

Chapter 15

Where Does Social Support Come From? The Social Network Basis of Interpersonal Resources for Coping With Stress*

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When North Americans need help, where do they turn? They could buy many kinds of help in the marketplace, but the cost might be too expensive and not be sensitively suited to their needs. They could obtain help from governments and other organizations, just as most people obtain education, but such institutional distributions often are in short supply and may require difficult dealings with complex bureaucracies. They could coercively appropriate helpful resources through theft or force, but this is only possible for unskilled services, material goods and information, and the social control of such deviant behavior may cause more stress than the coercion alleviates. They could help themselves by making goods or doing services (as peasants have historically done), but such self-provisioning cannot produce many of the complex material and intangible resources that people now need.

North Americans obtain many helpful resources by means of social support. They use their interpersonal relations to meet a wide variety of their needs: emotional aid, material aid (goods, services and money), information, and companionship. Such interpersonal provision of supportive resources is a key constituent of social life. It includes, but is much broader than, the principal focus of American social scientists: the effects of emotional support on stress, health, and health care (see the review in Gottlieb & Selby, 1990). Our primary concern in this chapter is with the kinds of networks and relationships that tend to provide different kinds of support. However, we also consider briefly how the very networks that provide support may also be sources of personal problems. Socioeconomic diversity and socioeconomic level are treated as predictors of different kinds of support and problems.

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Personal Communities as Networks of Social Support

Supportive Communities are Personal Networks

Although scholars used to think that a postindustrial loss of community had dried up interpersonal sources of support, we now know that community has stood up well to the large-scale social transformations of urbanization, industrialization, bureaucratization, technological change, capitalism, and socialism (See the reviews in Fischer, 1976, 1982; Goldthorpe, 1987; Lee, 1980; Moge, 1977; Sussman & Burchinal, 1962; Wellman, 1988, 1990, 1992b, 1994; Wellman & Leighton, 1979). Although few North Americans are embedded in densely knit, tightly bounded villages-- urban or rural--, most are enmeshed in ramified, supportive personal communities. Analysts have learned that kith and kin are not relics from a pastoral past but are active arrangements for helping individuals and households deal with stresses and opportunities (Wellman, 1988, 1990, 1992b; Willmott, 1987).

The residents of Western societies usually know few neighbors, and most of their personal communities live outside of their neighborhoods. A sizeable minority of active community ties stretch even farther than the metropolitan area. People easily maintain far-flung relationships by telecommunications-- with telephones now being supplemented by faxes and electronic mail-- and transportation based on cars, public transit and airplanes. In Toronto, the neighborhood is no longer the effective boundary for frequent face-to-face contact and delivery of supportive goods and services. Frequency of contact and the percentage of network members delivering goods and services do not start decreasing until network members live 30 miles away, which roughly corresponds to an hour's drive or being within the local flat-rate telephone calling zone (Wellman, Carrington, & Hall, 1988; Wellman & Wortley, 1990). Friends comprise the largest segment of the active ties in these networks, but neighbors and coworkers dominate daily meetings (Wellman, 1996), with many kin also being important network members.

In the past two decades, social network analysis has led sociology away from sterile polemics about whether modern times have destroyed community (Wellman & Leighton, 1979). The organizing concept of the *personal community network* has led analysts to study the composition, structure, and contents of people's ties with friends, kin, neighbors, workmates and acquaintances, wherever located and whomever with. *Analysts no longer start with the a priori assumption that communities must be tightly bounded, densely knit, broadly supportive solidarities, nor do they limit their searches for community to neighborhoods, workplaces, and kinship groups.* Research has shown that most people have sizeable personal community networks with complex structures and variegated compositions. These networks provide a wide range of supportive resources that are important to the lives of both the recipients and the providers.

Communities operate now as private personal communities rather than as public collectivities, and people have come to rely heavily on their active community ties for informal help (Wellman, 1992a). Social network analysis treats these personal communities as networks whose composition, structure, and contents are defined from the standpoint of (a usually large sample of) focal individuals at their centers. Such studies present Ptolemaic views of the network universe as experienced by the focal persons at their centers. *Analysts have been centrally concerned with understanding how the composition and patterns of relations in these personal community networks affect the ways in which resources flow to their members.*

Personal community networks come in all shapes, sizes, and flavors: large and densely knit extended families, sparsely connected and fragmented sets of friends, small self-reliant clusters, etc. The ties in these communities vary markedly in strength, typically consisting of 3 to 6 socially close intimate ties, 5 to 15 somewhat less strong but still significant ties, and over 1,000 acquaintances and latent (but often still mobilizable) relationships. *Although not all ties and networks are supportive, most ties do provide some kind of "social support," and most networks provide a range of assistance that is often low-cost, flexible, effective, and quickly available* (Wellman, 1992b). Even if we restrict our attention to a person's most active ties (those that are intimate or otherwise significant), these 10 to 20 ties usually provide network members with an important share of their resources along with what they purchase or get from household members, formal organizations, and the state.

A key question for us is how the variation in size, composition, and structure of these complex networks is related to the quantity and quality of the social support they deliver. Our group's research (Wellman & Potter, 1997) suggests that personal community networks basically vary along four dimensions:

□ **Range:** How large and heterogeneous are these networks? Does high range mean that networks have more resources--and more diverse resources--available?

□ **Availability:** How available for contact are network members so that they can easily receive information about each other's needs? Does high availability mean that they can conveniently deliver instrumental aid?

□ **Densely Knit Kin/Sparsely Knit Friends:** Are network members bound by densely knit, normative ties of obligation and social control or sparsely knit, voluntary ties of companionable shared interests?

□ **Composition:** To what extent are these networks composed of women, who tend to offer much emotional support, or people of high socioeconomic status, who tend to have more material resources available?

This chapter's main thrust is to see how these different dimensions of personal community networks are associated with the networks' provision of various kinds of social support.

