

A NETWORK TYPOLOGY: From Theory to Practice

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ABSTRACT: *Based on a longitudinal study of aging in rural communities in North Wales, the article describes the development of a typology of the informal support networks of elderly people based on qualitative data from an intensive study and subsequent operationalization for use in a large sample longitudinal survey (N = 534 at T1). Relationships with demographic variables and service use are described and policy implications identified. Network type was found to be highly predictive of service use and availability of informal support. The development of the typology as a practice tool for workers in community care is discussed.*

BACKGROUND

The life-span, the process of change and network interaction have been identified as specific areas where anthropology can make particularly appropriate contributions to social gerontology (Nydegger 1981) and it is on support networks, the dynamics of change, adaptation and interactions in support networks and the impact of these on problem solving patterns and use of services that this article focusses.

The concept of the social network was introduced into anthropology at a time when anthropologists were moving into the study of complex societies (Barnes 1954). This approach made complex social organization more amenable to study. Because of its emphasis on relationships rather than groups or institutions, it is a particularly suitable tool in the search for understanding of the social aging process where relationships are central. Despite this, social gerontology has only recently recognized the importance of network analysis, which looks at the broad range of social relationships as a whole rather than relations with specific categories of actors such as family, friends or neighbors. Network studies of the elderly, therefore, have until recently been rare

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(Kendig 1986). Because of the social policy relevance of the support networks of old people, previous emphasis in gerontology had been on sources of informal help available and the interface with formal service provision. Very little attention had been paid to the ways in which networks are formed, change and adapt, that is *process* within networks and the effects of networks, network variation and network dynamics on help-seeking behaviors.

The usefulness of network analysis as an analytical tool depends very much on the problem under study (Mitchell 1974). Having decided on the research problem, the researcher needs to decide what are the critical dimensions (Fischer 1977). As Wellman has suggested, "A support system is a social network: a set of nodes connected by a set of ties. Yet a support system is an analytically constricted social network which only takes into account supportive ties" (Wellman 1981, p. 173). Various aspects of support networks have been identified as theoretically useful. The most important of these appear to be: (1) range, (2) density, and (3) pathways followed in the search for help (Collins and Pancoast 1976). It has been suggested that even helping networks can no longer be restricted to localities but should include also telephone links and help which can be quickly mustered via rapid travel (Warren 1981).

Previous work has shown that behavior, including the search for support or help, is mediated through the social network (Bott 1957; Collins and Pancoast 1976; d'Abbs 1982; Price 1984; Brannen 1985). Access to resources is affected by the structure and content of the network as is the capacity to cope with life. It has been noted that a relatively simple unchanging social identity is best maintained by a network of "small size, strong ties, high density and homogeneity and a low degree of dispersion of membership." On the other hand, "a more complex identity, open to change, would be best maintained by a larger network with a greater number of weak ties, lower density, greater cultural heterogeneity and dispersion of membership" (Walker et al. 1977). The latter model is more likely to be a middle-class adaptation. The importance of the ability to change has also been identified (Kuypers and Bengtson 1984).

It has been shown that the second type of network described above offers a broader range of communication channels to external resources (Granovetter 1973). Weak ties, it has been suggested, are important links in information seeking. The importance of loose-knit networks has also been commented upon by others, who found that such networks are more effective in facilitating adaptation to widowhood and divorce than close-knit networks (Hirsch 1980). These studies reinforce findings on life satisfaction, which suggest extra-familial orientations are more adaptive (Mass and Kuypers 1974; Fooker 1981). On the other hand, support from family members remains important in heterogeneous networks. The proportion of network members providing support has been found to be inversely related to psychological distress, although the study on which this finding is based was conducted with college students and may not be generalizable to other sectors of the population (Liem and Liem 1976).

Gender and marital status also affect network structures (d'Abbs 1982). Marriage and living alone with a spouse have been found to have a negative influence on network size for women but a positive influence for men (Corin 1982). On the other hand, widowhood has more impact on the networks of men than of women (Lowenthal and Robinson 1976; Wenger 1984). Women are likely to have more friends in their networks and it has been suggested that this reflects the greater capacity of women in western

society for intimacy and same sex friendship (Lowenthal and Robinson 1976). These types of differences between men and women affect potential adaptations to aging.

