SOCIAL CONTACTS AND SOCIAL ISOLATION: A TYPOLOGY

LUDWIEN MEEUWESEN, ROELOF HORTULANUS
and ANJA MACHIELSE

Introduction

The past two decades have witnessed growing psychological and sociological research into loneliness and social isolation (e.g. Hughes & Gove, 1981; Peplau & Perlman, 1982; De Jong-Gierveld & Van Tilburg, 1990; Brummett et al., 2001). For some time, there have been indications that social isolation is more apparent throughout the population, and is not restricted to people in poor health, the unemployed or the aged (Hortulanus et al., 1992). This study theoretically and empirically explores a meaningful approach to social isolation.

Although there is no clear-cut definition of social isolation, a common characteristic is the lack of meaningful social networks (De Jong-Gierveld, 1984; Schrameijer, 1990; Sumbadze, 1999; Lincoln, 2000; House, 2001). The word 'meaningful' refers to the fulfilment of the individual's social needs. People can have extensive social contacts and still lack something, resulting in feelings of loneliness. On the other hand, people may have just a few social contacts, which are quite sufficient and comforting for them. The lack of a meaningful social network can have serious consequences for the well-being of individuals. People without personal contacts do not receive social help and support, they do not feel comfortable, and barely have access to social resources. If people in our society do not have meaningful social contacts, it has a negative influence on their quality of life and personal functioning. They stand alone and find themselves in a position of social isolation. Enduring loneliness often results in serious problems such as depression or poor self-esteem. Social isolation also has negative consequences for society as a whole, and detrimentally affects social cohesion (Komter et al., 2000).

A social network that functions well has positive effects on individuals as well as the society they live in. Social relations provide a sense of security, comfort and esteem. People derive their identity from their personal contacts in their immediate surroundings. They acquire self-esteem and self-confidence and, to a certain degree, a sense of competence and resistance to stress. Moreover, social networks provide access to social resources such as education, jobs and information. From a societal point of view, personal networks are relevant because they contribute to social integration and participation in society.

A common approach to the issue of social isolation is via the social network (Fischer, 1982; Tijhuis et al., 1992; Van der Poel, 1993). This network approach makes it possible to describe the quantity of someone's personal network, its functions in terms of support, and some qualities of the contacts in terms of type of relationship, distance, intensity and frequency. Although only a specific part of someone's personal network is relevant to their well-being, delineating personal networks provides ample relevant information about *potential* social support. However, while it is still common in research to view social isolation as synonymous with a small network (e.g. Brummett et al., 2001), most authors agree that a fruitful approach to social isolation or the lack of meaningful social contacts should incorporate objective as well as subjective elements (De Jong-Gierveld, 1984; Schrameijer, 1990; Van Sonderen, 1995, Sumbadze, 1999). In an excellent overview, Lincoln (2000) rightly cautions that the negative side of social interaction has been largely overlooked in research:

> "Simply assessing the structure of a person's social network (e.g. size or number) provides little information about the quality, amount, and experience of positive and negative interactions" (p. 242).

The degree to which personal networks are meaningful largely depends on the degree of support the contacts provide. People's subjective feelings about these contacts are essential for their well-being.

The two elements of social isolation are composed of a more objective criterion, the network size or potential social support, and a more subjective criterion, the quality of a network, in terms of subjective well-being. In line with De Jong-Gierveld (1984), who distinguished between objective and subjective isolation, the concept of loneliness is preferred. The presence or absence of feelings of loneliness lie at the core of subjective well-being. The term loneliness is often used as a synonym for social isolation, although it is something different. Perlman and Peplau (1981) hold that

> "Loneliness is the unpleasant experience that occurs when a person's network of social relations is deficient in some important way, either quantitatively or qualitatively" (p. 31).

Van Tilburg (1988) stresses the relevance of the subjective evaluation of the social contacts, as opposed to more objective facts about network size, by reporting rather low correlations (r=0.30) between network size and feelings of loneliness.

In an effort to understand this phenomenon, Van Sonderen (1995) distinguishes between potential suppport, i.e. a person's perception of the expected support in the event of problems, and the actual support that is needed and received which is not quite the same. In other words, an important function of

the social network is the social support it can provide for an individual (Sarason et al., 1990; Van Sonderen, 1995; Sumbatze, 1999; Lincoln, 2000). The actual support that is needed and received is decisive for the functioning of the network, as it is meant to be.

In addition to the concept of actual social support, there is the notion of reciprocity. The process of giving and receiving is usually characterised by reciprocity, an expectation that people will help people who have helped them (Gouldner, 1960). It seems relevant to devote attention to the interdependence or reciprocity of actual social support (Badr et al., 2001). Reciprocity is essential to human relations and contributes to social cohesion (Komter et al., 2000), and a lack of reciprocity coincides with negative feelings Personal competences such as social skills or coping behaviour are instrumental in dealing with major or minor life events (Sarason et al., 1990; Mallinckrodt, 2001).

Although the relevant dimensions (objective and subjective criterion) for a fruitful approach to the issue of social isolation may be clear, it is typical of the current status of the social isolation issue that an approach explicitly incorporating these two elements, is not common yet, even if there are studies where both elements are studied. For example, Brummett et al. (2001) report that in a sample of medical patients, 12% are socially isolated, based exclusively on network size. Of the isolated group, 57% are satisfied with their relationships as compared to 83% of the non-isolated group. In our study, we explicitly take these two elements as a starting point for defining social relationships in terms of a typology of social contacts.

A typology of social contacts

The combination of an objective component in terms of network size and a subjective one about social contact quality in terms of feelings of loneliness offers four possibilities (Table 1).

Table 1 Combination of network size and feelings of loneliness

		Network size	
		large	Small
Feelings of Loneliness	Absent	large network and not lonely (A)	small network and not lonely (B)
	Present	large network and lonely (C)	small network and lonely (D)

The combinations (A) and (D) are both unambiguous: Individuals have extensive networks and they do not feel lonely (A), or they have small networks and do feel lonely (D). The first group feels strong and is not at risk; the second group is quite vulnerable. The combinations (B) and (C) are more complex. In the case of (B) the network size is small, but the subjects do not feel lonely at all. The potential support is adequate and meaningful, but there is a risk: someone with a small network is definitely more vulnerable than someone from group (A). Individuals from the (C) group have large networks, but they feel lonely. Apparently in this situation, the potential network support is not adequate or meaningful enough. There is also a risk of social isolation.

