THE SIZE OF THE SUPPORTIVE NETWORK IN ASSOCIATION WITH THE DEGREE OF LONELINESS

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One of the major methodological problems of research on social support is the identification of the relevant members of the network of personal relationships. The process of designing a study on the supportive content of the respondents' personal relationships requires answering such questions as "Who provides the support?" and "How many supportive relationships are there maximally in a network?" Answers to these questions are more or less dependent on theoretical ideas about the meaning of different compositions of personal networks for individual well-being.

Research has shown that the absence of a confidant, such as a partner or a friend, increases the likelihood of experiencing mental and physical health problems (for example Berkman and Syme 1979; Gove 1972; House, Robbins, and Metzner 1982; de Jong-Gierveld 1984, 1987; Knipscheer 1980; Kobrin and Hendershot 1977; Lowenthal and Haven 1968; Ormel 1980). In particular the *support* within the confidant relationship contributes to well-being. We view support as the exchange of positive, emotional, and instrumental content aspects within personal relationships.

Attention focused completely and exclusively on the importance of the confidant implies the *dominance* in the network of a confidant over other possible relationships: "One relationship dominates all forms of support; no other relationship is either involved or considered appropriate" (Cantor 1979, p. 453). Over recent years, however, there has been a growing recognition of the impact of support from relationships other than from a confidant on individual well-being.

The need to pay attention to the support from the network stems from various considerations. First, there is the consideration that the relationship with the confidant is vulnerable (Hammer 1983; Longino and Lipman 1981): Divorce, separation, the death of a partner, or the move of a friend can put an end to the relationship or strongly reduce its significance. Therefore, even if the support in the network is dominated by the confidant, it is important to know whether or not the relationship with the confidant can be replaced by another relationship, should that be necessary (Stroebe and Stroebe 1986).

There is, however, a second reason for paying attention to relationships other than the relationship with a confidant: compensation. It is unlikely that one relationship can completely meet all the needs of the an individual in all circumstances (Hirsch 1981; Langeveld 1985; Thoits 1982; Wilcox 1981). If the relationship with

the confidant is lacking in some respect, other relationships might compensate, providing those forms of support that cannot be met in the relationship with the confidant. This approach shares a characteristic with the approach of dominance in that it also starts from the role of a confidant, but it differs in that more than one relationship is considered important. Because the contribution of the other relationships depends on the contribution of the confidant, this approach has similarities with ideas of marginal utility.

Yet another approach assumes linear *additivity* in relationships: "Each support element performs randomly chosen tasks which added together increase the social support available to the . . . person" (Cantor 1979, p.453). In this situation every supportive aspect within a relationship from the network will contribute to the well-being of individuals, independent of the number of other relationships characterized by that aspect, and independent of the number of supportive aspects provided by the relationship in question. For instance, the instrumental support received by an individual within a relationship with X is important in itself, even if (a) the individual receives no emotional support within the relationship with X, (b) the individual receives no emotional support at all from the network, or (c) the individual already receives instrumental support from various other relationships.

This article deals with the implications of distinguishing between the mechanisms of dominance, compensation, and additivity for designing surveyresearch on the impact of the supportive network of relationships on individual well-being. In our view, it is necessary, when developing a questionnaire, to specify in advance one's conceptions of the associations between the various relationships in the network, because the different conceptions involve different procedures for determining the significance of supportive relationships. Not all procedures differ fundamentally from each other, but each requires a somewhat different approach by the researcher and is accompanied by a different "workload" for the respondent.

If one assumes the dominance of a confidant in the network of relationships, it is necessary and sufficient to identify the confidant and the support within this relationship. The task for the respondent in this procedure is rather simple: The respondent has to determine which person is seen as a confidant, then keep this confidant relationship in mind when answering the questions about support within this relationship. To examine the possibilities of substitution, questions can be added in order to identify a second confidant and to determine the support within that relationship.

