50% of the Anglos were married. Referring to Treiman's occupational prestige scale (ILO, 1969; Treiman, 1977), the mean prestige score across all informants is 42.6 (s.d. 14.0). The Hispanics work in jobs with much lower average prestige (mean 25.5, s.d. 4.7; construction worker, for example) than the Anglos in our sample (47.0, s.d. 11.6; bank teller, for example). The average size of personal networks as elicited by

⁶ The relevant figures for our probability sample of 57 initial interviews of the random walk are 71.9% Anglos, 21.1% Hispanics, 3.5% Asians, and 3.5% Blacks and others; for the whole sample of 91 respondents (covering all nodes at the initial and sequential parts of the random walk) the respective numbers are 72.5%, 22.0%, 3.3%, and 2.2%.

⁷ In the following we are focusing on the contrast between Anglos and Hispanics as the main ethnic groups in our sample (which adds up to $n = 86$), and we disregard the remaining five cases.

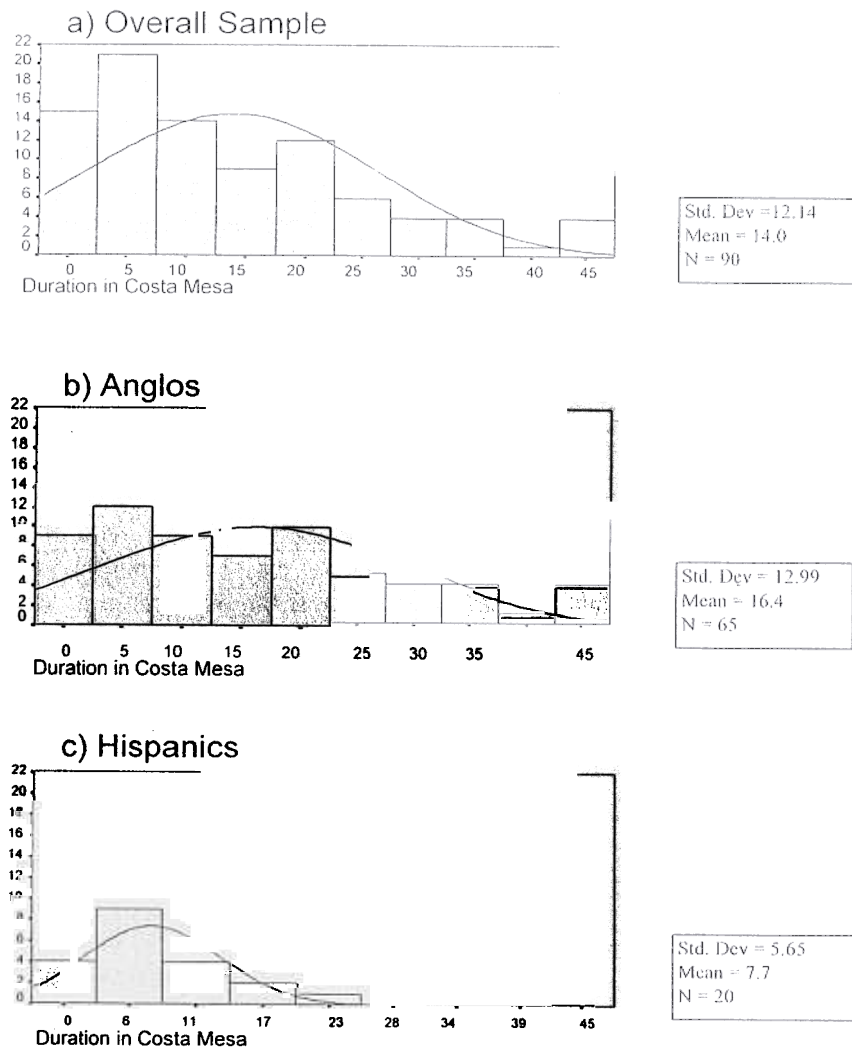


Fig. 1. Histograms of length of stay in Costa Mesa.

the name-generating questions is 10.3 (s.d. 5.44). The mean network size does not vary dramatically between men and women (women: 10.0, s.d. 5.9; men: 10.6, s.d. 4.81). Differences between the Hispanic and the Anglo subsamples are a bit higher. The mean size of the Hispanic core network is 8.7 (s.d. 2.0) and that of the Anglos 11.0 (s.d. 6.2).

In sum, the typical Hispanic informant in our sample can be characterized as young, married, and working in a low-prestige job; the average Anglo is middle-aged, not necessarily married (half are), and working in a job with middle-level prestige.