This classification underlies the typology of social contacts, containing four groups: the 'socially competent', the 'socially inhibited', the 'lonely', and the 'socially isolated' (Hortulanus et al., in press). They can be characterized as follows:

1. The *socially competent* have many social contacts, their social network functions adequately and they are satisfied with their social life. They do not run a risk of social isolation.
2. The *socially inhibited* have only a few contacts, but their network is adequate and meaningful for their social needs. They feel satisfied and in fact they do not feel lonely. However, they are vulnerable in a specific way. If, for whatever reason, one or two people are removed from their social network, they would lose the greater part of their support system. In this way there is a risk of social isolation.
3. The *lonely* have numerous contacts but nonetheless feel lonely. For whatever reason, they have an inadequate support network. There is a discrepancy between the number and the quality of the contacts, which implies a clear risk of social isolation.
4. The *socially isolated* have few contacts and they do not feel happy about it. They meet the social isolation criteria formulated above: the network size is small and they feel lonely; there is a desire for changes in one or both of these aspects.

The main advantage of this social contact typology is that two essential aspects, size and quality, are systematically taken into account, and different forms regarding the risk of social isolation are included. By designing a social contact typology, we formulate the aim of this study, which is to explore relevant features of the four social types. We expect this kind of approach to reveal more about social isolation than the sole use of either an objective or a subjective criterion.
The questions to be answered here are as follows:

1. How does the social contact typology differentiate actual social support?
2. How can the various groups be characterized in terms of demographic variables and other relevant personal characteristics?

3. What is the relevance of the typology for a fruitful approach to social isolation?

On the basis of the literature (Van Sonderen, 1995; Lincoln, 2000) we expect the typology to differentiate actual social support and other relevant variables. We expect the typology to be more informative than an approach exclusively based on either network size or loneliness.

Method

Sample characteristics and procedure

The study, based on personal interviews with some 2,400 Dutch people, was held between 1995 and 1998. Local and national authorities (the Ministry of Health, Social Welfare and Sport) commmissioned the research project in four communities in the Netherlands. The locations were two urban areas of Utrecht (Utrecht-Noord) and Amsterdam (Oud West and Westerpark), and two rural areas, Binnenmaas (De Hoeksche Waard) and Het Oldambt (Oost-Groningen). The locations were chosen because of the financial and technical possibilities and the desirabiliry of an equal division between urban and rural areas. A sample of persons above the age of 18 was selected for each location from the community register. All the selected persons were contacted by a letter, explaining the aim of the interview and providing information about the commissioning authorities and the research interviewers. The letter also stated that an interviewer would be coming in the near future with an official request for participation in the project. When the interviewer came, many respondents were not at home or were on holiday or had moved or died. The response rate of the remaining group was 48%. The main reasons for refusal were 'not interested', 'not in the mood' or 'no time'; and 'no opportunity' or 'illness'. Table 2 contains the composition of the research sample, expanded with data on the Dutch population.

Table 2 Research sample characteristics compared with total Dutch population

		Research sample N = 2400	Total Dutch population, ≥ 18 N = 12 million (CBS, 1996)
Age:	18-29	22%	23%
30-44		30%	31%
45-64		29%	30%
65-<		18%	17%
Sex:	male	50%	49%
	Female	50%	51%
Marital status:			
Unmarried		31%	28%
Married or longlasting intimate relationship		54%	58%
Divorced/separated		7%	6%
Widowed		9%	7%
Ethnicity:			
Dutch		86%	90%
Surinamese/ Antillian		2%	2%
Moroccan/ Turkish		6%	2%
Other		6%	6%
Education:	low*	55%	40%
	middle	28%	39%
	high	18%	20%

*) The percentages of education are not quite comparable. The CBS data are restricted to people aged 15-64 and employed for more than 12 hours a week.

At the start of the project, the research questions were dictated by the issue of social isolation. The interview topics were based on relevant information resulting from a literature study and in-depth interviews with relevant key figures: civil servants, professionals from social welfare organizations, and volunteers. The list of topics included quantitative and qualitative aspects of social contacts, the exchange of help and support, the social-life climate, health, life events, personal competences, neighborhood aspects, and participation in society. The results on a selected number of topics, relevant to the typology, are reported here.

Measures

First, a description is given of the core variables 'network size' and 'feelings of loneliness', followed by the variable 'actual social support' (a function of the social network). A number of other relevant measures are also presented.

Network size: As stated above, social contacts make a significant contribution to people's welfare, especially regarding emotional, social or instrumental support (Fischer, 1982). Personal networks are delineated by an adapted version of the exchange approach of Fischer (1982). This method traces the number of people the respondent can count on for regular support or companionship. In terms of validity and objectivity, the exchange method is generally considered the most appropriate. The network relations delineated by this method refer to personal relationships and the items can be interpreted in the same way by the respondents (Van der Poel, 1993). In order to delineate the personal network, seven name-generating questions were asked concerning specific supportive interactions: emotional, instrumental and social. An eighth question was added referring to possible significant persons not yet mentioned. Since the potentially supportive relationships could be traced, the questions were formulated hypothetically, apart from the two social support items. The items were formulated as follows:

Emotional support
1. Suppose you have serious personal problems and want to talk to someone about them, who would you talk to?
2. Suppose you need advice on a major change in your life, such as changing jobs or moving to a different area, who would you go to?

Instrumental support
3. Suppose you need help with chores in or around the house, doing an errand, cleaning, repairing or painting, who would you ask?
4. Suppose you are going on holiday and the plants need te be watered or the letter box needs to be emptied, who would you ask?
5. Suppose you need to borrow a large sum of money, who would you ask?

Social companionship
6. Who do you go out with once in a while, shopping or to a restaurant, movie or theater?
7. Did you visit anyone last month, or did anyone visit you?

Other
8. Are there any significant persons you have not mentioned yet?