If compensation is the startingpoint, it is necessary to consider various aspects of support when examining the network. Respondents can be asked if there is (at least) one relationship characterized by the aspect in question (e.g, "Is there someone who gives you advice?"); This question should be repeated for each aspect distinguished. The task for respondents in this procedure is more complex than in the case of dominance, for they must repeatedly review their various relationships to identify one that is characterized by the aspect in question. The respondent's task can be shortened and possibly simplified by following a procedure similar to the one followed in the case of dominance. Then the first question is whether the relationship with the confidant is characterized by a certain aspect (e.g., "Does the confidant

give advice?"). If the relationship with the confidant is not characterized by a certain aspect of support, the next question is whether a different relationship in the network is characterized by that aspect (e.g., "Is there another person who gives advice?").

If additivity of relationships is assumed, it is necessary to accurately determine the support within as many relationships in the network as possible. One must ask for the number of relationships characterized by a certain aspect and repeat the question for each aspect distinguished. This is a difficult task for the respondent. Inaccurate answers are likely to be obtained, particularly if the relationships are not individually identified. Therefore we prefer a procedure that first identifies the appropriate relationships in the network and then assesses whether or not the relationships are characterized by each of a number of aspects of support. The quantity of information the respondents must provide increases in proportion to the number of relationships under consideration and to the number of aspects of support that are distinguished. House and Kahn (1985) have suggested examining from five to ten relationships. It is evident that this procedure leads to a much longer questionnaire than the approaches discussed earlier. The central question addressed in this paper is whether such an intensive examination of the supportive network of relationships produces enough additional information to justify the extra effort required of both respondent and researcher.

The data are from a survey that focused on the association between the supportive network and loneliness. A first research question to be dealt with is: Do people in fact often have several supportive relationships at their disposal? If this is unlikely, the distinction between dominance and compensation on the one hand and additivity on the other would be primarily of theoretical relevance, and datacollection could be limited to one or two relationships.

If we find that most people indeed have several supportive relationships, we will proceed to address a second research problem: Does an intensive examination of the network of relationships, with the help of a procedure based on the idea of additivity in relationships, produce a stronger association with loneliness than an examination that starts from the relationship with the confidant (assuming dominance, respectively compensation)? If an intensive examination of the network of relationships on the basis of additivity shows a stronger association with loneliness than does a procedure based on the centrality of a confidant, we will proceed to address a third research problem: How many relationships from the network must the collection of data involve? The answer to this last question will possibly substantiate the recommendation of House and Kahn (1985) to examine five to ten relationships.

THE ORGANIZATION OF THE SURVEY

Respondents

The respondents were 419 men and women, aged 20 years and over, who were interviewed in 1985/1986 on the extent, type, and importance of their close relationships. Their names and addresses were obtained by taking a random sample, strati-

fied according to sex and marital status, from the Population Registers of the Municipalities of Purmerend and Haarlemmermeer. Purmerend, with more than 50,000 inhabitants, is a fast-growing town near Amsterdam. Respondents were drawn from three of the town's oldest districts and two newer districts. Haarlemmermeer is a large municipality in the western part of Holland. The municipality includes a number of villages of various sizes. Sixteen of the smallest villages, with a median of about 600 inhabitants, were selected.

The response rate in the eight subsamples varied between 38.1% and 57.6%. The nonresponse was especially high in the subsamples of never married men and women, categories of people who are often away from home and change addresses frequently. The response rate for the total sample was 47.7%; 10.8% could not be found (never home, wrong address, moved, died, et cetera); 7.6% were not able to cooperate because of illness; and 34.0% refused cooperation. With regard to the topic of the survey (delicate, privacy-sensitive issues) and the difficulties of executing surveys in the western part of the Netherlands (overloaded with marketing research in particular), and in comparison with surveys carried out by the Netherlands Central Bureau of Statistics, the response rate is not extremely low (Bethlehem and Kersten 1986).

Questionnaire

The respondents were interviewed for an average of two and a half hours with the aid of a questionnaire composed of both open and prestructured questions. The list included questions about demographic characteristics; living, working, and housing conditions; personality traits; social contacts; support; problematic situations; and loneliness.