One of the interesting characteristics of the personal networks is their *geographical spread*. For southern Californians, often considered highly mobile, one might expect most relationships to be outside the community where people live. This is clearly not shown in our data (Table 2). In the overall sample, 48.1% of all ties exist within Costa

Mesa; an additional 24.1% of all reported ties are in the wider area of Orange County.⁸ This finding on the importance of local ties also points in the direction of the earlier result (Fischer, 1982, p. 159) for northern California that two thirds of associates are living within one hour of driving distance.

Hispanic informants strongly deviate from their Anglo neighbors. Among them, 71.7% of all ties are within the city of Costa Mesa, in contrast to 42.4% of links in Costa Mesa among Anglos. Looking at the relationship between residence and occupational prestige, there is considerable difference between people with low- and high-prestige jobs. Those with low-prestige jobs had 52.5% of their ties within Costa Mesa; those with high-prestige jobs had 41.3%. Marital status also has some impact on the amount of ties within Costa Mesa. Singles report that 40.7% of their ties are in Costa Mesa; for married people that rises to 51.6%. Hence, low-prestige job holders and married groups in our sample report more ties within Costa Mesa. As mentioned above, the proportion of Hispanics is high in these two groups, so the effects of low prestige and married status on local residence of alters indirectly measure Hispanic ethnic affiliation as well.

Since we get much higher effects on residence when we compare ethnic affiliation rather than occupational prestige (as a proxy of social class) and marital status (as a proxy of life cycle), we conclude that ethnic affiliation is the main cause of variation in our sample. The Hispanic subgroup in our sample is so small that it is not advisable to break it down further by occupational prestige and marital status. The Anglo subgroup can be broken down by these variables. Among the Anglo respondents, however, there is no impact of occupational prestige on the percentage of local ties (41.1% among the low-prestige subgroup compared with 40.3% among Anglos with higher-prestige jobs). There is a slight difference only between married (43.8%) and single (37.6%) Anglo respondents in the percentage of alters living in Costa Mesa. The outstanding effect on the presence of local ties in personal networks is due to the overall ethnic difference between Hispanics and Anglos and cannot be explained in our data by social class (as measured by occupational prestige) and marital status.

Another basic descriptive aspect of personal networks that is of interest to network studies of social support (Wellman and Wortley, 1990; Walker et al., 1994) is the presence of *different kinds of social roles* connecting egos and alters. Table 3 reports on the roles of alters in our data set. In the overall sample, kin are the most important category of people with whom the respondents interact (48.3%), followed by friends (39.0%). Neighbors (8.2%) are not very significant members of the core networks elicited by our name-generating questions. There is a striking difference between Anglos and Hispanics. For Anglos, kin (42.6%) and friends (42.4%) are of equal importance; for Hispanics, ties to relatives are most frequent (73.3%), whereas friends (21.7%) are much less important. Further, in the personal networks of Hispanics the role of neighbor is

⁸ Since we were interested in the general patterning of ties and social support in the personal networks of respondents we did not exclude alters living in the same household (e.g. partners) in the name-generating process of the interviews and the tables. When we exclude partners within the same household in the residential breakdown, the percentage of alters living in Costa Mesa drops to 42.8% compared with 48.1% in Table 2. Likewise in Table 3, the category of partners includes 49 partners of a total of 57 living in the same household (overall sample).

Table 3
Role of relationship to alters

Role of relationship	Overall sample (<i>n</i> = 941) (%)	Anglo subsample (<i>n</i> = 726) (%)	Hispanic subsample (<i>n</i> = 175) (%)
Partner	6.6	5.9	8.6
Child	7.0	6.5	8.6
Parent	8.5	6.7	16.6
Sibling	10.4	8.5	18.9
Extended kin	15.8	15.0	20.6
<i>Subtotal all kin</i>	<i>48.3</i>	<i>42.6</i>	<i>73.3</i>
Friend	39.0	42.4	21.7
Neighbor	8.2	9.6	2.3
Others	4.5	5.4	2.7
Total	100.0	99.8	100.0

insignificant (2.3%), but in Anglo networks some neighbors are mentioned (9.6%). Thus, the Hispanic community is kin based, whereas Anglo personal networks are comprised of a mixed circle of associates based on kinship and friendship. In Section 3.3 we give a more in-depth interpretation of these findings. In the following section we turn to the relationship between gender and social roles with social support, that is, the kind of exchanges flowing between different categories of people in personal networks.

3.2. The correlation of gender and social roles with types of social support

There is a slight gender similarity among egos and alters ($r = 0.21$, $p = 0.000$). Among male respondents the proportion of male to female alters is 60/40, and among female respondents 39/61. This gender similarity effect vanishes among kin ($r = 0.00$, ns) and increases considerably in the subgroup of “freely chosen” friends to $r = 0.46$ ($p = 0.000$).