Studies of the networks of the elderly have emphasized their instrumental role in providing help, stressing the importance of this for social policy decisions (e.g. NISW 1982). However, it has been noted that a wide range of patterns of informal support exists in the community (Bayley et al. 1982). Different types of neighborhoods have been shown to produce different types of networks and thus different patterns of help-seeking behavior (Warren 1980, 1981).

With the exception of the study under discussion, little work had previously been done in the United Kingdom on networks of representative cross-sections of elderly people, although some studies of the networks of clients of various agencies had been undertaken (e.g. Bayley et al. 1982; Sinclair et al. 1984). It had been suggested that more attention needed to be paid to the nature of networks in terms of, among other things, their durability (Mitchell 1974), and the question has been asked hypothetically whether perhaps there may be rhythmic fluctuations in withdrawal and involvement throughout the life cycle or whether increased involvement in one area compensates for loss in another (Lowenthal and Robinson 1976). Little attention had been paid to the adaptation process in networks (d'Abbs 1982) and none of the research discussed in the foregoing paragraphs has been based on *prospective* studies; that is, studies which observe change rather than relying on retrospective information.

THE RESEARCH PROJECT

The research project under discussion was conducted in rural communities in North Wales (U.K.) and started in 1979 (before much of the work on networks cited above was published) with the object of discovering the nature of the network support available to elderly people (aged 65+) living in the community. Information was sought on the size (how many people were involved), the content (who were the people involved) and the function (what did the network members do) of support networks. Data were also collected on a wide range of other variables including: contacts with statutory health and social services; contacts with various family members; and, loneliness, isolation and morale; but the primary emphasis discussed here is on the support network.

The support network was defined as all those closely involved with the elderly respondent providing companionship, advice, help or care. These were ego-centered networks inasmuch as they were based on the direct links of members to the elderly person. The *support* network was not the whole *social* network but formed the core of it. The methodology used was a survey of elderly people, living in their own homes, based on an adaptation of a technique for eliciting partial networks designed by McCallister and Fischer (1978). The initial survey took place in 1979 (N = 534) with repeat interviews at four year intervals in 1983 and 1987. The study also included an intensive qualitative study of 30 people aged 79+ from 1983-1987.

The work was funded by the U.K. Department of Health and Social Security (1977-1989) and the Economic and Social Research Council (1986-1989). Because of the desire of the funding agency for statistically significant findings, early emphasis was on survey data, although interviewers were trained to collect a broad range of qualitative and verbatim information. However, at the second phase funding was agreed for the more

anthropological intensive study, which involved repeated visits 2-4 times a year to the old-elderly subjects in their own homes for four years, unless death intervened. This study collected data on the ways in which old people coped, adapted and made sense of their lives and was primarily concerned with process.

The findings from Phase I were published in 1984 under the title, *The Supportive Network* (Wenger 1984). They showed that networks ranged in size from 2-18 but that modally elderly people had support networks in the range 5-7. Thus networks in this size range were described as average and those with fewer or more members as small or large respectively. The overall distribution of network size was as follows:

Small < 5	24%
Average 5-7	43%
Large 8+	32%

Large networks were most common among those who were still married and single people were more likely than others to have small networks. However, differences were also related to gender. Overall small networks were most common among single men, followed by widowed men, while married men were least likely to have small networks. Among women network size was unrelated to marital status and while men's networks appeared to shrink on widowhood, women's networks appeared to remain stable.

There also appeared to be some difference in the distribution of support tasks within networks. Those who were married or widowed tended to concentrate their dependency needs on one person—their spouse—or when widowed an adult child or sibling. Those who had never married, on the other hand, tended to spread their needs through the network.

The data demonstrated that most support to elderly people came from their immediate families, although friends and neighbors were also important to many for companionship or help with unpredictable needs which depended on proximity. It was also clear that who one relied on for different things was related to household composition and availability of particular types of network members. Those who lived alone, or had no living close relatives, or who had moved after retirement age, or who were middle class, were more likely to get help in a range of situations from friends and neighbors. So there were indications of variation between networks. Other work which was being published about this time, also indicated variation in networks but there was still little work on change and adaptation.