Identification of relationships. A network of supportive relationships was identified by means of two questions. Respondents were first asked to name persons with whom they had the most contact and with whom they had close personal ties. Respondents wrote the first names or initials of the persons they had named on a list, that specified several relational categories – e.g., "parent," "child," "partner," "friend," "colleague." If nine or more persons were listed, a second question was asked: "Please circle the names of the eight persons on the list with whom you have the closest ties?" Questions were then asked about each of a maximum of eight persons, and the respondent's relationship with them.

Assessment of support. Ten questions were about the positive, emotional, and instrumental aspects of the content of each relationship. Five of the ten questions about the positive content were directed toward the ordinary, day-to-day content of the relationship. For example, "Do you notice that he/she cares for you?" Possible answers were "never," "sometimes," "often." Five questions were related to the content expected of the relationship if serious problems should occur, for example, "Would he/she help you with practical matters, such as baby-sitting, transportation, or shopping?" The choice of answers was "no," "maybe," "certainly." The ten questions can be ranked on a unidimensional scale of emotional-instrumental support (Loevinger's coefficient of homogeneity is .38, coefficient of reliability rho is .79). For each of the (maximum of) eight persons a sum-score was calculated of the

responses "often" or "certainly" to the ten questions about the supportive content (range 0 to 10).

Identification of a confidant. After the identification of supportive relationships and the assessment of support, the respondent was asked to identify a confidant with the aid of the following question: "Suppose you have a problem. To whom would you go first to talk about that problem, to ask for advice or help?"

Loneliness. A scale consisting of five positive and six negative items was used to measure the intensity of loneliness. Examples of scale items are: "There is always someone I can talk to about my day-to-day problems" and "I wish I had a really close friend." The scale meets the strict criteria of a Rasch model (de Jong-Gierveld and Kamphuis 1985). The scores range from 0 (no loneliness) to 11 (very strong loneliness).

Procedure

Number of supportive relationships. The first research problem concerns the question of whether most respondents have several supportive relationships at their disposal. As described previously, two questions in the interview were aimed at identifying the relevant, supportive relationships. The number of relationships mentioned in response to the first question can possibly be seen as a direct indication of the size of the network of supportive relationships. However, one should not preclude the possibility that respondents felt obliged to mention a large number of relationships, even if they actually had fewer relationships that met the criterion. The number of relationships mentioned in answer to the first identification question is therefore a "maximum" estimate.

If, on the other hand, the maximum estimate provides the appropriate indication, the second identification question (asking respondents to mention a maximum of eight relationships) would have the unintended effect of excluding relevant supportive relationships from data collection. This would be true for the 333 respondents who mentioned more than eight relationships in response to the first question; for them, no data were collected on the relationships that were dropped after the second identification question. To determine whether or not it is an undesirable omission that data were not collected on a number of the relationships of the 333 respondents, we offer the following procedure.

We assume that the 86 respondents who mentioned eight relationships or fewer in answer to the first question, mentioned all their supportive relationships. This is a plausible assumption, since they were not asked the second identification question, and thus, were not forced to remove any relationships from the list. Next we compute the average support in the least supportive relationship of the respondents in this category, and consider this average to be a standard by which supportive relationships can be distinguished from nonsupportive relationships. We then determine whether the average support from the least supportive relationship of those 333 respondents who had mentioned more than eight relationships is higher than the average support from the least supportive relationship of the 86 respondents who had mentioned eight relationships or fewer. If it is *higher,* then limiting the data collection to a maximum of eight relationships means that for 333 respondents we

would not be obtaining an accurate assessment of the support derived from their networks. If the averages are *equal* we can assume that a maximum number of eight relationships gives an adequate indication of the size of the supportive network. If we find that the average support from the least supportive relationship of those 333 respondents who first mentioned more than eight relationships is *lower* than the average support from the least supportive relationship of the other 86 respondents, we can conclude that respondents in the former category interpret the first identification criterion differently, less strictly, than do those in the latter category. In that case, it remains unclear to what extent the eight relationships mentioned by the former category of respondents in response to the second identification question provide an accurate assessment of the number of relevant supportive relationships. It will be necessary to examine more closely how many of the eight relationships are supportive.