Table 4 displays the correlations of different types of social support with the gender of alters and three dichotomous variables measuring different social roles—kin, friends, and neighbors. The effects of all four explanatory variables on types of social support are weak but statistically significant and display a systematic pattern. Looking at gender first, when our respondents need help with jobs in the house or when they want to borrow a large sum of money, they turn to men. However, when they need care in times of sickness, when they feel depressed, or when they have problems with their partner, they ask women for help. Women are also those to go shopping with or with whom to have chats. So the general tendency is to ask men for functional help and women for emotional support. This is in accordance with the finding that “men fix things; women fix relationships” (Wellman and Wortley, 1990, p. 582).

The kinship variable further explains some of these correlations. Kin are consulted for advice on major changes in life and to discuss important matters. They care when our respondents are sick (mothers and sisters); they lend money (fathers and sons); and various relatives are also mentioned as people who are important in one’s life. Typically, our respondents turn to non-kin—neighbors—to borrow sugar. Hence, kin are important

Table 4
Correlation of types of social support with gender and roles of alters

Types of support	Gender Female/male (<i>n</i> = 941)		Friendship Friend/else (<i>n</i> = 912)	Neighborhood Neighbor/else (<i>n</i> = 912)
House jobs	–0.27 ^a	–0.01	–0.04	0.14 ^a
Borrow money	–0.11 ^b	0.18 ^a	–0.13 ^a	–0.09 ^b
Sickness	0.12 ^a	0.15 ^a	–0.13 ^a	–0.02
Visit	0.09 ^b	–0.17 ^a	0.24 ^a	–0.08
Depression	0.10 ^b	0.04	0.00	–0.09 ^b
Spouse problems	0.10 ^b	–0.03	0.14 ^a	–0.12 ^a
Go out	0.12 ^a	–0.06	0.13 ^a	–0.15 ^a
Life change	–0.04	0.17 ^a	–0.11 ^a	–0.15 ^a
Borrow sugar	0.00	–0.15 ^a	–0.09 ^b	0.48 ^a
Discuss important matters	0.02	0.09 ^b	0.00	–0.16 ^a
Others also important	0.02	0.15 ^a	–0.08	–0.14 ^a
Help with bureaucracy	–0.07	0.07	–0.05	–0.07

Pearson product moment correlations. ^a $p = 0.000$; ^b $0.008 > p > 0.000$. Statistically significant correlations marked.

sources of strong emotional and economic support, but are less significant as daily companions.

In contrast, the highest correlation between the role of friends and types of social support is socializing during visits and when going out. Friends are not restricted to companionship only but are also consulted when there are partner problems. However, there is a negative correlation of the role of friends with the other issues of strong emotional and economic support, which are the domains of kin. Thus, in addition to daily companionship, in Costa Mesa friends are “partner specialists” but are not involved in other emotional or economic affairs. Overall, kin and friends play important and contrasting roles in the lives of Costa Mesans.

Looking at neighbors in Table 4, a stark contrast emerges between all the variables mentioned so far and neighbor relations. Neighbors are involved exclusively in the exchange of small services, but in the opinion of Costa Mesans this category of people should not be consulted in emotional and economic problems, the domains of relatives and friends. The quality of the relationship to the people living next door is described by Tony, a 34-year-old single mechanic: “As far as the guy who lives four to five apartments down the other direction you might get a ‘Hey, how are ya doing?’ at the mailbox, but as far as small talk, even small talk isn’t there, unless the Rams⁹ are in the playoff, then you get a neighborhood; but day to day not.”

The overall result of strong and multiplex ties to both kin and friends and instrumental as well as uniplex ties to neighbors in Costa Mesa, however, could conceal ethnic differences. We tackle that in the next section.

⁹ The Rams are the professional football team of Los Angeles and are very popular in the area.

3.3. Anglos vs. Hispanics: Ethnic differences in personal networks and social support

One of the striking features of significant social relations among people in Costa Mesa is their ethnic homogeneity (Table 5).

Anglos have 93.5% of their social ties and Hispanics 97.1% of contacts within their own ethnic group. But, due to our name-generating questions, this very high correlation ($r = 0.89$, $p = 0.000$) pertains to *core networks* only and does not rule out weaker ties across ethnic boundaries at work and in other contexts. Most of the few interethnic ties are friendship ties (46.7%); these are followed by interethnic kin relations (33.3%), which implies some intermarriage.

