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Intervention Against Loneliness in a Group of Elderly Women: A Process Evaluation[1]

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This article describes a method (the CCC design) for undertaking social work with the elderly. The presenting symptom is the experience of loneliness. Also examined is how far the sample was representative of elderly people who had shown interest in institutional living and among whom the experience of loneliness could be expected, and also whether the intervention efforts were undertaken as specified. The results indicate that when subjects are randomly assigned to a treatment they have not sought, the participants, as compared to nonparticipants, seem to be somewhat higher in socioeconomic status and some of its correlates, but lower in self-esteem. On the whole the proposed method seems easy enough to execute and can accordingly be applied to other populations.

INTRODUCTION

One of the objectives of the Aging and Loneliness Project, described in Andersson (1982), was to carry out an intervention. The intervention was

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principally directed at the experience of loneliness. Weiss (1982, p. 79) suggest that

> it is important for those who do research on loneliness to give thought to application of their work. Concern for application can help ensure that the research does not become excessively academic. The condition we are studying is so disturbing that we surely have some responsibility to do what we can to be helpful to those who experience it.

Several authors have offered well-intentioned advice on how to avoid loneliness, but as Young (1982) points out, nothing has yet been published on systematic treatment. Various treatment models have, however, been proposed. For instance, Young, in the above mentioned paper, presents a program based on cognitive-behavioral principles.

At the start of the intervention there was thus a lack of results from experimentally based treatment and the proposed models had not been designed specifically for an elderly population. It was therefore decided to begin with a simple design and rely on group interaction, not on experts. A prerequisite of the intervention was that, if proved useful, it might be recommended to the Social Service Bureau in the city of Stockholm. This meant that the model should be inexpensive and easy to administer. Furthermore, it was realized that the scarce and rather expensive therapeutic experts are still disinclined to take on aged subjects (Eisdorfer & Stotsky, 1977, p. 732).

The intervention program (CCC design), designed to strengthen the local network is based on three sociopsychological concepts: (i) social comparison, (ii) personal control, and (iii) availability of a confidant. These concepts, which are also reviewed in Peplau, Bikson, Rook, and Goodshilds (1982), have been suggested to be connected with loneliness. Social comparison refers to the possibility of comparing with one's own past experiences or with other people. Perlman, Gerson, and Spinner (1978), for example, found that loneliness was associated with a desire to receive more personal information from other people, though in their sample this was true for only males. The second concept, personal control, refers to the feeling of mastery and control over some aspect of the environment. Perlman et al. (1978) concluded their paper by saying that "we would recommend that to avoid loneliness, senior citizens should take as much responsibility and control over their affairs as possible." Finally, Peplau et al. (1982), based on Lowenthal and Haven (1968), suggest that the availability of a confidant might be associated with less loneliness.

THE LONELINESS CONCEPT

As regards loneliness, there is no consensus on the theoretical level as to whether this is a multidimensional concept and, if so, of how many dimensions it is composed. For a general up-to-date discussion of loneliness the reader is referred to Peplau and Perlman (1982).

In view of the theoretical disagreement, a single question bearing on self-rated loneliness was used as the means of *selection* for this intervention ("Does it happen that you feel lonely?"). While such an instrument does lack precision (Brennan & Auslander, 1979), it carries the advantage of having been used in several studies. It also has a high face validity, does not take any unestablished characteristics of loneliness for granted, and—assuming that the intervention proves successful—is easy to use as a general method of selection. But as an operationalization of the *theoretical conception* of loneliness used in this project, and thus for the *calculations,* the UCLA Loneliness Scale (short version) was also included in the questionnaires. The two measures of loneliness correlated moderately (r = .44).

SAMPLE

Those who experience loneliness can handle it in different ways (coping). A reaction on the social level can be directed toward social services—for example a wish to move to a senior citizen apartment or an old people's home. It has been shown that social factors—like "feeling insecure in the present flat," "feeling lonely," and "living far from relatives and friends"—play an important role for the decision to apply for a place in an institution (Berg & Dahl, 1978). The individual might believe that the feeling of loneliness decreases with increasing social contacts and that these could be obtained in an institution. However, there are no data as yet which point to institutionalization as a general solution of loneliness. What we do know, though, is that living in an institution is accompanied by a lot of negative effects (Goffman, 1961). It would accordingly be an advantage—both for the individual and for society—if institutional living could be reserved for those whose needs have been shown to be satisfied in this manner. In accordance with this it was decided to choose for study a

group of elderly who had shown interest in institutional living and among whom the experience of loneliness could be expected.