Various procedures for determining support from the network. The second research problem involves an examination of the mechanisms of dominance, compensation, and additivity. The examination of dominance is based on the correlation between the support within the relationship with the confidant (range 0 to 10) and the intensity of loneliness.

Under the assumption of compensation, the support from the confidant is supplemented with support from other relationships in the network. The support score is calculated as follows. One point is given for each aspect of support of the confidant. If a certain aspect of support is not provided by the confidant but is provided by another relationship, a point is also given. Thus, under the assumption of compensation, the support is equal to or higher than the support under the assumption of dominance, but it never exceeds ten. Again, the correlation between support and loneliness is computed.

We used the support received from the specified maximum of eight relationships in order to assess the degree of the total (additive) support coming from the network (range 0 to 80). The maximum score of 80 is obtained if there are eight relationships that each provide the ten aspects of support. We then calculated the correlation between the total support score and loneliness.

Number of supportive relationships relevant to understanding loneliness. The third research problem concerns the situation of an additive distribution of support. It addresses the question of how many relationships should be examined in order to find the strongest possible correlation between support and loneliness. In answering this question, one runs into the difficulties of multicollinearity. Not only are the various relationships part of *one* network, but the data collected on support within the various relationships of one respondent are – as a consequence of the procedure used – mutually related to each other. Two possible solutions to the difficulties of multicollinearity are presented here.

Two series of data on the association between support and loneliness were computed, both based on the same data set. In both analyses, the sum of the support from the network was split up into the support from the eight separate relationships. Where fewer than eight relationships were mentioned by the respondent, a support score of 0 was assigned to the not-mentioned relationships. Next, the eight relation-

ships were ranked hierarchically on the basis of the support in the relationship (Figure 1).

The first series of data was obtained as follows. First the correlation was computed between loneliness and the support from the most supportive (rank number rn_1) of the eight relationships. Next, a correlation was computed between loneliness and the support from two relationships, namely, the support from the most supportive relationship (rn_1) and from the next most supportive relationship (rn_2). The support from these two relationships is referred to as Σ (1. . . 2). Subsequently, the correlation is computed between loneliness and the support from three relationships. At this step the relationship $rn3$ is added to the sum to make Σ (1. . . 3). The procedure is repeated until the correlation between loneliness and Σ (1. . . 8) has been computed. If adding the support from the relationship rni to a previous sum of support no longer raises the correlation, it is an indication that this relationship is no longer relevant to understanding loneliness. Henceforth, no information has to be collected on this relationship.

The second analysis is based not on successive additions but on differences in support. The support from the most supportive relationship in the network is taken as the first variable (Figure 1). Next, the difference between the support from the most supportive relationship (rn_1) and the next most supportive (rn_2) is computed. The difference is referred to as δ (1,2). The procedure is repeated for the remaining relationships. With the help of regression analysis we can examine for each relationship rn_{i+1} if the difference with relationship rni significantly raises the proportion of the explained variance in loneliness. In that way, we can obtain an indication of whether the relationship rn_{i+1} is relevant to understanding loneliness.