As shown in Table 2, 16.8% of Hispanic ties are to their native countries and 71.7% are ties within Costa Mesa. These relations are mainly among kin (73.3% of all names generated by our questions refer to kin; see Table 3). Siblings and extended kin who were named by our respondents tend to live in Costa Mesa, whereas parents still live in Latin America. Hence, due to chain migration there is a locally bounded kin-community. The interesting point is that kin of Costa Mesan Hispanics do not live in Orange County or elsewhere in California but almost always in Costa Mesa itself. Almost no neighbor (2.3%) is named by Hispanic respondents for any question. This does not mean that the Hispanics in Costa Mesa live without ties to neighbors. In fact, participant observation reveals an active street life in Hispanic neighborhoods. Rather, it points to an overlap of kin and neighbor roles: 84.2% of the Costa Mesan relatives mentioned by Hispanic respondents live on the same block!

Hispanic migrants are strongly connected internally by kinship and co-residence and do not have strong ties to the Anglo majority. In addition, there is a positive correlation of $r = 0.25$ ($p = 0.001$) between length of stay of Hispanics in Costa Mesa and the number of kin ties they report in their personal networks. This supports the chain-migration hypothesis and shows that Hispanics are actively building kin-based communities in their neighborhoods. Although kin are the core of Hispanic networks, one should not disregard the 27.8% of ties established to non-kin, mainly friends (21.7%, Table 3), of Hispanic origin.

Anglos also maintain many relations with their kin. Similar to the results in Jacksonville, Florida (Bernard et al., 1990, p. 193) and the San Francisco Bay area (Fischer, 1982, p. 40), almost half (42.6%) of Anglo ties are based on kinship, but there is no local focus on Costa Mesa and kin are spread all over the country. In general, in

Table 5
Ethnic homogeneity of ego–alter ties

Ego	Alter		
	Anglo	Hispanic	Total
		27	704
		170	175
		197	879

$n = 65$: mean number of ties per respondent = 11.0

$n = 70$: mean number of ties per respondent = 8.7

Anglo personal networks there is less concentration of associates in the same community (42.4%, Table 2). But 70.6% of the alters live in Orange County and 88.1% in California; thus there is a clear distance effect favoring ties in the same area. In contrast to the Hispanics, there is no correlation between length of stay in Costa Mesa and the number of kin ties reported. Differences in occupational prestige among the Anglo subgroup do not influence the amount of kin ties in their personal networks. Anglos in low-prestige jobs report the same amount of kin (38.0%) in their networks as do high-prestige Anglos (38.4%).¹⁰ The marital status of Anglo respondents, however, has an impact on the number of kin ties. Married Anglos report 48.1% ties to kin, whereas single Anglos mention only 32.0% of such ties.

Thus, the amount of kin ties in the overall sample is mainly influenced by ethnic affiliation, but as the Anglo subsample shows it is also influenced to a certain degree by the marital status of respondents. (The small Hispanic subsample does not allow a breakdown by marital status.) The remarkable feature of Anglo core networks is the high number of supporting friends (42.4%) and neighbors (9.6%) who live in close proximity. There is no effect of occupational prestige on friendship or on neighborhood ties among Anglos in our sample; but married people report less friends (37.8%) and slightly more neighbor interaction (9.6%) than singles do (48.6% friends, 9.1% neighbors). An age and life-cycle effect can explain these findings: singles are younger and not yet building a family; married respondents already have families with children, so kin are more and friends are relatively less important. There is a direct effect of age on the percentage of neighbors in Anglo personal networks: those under 30 mention 5.8% of neighbors; for respondents between 30 and 55 this rises to 9.7%; people above 55 name 10.5% of neighbors in their personal networks.

So the broad picture of personal networks of Costa Mesans is painted by the ethnic affiliation of respondents leading to ethnically homogeneous, more (Hispanic) or less (Anglos) kin-based circles of associates. On a finer scale in the Anglo subgroup of this community, some internal variation is caused by marital status (as a proxy of life cycle) and less by occupational prestige as an indicator of social class.

3.4. *A model of kinship roles and types of social support*

In the literature on social support and kinship, the thesis frequently emerges that kinship relations lose importance in modern (post-)industrialized societies (Höllinger and Haller, 1990; Maryanski and Turner, 1992, pp. 150–151, 156–157; see, however, Keesing, 1975, pp. 129–131). This is clearly not supported in our data. Kin account for 48.3% of all relationships. For the Hispanic subsample that figure is 73.3% of one's personal network. Given the importance of kin relations we want to learn whether there is a clear assignment of particular types of support to specific kinship roles. In addition,

¹⁰ When interpreting these two figures one should focus only on the percentage difference and not on the percentages as such. The percentages are slightly below average because retired people have been excluded from the occupational prestige coding due to their ambiguous occupational status. Since older people generally tend to report more kin, this coding decision decreases the percentages of kin.

we compare this assessment of roles and support tasks between the overall sample and the Hispanic subsample. In both analyses we concentrate on the ten most frequently mentioned kinship roles. In-laws and other less frequently named kin were collapsed into a single category, labeled *extended kin*.