In response to each of these questions, the respondent can mention up to three persons, including the partner. With eight questions there are theoretically a maximum total of 8 x 3 = 24 different names that can be generated. For assessing whether the personal network size is small or large, several methods could be used, depending on the aim of the study, e.g. a cut-off score 3/4 or 4/5, or the

lowest decile of the sample recognized as 'extremely isolated' (Tijhuis et al., 1992; Fischer & Philips, 1982, Brummett et al., 2001). For the aim of our study, the cut-off score was determined at 4/5. Respondents with a total score of between 0 and 4 were viewed as having small networks, and respondents with a total score of between 5 and 24 as having large networks.

Loneliness: De Jong-Gierveld developed a cognitive model for loneliness (De Jong-Gierveld, 1984; De Jong-Gierveld & Kamphuis, 1985). In this model, the discrepancy between an individual's desire for affection and intimacy and what the individual has in reality is emphasized. The larger the discrepancy, the greater the feelings of loneliness. This model underlies a designed 11-item scale of loneliness, which met the criteria of the Rasch model for dichotomous variables and has been validated for the Dutch population.

Items on the loneliness scale

1. There is always someone I can talk to about my day to day problems.
2. I miss having a really close friend.
3. I experience a general sense of emptiness.
4. There are plenty of people I can lean on in the event of trouble.
5. I miss the pleasure of the company of others.
6. I feel my circle of friends and acquaintances is too limited.
7. There are numerous people I can count on completely.
8. There are enough people I feel close to.
9. I miss having people around.
10. I often feel rejected.
11. I can call on my friends whenever I need them.

The scores on the loneliness scale run from 0 (not at all lonely) to 11 (very lonely). Following the guidelines of De Jong-Gierveld (1984), the borderline for being lonely or not was determined by a cut off score of 2/3. A score of 0, 1 or 2 means *'not or slightly lonely'*. A score of 3 or higher means *'moderate or very strong feelings of loneliness'*. The internal reliability in terms of Cronbach's alfa is .89. By combining these two dichotomized variables, we arrive at a social contact typology, containing four values.

Actual support received and given

Since the network questions were somewhat hypothetical and focussed on the potential social support, a number of comparable explicit questions about the past month were also asked. These items focussed on the actual support received. While recognizing the relevance of reciprocity in human relations, the same items supplied information regarding 'actual support given'. The questionnaire contained 9 items on a three-point scale, mostly referring to practical support, and an overall measure was a summation of the 9 items. This was done

for 'support received' as well as 'support given'. The appendix contains more detailed information about the separate items.

Additional measures:
The additional measures comprised a general measure regarding *satisfaction with social contacts*, *life events* and how to cope with them, *personal competences*, *social responsibility*, and *demographic variables*.

Satisfaction: Regarding general satisfaction with social contacts, an evaluation score was given on a scale between 0 and 10.

Life events: Subjects were asked to fill out a list of 88 important life events and indicate '....which events still played an important role in their life at the time of the interview'. They could be recent events or events in the more distant past. An adapted version of the Questionnaire on Recent Life Events was used (Van de Willige et al., 1985).

Personal competences: A questionnaire (17 items) was used to get an indication of the 'subjects' personal competences. There were three subscales: self-confidence, coping, and social skills, based on the work of Luteijn et al. (1985) and Bandura (1997) (Cronbach's alfa = .68).

Social responsibility: To get an impression of the individual's social responsibility, some closed questions were asked regarding attitudes to problem-solving and giving support to people in need.

Demographic variables: Data about the following risk factors were given: age, sex, marital status, ethnicity, education, income, socio-economic status, and location.

The data were gathered in two phases. The most information was gathered in the first phase (described above) except for life events and personal competences. These data were gathered in a second phase, about half a year later. This smaller dataset on 450 respondents selected from the original dataset contains relatively more people at risk of social isolation. Since the emphasis of this study is on exploring features of the typology, this selection is not regarded as problematic.

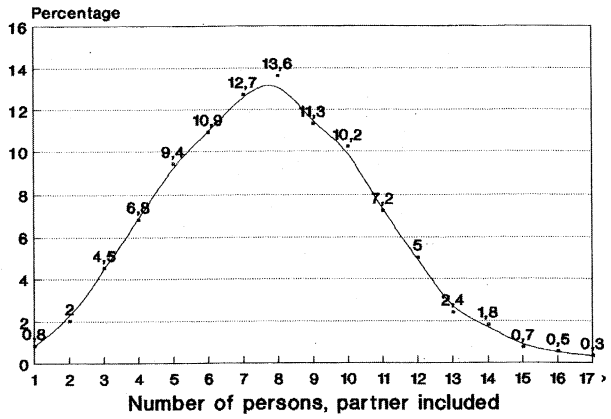
Statistical analysis
Descriptive statistics were used to report the results of network size, loneliness and the typology of social contacts. Means were calculated for the characterization of the various social groups in terms of actual social support, life events, personal competences and social responsibility. The relation of the typology with these variables was calculated with one-way ANOVA and multiple range tests (Bonferroni). The means of giving and receiving support were compared by using paired t-tests. Discriminant analysis was performed to assess a number of risk factors for social isolation.

Results

Personal networks and loneliness

The average personal network size, assessed with the instrument of eight name generators, was X=7.8 (sd = 3.0). Figure 1 shows the frequency distribution of the personal network size, partner included.

Figure 1 Personal network size (n=2443)

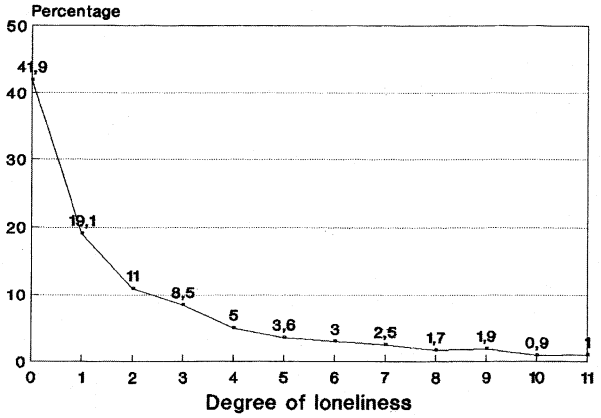


While the network size ranged from 1 to 22, about 38% of the subjects had seven to nine people they could rely on for emotional, instrumental or social support. According to a cut-off score of 4/5, 14% of the subjects were viewed as having small networks, meaning a potential risk of social isolation. Subjects with larger networks evaluated their social contacts more positively (r=.14, P < 0.05); however, this correlation was rather small.