RESULTS

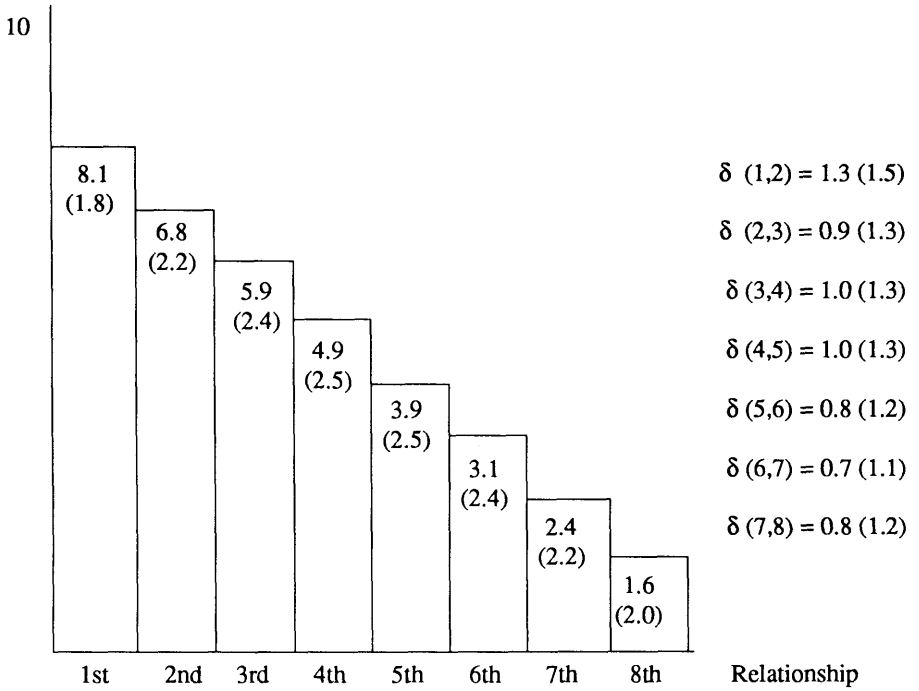## Number of supportive relationships

The question of whether most respondents have several supportive relationships at their disposal can simply be answered affirmatively. On average, 17.5 ($SD = 10.6$) relationships were mentioned in response to the first identification question, with a minimum of 0 and a maximum of 63 relationships. We would like to be note that these numbers correspond with the numbers found by Fischer (1982) with the help of another method (see McCallister and Fischer 1978): An average of 18.5 was reported, with a range of 2 to 65.

By far the majority of the respondents, namely 333 of the 419, mentioned more than eight relationships. It could be suggested that collecting data on the support from a maximum of eight relationships, as we have done, is not enough. How likely is it that, having collected data on eight relationships, more *supportive* relationships would still be found? To answer this question we will examine the data collected on the support within the relationships of the 86 respondents who mentioned eight or fewer relationships in answer to the first identification question.

The mean support from the least-supportive relationship of these 86 respondents is 2.3 ($SD = 2.2$). We consider this mean score to be the minimum standard used by

Figure 1: Histogram of the Average Degree of Support.

Degree of
Support

8.1 (1.8)	$\delta\ (1,2) = 1.3\ (1.5)$
6.8 (2.2)	$\delta\ (2,3) = 0.9\ (1.3)$
5.9 (2.4)	$\delta\ (3,4) = 1.0\ (1.3)$
4.9 (2.5)	$\delta\ (4,5) = 1.0\ (1.3)$
3.9 (2.5)	$\delta\ (5,6) = 0.8\ (1.2)$
3.1 (2.4)	$\delta\ (6,7) = 0.7\ (1.1)$
2.4 (2.2)	$\delta\ (7,8) = 0.8\ (1.2)$
1.6 (2.0)	

1st   2nd   3rd   4th   5th   6th   7th   8th   Relationship

$\Sigma\ (1) = 8.1\ (\ 1.8)$
$\Sigma\ (1\ldots2) =\ 8.1 + 6.8 = 14.9\ (\ 3.8)$
$\Sigma\ (1\ldots3) = 14.9 + 5.9 = 20.8\ (\ 5.9)$
$\Sigma\ (1\ldots4) = 20.8 + 4.9 = 25.7\ (\ 8.0)$
$\Sigma\ (1\ldots5) = 25.7 + 3.9 = 29.6\ (10.0)$
$\Sigma\ (1\ldots6) = 29.6 + 3.1 = 32.7\ (11.9)$
$\Sigma\ (1\ldots7) = 32.7 + 2.4 = 35.1\ (13.6)$
$\Sigma\ (1\ldots8) = 35.1 + 1.6 = 36.7\ (15.0)$

Notes: Standard deviation between parentheses;
The eight relationships are ordered in diminishing sequence;
δ : *M* (*SD* between parentheses) of scores of differences between the relationships;
Σ : *M* (*SD* between parentheses) of sum-scores of support for each possible number of relationships;
N = 419

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these respondents to call a relationship close or supportive. This standard can be used to distinguish supportive from nonsupportive relationships among the 333 respondents who mentioned more than eight relationships in answer to the first identification question. Among these respondents the mean support from the least supportive relationship is 2.5 (SD = 2.2). The difference between the two categories of respondents is not significant (t = .68, p > .05). We would like to point out that the 86 respondents who mentioned eight or fewer relationships receive on average less support from each relationship than do the 333 other respondents. For example, the support of the most supportive relationship is 7.1 (SD = 2.4) versus 8.3 (SD = 1.6); the difference is significant (t = 4.52, p < .001).