Correspondence analysis (Greenacre, 1990; Weller and Romney, 1990) is useful in modeling the complex relationship between two sets of variables with multiple categories. Distances on the two-dimensional scatterplot of the scaling provided by the correspondence analysis can be interpreted as a measure of relative similarity between any two items. Those types of support clustering around a particular kinship role are the most typical for the proximal categories of people.

Fig. 2 shows the plot of the first two dimensions provided from correspondence analysis. On the first, the horizontal axis that captures 43.8% of the variance in the data, there is a clear split between the people who belong to the nuclear family of procreation on the right and those consanguineous kin who formed the family of orientation in which one was born and reared on the left of the image (on this distinction, see Murdock, 1949, p. 13). The second dimension explains 23.4% of the variance and seems

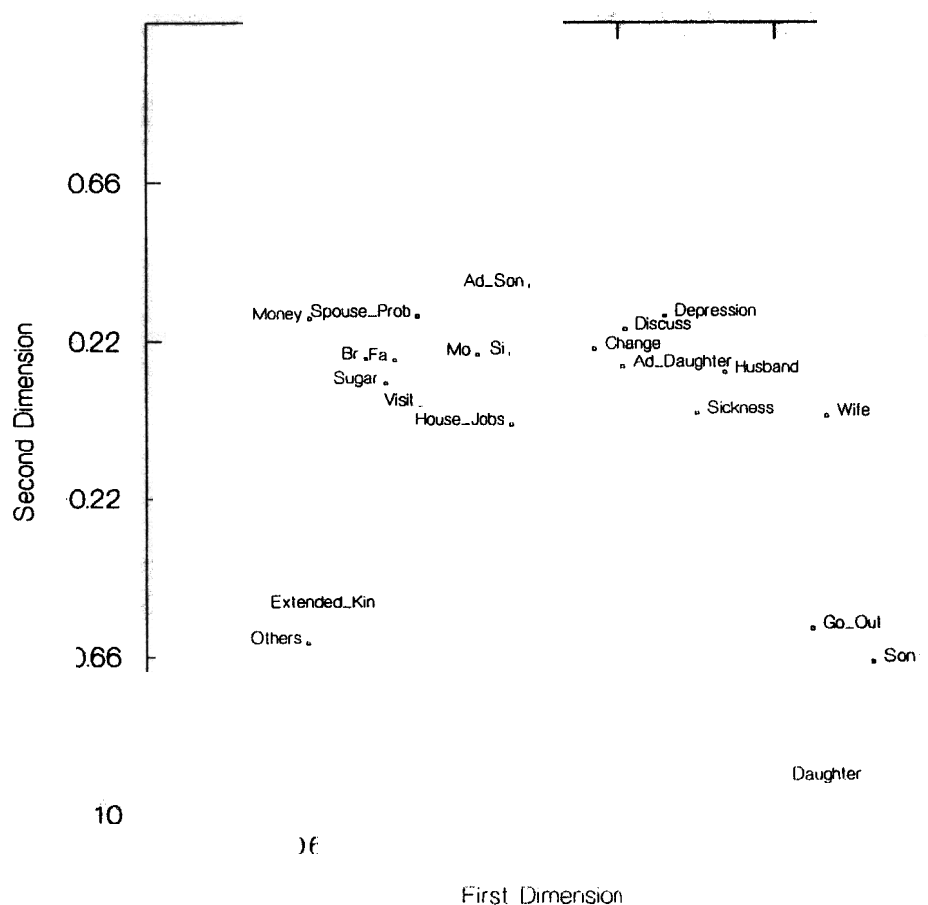


Fig. 2. Kinship roles and types of social support: overall sample

to contrast a large cluster of serious support problems that involve adult family members in the upper part of the image from leisure activities (go out), the residual category of others and extended kin as well as dependent offspring (son, daughter) in the lower part.

Turning to the more significant first dimension, on the right of the plot is *son*, *daughter*, *husband*, and *wife*. *Son* and *daughter* (in the SE corner of the plot) are the ones with whom you spend much social time but do not draw on in any other support situation.