Stress, Support, and Well-Being

Until recently, the nature of *support* itself has largely remained an unanalyzed, antecedent "black box." *Most scholars originally treated it as a single, unidimensional phenomenon.* They viewed it as a generalized resource (whose precise manifestations might vary by circumstances) available from "supportive" members of social networks (e.g., Wellman, 1979). *In recent years, analysts have developed more differentiated typologies, distinguishing among such types of support as empathetic understanding, emotional support, material aid (goods, money, and services), and information provision (Barrera & Ainlay, 1983; Tardy, 1985). They have come to look more at the specific resources flowing through networks than at the general potential for network members to be supportive.*

Since the late 1970s, researchers have been interested in the relationship between the social support found in personal communities and physiological and psychological well-being (Cassel, 1976; Cobb, 1976). *Researchers have generally been more interested in the outcomes of support-- its implications for well-being-- than its sources.* They have focused on the effects of support, arguing that it appears to make individuals healthier, feel better, cope better with chronic and acute difficulties, and live longer. However, analysts have given much less attention to our topic here, how interpersonal phenomena and their contexts foster social support, an area essential to strategic planning for disease prevention and health promotion.

Concerned with demonstrating the therapeutic effects of support, researchers have refined concepts and measures of acute stress, chronic strain, consequent physical and mental distress, and compensatory coping behavior (Berkman, 1984; Dohrenwend & Dohrenwend, 1984; Lazarus & Folkman, 1984).¹ They have claimed that the evidence indicates a process in which social support may be a protective factor in alleviating the physiological and psychological consequences of exposure to stressors. They have argued that support prevents people from encountering stress, “buffers” them from experiencing the full brunt if stress is encountered, and steers them to help from formal and informal caregivers. *Thus, social support is seen as one among many factors that can affect a person’s ability to resist disease in the face of acute and chronic stress* (Pearlin, 1989).

¹ Because such stresses were usually identified as related to health, psychological functioning, or interpersonal relations (e.g., Holmes & Rahe, 1967), it is not surprising that the proposed remedies fall into these domains. Yet significant gaps remained in these largely American formulations, such as stresses caused by the threat (or experience) of war or by the lack of food, clothing, or shelter.

Fueled by comparatively large funding from health care agencies, social scientists have launched many studies of how such support promotes physical and mental health. Until about a *decade ago*, such research had several unfortunate characteristics:

1. It implicitly *assumed that social support itself was a unidimensional phenomenon*, a broad array of informally provided emotional aid, material aid, and companionship, largely provided by the active members of personal community networks.

2. It *assumed that just about all active ties were broadly supportive*.

3. It *analyzed social support as an interpersonal duet between sender and receiver*, without taking into account the networks in which such relationships are embedded.

4. It concentrated almost entirely on the funding agencies' chief preoccupation-- the health-maintaining consequences of social support. *It took for granted the factors that led to the provision of social support*.

We now know that the first three assumptions are not true. Network members specialize in the kinds of support they provide. Some provide mostly emotional aid or material aid or only companionship. Some provide little or no social support.

Recent work has gone from sensitizing statements to more rigorous formulations of support and analyses of its consequences. For example, Lin, Dean, and Ensel (1986) used a battery of validated measures to show the relationship of expressive support to depression. They define support as the “perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners” (p. 18). Much empirical research linking stress and support has been done (see the reviews in Berkman, 1984; Gottlieb & Selby, 1990; House, Landis, & Umberson, 1988; House, Umberson, & Landis, 1988; Lin & Ensel, 1989; Tijhuis, 1994; Wellman, 1992b). *Although results are mixed, on balance there appears to be a positive relationship between receiving higher levels of social support and having better physical health, although researchers have not yet found a clear relationship to morbidity and mortality with reference to specific diseases.*

Some work has integrated studies of stress and support with studies of stress and immune function (e.g., Woolfolk & Lehrer, 1995). This work suggests that the down regulation of the immune system is partially linked to physical and psychological stress. Strong social support can mitigate the harmful effects of stressful stimuli on cholesterol level, uric acid level, and immune function (Dorian, 1985; Thomas & Goodwin, 1985). Such studies suggest that links between chronic exposure to stress, social support, and coping strategies can result in a specific immune response. The two systems most closely associated with maintaining homeostasis of the organism, the neuroendocrine system and the immune system, are more effective adaptive systems under the influence of social support. Stress exerts a negative influence on both these systems, while support mediates the effects of stress on the central nervous system and ultimately on the immune system.

With respect to psychological health, many studies have indicated that a person's receipt of social support may help moderate the effects of stressful life events on his or her psychological state (see Abbey, Abramis, & Caplan, 1985; Goldberg, Van Natta, & Comstock, 1985; Hammer, 1983; Kessler & McLeod, 1984; Kessler, Price, & Wortman, 1985; Thoits, 1982; Turner, 1981; Turner & Marino, 1994; Vaux, 1985). For example, Brown et al. (1977) found that among two small samples of working-class London women, those who were more socially "integrated" (i.e., had more social support) tended to have lower rates of depression. *Much effort in the study of support and psychological health relationships has been devoted to examining the extent to which support affects health independently of stress, or the extent to which support "buffers" people from experiencing the full brunt of stress when it is encountered. Both processes appear to be operative (Lin et al., 1986). Affective support (emotional aid, companionship) appears to be a better predictor than instrumental support (goods, services, money, information) of psychological well-being and physical health (Abbey et al., 1985; Israel, 1985; Kessler & McLeod, 1984).*

The distinction between affective and instrumental support indicates that “support” is as vaguely metaphorical a concept as “disease.” It is a global, unidimensional, sensitizing concept rather than a variable to be analyzed. *Support needs to be deconstructed into its constituents, operationalized for measurement, and studied for its functionality.* In addition to analyzing the consequences of social support for health, investigators need to consider its etiology and understand what kinds of personal communities and community ties produce which kinds of social support. When applied to the study of social support, the social network approach engenders a more fine-grained attention to how the composition of ties, the nature of relationships, and the structure of these relationships affect the quantity and quality of support available through the networks.