We conclude that it is very likely that the relationships that were dropped after the second identification question are nonsupportive and that the number of eight relationships gives a good indication of the number of supportive relationships of many respondents. Since the number of supportive relationships has, at any rate, turned out to be much greater than one or two, it is now useful to address the second research problem.

Various procedures for determining the support from the network
Here we compare the association between support and loneliness for three different procedures for determining support: (1) on the basis of an assumed dominance of the confidant in the network, (2) a compensatory division of support from various relationships in the network, and (3) an additive distribution. The mean support from the confidant is 7.6 (SD = 2.2, N = 402; no data were collected on the confidants of a number of respondents). It should be noted that the confidant is the most supportive relationship in only 290 cases (69.4%, N = 418). The correlation between support in the relationship with the confidant and loneliness is -.248. Thus, the more support provided by the confidant, the less lonely the respondent is.

The second analysis started from the idea that, should support from the confidant be lacking with respect to some aspect, supplementary support could be provided by other relationships (mechanism of compensation). Here the mean support score is 8.4 (SD = 1.7). The correlation with loneliness is -.231, which is lower than in the first analysis. This indicates that the process of selectively adding support from other relationships to the support provided by a confidant is not of importance for loneliness, in spite of the fact that the average support is higher.

The third analysis (mechanism of additivity) is based on the sum of the support from all eight relationships (M = 36.8, SD = 15.0); the correlation between loneliness and this additively determined support is -.305. Here we find the highest correlation of the three analyses, indicating that the determination of the support from (a maximum of) eight relationships from the network gives extra output in comparison with the preceding procedures.

Number of supportive relationships relevant to understanding loneliness
Given this conclusion, we now turn our attention to the separate relationships within the network, in order to obtain indications of the number of relationships that should be involved in data collection in subsequent surveys. In two analyses the correla-

tions between the hierarchically ranked relationships and loneliness were determined.

In the first analysis, the correlation was computed between loneliness and the support from the most supportive relationship from the network _(1), then the correlation between loneliness and the sum of the most supportive relationship and the next most supportive Σ (1... 2), and so on. The correlations are for Σ (1), -.264; Σ (1... 2), -.278; Σ (1... 3), -.280; Σ (1... 4), -.271; Σ (1... 5), -.285; Σ (1... 6), -.294; Σ (1... 7), -.294, and as already reported, for the sum of all eight relationships Σ (1... 8), -.305.

For the purpose of the second analysis, the difference in support scores between a relationship with rank number rn1 and the relationship rn_2 was computed, then the difference between the support scores of the relationships rn_2 and rn_3 and so on. The difference scores together with the support from the most supportive relationship were entered into a regression analysis as predictive variables (the highest intervariable correlation is .19), loneliness being a dependent variable. The results of the analysis can be summarized as follows. If the most supportive relationship is strongly supportive, the likelihood of experiencing loneliness decreases significantly. The likelihood of experiencing loneliness decreases further when the second-, third-, and fifth-ranked relationships are also highly supportive: the beta's of the variables δ (1,2), δ (2,3), and δ(4,5), are significant, whereas the beta's of the remaining difference scores are not significant.

The results of the first analysis indicate that when the support from increasingly more relationships is involved in the collection of data, the proportion of explained variance in loneliness also increases. However, the marginal usefulness of the added relationships is small. We should note that one relationship disturbs an otherwise consistent pattern: As the relationship ranked fourth gives more support, the likelihood of experiencing loneliness increases slightly.