Husband and *wife* are mostly referred to with problems where emotional support is expected. He or she is most typically the person to talk to if one feels depressed, to take care of one in times of sickness, and with whom one can talk about important matters. The fact that the *husband* and the *adult daughter*, who also belongs to this cluster, are in closer spatial distance to the points representing those problems than is the *wife*, indicates that women are more likely to consult their partner and *adult daughter* with these problems than are men. The *adult son* more than the *adult daughter* still belongs to the family of orientation as it is bound through a similar pattern of support services. Gender, not age, separates the *adult son* from that cluster around the family of procreation.

Mother and *sister* both show a similar pattern with respect to the support that is expected from them. They remain in between the nuclear family with its internal flow of support and their male counterparts. More than the male side, they are associated with the kind of problems typically managed within the nuclear family. Aside from that, they are the people referred to if you need to talk about problems you cannot discuss with your spouse. *Father* and *brother* are more distant from *mother* and *sister*. Like their female counterparts, they show a very similar pattern of situations under which they are expected to give support. They are the ones most likely to be mentioned if you need to borrow a large sum of money.

Extended kin do not play a major role in the support network of the majority of people from Costa Mesa (although they do for Hispanics, see below). They are mostly mentioned as people who are also important to you. They are named but do not fulfill any specific kind of support.

The two-dimensional solution from correspondence analysis provides a robust statistical model of the relationship under study. The first two dimensions captured 67.7% of the variance in the data. It is likely that the robustness of the computed model results from the fact that we are dealing with cognitive data. As former studies have shown (e.g. Freeman and Webster, 1995), people systematically simplify when confronted with cognitive tasks. In addition, the hypothetical character of the name-generating questions, which often start with “suppose you . . .,” might have caused the informants to think of whom one *should* report instead of whom they actually asked for the support the last time they needed it. The fact that the structure underlying the relationship is so clear is due to the high consensus among all informants and might allow us to talk of a shared cultural model (D’Andrade, 1995, pp. 212–216). This underlying cultural model of and for social roles would prescribe the ideal regarding whom to recruit for which kind of support.

If we look at the data from that perspective, an interesting question arises: how do subgroups sharing similar norms, values or experiences deviate from the overall cultural

model? In other words, is their cognitive model similar or even the same? One of the subgroups that might be expected to deviate are the Hispanic informants. The question we pose is whether there are systematic deviations that can be traced back to the specific life circumstances of migrants or to the different cultural background of Hispanics. In order to compare the two cognitive models, the Hispanic model is projected into the geometric space being calculated on the aggregate of all informants with types of support fixed.¹¹ In this comparison we contrast the overall cognitive model which is computed in the set of all respondents with a subset of respondents who might deviate. In correspondence analysis this set/subset comparison has the advantage that we can use a common space in both representations for assessing the deviation of the subgroup from the whole group. Contrasting Anglos vs. Hispanics in a subset/subset comparison has the disadvantage that we cannot use a common space for representing similarities and differences among these subgroups, since correspondence analysis would produce distinct mathematical solutions for each subset of respondents. The resulting geometric representations would not be as easily comparable.

Fig. 3 shows the projection of the Hispanic subset into the space of all respondents. The vectors indicate the direction in which the Hispanic cultural model deviates from the overall structure. The end of each vector marks the point where the kinship role for the Hispanic relatives would fall.

First, we take a closer look at the position of the nuclear family within the network. The Hispanic (dependent) *son* and *daughter* are drawn away from the deep-support-providing center of the plot. In 76.3% of the cases they are referred to (comparing with 46.7% in the overall data) as people with whom you spend part of your social time (question 10, go out).

Husband and *wife* show a similar pattern of the situations under which assistance from them is expected. In the Hispanic data they are more often looked on as social companions and less frequently as those who give deeper emotional support.

Father and *mother* are moved out of the center toward the direction of the *extended kin* or those people who are also important for you. This can be explained as being due to the migration history. Almost 80% of the parents of the Hispanic informants still live in Latin America. The geographical distance removes them from the set of support services that involves more frequent contact. Still, *mothers* remain more central than *fathers*. This corresponds to observations in the ethnographic literature (Hunt, 1971, pp. 136–137; Lomnitz, 1977, pp. 96–97, 157) that in the Hispanic kinship system mothers

¹¹ Technically speaking a second matrix is appended onto the original data table of the relationships between kinship roles and types of support among all respondents. This matrix is calculated on the subset of the Hispanic respondents and contains exactly the same relationships as the first one. Greenacre (1993, ch. 12) invented a procedure to project this additional information as supplementary points into the Euclidean space calculated on the aggregate of all informants. In a second step, lines are drawn from the original points to the supplementary points that represent the answers from the Hispanic respondents. The calculations for the correspondence analysis were done with the program SimCA (Greenacre, 1990). The scatterplots were drawn with SYGRAPH (Wilkinson 1990).