The mean score on the loneliness scale was X=1.9 (sd = 2.5) (Figure 2); 28% of all the participants indicated they had mild to strong feelings of loneliness, such as *'experiencing a sense of emptiness'*, *'not having enough people to count on'*, *'missing people around them'* and *'having no friends to call on in need'*.

Subjects with larger networks had a smaller chance of feeling lonely (r = -0.23, P < 0.01); again the correlation was small. The correlation of loneliness and general satisfaction with social contacts was substantially stronger (r=-.40, P<0.01).

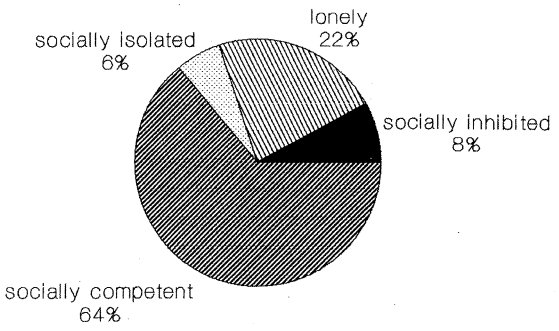
Figure 2 Feelings of loneliness (n=2422)



Social contact typology
When combining someone's network size (large versus small) with the presence or absence of feelings of loneliness, the following interesting partition emerged (see Figure 3).

Two out of three respondents (64%) stated that they had large networks (five persons or more) and did not feel lonely; they were the *socially competent*; 22% seemed to have large networks but still felt lonely, they were the *lonely*; 8% of

Figure 3 A typology of social contacts



the respondents indicated they had small networks, but no feelings of loneliness; they were the *socially inhibited.* Finally, 6% of the subjects scored negatively on both network size and feelings of loneliness; they were *socially isolated.*

An obvious question is whether there are any differences in *need for social contacts.* It is striking that the four distinct groups did not differ in their need for social contacts, nor did they differ in the time they say they spend on social contacts. There were, however, significant differences in the degree of *feeling at ease with others.* While 79% of the subjects indicated they felt at ease with others in general, this percentage was significantly lower for subjects who were isolated (56%). But even in the group of lonely subjects, in spite of having extensive networks, 40% did not feel at ease. Apart from the need for contacts and the time spent on them, it is evident that one person draws support from social contact, whereas for another, social contact would seem to be a source of trouble.

Giving and receiving support

Is there any relation between potential support in terms of network size, and actual received social support? This correlation was r=.17 (P<.01), which is rather small. Although they are related, network size is not the same as social support. The same can be said of loneliness and actual received social support (r=.05, P<.05). The subjects with large networks differed significantly from those with small networks on the actual support received (X=3.47 vs X=2.75, t=4.262, P<.001). The 'lonely' and 'not lonely' groups did not differ that much (X= 3.17 vs X=3.43, t=1.871, P<.1). Regarding 'received support', the main differences were in terms of network size.

Analysis of the 'given support' presents the following picture: The 'large network' group gave more support than the 'small network' group (X=3.77 vs X=2.24, t=8.352, P<.001), as did the 'not lonely' group compared to the 'lonely' group (X=3.82 vs X=2.79, t=6.965, P<.001). Regarding 'given support', the main differences were in terms of network size as well as loneliness.

Paired t-tests show that the group with large networks gave more support than they received (X=3.81 and X=3.43, t=4.943, P<.000), and the group with small networks received more support than they gave (X=2.59 and X=2.17, t=-.2,72, P<.01). Lonely people also received more than they gave (X=3.10 vs X=2.79, t=-2.410, P<.05), and the 'not lonely' group gave more than they received (X=3.86 vs X=3.40, t=5.715, P<.001).

Table 3 contains the mean scores of received support and given support for the total group, as well as the four separate types of social contacts (the *Appendix* contains more extended information on item level).

Table 3 Received support and given support in relation to the typology of social contacts

	S C***	S IN	L	S I**	T***
Support received[1]					
X	3.49	2.91	3.40	2.61	3.37
(sd)	(2.67)	(2.48)	(2.55)	(2.36)	(2.69)
Support given[2]					
X	3.95	2.76	3.18	1.64	3.56
(sd)	(2.67)	(2.48)	(2.55)	(2.36)	(2.69)

S C=socially competent; S IN=socially inhibited; L=lonely; S I=socially isolated; T=total

Comparison of colums:
) p<.01; *) p<.001 (paired t-tests between support received and support given on each column)

Comparison of rows:
[1]) The four groups of social contacts differed significantly in `support received' (F= 6.205, df=3, p<.001)
[2]) The four groups of social contacts differed significantly in `support given' (F=33.907, df=3, p<.001

The four groups of social contacts differed significantly in 'support received' (F= 6.205, df=3, P<.001). The socially competent received the most support, and the socially isolated the least. The patterns of the socially competent and the lonely were similar, although the former group was better off. The patterns of the socially isolated and the socially inhibited were also similar, the latter being better off. The socially isolated were the worst off in almost all cases. Bonferroni tests show that the socially competent differed significantly from the socially isolated and the socially inhibited. The lonely also differed from the isolated.

The four groups of social contacts also differed significantly in 'support given' (F=33.907, df=3, P<.001). The socially competent differed from all three other groups; the same can be said of the socially isolated. Only the socially inhibited and the lonely did not differ significantly from each other. For receiving and giving support, the means of the socially inhibited and the lonely were in between.

Across the board, the subjects indicated they gave help more often than they received it; paired t-tests show that the scale tipped in favour of giving support. However, a closer look at the four distinct types of social contacts presents quite a different picture. The results show that this general image only held true for the socially competent (the largest group, 64%). The observation for the socially isolated was completely the opposite: on all the issues, they claimed they received more support than they gave. The same can be said of the socially inhibited and the lonely, although the differences were less pronounced.