The results of the second analysis give more insight. The first-, second-, third-, and fifth-ranked relationships significantly decrease the likelihood of experiencing

Table 1: Regression of Loneliness on (the Differences between) the Support of the Specified Relationships (N = 418).

Predictive Variables	beta	p
Support from the most supportive relationship	-.36	< .001
δ (1,2)	.16	< .01
δ (2,3)	.10	< .05
δ (3,4)	.04	> .05
δ (4,5)	.22	< .001
δ (5,6)	.08	> .05
δ (6,7)	-.01	> .05
δ (7,8)	.05	> .05

Squared multiple $r = .128$
$F = 7.5, p < .001$

loneliness. Now again we see that a strongly supportive fourth relationship does not significantly reduce the chance of loneliness; the beta of the variable δ (3,4) is positive, however. The contributions of the sixth, seventh, and eighth relationship in decreasing loneliness are small and not significant.

DISCUSSION

On the basis of the data presented we can conclude that there are some indications for a so-called additive mechanism of support: each support element in each relationship was found to increase the social support that is available to the person. It appears that the most supportive relationship, and the second, third, and fifth in ranking are of particular importance; if these relationships give much support the likelihood of experiencing loneliness decreases. Our findings on the association between the number of supportive relationships and the degree of loneliness, substantiate the recommendation made by House and Kahn (1985) to incorporate at least five relationships in the collection of data.

However, the findings do not fully support Cantor's (1979) ideas with regard to the *linear* additivity of relationships. We did not find that the support of *each* relationship contributes to the well-being of the respondents: the fourth-, sixth-, seventh-, and eighth-ranked relationships were of no importance.

If the fifth-ranked relationship was highly supportive, a significant decrease in the likelihood of loneliness was found. This relationship was found to be more important than the second-, and third-ranked relationships for the explanation of loneliness, whereas the contribution of the fourth-ranked relationship was not significant. This fact can be interpreted as follows. The individual is surrounded by circles of relationships, each with a different content or with different structural properties (Kahn and Antonucci 1980). The adequacy of support received by a person depends not only on the intensity of the support in the entire network, but also on whether or not support can be mobilized *from various circles*. Granovetter (1973), for instance, pointed to the importance of weak ties for obtaining information from a wider network than the network of closest relationships. We realize this interpretation of the results is very speculative, and it would be interesting to conduct further research on this point. It is possible that the importance of different circles varies with the needs in specific situations, for example after a life transition in which the structure of the supportive network has changed (Walker, McBride, and Vachon 1977).

The results show that the relationships ranked sixth, seventh, and eighth generally are supportive. This is contrary to the findings of McFarlane, Norman, Streiner, and Roy (1984) who suggest that a large network is a consequence of a certain lack of depth in the core (the inner circle of close relationships) of the network. When the support from the relationships ranked sixth, seventh, and eighth was entered into the analysis, the likelihood of loneliness was reduced, but not significantly. It is possible that an increase in support within the inner circle, and an increase in support within the outer circle only weakly increase individual well-being. In other words,

we suggest that within the circles the mechanism of compensation holds, whereas the notion of a variety of circles relates to the mechanism of additivity. The availability of a diversity of relationships, weakly *and* strongly supportive, seems to be important in reducing the likelihood of loneliness (Schulz and Rau 1985).

The following remarks are pertinent to the recommendation to involve at least five relationships in the collection of data. Considerable extra 'costs' have to be made to obtain the extra-output achieved by starting from the additive approach. The question is whether the increase in the correlation between support and loneliness makes up for these costs. It is hard to answer that question, particularly since, by starting from the additive approach, the attention is not primarily directed at a confidant. It is important to note that we found indications that the presence of a (strongly supportive) confidant is only one of the factors that contribute to a reduction of the likelihood of loneliness; the presence of other highly supportive relationships in the network also reduces the likelihood of loneliness. However, the additional explanatory value provided by a number of relationships greater than one seems to be small. Further research into the importance of these relationships for the individual is necessary. Such research can also direct attention at the way in which these relationships can be initiated and developed, particularly in a situation where an existing partner relationship possibly hinders this development (Altergott 1985; Babchuk 1965).

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