In Stockholm there is a long waiting list of old people who have requested admission to senior citizen apartments. This computerized waiting list was used to generate the sample for our study. Another sample from the elderly population might have yielded as large a proportion of lonely subjects. But we have aimed at a group that might display a coping style of the type described above—a style that might be termed "problem-focused" (Folkman & Lazarus, 1980) and maladaptive and whose effects are probably detrimental to the individual, expensive for the municipality, and out of line with the general recommendations for senior citizen services.

Thus, the design of the *study* does not rely on *self-selection of participants.* This is one of four factors mentioned by Bernstein, Bohrnstedt, and Borgatta (1976) as important for avoiding selection biases in evaluation research. The other three prerequisites for a thorough design are likewise met here: Since the selected group was hypothesized beforehand to be a group "at risk," there was no selection *by expedience.* As the evaluation was planned from the start there was no need to set about a *nonrandom-posttreatment matching,* and as there was only one program in effect, there was no *selection by excellence.*

Before applicants are placed on the waiting list they must attend a medical interview, after which their need is ranked on a 4-grade scale. The highest priority is accorded to those who live under conditions incompatible with their physical abilities. For this study the subjects were chosen from the lowest category only, to avoid those whose physical disabilities necessitate referral to an institution. Before drawing the sample, some additional limitations were made: (i) Only subjects living alone were included. This criterion kept us from interfering in family life. Also, living alone is associated with loneliness, above all among divorced or widowed persons. (ii) Only females were included. A clear majority of elderly persons living alone are women. In Stockholm, single women make up 40% of the total retiree population (Fried, 1980). Women also report loneliness to a higher degree than men, though a conceivable explanation for this is that males may be more reluctant to admit loneliness (Borys, Perlman, & Goldenberg 1982). Including only females also simplified the design of the intervention. (iii) Those few who did not have a modern standard of housing were not included since they need the better standard offered by the senior citizen apartment. (iv) Only subjects with less than five hours of home help per week were included. Those with more home help already get many visits (from the social services). (v) In view of the study's longitudinal design, we imposed an upper age limit of 80 years. For practical reasons, moreover, our study group consisted only of those who exhibited the above characteristics and who lived in inner-city districts (with the single exception

of a district just south of the inner city). The number of subjects who matched these requirements turned out to be of a manageable size, so the total group was included in the study. As indicated earlier, the group thus arrived at is also an example of a group of sociopolitical interest. To a large extent its members do not yet make demands on the social services, but they comprise a high-risk group.

PROCEDURE

In November-December 1980 five social workers/home-help assistants visited the subjects under study and during their call they asked the question bearing on self-rated loneliness.

The first round of interviews took place during the spring of 1981. The interviews were performed by the same five social workers who had called on the subjects earlier and who were to take part in the intervention, following directly in the late spring of 1981. All five had been trained in interview techniques, and all participants had given their informed consent.

After dropouts had been excluded from the records, the nonresponse rate was 19.7%, so that the final number of initial interviews was 207. The mean age of the participants was 77 years. Since married women were excluded, the distribution by civil status was 62.8% widows, 23.7% unmarried, and 13.5% divorced. Accordingly, only 51.2% had children.

At the calling visits, 108 of our 207 subjects had reported loneliness (always, often, sometimes). It may be questioned whether subjects experiencing loneliness as infrequently as "sometimes" should be labelled lonely. But in defining the group of interest one should take the following into consideration: First, due to social undesirability, there may be an under-reporting. Secondly, we also do not tap the strength of the emotion; the feeling of loneliness may be very severe even when it does not occur often. Thirdly, Jones (1982) reports that among college students, loneliness is inversely correlated with social skill and social functioning. He also suggests that the same relation is true for the elderly. If that is so, we do not want to take the risk of concentrating subjects with severe social skill deficits in our small groups. A final and practical reason for including the "sometimes" lonely is that we wanted to have a group large enough to start with, a perhaps make appropriate reductions later. It may turn out that the proposed method works best with the least severe cases.