Fostering Social Support

The discovery that one could not just assume the existence of a broad spectrum of social support in all community ties encouraged investigations into the causes and correlates of social support as well as its consequences, thereby extending the analytic chain backward to discover social factors associated with the provision of support. Researchers acknowledge that “research on the relationship of social networks to health care use has been retarded by imprecise definitions of social network characteristics, nonspecific hypotheses concerning their relationships to utilization, [and] a confusion of social support and social networks” (Horwitz, Morgenstern, & Berkman, 1985, p. 947). *Work is now more likely to distinguish between supportive and unsupportive ties, and perceived and received support, and to recognize that different types of networks may provide different kinds and amounts of support.*

If one cannot assume the universal and undifferentiated existence of broadly supportive relationships, then it becomes important to understand the circumstances under which particular kinds of social support will be available to maintain health. *By contrast to the emphasis on the health-giving effects of social support, far fewer studies have looked at the social causes of social support. What social factors are associated with the production of social support in community ties and networks?* This is an important practical as well as intellectual question; people want to know which of their network members will help deal with their various needs. Most research into

this question has concentrated on identifying the types of ties that provide different kinds of support. *Thus, our research group has found that people tend to receive different kinds of social support through different types of relationships. Parents and adult children are preeminent sources of emotional support and large services; available relationships (living or working nearby, or otherwise in frequent contact) provide many small services; friends and siblings are preferred sociable companions; and women provide much emotional support, especially to other women (Wellman & Wortley, 1990). The specialized nature of these supportive ties and the fragmented nature of the networks means that people must actively work to maintain each supportive relationship rather than relying on solidary communities to do their maintenance work.*

Initially, most studies of social support have treated community ties as discrete dyads, using exchange theory as an underlying perspective. While they often termed the aggregate of these dyadic ties a "social network," their loose, metaphoric formulation did not allow them to analyze the characteristics of these networks. The studies implicitly assumed that networks are homogeneous in their structure and composition and that variations in structure and composition are largely irrelevant to the provision of support. Such assumptions led to a focus on network size as the only important precursor variable, for if all relationships are the same, then the greater the body count, the more support available. Yet the essence of community ties is that they are parts of social systems: Each tie is structurally embedded in larger social networks, and the form of these networks can markedly affect the kinds of resources that flow through any specific tie.

The research reported in this chapter builds on existing work by considering for the first time how the characteristics of personal community networks affect the supportiveness of these networks. Social support has a social network as well as an interpersonal basis. Not only do people need--and want--to know which of their relationships are apt to provide different kinds of support, they also need and want to know the number and proportion who provide different kinds of support. Thus the flow of supportive resources through a network is inherently shaped by the characteristics of the networks themselves, as well as by the characteristics of the persons and ties of which these networks are composed.

We explore the extent to which four properties of personal community networks shape the kinds and amount of resources that flow through them: the networks' range, availability, kin dominance, and composition. We analyze how these structural and compositional properties of networks contribute to the provision of different types of social support, and we propose improved conceptualizations.

Studying Networks of Social Support

The Context

Our information comes from two linked data sources: a large survey conducted in 1968 and a small set of interviews conducted a decade later. This information was collected from one-time residents of the Toronto borough of East York. Densely settled East York, with a population of about 100,000, is an integral part of the transportation and communication networks of metropolitan Toronto (population = 3+ million). It is located about 6 miles (a half-hour subway ride or drive) east of Toronto's central business district. When the survey and supplementary interviews were conducted, its small private homes and apartments housed a settled, predominantly British-Canadian, working- to middle-class population (for details see Gillies & Wellman, 1968; Wellman, 1982). East York has a long tradition of communal aid and active social service agencies. Because medical services are paid for from the public purse, social support among East Yorkers (and Torontonians in general) is often intertwined with and complementary to formally mandated care.

The Large Survey

The large, 1968 in-person survey of a random sample of 845 adult (age 18+) East Yorkers used a structured interview. The respondents reported about their relationships with each of a maximum of six *intimates* (mean= 5), a total of 3,930 relationships. The virtues of this data set are its large sample size, systematic information about each intimate, information about each network's social density, and its fit with the subsequent interviews. Although the data were collected more than 25 years ago, the findings are consistent with more contemporary studies (for details see Wellman, 1979, 1988, 1993).

This was one of the first surveys to inquire about social support (Wellman, 1993), and at that time we did not appreciate the differentiated nature of social support. Hence, we asked only two broad questions about whether each intimate provides social support:

1. “Which of these [intimates] do you rely on for help in everyday matters?” The respondents reported that 22% of their intimates provide everyday support. However, 60% of the respondents reported that they have such everyday help available from at least one intimate.

2. “Which of these [intimates] do you rely on for help in an emergency?” The respondents reported that 30% of their intimates provide emergency support. However, 81% of the respondents reported that they have such emergency help available from at least one intimate.

Thus the usual respondent receives help from intimates, particularly in emergencies, but the providers of this support are a relatively small part of their social network. The overly broad questions about “everyday” and “emergency” social support limit our ability to understand the specialized kinds of support that different types of ties and networks provide, and it also probably led to underreporting of the support provided by intimates. Moreover, in asking only about the strongest ties in each focal person’s network, the survey ignored the support that could be provided by weaker, but still active, relationships.

The In-Depth Interviews

To deal with these conceptual limitations, we conducted in-depth interviews in 1977–78 with a random sample of 29 of the original survey respondents. We complemented the breadth of the original survey with depth in these interviews, gaining much more information about many more ties in each network. We held open-ended discussions with each respondent lasting for a total of about 15 hours, asking in detail about all persons with whom they were significantly “in touch.” We elicited the kinds of support exchanged with each network member by asking respondents about 18 different kinds of help they had ever given to or received from network members.²²

²² Because of length constraints, we provide only quantitative data here, but qualitative evidence is available in other papers based on these interviews (Wellman, 1982, 1992a; Wellman, Carrington, & Hall, 1988; Wellman & Tindall, 1993; Wellman & Wortley, 1989, 1990; Wellman, Wang, Tindall, & Nazer, 1997).