At the end of the first phase of the research it was possible to say quite a lot about the size, content and functions of support networks in a general way, but nothing about the stability or reliability of the networks or the support they offered. There were indications of change, for instance, in men's networks following widowhood, and indications that the sources of help of those who lived alone were qualitatively different but there was no data on the dynamics of change or the aetiology of networks.

Other factors for which no systematic data had been collected also appeared to be significant. The proximity of kin was obviously important and it was evident that some elderly people maintained important ties with relatives, usually adult children, who lived many miles away. Some people, therefore, had dispersed support networks, while all members of some other networks were living within 5 miles of the person concerned.

It was also apparent that the support networks of elderly people were often made up predominantly of others over the age of 60 and that a high proportion of network members were women.

In order to extend knowledge of support networks, but principally to look at the dynamics of change and adaptation a follow-up study was embarked upon. Because funds were limited and because the funding agency was primarily interested in the implications of change in general on statutory service use, the follow-up survey (1983) was limited to those who had been 75 or older at the time of the first survey ($N = 108$). It also seemed likely that because of the greater age of peers, attrition in support networks might be more common among the old elderly and that, therefore, the passage of time might have more impact.

The major findings from the second survey in terms of change and stability in size, membership and function, were subsequently published in *The Journal of Cross-Cultural Gerontology* (Wenger 1986). The findings demonstrated that there was a great deal of stability in support networks; that families adapted over time to meet increasing needs and that as members dropped out of the support network they were replaced by others. It was also shown that network radius followed a bi-modal distribution with either all members within 5 miles or at least one living more than 25 miles away. Most networks were predominantly female and predominantly elderly but a significant minority were not.

In the second phase it had been decided to conduct the intensive in-depth study of 30 of the surviving sample (stratified for gender and household composition). This, it was felt, would provide insights into the development and internal functioning of networks and with the handling of problems and crises as they arose. The intensive study proved to be reassuring in terms of the efficiency of the network eliciting technique used in the survey, which proved to have been highly accurate in determining membership of the support network. The qualitative data thus supported the quantitative data. The extensive interviews also made it possible to explore the larger *social* networks of other contacts, not involved in support, within which the support network is embedded.

It was now possible to test hypotheses which were raised by the survey data and to document network dynamics in the face of increased dependency or in the event of crisis. It was also possible to document gains and losses, and to demonstrate that losses occurred primarily as a result of death or frailty and that gains came from the larger social network of people already related or known to the elderly person. It was also possible to document co-operation and interaction within networks and to identify the normative expectations for different types of relationships (Wenger 1987).

The most important outcome from the intensive study, however, was that it became possible, on the basis of the detailed qualitative data, to identify 5 different types of networks (Wenger 1989) on the basis of:

- the proximity of close kin;
- the proportions of family, friends and neighbors involved; and
- the levels of interaction between the old persons and their families, friends, neighbors and community groups.

The 5 support network types identified were named on the basis of the nature of the old person's relationship to the support network, as follows:

1. Family dependent
2. Locally integrated
3. Local self-contained
4. Wider community focused
5. Private restricted.

The five types of support networks identified can be summarized as follows:

1. *The family dependent support network* has primary focus on nearby kin ties, close family relationships and few peripheral friends and neighbors. It is often based on a shared household with adult children, sister(s) or brother(s), or very near separate households. Most commonly the old person relies primarily on a daughter.

2. *The locally integrated support network* includes close relationships with local family, friends and neighbors. Many friends are also neighbors. Usually based on long-term residence and active community involvement in the present or recent past.

3. *The local self-contained support network*, typically has armslength relationships or infrequent contact, with at least one relative living in the same or adjacent community, usually sibling, niece or nephew. Reliance is focused on neighbors but respondents with this type of network adopt a household focused lifestyle and community involvement, if any, tends to be very low.

