Hierarchical Mapping Technique

by TONI C. ANTONUCCI

IN RECENT YEARS a great deal of research, literature, and general attention has been focused on social support (Antonucci, 1985), for several reasons. First, numerous empirical studies have shown social support to be related to health, well-being, and overall quality of life. Second, the role of the informal social network, consisting of family and friends, represents an important resource that is no longer considered intangible and difficult to measure. It can aid in the accomplishment of those tasks previously considered the sole domain of the formal network of paid support providers.

In an effort to both assess and evaluate social networks and supportive relationships, a hierarchical mapping procedure using a diagram of concentric circles was developed (see Figure 1). This method is simple, efficient, and comprehensible to the general public. The purpose of the circles diagram is to provide respondents with some framework for the description of their social support network. Simply asking them to name or talk about their family, friends, and others with whom they exchange supportive acts leaves respondents floundering in an unstructured maze, trying to develop some criteria for including certain people from among the many they know. On the other hand, this mapping method does not assume too rigid a structure. Many previous attempts to measure network membership assume that certain family or role relationships automatically mean network membership. Thus, it would

be assumed that if the individual has a spouse or children, they provide support. This approach simply equates the existence of social ties with warm, supportive interactions — a highly questionable assumption.

Although family ties often provide the structure of supportive relationships, this is not always the case. Sometimes relationships with spouse or children are strained or even hostile. The concentric circles diagram makes no assumptions about who is or should be a network member; it simply permits respondents to describe their social support networks according to their own personal feelings of closeness. A concomitant advantage of this approach is that the series of questions used contains minimal biasing or demand characteristics. Since people are not nominated for inclusion because of role relationships, questions such as, "How close do you feel to your spouse/parent/child?" which may be perceived as having some cultural or socially appropriate response, are avoided.

We developed the concentric circles diagram as a visual image of the support network when we were preparing to go into the field with the first national study of support networks of older adults in 1979 (Kahn and Antonucci, 1984). We were confronted by two problems. The first, briefly alluded to above, was the problem of bias or preconceptions concerning network membership. The second problem was of a different, though related, sort. We wondered whether average adults understood the somewhat abstract notion of support network and, if so, whether they could evaluate and hierarchically organize these relationships. Our pilot work and consequent studies have made it abundantly clear that people readily understand what is meant by the term *support network*, even if they did not know that specific term previously. They also have a very clear idea of which support-network members are more and which are less close. Each of these characteristics can be readily captured with the hierarchical mapping circles diagram.

The technique begins by asking the individual to look at the diagram of three concentric circles, with a smaller circle in the center containing the word "You." Each of the three circles is viewed as representing different levels of closeness to the focal person. Respondents are told that the three circles should be thought of as including "people who are important in your life right now" but who are not necessarily equally close. Since individuals in the inner circle are viewed as the most important support providers and frequently the support receivers, we describe people in the inner circle as "those people to whom you feel so close that it is hard to imagine life without them." Membership in this inner circle was thought to be limited to a few very close relationships of the kind frequently seen between confidants. In our studies and those of others using this technique, inner-circle memberships are usually limited to special relationships such as those between happily married

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friends, or sometimes a
[...]ent/child dyad. The rela-
[...] and support exchanged be-
[...]nner-circle members and the
[...] person transcend the usual role
[...]undaries and extend to any real or
[...]erceived need of network members.

The middle circle is described as "people to whom you may not feel quite that close but who are still important to you." Membership in this circle, although still significant, is not as important or distinctive as inner-circle membership. People in this circle are fairly close, and the relationship usually involves more than the simple fulfillment of role requirements. Such relationships, like those in the inner circle, are likely to involve the giving and receiving of more than one type of support but, unlike relationships among inner-circle members, are limited in some ways and are likely to be severely affected by a change in role status. Thus, in-laws might be seen as close and important in many ways, with a fairly significant exchange of different types of support, but the relationship and middle-circle membership are not

likely to survive a divorce.

And finally, outer-circle members are people with whom there is a significant but usually singular relationship. Outer-circle members are described as "people whom you haven't already mentioned but who are close enough and important enough in your life that they should be placed in your personal network." These relationships tend to be very role-prescribed. An example might be a co-worker or classmate with whom you exchange support during work or school hours but whom you do not see or wish to see in other situations outside of work or perhaps after retirement. Our analyses of the support networks of our national study are consistent with these descriptions of network memberships and relationships (Antonucci and Akiyama, 1985).

The concentric circles hierarchical mapping technique has been used with a variety of samples and, judging from reports we've received, has been universally successful. In addition to the advantages outlined above, this technique seems to transcend

culture, age, life situation, and crisis. My colleagues and I used this technique originally with a national sample of adults 50 years of age and over and with members of their support network who ranged in age from 18 to 95. Levitt et al. (1985-86) used the circles diagram to assess the support networks of an at-risk sample of elderly living in South Miami Beach. Heller and Mansback (1984) used the concentric circles diagram with elderly women living independently. Pruchno and Faletti (1983) reported the successful use of the concentric circles diagram in the assessment of the support networks of a sample of community dwelling widows and a sample of elderly living in a long term care facility. Levitt, et al. (in press) have also reported the successful use of this instrument with mothers of young children, and Levitt (1985) used the technique with a three-generation sample of Hispanic, black, and white women. Campbell (1985) conducted a similar three-generation sample of women in Tokyo. The results of each of these latter two studies are intriguing because they permit the same technique to be used but also highlight unique sample differences.