The networks of the 29 respondents contain a total of 343 “active” ties, with a mean of 5 “intimate” ties and 7 somewhat weaker “significant” ties per network. *By showing that a majority of ties (which include non-intimates as well as intimates) provide some kind of support, these detailed data recast the impression left by the large survey that only a minority of intimate ties are supportive.*

Much more detailed questioning in the subsample interviews about multiple kinds of support yields a broader base of assistance; very few of these “intimates” do not provide any kind of support. Even among the somewhat less strong but “significant” ties, relatively few do not provide any kind of support. In short, most, but not all ties, appear to be supportive, but the weaker the relationship, the less supportive (Wellman & Wortley, 1990).

Detailed questioning also indicates that eight specific types of support predominate in these networks, each present in at least one third of the relationship ties and two thirds of the networks: minor emotional aid; advice about family problems, major emotional aid, minor services, lending household items, minor household services, sharing ideas, and doing things together. *Thus, these active network members are most apt to provide intangibles--emotional support and companionship--along with minor goods and services.*

- Note, however, that *no specific type of support is given by a majority of these active network members*, and presumably the 1,500 or so weaker relationships in a person’s network are even less apt to be supportive.
- The other specific types of support are each present in less than one fifth of the ties: aid in dealing with organizations, major household services, regular help with housework, major services such as children’s day care and long-term health care, small and large loans and gifts, financial aid for housing, and participating together in an organization. *Thus, only a small minority of network members provide financial aid or major goods and services.*
- These 18 specific types of support cluster into six basic support dimensions, for multiple types of support tend to be provided in the same relationships (Wellman & Wortley, 1989). For example, relationships that provide minor emotional support also tend to provide major emotional support. *Three dimensions are provided by a majority of active network members in the sub-sample and are present to some extent in almost all the networks: emotional aid, minor services, and companionship. Three dimensions are much less frequently provided by network members but are available from at least one person in most networks: major services, financial aid, and job information.*

These dimensions are congruent with other studies of social support (see the reviews in Gottlieb & Selby, 1990; Wellman, 1992b). Moreover, the grouping of specific kinds of support into substantively different dimensions has its own interest. *By contrast to the broadly supportive relationships of the East Yorkers' spouses* (Beverly Wellman & Barry Wellman, 1992), *in-depth interviews suggest that the members of personal community networks specialize in the dimensions of support they provide*. Although most of the subsample's active network members provide at least one dimension of support, only a minority provide at least three dimensions. *It would appear that to obtain a wide range of support, people often must actively shop within their networks for those who specialize in giving them a particular sort of help; they cannot count on most ties within their networks to give them the kinds of support they might need*.

In addition, only a small majority of ties studied in depth are trouble-free, whether involving "intimates" or "significants". (Similar data are not available from the survey.) However, most problems are minor, with few "intimate" or "significant" ties reporting major problems. Nonetheless, a greater likelihood of finding "significant" ties with major problems (x2.6) points to the involuntariness of some relations with extended kin, neighbors, and workmates. In fact, four types of problems occur in about equal amounts in these sub-sample networks, with one quarter of the problematic relationships involving somewhat involuntary ties with kin, coworkers, or neighbors (mostly kin). The remaining problematic relationships are equally attributable to: differences in socioeconomic status, stage in the lifecycle, and especially lifestyle; interpersonal hurts and withdrawals, especially failure to act when support is needed; and personality clashes.

Measuring the Number and Percentage of Social Supporters

Our principal analytic task in this chapter is to ask what variations in personal community networks are associated with the availability through these networks of various amounts and kinds of social support. If availability is principally a function of network size and composition, then simple aggregation from relational analyses may suffice. If availability is also a function of a network's structure and heterogeneity, then the network basis of support is more than the sum of its constituent relationships.

To study network support, we again rely on our early survey for basic information about a large sample and on the in-depth interviews for reconceptualization for more extensive testing in the future. The survey only asked about "intimates", the subsample interviews deal with both "intimate" and "significant" ties,-- the latter quite active but not intimate.

- For each dimension of support, *our two key measures are the number of network members providing support and the percentage of network members providing support.*
- The number measures tell how many members of each network provide everyday or emergency aid (from the survey) or companionship, emotional aid, services, or financial aid (from the interviews). For example, as there are three different kinds of emotional support, a 10-person network could provide a maximum of 30 strands of emotional support.
- The percentage measures reflect how likely a person is to receive support from an average network member. The percentage variables automatically control for network size in a way that the number variables do not.

We present our analysis in subsections. The first discusses the overall regression models. Each of the next four subsections discusses a particular network dimension: stating its rationale, operationalizing it, and discussing the kinds of social support that are associated with it.

The Relationship of Network Structure to Social Support

The 1968 survey data show the network dimensions studied to be significantly associated with both the *number and percentage* of all three types of support measured for “intimates”: visiting, everyday support, and emergency support (Table 1). The strongest association is with the number of intimates who visit socially ($R^2 = .19$), with the comparable size of the R^2 and the sum of Beta²s suggesting the absence of indirect or interaction effects, or the presence of offsetting indirect effects).

The interview data from the 1978 sub-sample suggest that more finely measured types of support might be more strongly linked to network characteristics, both for “intimate” ties and “significant” ties.

- For “intimate” networks, network structure appears to be strongly associated with the *number* of relationships providing companionship, emotional aid, and *major* services, with substantial negative disparities in size between R^2 and Beta² indicating suppressor effects (Table 2).
- For “significant” networks, structure appears to be associated with the *numbers* providing companionship, emotional aid, and *minor* services, with negative disparities in size between R^2 and Beta² indicating suppressor effects (Table 3).
- However, network structure does *not* appear to be reliably associated with the *percentage* of network members providing various types of support, i.e. controlling for size appears to account for the link between network structure and the provision of different types of support.