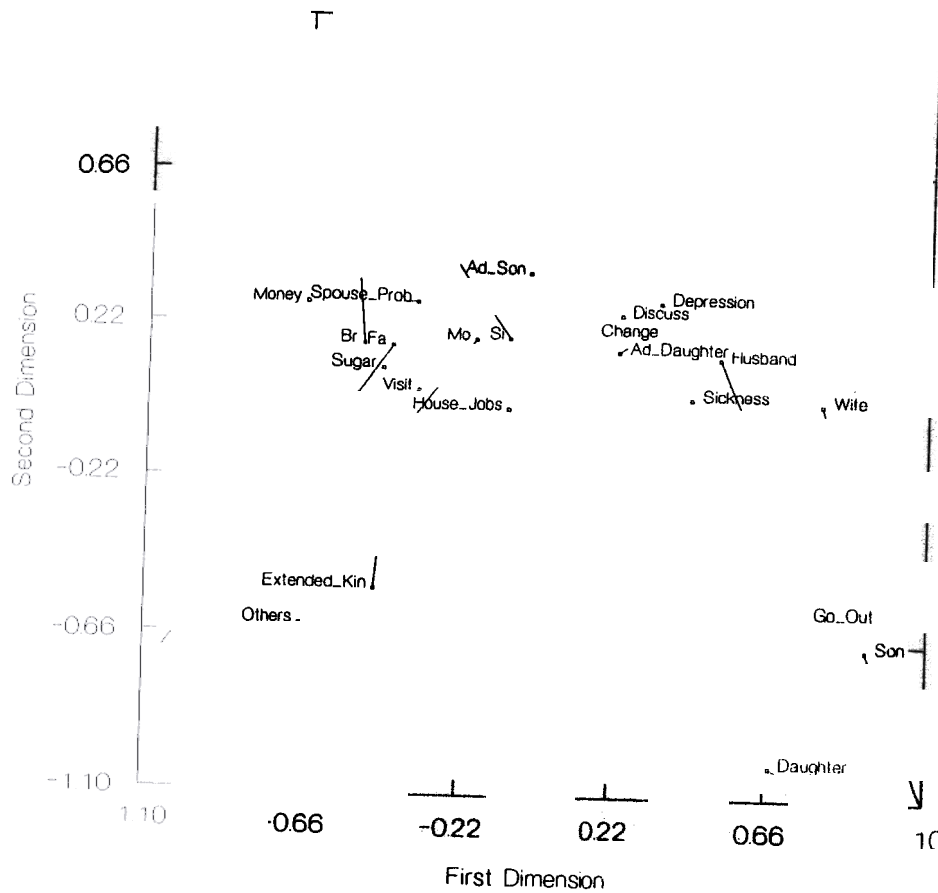


Fig. 3. Kinship roles and types of social support: overall sample vs. Hispanic.

are at the center of activity. The people who become by far more important among kin, as well as in overall networks, are *extended kin* (who even cluster with the role of *mother*). Among Hispanics, they cover an extremely wide range of situations under which they are expected to be supportive.

The question is whether the predominance of kin in Hispanic personal networks is due to the different life circumstances of migrants or to the Hispanic cultural background. To answer this question we refer to data collected on social support networks by Bernard and his colleagues (Bernard et al., 1990) in Mexico City. In the homeland of most of our Hispanic informants these researchers report about 46% of the social ties as kinship relations (Bernard et al., 1990, p. 193). This figure is lower by far than the 73.3% of kin relations among the Hispanic informants in Costa Mesa. We conclude that, except for the roles of *fathers* and *mothers*, it is the different life circumstances of migrants rather than cultural differences as Hispanics that lead to an increase in the importance of kin relations in the Hispanic cultural model. By and large, however, their cognitive model does not drastically deviate from the overall structure.

4. Discussion and conclusion

First we summarize our substantive findings on personal networks and social support in Costa Mesa. Then we draw some methodological conclusions.

1. When considering strong ties of social support, as captured by our name-generating questions that tap the core region of personal networks, Anglos and Hispanics live in ethnically segregated social worlds.¹²

2. Apart from the low frequency of cross-connecting (strong) ties between these ethnic groups, however, both communities are remarkably similar. Kin act as emotional and economic trouble-shooters. Friends are social companions. Neighbors are less significant and lend instrumental help. Due to the migration situation, extended kin are more important in Hispanic networks. In the process of chain migration, we can recognize among Hispanics efforts to build kin-based communities in which the roles of relative, neighbor, and friend overlap.

3. In personal networks we find a mix of localized and extralocal ties. Among Anglos friends are more local, whereas kin may live further away. The personal networks of Hispanics are dominated by kin, and a larger part of their alters live in the same neighborhoods.