The subjects who had reported loneliness were divided into one intervention (n = 68) and one control (n = 40) group (see Fig. 1). Care was taken to ensure that the two groups were comparable with regard to subjects who (i) did/did not have a confidant(e), (ii) liked/did not like making new acquaintances, and (iii) had few/many social contacts. These questions had

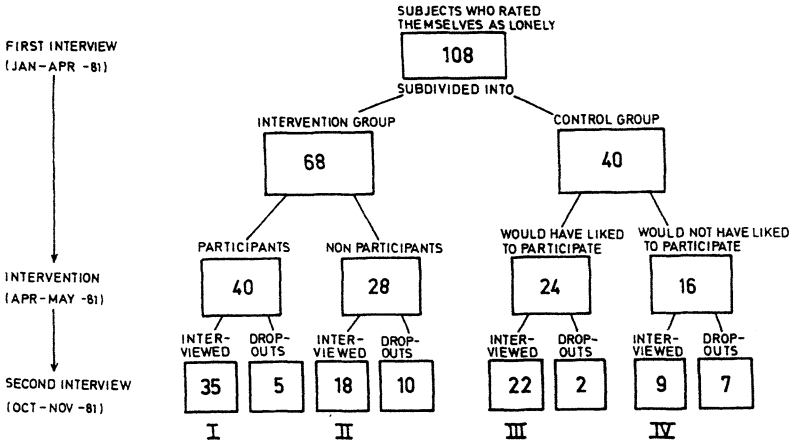

Fig. 1. Research design. The number of subjects is indicated in each box.

also been asked during the calling visits, which gave us time to plan the fieldwork while the initial interviews were being held. Just before the start of the intervention, the members of the intervention group were asked whether they would like to participate. For reasons of comparability, the members of the control group also were asked whether they would like to participate (if there was to be an intervention).

Six months after the intervention—in autumn 1981—both groups were interviewed again in a follow-up. After omission of dropouts due to natural causes, the nonresponse rate at the second round of interviews was 16%, which is what one might expect in a longitudinal project involving elderly subjects and mild attempts at persuasion.

MEETING ARRANGEMENTS

The five interviewers/home-help assistants were each working in one of five social districts in Stockholm. They were to organize the intervention for the participants living in their district. Within each district the participants were combined into small groups, composed in such a manner that persons living close to each other belonged to the same group. This was the sole basis for the formation of the groups. Such a procedure served a practical purpose. It also means that the subsequent estimation of effects will be conservative, since the goups were not built up in an optimum way, i.e., based on the participants' interests and background.

The size of the groups ranged from three to five persons. They were to meet four times—the first and last times with the home-help assistant present. This gave the participants the opportunity to speak more freely and it also reduced the risk of the participants merely responding to an intensive attention from the assistants. The meetings could thus form a ground for *social comparison.* The first meeting was to be held in a "neutral" locality, for example, a home-help center "in town," or at the social service center. From the second meeting onward, the participants were free to decide where they would meet.

A particular subject was to be discussed at each meeting. The importance of conversation is stressed by Miller (1981, p. 229):

> In my view conversation is undervalued as a source of gratification.... Conversation is unique as a motor and sensory experience that is midway between thought and action.... Isolation is the path to madness; negative feedback is required to provide consensual validation or refutation of emerging fantasies.

The subject at the first meeting was the residential area (e.g., traffic planning, public communications, shops). At the second meeting: the role of the retiree (e.g., How are you treated as a retiree? Are the retiree's knowledge and experience utilized?). At the third meeting: social and medical service (e.g., home-help service, hospital service, and so forth). At the fourth meeting: summary of the first three meetings and possibilities for leisure activities.

The participants were asked to write down their views on the above four subjects, so that their opinions could be communicated to the project leaders and the administrators. This process might influence the participants' sense of *personal control.* The meetings in themselves also offered an opportunity for finding a *confidant.*

EVALUATION OF THE PROCESS

Evaluation research is basically concerned with two questions (Freeman, 1977), namely (i) whether or not an intervention is carried out as planned (process evaluation), and (ii) whether or not an intervention made a difference (impact evaluation). The present paper deals with the first question.