Range

Rationale. The range of a network refers to a mix of structural characteristics that collectively heighten its capacity to provide diverse resources and access to other social milieus (Burt, 1983; Haines & Hurlbert, 1992; Marsden, 1987). *A network with a high degree of range is one that is relatively large and is composed of heterogeneous network members.* Our data already have shown that large personal communities with a high proportion of “significant” ties usually are socially heterogeneous and *sparse* networks (Wellman & Potter, 1997).

Are networks with high range more cohesive and supportive than networks with low range?

- The connection between network range and social support rests primarily on standard sociological interpretations of network heterogeneity. Arguments that range breeds support reflect the conjectures of Durkheim (1893) & Simmel (1922) that relationships that cut across social categories foster solidarity and satisfy mutual needs (see also Blau, 1993; Blau & Schwartz, 1984; Kemper, 1972). Thus Granovetter's "strength of weak ties" (1973, 1982) argument contends that weak ties provide better connections to different social milieus because they usually connect socially dissimilar people (see also Burt, 1987). Hence, *the greater the range within a network (greater size and heterogeneity, lower density), the more access to diverse sources of support and thus the greater availability of support.*
- Network size enters into this argument with the standard expectation that as the number of network members increases, the relative heterogeneity of the network also increases (Haines & Hurlbert, 1992). Under this assumption, greater size provides access to a greater variety of potential sources of support. *Accordingly, as the size of a network increases, so should the number of potential support givers.*
- If these relationships are linear, as the number of network members increases, the number of persons providing support increases at the same rate while the percentage of network members providing support remains constant. *An even stronger relationship would be that as the number of network members increases, both the number and percentages of network members providing support also increase.* This curvilinear relationship would be consistent with research showing that people with more social skills tend to have larger, more supportive networks (Parks & Eggert, 1991; Riggio & Zimmerman, 1991).

There is also a plausible contrasting argument that low network range fosters supportiveness.

- This argument is based on the supposition that network members with similar social characteristics tend to flock together in similar structural positions and become supportive friends (Lazarsfeld & Merton, 1954; Marsden, 1988). Thus, the similar characteristics and interests of network members may foster cohesive networks, empathetic understanding, and mutual support. *This argument suggests that the greater the range (and hence diversity) within a network, the less support one would find.*
- *Research into the circumstances in which bystanders intervene to help strangers (Latané & Darley, 1976) also suggests that networks with low range-- especially small networks-- would be more supportive.* Its findings suggest that network members would be reluctant to get involved when they think that others can provide support.

- A weaker form of the argument suggests that more network members would lead to an increased number of supporters but that the rate of increase in support (i.e., the percentage of network members providing support) would decrease (van Tilburg, 1990).

Operations. Network size, one of the indicators of range, is difficult to measure because networks have fuzzy boundaries. Social networks are dynamic entities since network members can easily come and go (Wellman, Wong, Tindall, & Nazer, 1997). As there is no such thing as “the network,” analysts must specify inclusion criteria. The 1968 survey focused on intimate ties, a mean of 5. Since the 1978 data allowed us to control for tie strength, we were able to analyze network size in terms of the number of active ties per network, including the number of intimate and significant ties per network. In 1978, the mean number of “intimate” ties was also 5, there was a mean of 7 “significant” ties, and the mean, total network size was 12. Because intimate ties are more apt than significant ties to give multiple kinds of support, we analyze separately (in the supplementary interviews) relationships between the number of “intimates” and “significants” and the number and percentage of network members providing each kind of support.

Measures of network size and network heterogeneity (another indicator of range) are often confounded because they are highly correlated: the larger the network, the less homogeneous it is. For both data sets, we used standard deviations to measure the homogeneity/heterogeneity of network characteristics that were measured as continuous variables: age and socioeconomic status.³ In the 1978 data set, we were able to use Schuessler’s Index of Qualitative Variation (Mueller, Schuessler, & Costner, 1970) to measure the heterogeneity of network characteristics that were measured as nominal variables: ethnicity, role, sex, religion, employment status, and marital status. As preliminary work showed that almost all heterogeneity measures for the supplementary interviews formed one factor, we then constructed a composite measurement, combining all of the indicators of network homogeneity: marital status, employment status, religious affiliation, ethnicity, age of network members, similarity of education of network member to respondent, and socioeconomic status. This standardized composite measure is based on a scale of 0 to 4: the higher the score, the more heterogeneous is the network.

³ We measured socioeconomic status using the Blishen and McRoberts (1976) scale for occupations, a Canadian adaptation of Duncan’s (1961) U.S. scale.

As our research has shown that network size and heterogeneity form a single element of personal networks (Wellman & Potter, 1997), we constructed a single range variable. To simplify the analyses and provide a comparable measure between data sets, we standardized the variables for size and heterogeneity in each data set and combined them.

Findings. *Our findings show the importance of high network range for the provision of social support. Large, heterogeneous networks have greater numbers of members who provide all kinds of support.*⁴

- *In the 1968 survey data, the regression coefficient of range is quite strongly associated with number of “intimate” network members engaging in social visits, accounting for almost all of the attributable relationship. Range is also significantly (although less strongly) associated with the number providing everyday and emergency support (Table 1).*
- *On the other hand, in the 1968 data high network range is associated reliably but not strongly with low percentages of network members who are supportive, particularly during emergencies.*
- *Thus, in the 1968 data low network range is associated with both a low number of intimates engaging in social visits and support, as well as (less strongly), a high percentage of network members who are supportive, particularly during emergencies.*
- *The more finely measured 1978 sub-sample data suggest that both intimate and significant networks with high range contain a large number of members who provide companionship, emotional support, and minor or major services, but that the percentage of network members with high range is not a reliable predictor of this activity. (Tables 2 and 3)*

These findings lend credence to the hypothesis that networks of intimates with high range have both a larger number and greater variety of support givers. They further suggest the hypothesis that range (size and heterogeneity) is as important in networks of “significant” as among “intimates”.