The typology of social contacts presents a more differentiated picture than solely the network approach or solely loneliness. Although network size does differentiate, we cannot conclude that having small networks is the same as social isolation.

Risk factors

Other studies have shown that a number of demographic factors indicate a risk of social isolation (Dijkstra & De Jong-Gierveld, 1999; Brummett et al., 2001). Table 4 shows the demographic variables relevant to the different types of social contacts.

The percentage of socially isolated people was six times higher among the subjects with a low socio-economic status than among those with a high socio-economic status (11.9% versus 1.7%). The percentage of lonely people was 32% in the low socio-economic group and 14% in the high socio-economic group.

Social isolation increased with age: 12% of the subjects above the age of 65 belonged to this group. Divorced or widowed subjects formed a group at risk, and 16% of the immigrants from Surinam or Morocco, and 12% of people from Turkey were socially isolated. Subjects living on their own or without a regular job were also at risk. Although these factors do increase the risk of loneliness and isolation, it should be viewed in the proper perspective. For example, 50% in the socially competent group are poorly educated, and 15% are above 65.

The correlations lie between the minimum of r=0.01 for sex, and the maximum of r=-0.25 for socio-economic status. Stepwise discriminant analysis shows that only 14% of the differences can be reduced to three factors, i.e. socio-economic status, location, and age; all the other factors do not add to it.

This means social isolation is a relatively autonomous phenomenon, and cannot be reduced to structural variables.

Life events

Major life events are situations where people tend to ask for support, e.g. the loss of a loved one, illness, relational problems, getting married, having children, work and income, moving house, and victimship. The respondents reported a mean number of X=2.2 positive events, and X=3.3 negative events (Figure 4).

The social contact groups differed significantly in the number of negative events mentioned (F=7.25, df=3, P=0.000); the number of positive events were about the same for the four different groups. The number of positive and negative events among the socially competent were fairly balanced, but the lonely mentioned twice as many negative events, and the socially isolated even more. We see a linear relation in the typology: the socially competent are the best off, the socially isolated the worst, and the socially inhibited and the lonely are in between.

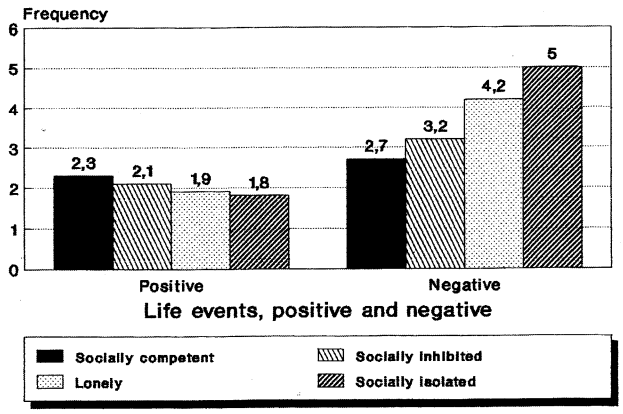
Table 4 Percentages within risk factors of the four categories of social contacts

	S C	S IN	L	S I
*Age**				
18-29	66.7	7.6	22.0	3.7
30-44	68.3	7.0	19.8	4.9
45-64	64.9	7.0	22.2	5.9
65-<	53.4	10.1	24.6	11.9
Sex				
male	64.7	7.9	21.5	5.9
female	64.1	7.5	22.2	6.2
*Marital status**				
unmarried	64.6	9.8	19.5	6.2
married	68.6	6.5	20.8	4.1
divorced	53.8	5.8	27.6	12.8
widowed	43.1	9.8	32.8	14.2
*Ethnicity**				
Dutch	66.2	8.4	19.8	5.6
Surinamese/Antillian	54.9	15.7	13.7	15.7
Moroccan/Turkish	38.9	8.8	38.1	14.2
Other	52.9	11.0	25.1	11.0
*Education**				
low	58.6	8.4	24.2	8.8
average	69.7	7.3	20.3	2.7
high	74.4	5.5	16.7	3.3
*Income**				
low	53.1	7.9	29.6	9.4
average	66.6	8.8	21.6	3.0
high	73.8	4.8	18.4	3.0
*SES**				
low	4.3	8.6	32.2	11.9
average	68.2	6.3	22.2	3.3
high	78.5	5.5	14.3	1.7
*Location**				
urban	54.2	12.3	23.8	9.8
rural	74.0	3.4	20.0	2.6

S C=socially competent; S IN=socially inhibited; L=lonely; S I=socially isolated; T=total

*) $p<.001$, Chi^2-tests

Figure 4 Life events (n=450)



One way to cope with major negative events is by receiving personal support. What kind of support did the subjects receive after the most significant life event? Most of them (78%) mainly received emotional support from others. This percentage was much lower (55%) for the socially isolated. If we take a closer look at the relationships, the group of network members of the socially competent and the lonely is quite varied: in addition to immediate family members (parents, children) they can also receive support from friends, colleagues, and neighbors. This variation is much smaller for the isolated and the inhibited.

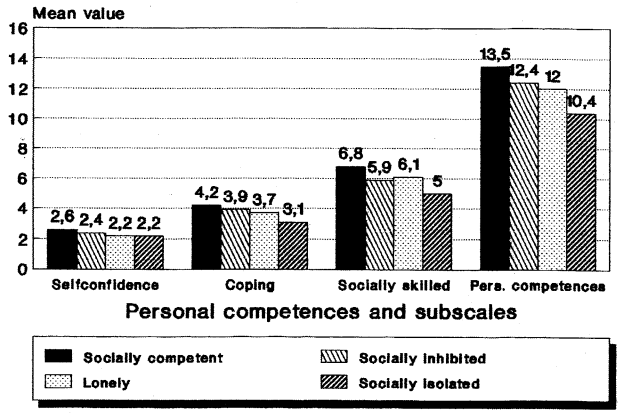
The data also show that while 70% indicated they felt no need for help, this held true for only 20% of the socially isolated. This means four out of five isolated subjects are in urgent need of help after an important life event, but there is nobody there for them. What is striking is that for the groups in most urgent need, professional organizations are quite difficult to reach.