Bernstein and Freeman (1975) have identified two central questions for a process evaluation:

1. Has the program been directed at the appropriate and specified target population or target area?
2. Were the various practices and intervention efforts undertaken as specified in the program design or derived from the principles explicated in that design?

I will try to answer the first question with the help of:
- A statistical comparison between "participants" and "non-participants" (groups I and III compared to groups II and IV in Fig. 1).
- An interview with the home-help assistants by a psychologist.

The second question I will try to answer with the help of:
- "Diaries" written by the ássistants.
- The participants' written contributions.
- The interview with the home-help assistants.
- Follow-up questions, bearing directly on the intervention, in the second round of interviews.

Target Population

The questions concerning target population are whether the intended group was approached, and whether more suitable groups exist. To answer the first question, the effects of the refusal rates must first be evaluated.

At the calling visits, 52.7% of the subjects rated themselves as lonely. Then at the first round on interviews the dropout rate, as mentioned, was 19.7%; however, the percentage of the interviewed subjects who had rated themselves as lonely at the calling visits was about the same—52.2% (108 out of 207). This is an indication that the remaining sample was not biased, at least with regard to self-rated loneliness, which is our main variable.

The dropout rate at the second round of interviews does not seem too serious, but comparing boxes I and III with II and IV in Fig. 1, it might be argued that probably not all those in the control group who said they would have liked to participate, would actually have done so. This does not seem to be a seric us problem though, since only seven subjects in the intervention group failed to participate even though they had said they would.[3] The same percentage in the control group would reduce box III by at most three subjects. All subjects in Fig. 1 had rated themselves as lonely, but some refused or would refuse to participate in the small group meetings. How do these lonely subjects differ from the "participants"?

As can be seen from Table I, with a few important exceptions there was in general no difference between participants and nonparticipants. Age, harmonious childhood, number of children, and our various measures of loneliness or social contacts did not differ significantly between the groups. The participants, however, were somewhat higher in socioeconomic status ($p < .01$) and engaged in more leisure activities ($p < .05$). In another

[3]Of the 68 subjects in the original intervention group, 47 agreed to participate but 7 of them did not do so. Five of the dropouts did, however, participate in the second interview and are therefore included in box II; the other two also refused to participate in the second interview and are accordingly included in the "dropout box" of 10 subjects.

Table I. *T* Test for Differences Between Participants and Nonparticipants[a,r]

Variable	Participants		Nonparticipants		
	N	*M*	*N*	*M*	*t*
Age	57	76.67	27	78.11	1.69
Socioeconomic status[b]	55	2.97	25	2.34	−2.97[p]
Harmonious childhood[c]	56	3.65	25	3.38	−1.05
No. of children	57	0.77	26	1.15	1.30
No. of leisure activities	57	1.18	27	0.59	−2.06[q]
Self-esteem[d]	56	3.29	26	3.77	2.03[q]
Loneliness[e]	56	3.61	25	3.48	−0.56
Self-rated loneliness[f]	57	1.72	26	2.15	1.87
Social contacts[g]	57	2.31	26	2.47	1.15
Confidant(e)[h]	57	1.68	25	1.64	−0.39
Hours of home help	57	1.18	26	2.27	2.13[q]
Use of services[i]	57	1.73	26	1.69	−1.04
Use of medical care[j]	57	2.57	26	2.60	0.53
Diseases[k]	56	1.79	22	1.79	0.06
Blood pressure, systolic[l]	56	159.38	22	162.73	0.64
No. of medicines	56	2.98	22	2.91	−0.18
Subjective health[m]	57	2.53	26	2.62	0.46
Depressive disorder[n]	57	3.18	26	3.08	−0.46
Physiological isolation[o]	57	3.17	26	2.66	−2.13[q]
No. of days outdoors last week	57	5.35	27	4.56	−1.46