The original national study allowed us to document the number and distribution of support network memberships among the average mature adult population. It was particularly interesting to compare the data from the at-risk sample of Levitt et al. (1985-86). Individuals in the South Miami Beach sample had fewer people in their networks, in their inner circles particularly, and reported exchanging fewer types of support among their network members. Heller and Mansback (1984) report that their sample of low-income elderly women in Illinois were able to hierarchically map their support networks, as were Pruchno and Faletti's (1983) community-dwelling widows in Miami. It is interesting that the widows consistently included their dead spouses in their networks and that Pruchno and Faletti's (1983) institutionalized sample distinguished between the support provided by staff and the support provided by friends and family. The sample did not consider staff persons to be members of their support networks. Levitt, et al. (in press) found the circles diagram

Figure 1
DIAGRAM FOR MAPPING A SOCIAL SUPPORT NETWORK

YOU
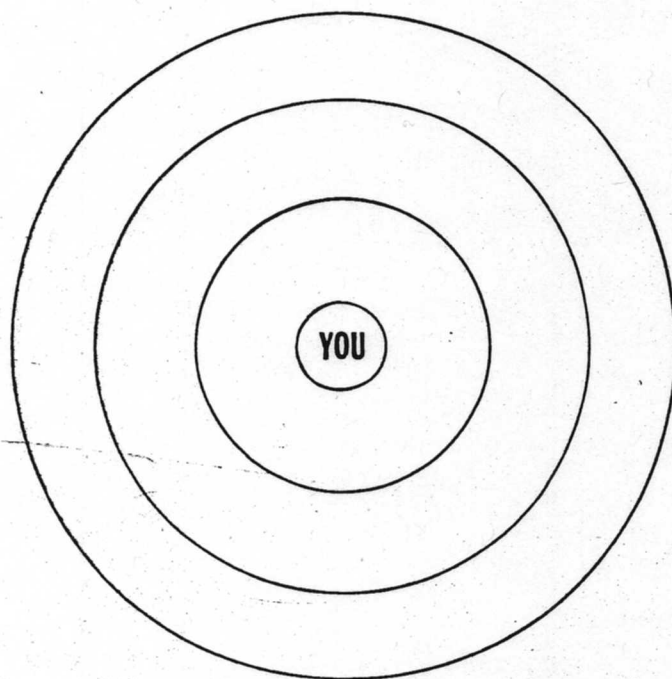
...ful in their study of mothers of small children, reporting the important supportive role and frequent inner circle membership of husbands and mothers. The women in their sample were able to clearly identify those people who were important during this critical life-transition stage.

The work of Levitt (1985) using a three-generation, multicultural Miami sample, and of Campbell (1985) using a Japanese sample in Tokyo, shows the adaptability of this technique and provides some unique insights into the differences in support network memberships, expectations, and circle placement. In all cases, only a few people were included in the closest, inner circle. However, some ethnic groups showed consistently more family as compared with friends in their networks, whereas the Tokyo sample found an unusual (by American sample standards) frequency of daughters-in-law, exemplifying the unique position of the daughter-in-law in Japanese culture. However, the cultural changes currently evident in Japanese society were demonstrated by generational differences in the frequency of daughter-in-law and mother-in-law nominations.

In sum, we find the concentric circles hierarchical mapping technique particularly useful as a method for providing a relatively unbiased, respondent-generated account of the important social support relationships an individual's life. Additional researchers have been in contact with us and are continuing to report success with this technique. □

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Intimacy as We Age

The need is lifelong and requires a tapestry of significant relationships.

by BONNIE GENEVAY

Margaret, a young woman who taught classes to residents in a nursing home, was taking a life history of a man in his late seventies. He was bed-bound, paralyzed from his waist down. As he spoke about his three wives, how they had all betrayed him and how he felt his marriages were failures, he suddenly pulled the young teacher down onto the bed and held her close. She did nothing for a moment because she was in shock; then she pulled away abruptly and left the room. Margaret skipped her next appointment with this man and struggled with what she would say to him when she saw him again. She had enjoyed his wit and intelligence, but he had violated her personal space. Two weeks later, when she went to his room, he was not there. He had died, and she was left with guilt and regret.

Emily was 94 and had feared closeness all her life. An orphan, she had not been able to trust that people would be there for her when she needed them. As an adult she smothered and controlled her husband and children and never counted on anyone she couldn't control. With memory loss and confusion in her nineties, she began to experience increasing fear of being abandoned. Even though family members visited her often at her nursing home, Emily never believed that they would see her through her aging and dying. Many days when a relative arrived, Emily would cry and scream, "You're here! I thought you'd never come back."

An older man in a nutrition-site