⁴ Separate analyses for network size and network heterogeneity yields results similar to those obtained for the combined network range measure. This is to be expected, given the high correlation (and common factor location) of the size and heterogeneity variables. We found no association between network similarity and social support, where similarity is the extent to which the focal person at the center of a network is similar to network members. Other research has found that such structural similarity is less salient for the provision of support than “experiential” similarity between people who have experienced similar life events and traumas (Suitor, Pillemer, & Bohanon, 1993).

Network Availability

Rationale. Analysts have argued that the more contact among network members, the more supportive the relationship. They contend that frequent contact fosters shared values, increases mutual awareness of needs and resources, mitigates feelings of loneliness, encourages reciprocal exchanges, and facilitates the delivery of aid (Bumpass, 1990; Clark & Gordon, 1979; Connidis, 1989; Galaskiewicz, 1985; Homans, 1950, 1961).

- Frequent contact, or even just being physically available for contact, provides an important basis for the delivery of goods and services. Indeed, *our research group has found in the past that available ties (having frequent face-to-face or telephone contact or just living or working nearby) are significantly more likely to provide small supportive services, such as child minding or lending household goods* (see also Marsden & Campbell, 1984). *Such findings suggest that the effects of availability operate independently of the strength of the relationship, so that in the networks we study there is much material support provided in all highly available networks, regardless of whether they are composed of strong, intimate ties or are more broadly composed of all active ties.* In short, the argument proposes that the greater the availability of a network, the more apt that network is to provide social support.
- Other scholars see an interaction among availability, the strength of relationships, and supportiveness. They argue that many routinely available ties (such as with coworkers or people living in the same neighborhood) are not likely to be supportive under any circumstances. *In contrast with the previous argument, this one suggests that it is the availability of strong (intimate) ties, and not of all ties, that fosters support* (Israel & Antonucci, 1987; Jones, 1982; Kessler & McLeod, 1984; Rook, 1984; Seeman & Berkman, 1988).

Operations. Our operationalization of network availability is a multistage process. To construct contact measures, we use in all data sets the logged (base 10) mean network frequency of face-to-face contact and telephone contact. . We also use (logged) residential distance.

- As the 1968 data set does not have a measure of continuous residential distance, we calculated the percentage of network members who live in metropolitan Toronto (75%). We use this measure, rather than the percentage living in the same neighborhood, because previous research has shown that network members living outside the neighborhood but in metropolitan Toronto give about as much social support as those in the same neighborhood. We use logged statistics because an increase of 1 day or mile at higher values (e.g., from 364 to 365 days or miles) is less socially meaningful than an increase at lower values (e.g., from 1 to 2 days or miles).
- The 1978 data sets show that network members live a median of 9 miles apart, although a significant minority (22%) live in the same neighborhood, and a handful live in Europe
- Like the range variable examined earlier, our availability variable in all data sets is based on Wellman and Potter's (1997) delineation of the basic characteristics of personal communities, in this case showing that the frequency of face-to-face contact, telephone contact, and residential distance load highly on one factor. To maintain comparability between data sets, we do not use the factor loadings themselves. Instead, we combine into a composite measure of contact the standardized logged mean frequencies of telephone and face-to-face contact and the logged mean residential distance.

Findings. *Both the survey data and the in-depth interview data support the argument that it is availability in particular that accounts for the supportiveness of intimate networks.*

- The large 1968 survey sample shows that *highly available* networks have a significantly *higher number and a higher percentage* of network members who *provide all kinds of support: social visits, everyday aid, and emergency aid* (Table 1). Indeed, these are consistently the strongest regression coefficients for the percentage of supportive network members, and along with range, they are the only significant, positive coefficients for the *number* of network members.
- The pattern is similar for the intimate networks in the 1978 interview data set, although the coefficients are not significant in this smaller sample (Table2).
- The pattern is different for the less intimate, “significant”, 1978 networks, in which network availability is not positively associated with any kind of network supportiveness (Table 3).

Densely Knit Kin vs. Sparsely Knit Friends

Rationale. The saying that “blood is thicker than water” expresses the common understanding that kin are expected to be more supportive than other network members. There are both structural and normative reasons for this expectation. The densely knit structure of most kinship ties intersects with the norm of encouraging supportive relations among kin. Such norms idealize the promotion of family welfare, encourage kin to share resources, urge them to give other kin privileged access to these resources, and cherish long-term reciprocity.

- Networks with a high percentage of kin tend to be densely knit. Standard sociological interpretations suggest that densely knit networks have stronger norms and better communication, control, and protection (Bott, 1957; Durkheim, 1897; Fischer, 1982; Kadushin, 1983; Marsden & Hurlbert, 1988). Therefore, *densely knit networks should lead to a higher number and percentage of network members providing support (Pescosolido & Georgianna, 1989; Thoits, 1982). This is especially likely to be true for the provision of material support, which often requires more coordination than the provision of intangible support such as emotional aid and companionship.* In practice, network density and the percentage of kin are so highly correlated that they must be analyzed jointly.
- Yet not all kin are equally supportive; in the past our group has found that while immediate kin (parents, adult children, siblings) provide a wide range of support, other kin (aunts, cousins, grandparents) tend to provide less support than friends, neighbors or coworkers. This finding suggests that *the percentage (and density) of immediate kin-- and not of all kin--in these networks may well be a key to supportiveness.*
- An alternative hypothesis is also plausible, although less widely supported in the literature. Because there is more normative pressure to maintain kinship ties than friendship ties, they may be retained even if they are unsupportive, burdensome, and provide poor companionship (Stokowski & Lee, 1991). Indeed, women with a high percentage of kin in their networks can experience more stress in their lives (Haines & Hurlbert, 1992). Moreover, the high density of kinship relations can lead to “inbreeding” (Bienenstock, Bonacich, & Oliver, 1990; Burt, 1992;). Because information flows rapidly between densely knit kin, such networks may be less apt to acquire new information from the outside, be it about politics (Gans, 1962) or health care (Pescosolido, 1991; Salloway & Dillon, 1973; Beverly Wellman, 1995). *This contrasting argument suggests that sparsely knit networks with a low percentage of kin might have a high number and percentage of network members providing support because of the diversity of supportive resources available to such networks.*