[a]Where data are lower than the interval level, a high score indicates a more "positive" value.
[b]4-item index (education, no. of rooms in flat, income, work).
[c]4-item index.
[d]4-item index.
[e]UCLA Lonelines Scale—short version.
[f]Single-item self-report measure.
[g]6-item index.
[h]Dichotomy—yes-no.
[i]8-item index.
[j]5-item index.
[k]9-item index (cardiac disease, hypertension, asthma, gastritis, renal problems, dermal problems, diabetes mellitus, upper respiratory diseases, constipation).
[l]No significant difference for diastolic blood pressure either: $t = -1.13$ ($p > .10$).
[m]Single-item self report measure.
[n]7-item index.
[o]5-item index.
[p]$p < .01$.
[q]$p < .05$.
[r]A description of the variables and indices is available on request from the author.

measure of leisure—taking part in activities arranged by organizations—the participants also scored higher ($p < .05$). Of the measures of physical health or capability (use of services or medical care, diseases, blood pressure, number of medicines used, subjective health, depressive disorder, number of days outdoors last week, and physiological isolation), only the last one differed significantly between the groups ($p < .05$). This seems reasonable, since the five items in the isolation index—impaired sight, hearing, speech and mobility, respectively, and urinary incontinence—presumably play a part in determining ability or interest in taking part in group activities. Furthermore, Norris and Cunningham (1981) report clinical impressions of elderly hearing-impaired individuals as being withdrawn and insecure. The difference in hours of home help ($p < .05$) could be explained as an expression of a difference in physical competence, but also for example as a feeling of repletion in contacts with the social services on the part of the nonparticipant group. There was a significant difference in self-esteem, too, the participants scoring lower. This is in line with Cohen's (1959) suggestion that people high in self-esteem use avoidance type defenses. Partial correlations were also computed. The dichotomy participant versus nonparticipant group was correlated with each of the significant variables above while controlling for the appropriate remaining variables (Tables II, III). The result was that all correlations were significant except between types of group and number of leisure activities ($r = .02$). In summary, judging from the questionnaire and compared to the nonparticipants, the participants seem to be somewhat higher in socioeconomic status, to have fewer hours of home help, and less isolating physiological handicaps, but to rate themselves lower in self-esteem.

There were certain questions that we wanted the psychologist, as a neutral person, to try to elucidate. The question relating to target population read: "Which groups should be the target if an intervention like this one is used as a general method?" The question here is no longer whether we intervened in the intended group but rather whether our group is a good choice and whether there are other groups to approach.

The home-help assistants considered that in some cases the retirees were not aware that they were on the waiting list; either the former husband

Table II. Zero-Order Correlations

Group					
Socioeconimic status	.32[a]				
Physiological isolation	.23[b]	.10			
Hours of home help	−.26[a]	−.09	−.08		
No. of leisure activities	.22[b]	.26[a]	.28[a]	−.16	
Self-esteem	−.22[b]	.12	−.02	.08	−.03

[a] $p < .01$; two-sided test.
[b] $p < .05$; two-sided test.

Table III. Partial Correlations

Type of group (dichtomy participant vs nonparticipant) correlates with	r	Partial *r*	Controlling for
Socioeconomic status	.32[a]	–	None
Physiological isolation	.23[b]	.23[b]	1
Hours of home help	−.26[a]	−.28[a]	1, 2
No. of leisure activities	.22[b]	.02	1, 2, 3, 5
Self-esteem	−.22[b]	−.31[a]	1, 2, 3, 4

[a] $p < .01$; two-sided test.
[b] $p < .05$; two-sided test.

or some relative had handled the registration or the retiree had forgotten that she had done this herself. One of the assistants believed that it is the most active and those who are most able to arrange for themselves who get onto the waiting list. But three of the assistants argued that the target group should be younger and fitter; in their opinion the present group had already disengaged. But at the same time the assistants thought that the present subjects were not lonely enough—they were too active and this made it difficult to coordinate the group meetings. In summary, the participants were experienced as both too fit and too unfit. No doubt, in a large sample like the present one, it is possible to find noticeable examples of both categories. The question is how representative they are.

Intervention Efforts

Turning to the question of whether the intervention efforts were undertaken as specified, there are four sources of information. The issues here are whether the group meetings worked—administratively—from the assistants' and the participants' points of view.

The Diaries. The interviewers' diaries mainly contain practical matters, like the time and place for the meetings and number of participants, but they also include some notes on general impressions from the meetings. The diaries were written during the intervention and therefore reflect the positive attitudes held by the retirees. The diaries also show that attendance was high. Of the initial total of thirteen groups, two failed: one of these, consisting of just two persons, was not heard from after the first meeting; the other comprised three subjects but two did not show up, so the third was placed in another group.