Personal competences

The respondents were asked why some people are blessed with a rich social life and others are not. The most spontaneous answers referred to their character (57%), with a steady job far behind in second place (18%). Character was mentioned by all four groups to the same extent. Elaborating on the importance of character for a rich social life, it seems relevant to devote attention to the relation between personal competences and the social contact typology. To assess personal competences, a measure of 17 items is used, which gives an indication of someone's 1) self-confidence, 2) coping behavior and 3) social skills.

With regard to the total scale as well as the three subscales, the four social groups differed from each other substantially (Figure 5). The results were as follows: the socially inhibited, the lonely and the socially isolated felt less com-

Figure 5 Personal competences (n=450)



petent than the socially competent. They had less self-confidence, less effective coping behaviour, and fewer social skills (F=16.423, df=3, P=0.000). The socially inhibited and the lonely were similar and occupied a position in between: they had more competences compared to the isolated, but less than the socially competent. The difference between the inhibited and the lonely was that the lonely were socially more skilled than the inhibited, who were more self-confident and better at coping.

Social responsibility

In connection with personal competence, it seems relevant to learn more about the respondents' attitude towards problem-solving and giving support to others. An individual can feel lonely or isolated for varying periods of time for a variety of reasons. Is it an individual's responsibility to solve his/her own problems or is it the responsibility of society to help distressed people? The results of this survey show that a third of the subjects think the distressed individual had to solve the problems himself. Half the subjects felt they needed support from others to solve their problems, and 21% think professional help is necessary. The social groups do not differ regarding these ideas. There is probably a dominant idea in society about how to divide these responsibilities.

When asked *"If an acquaintance or friend gives the impression of feeling lonely or socially isolated, what do you think your duty is as acquaintance or friend?"*, well over two thirds of the subjects would intervene if this was the case, 15% if there were obvious problems, and 14% thought the initiative should lie with the distressed person. The most important finding was that the socially isolated group was significantly less responsive in offering help than the other three groups. Regarding their concrete experience in offering help, most respondents

said they were eager to help and would do so again straightaway if necessary. Over half the subjects (60%) said they received a lot in return, although only 33% of the socially isolated found this to be the case. Again we find that the process of giving and receiving is more in balance with the socially competent than the socially isolated.

Discussion

The findings of this study are grounds to a number of relevant conclusions and some critical comments. First, in this sample every type of social contact classification has been empirically assessed. About two thirds of the subjects can be considered socially competent, they have a lot of contacts and do not feel lonely. Although having an extensive personal network can improve a person's welfare, it is not necessarily the case. Despite their extensive contacts, 22% of the subjects feel lonely. On the other hand, 8% of the subjects do not feel lonely despite their small networks. However, this last group is vulnerable in a way, because they are quite dependent on a small number of other people. A risk of isolation arises if one or two other people are removed for whatever reason. The socially isolated (6%) were the worst off in both aspects.

The results of the core variables underlying the social contact typology, network size and feelings of loneliness, are largely comparable with other findings. De Jong-Gierveld and Van Tilburg (1990) report the results of sixteen studies with means between X=1.8 and X=4.6, which are somewhat higher than the score in our study. As far as network size is concerned, results are available from a representative sample (n=882) in a study by Van der Poel (1993), which is a mean of nearly ten, whereas Tijhuis et al. (1992) report a mean of almost four. These results differ from ours - nearly eight - due to differences in the method used; e.g. Van der Poel used 10 items - our study used 8 items, and Tijhuis had a maximum of 6 persons who could be named. The percentages in our study are also comparable with Brummett's (2001). In comparing the effects of different approaches (the network size, the loneliness) on social support, the combined approach gives a more differentiated picture.

Elaborating on the typology, the contrast between the socially competent and the socially isolated is considerable according to the measures applied. The socially inhibited and the lonely group occupy a position in between. As a rule, they do worse than the socially competent, but better than the socially isolated. However, there is a pattern of linearity between the typology and the measures applied, implying that the socially inhibited are better off in general than the lonely group. The results on giving and receiving support, life events and personal competences confirm the concept underlying the typology of social contacts.

In addition to the linear increase in the risk of social isolation, another feature of the social typology is the degree of social balance. The socially competent are

the most balanced group. The socially isolated are generally out of balance, as is expressed in the results about receiving and giving support, life events and the attitude towards giving help. In contrast with the socially competent, the socially inhibited, the lonely and the socially isolated run the risk of isolation in a specific way. The socially inhibited are generally content and appear stable, but have relatively small networks. They are dependent on a small number of people, and a possible disruption of this pattern renders them vulnerable. The lonely have extensive networks, but are not quite satisfied; there is an obvious discrepancy between their ideal and their reality. The socially isolated do poorly on both aspects, but seem to survive on a daily basis. Our study confirms Komter's notion (1996) that, in general, socially competent people say they give more than they receive, but it is not confirmed for the groups at risk of social isolation. On the contrary, the three risk groups say they receive more support than they give. Regarding the issue of social isolation, subjective feelings of loneliness are more indicative than network size. Finally, it is the quality of the contacts that is decisive and not the quantity. The main virtue of this study, however, is that it empirically shows that applying a combination of two criteria offers a surplus value, which differs from exclusively applying a subjective criterion in terms of loneliness or an objective criterion in terms of network size (Schrameijer, 1990; Lincoln, 2000). The two criteria measure different aspects, but together they encompass the two most essential components of meaningful social contacts versus social isolation. Although reality is much more complex and diverse, this model based on dichotomisation of objective and subjective criteria is a good starting point for investigating social isolation. Further analysis is needed to differentiate within the four groups. The two dimensions of the loneliness scale, social and emotional loneliness, could probably offer a fruitful approach (Van Baarsen et al., 2001).