Operations.-- Because of the strong association between high percentages of kin and network density in the data sets, we created a single measure of kin/density. First we standardized the percentage of immediate kin, the percentage of friends, and network density. Then we combined them into a composite measure for each data set. Density was calculated as the ratio of the number of links that actually exist between network members to the number of links that are theoretically possible. Both the survey (33%) and the supplementary, subsample interviews (42%) show moderate density among network members; that is, a substantial minority of active network members are directly linked with each other as well as indirectly linked (by a two-step path) through their respective ties to the respondents.

Findings. *Kin/density is an important factor in make-up of networks of “intimates” that provide support rather than in the numbers of supporters.*

- The 1968 survey data fit the argument that intimate networks with high kin density have *larger percentages* of social visitors and providers of emergency support,-- presumably because of family-centered norms, better communication, control, protection and material support, as well as the predominance of immediate kin . Conversely, these data fit the argument that intimate networks with low kin density have *smaller percentages* of social visitors and providers of emergency support (Table 1).
- The supplementary 1978 interviews suggest that intimate networks with high kin density are likely to generate lower *numbers* of intimate ties providing companionship, whereas those with low kin density are likely to generate higher *numbers* of intimate ties providing companionship (Table 2)-- perhaps because the composition of their intimate networks contains relatively fewer immediate kin or because it provides/imposes less social visiting or need for emergency support. .The supplementary interviews do indicate that immediate kin are especially apt to help with major domestic needs and to care for serious illness and infirmity. (Table 2)
- In the less intimate 1978 networks of “significant”, kin/density is not related to the provision of any kind of support (Table 3).

Network Composition: Socioeconomic Status and Women

Rationale. Social characteristics reflect social positions-- and associated status “possessed” by network members-- rather than qualities of their network relationships. When people with certain social characteristics are likely to possess such resources as wealth, empathy, or skill, they may be especially useful sources of social support. We concentrate here on socioeconomic status and gender. *Analysts have argued that because people with high socioeconomic status tend to have more material resources and information available, they tend to get more requests for instrumental support and companionship* (Campbell, Marsden, & Hurlbert, 1986; Degraaf, Lin, & Flap, 1988; Lin, Dayton, & Greenwald, 1983; Lin, Dean, & Ensel, 1986; Lin & Dumin, 1986). *Analysts have also shown that North American women are more likely than men to provide emotional support, possibly because “women express, men repress”* (Perlman & Fehr, 1987, p. 21). Indeed, women are often the principal emotional supporters of men as well as of other women (Sapadin, 1988; Wellman, 1992a, 1992b). *In addition, women provide many small services that are often taken for granted within the rubric of household chores* (Fox, 1980; Gullestad, 1984; Hammer, Gutwirth, & Phillips, 1982; Luxton, 1980; Stack, 1974).

Operations. The only decent indicator we have of socioeconomic status is the occupational status of the network members. We use the Blishen and McRoberts scale to measure a network’s mean occupational status (1976; mean = 55). For gender, we measure the percentage of women per network. Women are a majority in each data set.

Findings. The findings regarding socioeconomic status and support do not add empirically validated propositions to our knowledge so much as inform the direction of hypotheses for future research.

- *In the 1968 survey data, independent of other qualities of network relationships (SES rank and gender), SES diversity combined with other indicators of network range contributes positively to the significant number of network members providing everyday and emergency support-- particularly engaging in social visits. (Table 1)*

- *Independent of the qualities of network relationships and gender*, 1968 survey data also yield a reliable, but *small*, positive contribution by SES rank to predicting the provision of *emergency support* by “intimates”--a tie-level relationship rather than a network relationship but otherwise consistent with the postulated model. (Table 1)
- The 1978 subsample, on the other hand, suggests that *independent of the qualities of network relationships and gender*, SES rank is reliably and substantially linked to reports of *major services from “intimates”*. High SES predicts the *absence* of these reports, low SES the *presence* of these reports, consistent with the alternative model discussed earlier. An unreliable relationship similar in size holds at the aggregate level, i.e. controlling for network size. Similar unreliable trends are apparent among “significant” ties in the 1978 data. (Table 2)

Note that indirect and interaction effects have not been examined and were not originally postulated, although they are present and discussed in a subsequent paper (Wellman & Frank, 1999).

The gender composition of networks is not straightforwardly linked to provision of support either, as the survey and the interview data sets show discrepant findings.

- The 1968 survey data show that, independent of quality of network effects and SES rank effects, *the percentage of women in the network is negatively but weakly associated with the number and percentage of the intimates in these networks who provide both emergency and everyday support*. (Table 1).
- By contrast, independent of quality of network effects and SES rank effects, the subsample data show *a positive association between the percentage of women in a network and the number of network members providing emotional support* (Tables 2 and 3). This finding is consistent with tie-level analyses of these data, which have shown women playing active roles in the provision of emotional support.

Summary and Conclusions

We have asked a basic question: What types of ties and networks provide what kinds of supportive resources to the persons at the centers of these personal communities? This question connects us with key social scientific concerns about the following:

1. The complex structure and composition of personal community networks;
2. The multidimensional nature of social support;
3. The interplay between the structure of social networks and the personal characteristics of network members in affecting the flow of resources through their networks;
4. The long-standing core sociological question of whether a social system is more than the sum of its constituent relationships.

Our research suggests that social support is widespread and specialized in the networks studied. Most--but not all--active ties provide some kind of support. Such support is focused largely around domestic concerns, such as operating a household, interpersonal relationships within the household, and coping with illness. By contrast to the developing world, few of these Canadians' ties and networks are devoted to economic survival or dealing with political or bureaucratic matters.