4. *The wider community-focused support network* is typified by active relationships with distant relatives, usually children, high salience of friends and few neighbors. Distinction between friends and neighbors is maintained. Respondents with this type of network are generally involved in community voluntary organizations. Absence of local kin is common. This network is commonly a middle-class adaptation.

5. *The private restricted support network* is associated with absence of local kin, other than in some cases a spouse; minimal contact with neighbors, no nearby local friends and lack of wider community contacts or involvements.

On the basis of the qualitative data and the emerging network types it was possible to theorize about the strengths and weaknesses of different types of support networks and the types of demands that each would make on the health and social services. Depending on the pattern of membership and associated normative expectations, different types of networks were expected to demonstrate different problems and to have different service needs (Wenger 1987). On the basis of the literature and the qualitative data, it was suggested that the locally integrated and wider community focused networks were more robust and able to cope than the others (see Granovetter 1973; Walker et al. 1977; Hirsch 1980). They were larger, were part of larger social networks and appeared to be associated with low levels of isolation and high morale.

Family dependent, local self-contained and private restricted networks were seen as being more vulnerable. Old people with these types of networks were on average older and more dependent and both their support and social networks were smaller than others (see Walker et al. 1977).

At the third phase of the study the network typology, as above, was operationalized for assessor identification of the network type based on the total interview and detailed interviewer's report of the overall life situation of the elderly respondent. Thus we were able to look at the distribution of network types in the study area and to test various hypotheses raised by the intensive small sample study.

During the four years of the intensive study, it had been observed that in a few cases support networks shifted from one type to another. In order to control for this shift and to determine how common the phenomenon might be, all 1979 cases were re-examined and assessed for 1979 network type. For the survivors ($N = 195$), we were then able to examine change or shift over the 8 year period and to look at changes in the distribution of support networks in the community.

On the basis of comparison between the 1979 and 1983 support networks of the survivors, it was found that the distribution of network types was related to community at a high level of statistical significance ($\chi^2 p = .001$). Despite the attrition of the sample due to deaths and entry to residential institutions, the distribution between communities remained constant. This finding is interesting in comparison with the work of Warren (1980, 1981) in the United States, who found that different types of urban neighborhoods have different typical ways of coping or seeking help. Such patterns of help seeking behavior are likely to reflect different distributions of network type.

Most support network types remained stable. However, it was also shown that while shift in network type occurs (2.5% per annum), some types are more stable than others; that only some shifts are predictable; that most are from more robust to more vulnerable network types that reflect increased dependency; but that a few are to more robust types and may reflect recovery from illness or widowhood (especially in the latter case, release from the burdens of caring) (Wenger 1990). While all network types occur in all communities, the more stable the population, the higher the proportion of family dependent, locally integrated and local self-contained support networks. But differences occur even between stable communities. Locally integrated networks are most common in large nucleated villages and small towns, while family dependent and local self-contained networks are more common in small villages, hamlets and areas of dispersed settlement. Wider community focused and private restricted networks are more common in those communities with higher population turnover and/or where retirement in-migration is high such as the town studied by Collins discussed elsewhere in this issue.

Statistical analyses of support network type demonstrated high correlations with almost all demographic variables. This made it possible to refine the description of network types. In addition to the descriptions given above, people with family dependent networks were more likely than those with other types: to be over 80, widowed, to have daughters; to be living with or within 5 miles of relatives (usually children) and to have daily contact with relatives. More of these networks than other types were small (1-4). Those with locally integrated networks were more likely: to be under 80, to have lived in the same community since before they were 40; to have frequent (but not daily)

TABLE 1
Significant Correlations of Support Network Type with Selected Demographic Variables (%)