4. Occupational prestige and marital status exert minor influences only on the distribution of social roles in personal networks when compared with ethnic differences, which are the major source of variation in the community studied.

5. The overall pattern of personal networks and social support in Costa Mesa is similar to the picture drawn by Fischer (1982) for northern California and by Wellman and collaborators for East York/Toronto (Wellman et al., 1988; Wellman and Wortley, 1990). Studying an ethnically mixed working-class and professional population in the larger Los Angeles area, it turns out that—contrary to popular and social science images cited in the introduction—southern Californians are not so different from other North Americans. They socialize with friends and consult kin in times of important decisions or crises, and more than 40% of the members of their core networks live within the boundaries of the same community.

The following are the strengths and weaknesses of different approaches to urban social structure.

1. The random walk approach and similar link-tracing techniques reveal insights into the structure of the whole network that the different personal networks are taken from (Klov Dahl, 1989). However, the successful completion of random walks takes a lot of time in the field and depends on the cooperation of respondents. In our preliminary inspection of name similarities we have traced three persons as cross-links between different random walks. Out of twelve Hispanic starting points, two of them were Hispanics. This supports the hypothesis that the connectedness of the Hispanic subgroup of Costa Mesa is much higher than the connectedness of the Anglo majority (one cross-link out of 41 starting points).

¹² When considering weak ties, interethnic relationships become more complex, see Deng and Bonacich (1991) on Black and White networks, and H.R. Bernard's observation (personal communication) from the small world experiments that Whites report almost no Black ties, while Blacks report many White ties.

2. By comparison, the neighborhood ethnographic studies by urban anthropologists (Mitchell, 1969; Hannerz, 1980; Sanjek, 1982) recover dense and multiplex relationships at the local level in an in-depth investigation but fail to represent the whole urban network, which can be large and ethnically and socially diverse. In contrast, large-scale surveys of personal networks (Fischer, 1982; Zentralarchiv, 1986; Ruan et al., 1995) generate reliable information on egocentered social circles and can tackle variation of context variables like class, ethnic affiliation, and the like. The degree to which these results can be generalized to the whole network is still a matter of sophisticated methodological discussion, however (Frank and Snijders, 1994; Johnsen et al., 1995; Killworth et al., 1995). Clearly, we need to combine approaches and take advantage of their different strengths as Mitchell (1987) argued some time ago.

The method of data gathering in the Costa Mesa study is somewhere between ethnographic case studies of particular neighborhoods and large-scale surveys of personal networks. We used a probabilistic procedure for selecting respondents. This forced our interviewers to visit sites and talk to respondents whom they would not have selected purposely, and this, in turn, helped us explore the very different social circles in Costa Mesa. In the best of all worlds we could have enriched our study with more qualitative case study material and by completing the random walks. In the real world we got some systematic insights into variations of personal networks among urbanites in a mixed working-class and professional community of southern California.

3. In concluding we would like to sketch a yet untried, radically different approach to the study of large urban networks.¹³ Its inspiration comes from kinship-based structural anthropology of the past and the recent revival of network studies of kinship (White and Jorion, 1992, 1996; Brudner and White, 1997; Schweizer and White, 1997). This approach takes advantage of the observation that there are more and less stable elements in social systems changing over time (see Wellman et al., 1997 for a vivid example of changing personal networks). What if we start with documents on the ownership, inheritance, and sale of property like houses and real estate? We could then study the flow of actors staying in houses, renting or moving on. Rentals take place under economic, social, and political rules generated by the elite and middle classes. Due to their property and kinship ties they could be the stable elements at the core of this urban network. They, in turn, act according to cultural rules and interests that evolve and are shaped by economic, political, and social constraints. This would lead to a very different research design, but we think it is worth exploring in future studies of large urban networks.

The systematic investigation of personal networks and social support in southern California that we have pursued in Costa Mesa points to two major suggestions for future research on complex societies. (1) In addition to class, gender, life cycle, and other independent variables, *ethnic affiliation* should be taken into account as a major source of variation in the social organization of contemporary communities. (2) Looking at the significant bonds in people's personal networks, *kinship* is not on the decline in

¹³ These ideas have been developed in discussion of the senior author with J.R. White during the Costa Mesa study

complex societies, but plays a major role in molding everyday life, in managing crises, and in making decisions. Although friendship links are also significant and couples separate, the high percentage of ties to kin (over 40%) is a remarkable sign of the evolutionary adaptability of the social and cognitive structures that are based on the ancient notion of common descent. Kinship is still there in “postindustrialized” southern California and quite alive.

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