These social networks are not only support networks, however. An appreciable minority of relationships involve stressful problems, and many of the problems appear to be social. Such problems are related to the stressful nature of ties that are somewhat involuntary (such as kinship and working together), to differences in social status (lifestyle, life cycle, and socioeconomic status), and to interpersonal hurts, withdrawals, and failures to act. Only about one quarter of problematic relationships are related to purely psychological phenomena (such as personality clashes), and we suspect that some of these reported clashes could be sociologically engendered without the respondents realizing it.

Social support is neither randomly nor evenly distributed in these networks. Our research suggests that a number of network phenomena directly foster interpersonal supportiveness:

1. The range of a network-- its size and heterogeneity-- is generally the characteristic most closely associated with its supportiveness. The more network members, and the more diverse their characteristics—including socioeconomic status--, the greater the number and percentage of support providers. Moreover, large networks are more apt to provide a wide range of support. Members of large networks clearly are not bystanders.

2. The availability of a network substantially fosters the provision of support. To an appreciable extent, the delivery of support depends on network members being in contact to learn of such needs and being physically accessible to provide assistance.

3. Densely knit networks with high percentages of immediate kin tend to provide more emotional and material support, although the effects tend to be weaker than for range or availability. The dense interconnections of such networks facilitate communication about needs, normative mobilization to deal with problems, and coordination for effective delivery of support. However, such networks provide less companionship than others.

4. The composition of networks *directly* affects the provision of support, but more ambiguously than the aforementioned network structural properties.

Thus, the supportiveness of networks is *directly* related to the aggregated characteristics of network members and relationships and to the emergent structural properties of networks. With respect to relationships, intimate ties (both kin and friends) and immediate kin (whether intimate or not) are especially supportive, although kinship usually does not extend to companionship.. With respect to network properties, networks with high range (large size, high heterogeneity including SES diversity), more availability (live or work nearby, meet or phone frequently), and more density provide substantially more of certain types of support. Such structural effects cannot be inferred from the aggregated characteristics of ties.

To our knowledge, this chapter is the first attempt to go beyond the dyadic, interpersonal level to study the supportiveness of the social networks in which these ties are embedded. Analyzing how each network characteristic is related to social support is in a sense testing theories about what aspects of social structure are apt to convey different kinds of resources. Our work therefore also addresses a key sociological question: Do structural properties of a social system affect processes over and above the aggregated sum of what happens in its two-person relationships? When it comes to providing social support, a social network is more than the sum of its ties. At this point the available data strengthen but do not completely test the hypothesis that socioeconomic rank-- or for that matter socioeconomic diversity-- influence social support and the forms through which it is conveyed.

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Table 1. 1978 Data: Multiple Regression Statistics of Variables Predicting the Number and Percentage of Intimate Ties Providing Support

Network Dimensions	Dimensions of support							
	Companionship		Minor services		Major services		Emotional aid	
	No.	%	No.	%	No.	%	No.	%
Range	.58	(-.23)	.58	(-.08)	.46	(.18)	.66	(.20)
Availability	(.27)	(.28)	(.15)	(.18)	(.20)	(.22)	(.22)	(.38)
Immediate kin	-.32	(-.28)	(-.02)	(.09)	(.12)	(.04)	(-.01)	(-.07)
Socioeconomic status	(.21)	(.08)	(-.15)	(-.20)	-.40	(-.40)	(-.05)	(-.06)
Proportion women	(-.16)	(-.30)	(.07)	(-.22)	(.06)	(-.11)	.32	.38
Adjusted ²	.40	(.13)	(.20)	(-.06)	.23	(.003)	.39	(.11)

Note: Standardized regression coefficients and adjusted R^2 in bold are significant at $p \leq .05$. Numbers in brackets indicate regression coefficients that are significant at $p \leq .10$.

Table 2. 1978 Data: Multiple Regression Statistics of Variables Predicting the Number and Percentage of Significant Ties Providing Support

Network Dimensions	Dimensions of support							
	Companionship		Minor services		Major services		Emotional aid	
	No.	%	No.	%	No.	%	No.	%
Range	.60	(.24)	.69	(.36)	(.44)	(.004)	.56	(.11)
Availability	(.04)	(.03)	(-.08)	(-.03)	(.10)	(.15)	(-.21)	(-.10)
Immediate kin	(-.08)	(.002)	(.12)	(.11)	(.08)	(.20)	(.10)	(.07)
Socioeconomic status	(.10)	(.31)	(-.06)	(-.009)	(-.19)	(-.18)	(.10)	(.12)
Proportion women	(-.02)	(-.12)	(.07)	(.15)	(.12)	(.34)	(.16)	(.33)
Adjusted ²	.34	(.05)	.32	(-.03)	(.004)	(.02)	.33	(-.01)

Note: Standardized regression coefficients and adjusted R^2 in bold are significant at $p \leq .05$. Numbers in brackets indicate regression coefficients that are significant at $p \leq .10$.

Table 3. 1968 Data: Multiple Regression Statistics of Variables Predicting the Number and Percentage of Intimate Ties Providing Support

Network Dimensions	Dimensions of support					
	Visitation		Everyday support		Emergency support	
	No.	%	No.	%	No.	%
Range	.42	(-.03)	.16	-.08	.17	-.19
Availability	.14	.21	.18	.22	.13	.16
Immediate kin	(.01)	.08	(.02)	(.05)	(.03)	.08
Socioeconomic status	(.06)	(.04)	(.06)	(.05)	.10	(.06)
Proportion women	(.03)	(.01)	-.09	-.11	-.12	-.12
Adjusted ²	.19	.05	.06	.07	.07	.09

Note: Standardized regression coefficients and adjusted R^2 in bold are significant at $p \leq .05$. Numbers in brackets indicate regression coefficients that are significant at $p \leq .10$.