Defining and Associated Variables	1979 Networks Age 65+ (N = 525)		1987 Networks Age 73+ (survivors) (N = 197)	
	χ^2	<i>p.</i>	χ^2	<i>p.</i>
Proximity				
— children	118.047	.0000	115.830	.0000
— siblings	66.755	.0000	53.282	.0000
Frequency of contact				
— children	247.002	.0000	110.892	.0000
— siblings	84.223	.0000	66.809	.0000
— any kin	235.984	.0000	143.857	.0000
Attendance of Church/Chapel	99.642	.0000	(not measured)	
Regularity of attendance of meetings of vol. orgs.	142.305	.0000	(not measured)	
Age at arrival	134.691	.0000	70.352	.0000
Duration of residence	114.912	.0000	47.448	.0005
Ethnicity	112.254	.0000	50.728	.0000
Non-defining Demographic Variables				
Size of network	127.764	.0000	46.460	.0000
(Radius ¹)	52.610	.0001	44.572	.0002
Community	103.191	.0000	67.426	.0000
Gender	(0.236)	N/S	(3.772)	N/S
Age	68.809	.0000	19.588	.001
Marital Status	38.117	.0000	(11.083)	N/S
Household Composition	100.470	.0000	45.744	.0000
Social Class	26.117	.001	23.146	.003
Income	53.314	.0000	41.273	.003
Health	47.256	.0000	26.190	.01
Number of Children	51.023	.0000	31.520	.0000
Gender of Children	49.137	.0000	23.043	.03

¹ Partial sample 1979 (N = 216)

contact with relatives (at least weekly); and to have children and/or siblings within 5 miles. These networks were more likely to be large (8+). Elderly people with local self-contained networks were more likely to be: single, living alone, childless, and without living siblings. Contact with relatives tended to be either weekly or less than monthly—often perfunctory.

Wider community focused networks were associated with elderly people who were more likely than others to be: married, living with their spouse only, retirement migrants, living more than 50 miles from their nearest child and/or sibling and to have infrequent face-to-face contact with relatives. These networks were also likely to be large (8+). Those with private restricted networks were likely to be: married, living with their spouse only, to have come to the community after age 40, to have no child or sibling within 50 miles and to have infrequent face-to-face contact with relatives. These networks were mainly small (1-4).

It was also possible at this stage to test our hypotheses based on the network typology about the types of demands which, in the face of dependence, different types of networks were likely to place on the statutory domiciliary services and which needs support networks tended to meet independently. Data from the 1979 and 1987 surveys supported the hypotheses raised by the qualitative data and demonstrated not only that different types of networks make different demands on health and social services but that some networks are more likely than others to have unmet needs. (A detailed discussion of these findings is presented in Wenger and Shahtahmasebi 1990).

IMPLICATIONS OF VARIATIONS FOR SOCIAL POLICY

Family Dependent Support Networks

This type of network epitomizes the small high density, homogeneous network identified by Walker et al. (1977) as providing support for an unchanging identity but which may be dysfunctional in limiting contacts with professional sources of support or intervention, particularly in the context of mental health care needs. High standards of practical help and personal care based on long-term reciprocity are usual, although with increasing dependency demands tend to focus on one person, commonly a daughter. Loneliness and depression are common in the old person, but may also affect the carer. Parents and caring daughters may need mental health care. Sibling households are more likely to need practical help.

There are indications of need for professional social work intervention but network members may resist seeking or be unaware of such help.

Locally Integrated Support Networks

This type of network tends to combine some of the protectiveness of the family dependent support network with the extra-familial emphasis of the wider-community focused network. Long-term residence and community involvement serve to build-up well-established reciprocal support relationships. By including family, friends and neighbors, however, elderly people with this type of network are likely to have at least some weak ties shown to be important links for information seeking and advice and to be more conducive to the acceptance of change (Granovetter 1973; Hirsch 1980).

These networks, including extra-familial members, are associated with high levels of life satisfaction as could be predicted based on other findings (Maas and Kuypers 1974; Fookan 1981). Social and practical needs tend to be shared between members of the network. High morale is common. Networks cope well until high levels of dependency are present. Professional help is sought as a last resort. Earlier intervention may be indicated.

Locally Self-contained Support Networks

Networks of this type are frequently loose-knit but the often armslength nature of relationships and the privatized lifestyle of the elderly people involved appear to short-circuit any advantages of heterogeneity in access to resources. Resistance to reliance on others results in an absence of reciprocal ties. The influence of environment cannot

be overlooked here (see for example Warren 1980, 1981); since these networks were more common in areas of lower population density and are likely to reflect a life-long adaptation to low levels of contact.