This study evokes several methodological comments. As is noted in the method section, depending on the purpose of the study, different cut-off scores are applied regarding network size (Fischer, 1982; Tijhuis et al., 1992; Brummett et al., 2001). For example, when applying a cut-off of 3/4, the percentage of isolated people dropped to 4% in our study. Criteria about cut-off scores are always somewhat arbitrary, but the results do resemble those of other studies. Regarding the operationalisation of social support, which is rather complex (Van Sonderen, 1995; Lincoln, 2000), we preferred actual support given and received. This approach has some limitations, the items were mostly instrumental. Our measure was mainly restricted to instrumental support, and information about emotional support was limited. A more extended measure would have been preferable.

Some caution is called for the generalisation of the results, because of 1) the discussion about the cut-off scores, and 2) the representativeness of the research sample. The sample was not quite representative of the Dutch population as regards educational level.

This study did not aim to investigate the causes and effects of social isolation. It was aimed at pursuing a meaningful typology of social contacts based on objective and subjective criteria. The next step will be to investigate the causes and effects of social isolation; topics such as physical environment, societal participation and dependence on social welfare seem to be relevant to the issue of social isolation. A relevant question is to what degree is social isolation connected with societal isolation. These issues will be addressed elsewhere (Hortulanus et al., in press). Whereas this study is cross-sectional, it is recommended that more longitudinal research be conducted, which will offer more insight into the stability of the typology and the dynamics of patterns of social interaction over time (cf. De Jong-Gierveld & Dijkstra, 1996).

The results and recommendations are not just of academic interest, but are also relevant on a societal level. Considering social policy (RMO, 1997), information about the features, causes and effects of the four types of social interaction will provide information for the design of differentiated tools for social interventions.

REFERENCES

Badr, H., Acitelli, L., Duck, S. and Carl, W.J. (2001), 'Weaving Social Support and Relationships Together', in: B. Sarason and S. Duck (eds), *Personal Relationships: Implications for Clinical and Community Psychology.* Chichester etc.: Wiley, pp. 1-14.

Bandura, A. (1997), *Self-Efficacy: The Exercise of Control.* New York: Freeman.

Brummett, B.H. et al. (2001), 'Characteristics of Socially Isolated Patients with Coronary Artery Disease who are at Elevated Risk for Mortality', *Psychosomatic Medicine*, vol. 63, pp. 267-272.

Buunk, B.P. and Schaufeli, W. (2001), 'Het Belang van Wederkerigheid in Interpersoonlijke Relaties voor Gezondheid en Welbevinden: Een Evolutionair Perspectief', *Nederlands Tijdschrift voor de Psychologie*, vol. 56, pp. 41-56.

De Jong-Gierveld, J. (1984), *Eenzaamheid: Een Meersporig Onderzoek.* Deventer: Van Loghum Slaterus.

De Jong-Gierveld, J. and Kamphuis, F. (1985), 'The Development of a Rasch-type Loneliness Scale', *Applied Psychological Measurement*, vol. 9, pp. 289-299.

De Jong-Gierveld, J. and Van Tilburg, T. (1990), *Manual of the Loneliness Scale.* Amsterdam: Vrije Universiteit, Department of Social Research Methodology.

De Jong-Gierveld, J. and Dijkstra, P.A. (1996), 'Eenzaamheid Komt en Gaat met de Tijd: Effecten van Veranderingen in het Sociale Netwerk en in Gezondheid van 55-Plussers op hun Mate van Eenzaamheid', *Mens en Maatschappij*, vol. 71, pp. 189-208.

Dijkstra, P.A. and De Jong-Gierveld, J. (1999), 'Differentiële Kansen op Eenzaamheid onder Ouderen: De Betekenis van Type Partnerrelatie, Partnergeschiedenis, Gezondheid, Sociaal-Economische Positie en Sociale Relaties', *Tijdschrift voor Gerontologie en Geriatrie*, vol. 30, pp. 212-225.

Fischer, C. (1982), *To Dwell among Friends: Personal Networks in Town and City.* Chicago: University of Chicago Press.

Gouldner, A.W. (1960), 'The Norm of Reciprocity: A Preliminary Statement', *American Sociological Review,* vol. 25, pp. 161-178.

Hortulanus, R.P., Liem, P.P.N. and Sprinkhuizen, A.A.M. (1992), *Domeinen van Welzijn.* The Hague: VUGA.

Hortulanus, R., Meeuwesen, L. and Machielse, A. (in press), *Sociaal Isolement in Nederland*. The Hague: Elsevier.

House, J.S. (2001), 'Social Isolation Kills, but How and Why?', *Psychosomatic Medicine*, vol. 63, pp. 273-274.

Hughes, M. and Gove, W.R. (1981), 'Living Alone, Social Integration, and Mental Health', *American Journal of Sociology*, vol. 87, pp. 48-74.

Komter, A.E. (1996), 'Reciprocity as a Principle of Exclusion: Gift Giving in the Netherlands', *Sociology,* vol. 30, pp. 299-316.

Komter, A.E., Burgers, J. and Engbersen, G. (2000), *Het Cement van de Samenleving: Een Verkennende Studie naar Solidariteit en Cohesie.* Amsterdam: Amsterdam University Press.

Lincoln, K.D. (2000), 'Social Support, Negative Sociale Interactions, and Psychological Well-Being', *Social Service Review*, June, pp. 231-252.

Luteijn, F., Starren, J. and Van Dijk, H. (1985), *Handleiding bij de Nederlandse Persoonlijkheids Vragenlijst (NVP).* Lisse: Swets en Zeitlinger.

Mallinckrodt, B. (2001), 'Interpersonal Processes, Attachment, and Development of Social competencies in Individual and Group Psychotherapy', in: B. Sarason and S. Duck (eds), *Personal Relationships: Implications for Clinical and Community Psychology*, Chichester etc.: Wiley, pp. 89-118.

Perlman, D. and Peplau, L.A. (1981), 'Toward a Social Psychology of Loneliness', in: R. Gilmour and S. Duck (eds), *Personal Relationships in Disorder*, London: Academic Press, pp. 31-56.

Peplau, L.A. and Perlman, D. (eds) (1982), *Loneliness: A Sourcebook of Current Theory, Reseach and Therapy.* New York: Wiley.

RMO (1997), *Vereenzaming in de Samenleving*. Rijswijk/The Hague: Raad voor Maatschappelijke Ontwikkeling (RMO)/ Sdu Uitgevers.