Respondents tend to rely for help on family ties with relatives at a distance or with whom there is no really close relationship. There is risk of social isolation and possible resistance to professional help. Although neighbors may assume a monitoring role, respondents are likely to suffer as a result of unrecognized needs and emergencies.

Wider Community Focused Support Networks

Wider community focused networks epitomize the other side of the dichotomy described by Walker et al. (1977). They are larger, with more weak ties, greater heterogeneity and dispersion of membership.

As might be expected in the context of a largely extra-familial orientation, high morale is common. Reliance is placed on distant kin and local friends. Help in emergencies is usually forthcoming but regular help is likely to be problematic since normative expectations for friends and neighbors do not include long-term care or support at high levels of dependency when reciprocity becomes impossible. Early requests for professional help may be expected.

Private Restricted Support Networks

These networks, in contrast with wider community focused networks, are typically small, heterogeneous and dispersed. While their extra-familial focus is often associated with independence and high morale while good health is maintained, they provide no support or access to resources in the face of dependency. No informal help tends to be available, although neighbor monitoring may occur. There is heavy reliance on professional services with increasing dependency. Practical help is likely to be received from statutory services but mental health care is usually absent.

APPLICATIONS

The relationships between community type and network distribution and between network type and service use have obvious policy applications. It is clear that the distribution of network types in a particular community can usually predict both the level of demand and the type of services for elderly people for which demand can be expected.

Communities with high proportions of family dependent and/or locally integrated support networks make more demands on community nursing services and lower levels of demand for residential care because they cope well at low levels of dependency and support more heavily disabled/sick people in the community. However, informal supporters do not have the necessary medical skills. Need for carer support and respite care is also likely to be higher. High proportions of local self-contained and private restricted support networks mean higher levels of need for statutory domiciliary support with household chores. Need for long-term residential care is primarily associated with local self-contained, wider community focused and private restricted support networks. Those with wider community focused networks are more likely than others to use

privately contracted domestic help, professional services and residential care, while those with local self-contained and private restricted networks are most likely to use services provided by the welfare state, charities or voluntary organizations. While none of these relationships is exclusive, it can be seen that, at the practice level, understanding network distribution can provide a useful guide to local service needs and levels of provision of different types of services.

At the level of the individual, identification of network type can serve as a reliable short-cut in the prediction of: the likely availability of informal support including the nature of reciprocal relationships; the types of presenting difficulties and the effects of the passage of time and/or growing dependency. On the basis of such information, appropriate interventions can be planned with a higher likelihood of success because structured variations can be taken into account. For instance, schemes based on paid good neighbors have been found to succeed best for those with locally integrated or local self-contained support networks, where neighbors are integral to the natural support network; and, to be often unacceptable to those with family dependent, wider community focused or private restricted networks. Likewise, Jerrome in this issue draws attention to the fact that those elderly people who are lonely and isolated are those least likely to attend clubs organized by charities to counteract loneliness. Participation in voluntary groups was found to be common only for those with locally integrated and wider community focused support networks where loneliness is lowest. Those with other types of networks, who are more prone to loneliness, are more likely to adopt privatized life styles, avoiding contact or to be more impaired and thus unlikely to be sufficiently mobile to attend groups.

More carers need support in family dependent networks and locally integrated networks but carers here are likely to receive more informal support than carers in wider community focused networks. Carers in local self-contained and private restricted networks are likely to be fewer but to need more emotional (as well as practical) support because they are unlikely to receive informal support.

In phase 3 of the study, network type was assessed by social scientists on the basis of perusal and assessment of total interviews and total network membership. This method is obviously too clumsy, time-consuming and unreliable for use by practitioners. Therefore, the need arises to be able to identify network type by more concise methods appropriate for use by a wide range of assessors to give standardized outcomes. It has now been possible to isolate 8 questions on the basis of which distinctions can be made. The resulting assessment instrument has been tested blind against a wide range of previously categorized cases and demonstrates a high level of consistency (see Appendix A). The instrument is now being used by a range of community care practitioners in the early stages of the adoption of the Practitioner Assessment of Network Type (P.A.N.T.) as a practice tool.

Data are being collected by practitioners for use at the macro and micro level. Obviously, the distribution of network types making requests for support from the statutory services does not represent the distribution which exists in the community, because, as we have seen, some networks make earlier and more frequent demands on services. However, data collected by members of a team will reflect: (1) the types of networks predominantly seeking help in that area and thus the appropriate distribution of service provision; and (b) will make it possible to identify relationships

between network type and presenting problems. In this way, practitioners are helping us to refine our hypotheses about problems, service use and network type.

At the same time, at the level of the individual, interventions are being designed on the basis of knowledge of network type. Community care in the United Kingdom is at a watershed in 1990, as health and local authorities seek to implement the recommendations of the government White Paper "Caring for People" (Departments of Health, etc. 1989). Among the recommendations is the rubric that service provision be based on packages of care put together by care managers on the basis of assessed individual need. PANT is, therefore, being used as a guide in assessing need. In the past, emphasis has been on standardization and parity in the provision of services. Askham in this issue raises the importance of variety and flexibility in community care provision. It is hoped that the use of network assessment will introduce greater flexibility by drawing attention to variation and stressing the need for support to be appropriate to the context based on the identification of network type. As part of a training package, practitioners are learning about the wider characteristics and implications of network type and how to use this knowledge in the design of different interventions that are acceptable and appropriate in different contexts.

CONCLUSIONS

On the basis of qualitative data, approaching each network holistically, as an entity, it became possible to recognize similarities between subsets of networks and thus to construct a typology. Not only had the questions needed to identify different types of networks not been asked in the early stages of the study, but it is doubtful if they *could* have been asked without the experience gained through intensive interview and observation. It was this intensive phase which made it possible to recognize the important questions. The differences between quantitative and qualitative research methods and the strengths and weaknesses of each type of investigation are part of the content of the basic training of social scientists and need not be rehearsed here. What is important, is the success of the triangulation of methodology where questions raised by the existing literature are explored using quantitative and qualitative methods in a complementary way.

In the study under discussion, it has been possible to satisfy the academic aspirations of the researcher in adding to the understanding of the social life of elderly people and to apply this new knowledge to the policy field. The application of the network typology to practice is still in the early stages but has been well received by practitioners and the indications are that understanding and using variation in network type as a practice tool can have positive results in terms of responsive, creative, varied and intelligent interventions.

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APPENDIX A

NETWORK ASSESSMENT INSTRUMENT*

INSTRUCTIONS:

1. Ask all questions and circle code;
2. Circle same code across all boxes on same line;
3. Count (do not add) circled codes for each network column and enter number at bottom of columns;
4. Highest number on bottom line will be in column of respondents' network type.

<i>Questions</i>	<i>Codes</i>		<i>Family Dependent</i>	<i>Locally Integrated</i>	<i>Local Self- contained</i>	<i>Wider Community Focused</i>	<i>Private Restricted</i>
1. How far away does your nearest (IN TERMS OF DISTANCE) child or other relative live? (INCLUDES RELATED MEMBERS OF HOUSEHOLD; EXCLUDES SPOUSE)	No relatives	0					
	Within 1 mile	1					
	1-5 miles	2	1	2,3	3,4	4,5	4,5
	6-15 miles	3					
	16-50 miles	4					
	50+ miles	5					
2. Do you have any children? IF YES: Where does your nearest child live?	No children	0					
	Within 1 mile	1					
	1-5 miles	2	1,2	1,2,3	0,3,4	5	5,5
	6-15 miles	3					
	16-50 miles	4					
	50+ miles	5					
3. Do you have any living sisters or brothers? IF YES: Where does your nearest sister or brother live?	No sisters or bothers	0					
	Within 1 mile	1					
	1-5 miles	2	1,2	1,2,3	2,3,4	0,5	0,5
	6-15 miles	3					
	16-50 miles	4					
	50+ miles	6					
4. How often do you see any of your children or other relatives to speak to?	Never/no relative	0					
	Daily	1					
	2-3 times/week	2	1,2	1,2	3,4	4,5	0,5
	At least weekly	3					
	At least monthly	4					
	Less often	5					

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