Sarason, B.R., Sarason, I.G. and Pierce G.R. (1990), *Social Support: An Interactional View*. New York: Wiley.

Sarason, B.R., Sarason, I.G. and Gurung, R.A.R. (2001), 'Close Personal Relationships and Health Outcomes: A Key to the Role of Social Support', in: B. Sarason and S. Duck (eds), *Personal Relationships: Implications for Clinical and Community Psychology*, Chichester etc.: Wiley, pp. 15-41.

Schrameijer, F. (1990), *Sociale Steun: Analyse van een Paradigma.* Utrecht: NcGv.

Sumbadze, N. (1999), *The Social Web: Friendships of Adult Men and Women*. Leiden: DSWO Press, University of Leiden.

Tijhuis, M., Flap, H.D., Foets, M. and Groenewegen, P.P. (1992), 'Netwerken in Nederland: Een Onderzoek naar Persoonlijke Netwerken van Nederlanders', in: W. Jansen and G. van den Wittenboer (eds), *Sociale Netwerken en hun Invloed*, Meppel: Boom, pp. 2-38.

Van Baarsen, B., Snijders, T.A.B., Smit, J.H. and Van Duijn, M.A.J. (2001), 'Lonely but not Alone: Emotional Isolation and Social Isolation as Two Distinct Dimensions of Loneliness in Older People', *Educational and Psychological Measurement*, vol. 61, pp. 119-135.

Van der Poel, M. (1993), 'Delineating Personal Support Networks', *Social Networks*, vol. 15, pp. 49-70.

Van de Willige, G., Schreurs, P., Tellegen, B. and Zwart, F. (1985), 'Het Meten van Life-Events: De Vragenlijst Recent Meegemaakte Gebeurtenissen (VRMG)', *Nederlands Tijdschrift voor de Psychologie,* vol. 40, pp. 1-19.

Van Sonderen, E. (1995), 'Sociale Steun en Sociale Netwerken', in: R. Sonderman, C.M.H. Hosman and M. Mulder (eds), *Het Meten van Determinanten van Gezondheid: Een Overzicht van Beschikbare Meetinstrumenten*. Assen: Van Gorcum.

Van Tilburg, T.G. (1988), *Verkregen en Gewenste Ondersteuning in het Licht van Eenzaamheidservaringen.* Utrecht: Elinkwijk.

APPENDIX

Ratio *received* support and *given* support, in percentages (n=1758)

Type of support		S C	S IN	L	S I	T
Picked up or brought home	R***	70	63$^{\#\#}$	68$^{\#\#\#}$	51$^{\#\#\#}$	68$^{\#}$
	G***	71^{t}	48	51	26	62
Things borrowed or lent (e.g. car, utensil, sugar)	R***	57	46	43	23	51
	G***	66$^{\#\#\#}$	53	53$^{\#\#}$	31$^{\#}$	60$^{\#\#\#}$
Providing care for a child or pet	R***	47	26	40	15	42
	G***	46	24	41	18	41
Assistance filling out forms	R	41$^{\#\#}$	38$^{\#\#}$	46$^{\#\#\#}$	40$^{\#\#\#}$	41$^{\#\#\#}$
	G***	29	22	26	12	27
Providing care in case of illness	R^{t}	28	30	36$^{\#}$	32	30
	G	29	30	28	23	29
Name of a good doctor or babysitter	R	17	17^{t}	16	14	17
	G*	19$^{\#}$	11	19	12	18$^{\#}$
Introduction to a club, association, board etc.	R	14	15	17	13^{t}	15
	G**	18$^{\#\#\#}$	17	14	6	17$^{\#\#\#}$
Assistance finding a job	R**	14	13	10	8	13
	G**	20$^{\#\#}$	16	17$^{\#}$	8	19$^{\#\#\#}$
Mediation in problems with agencies or other persons	R**	11	12	16	19$^{\#}$	12
	G**	19$^{\#\#\#}$	12	15	7	17$^{\#\#\#}$

S C=socially competent; S IN=socially inhibited; L=lonely; S I=socially isolated; T=total

Comparison of rows:
R=received support; G=given support (Chi^2-test,*) p≤ .05, **) p≤ .01, ***) p≤ .001)
Differences between receiving and giving, comparisons for each cell (paired t-test, ^{t}) p< .1, $^{\#}$) p< .05, $^{\#\#}$) p< .01)

The most frequently mentioned support situations included being picked up or taken home (68%), borrowing things (51%), taking care of a child or pet (42%), and helping to complete forms (41%). In almost all the situations, subjects with large networks received the most support, except 'mediation in problems'. Generally speaking, lonely and isolated people received this kind of support the most (16% and 19%). In general, the socially competent received support most frequently, as opposed to the socially isolated. The patterns of the socially com-

petent and lonely resembled - although the first group was better off. The patterns of the socially isolated and socially inhibited also resembled. The socially isolated were the worst off in almost all cases.
Relatives, friends and neighbors provided by far the most support; for support of a caring nature, the subjects mainly appealed to relatives and friends; instrumental support was also asked of neighbors. Professionals mainly assisted in filling out forms and mediating in problems and, to a lesser extent, in cases of illness, and finding a job.
Not just receiving support, but giving support also constitutes an essential part of the network approach. The table also shows that support given was mainly instrumental, followed by caring support. A relatively small percentage referred to support in relation to different agencies. Here again there was a difference between the subjects with large and small networks. The group with extensive networks gave support most frequently, being the highest for the socially competent. People with small networks gave by far the least support to others, and this was strongest for the socially isolated. Mostly, the percentage of socially isolated who state they gave support was half the mean percentage of the whole sample. In general, the socially isolated receive and give by far the least support, the socially competent the most, and the two other groups in between.
Across the board, the subjects indicated they gave help more often than they received it; paired t-tests show that the scale has turned in favour of giving support. However, a closer look at the four distinct types of social contacts reveals quite a different picture. The results show that this general image only holds true for the socially competent (the largest group, 64%). The observation for the socially isolated was completely the opposite: on all the issues, they claimed they received more support than they offered. The same can be said of the socially inhibited and the lonely, although the differences were less pronounced.