The Written Contributions. Of the eleven groups, only one functioned passively. One group was active, going around with a protest against the bus company, writing a letter to the editor of the local paper, and calling on a local politician. From the other groups we got written contributions ranging in size from half a page to a few pages. The writings were edited and subsequently handed over to the administrators and decision-makers.

Interview with the Assistants. In examining how the intervention was carried out, some background information can be obtained from the psychologist's questions to the interviewers. The following are the most relevant sections in the psychologist's report: (i) "What were the interviewers' expectations/apprehensions before the intervention?," (ii) "What was seen as most difficult/laborious with the intervention?," (iii) "What was most pleasant/interesting?," (iv) "What did the retiree think about the intervention?," (v) "Estimate of the time needed to form, start, and follow up a group," (vi) "Estimation of whether an intervention would work without the back-up from research—on formal grounds—to motivate the retiree." In studying the assistants' views, a distinction can be made between project-dependent and more general circumstances.

For the first two questions it is important to know how the home-help assistants were recruited. They had been asked by their superior whether they wanted to work in a research project; the information given was very meager and they had to decide the same day. Their motive for accepting was the prospect of a change from the daily routine.

On realizing the extent of the work—interviews *and* heading the intervention—reactions differed: Three of the assistants found it fear-provoking to have to take so much initiative, while the other two welcomed this opportunity to influence their own work situation. Anyway, none of the assistants had positive expectations before the intervention and none expected positive results.

The assistants experienced a conflict in the connection between research and practical work, as they felt they were doing the work for the sake of research. They also experienced a gap between social theory and social practice. The neutral way in which the groups were to be formed was considered impersonal and frustrating. The assistants thought that their experiences were not being used and therefore that the project was based, not on practice and reality but on theories in which they did not believe. This might be so partly because, in their opinion, they did not know enough of what is happening in research.

The contact with the participants was experienced as very positive. It was nice to talk to them and get to know them under other circumstances than as "cases." The assistants were also pleased to see how certain participants took on a fresh lease of life and enjoyed making new acquaintances. Three of the assistants also found the group meetings very enjoyable, as the participants were keen on discussing and seemed to have a good time.

The reactions from the participants were in most cases very positive. Most of them were active during the group meetings but a few did not turn up after the first session.

It was difficult to estimate how much time had been spent on the intervention. The assistants considered that it had taken more time than expected, but most of them thought that fieldwork of this range would require half-time work. The most time-consuming part was getting in touch with the participants and booking times. The idea, of course, is that, even though somewhat time-consuming, preventive work of this kind will pay in the longer run by minimizing the risk of the aged appearing as "cases."

All the assistants considered that it would be feasible to include an activity of the present kind in their regular jobs. But in that case it should be done on a different basis, namely starting with an individual retiree they knew felt lonely and then arranging groups, taking the participants' interests into consideration. Motivating the retiree with this approach was not seen as a problem, even though, in the present project, the wish to aid research was reported to play a part and the participants were proud to have been selected. However, the approach suggested by the assistants is to be recommended if the proposed model is used as a routine. As mentioned earlier, our formation of groups was based on experimental reasons.

The Second Questionnaire. At the close of the second interview there were some questions bearing directly on the intervention. The first concerned attendance (Table IV top). The specified four meetings were arranged for slightly more that one participant in four but about half of the participants never met more than three times. This was mainly due to the fact that occasional absence resulted in cancelled meetings. The relatively low mean number of meetings may explain why only about one fourth of the

Table IV. Questions About the Intervention

How many times were you present at the group meetings?		
	n	%
Once	2	5.7
Twice	7	20.0
Three times	16	45.7
Four times	10	28.6
	35	100.0
Do you think you had time to get to know someone in the group?		
	n	%
Yes, definitely	0	0
Yes, to some extent	9	25.7
No, not really	11	31.4
No, definitely not	15	42.9
	35	100.0

participants felt that they had had an opportunity of getting to know someone (Table IV, bottom).

Retrospectively, the answers to the above questions suggest that it might have been better to opt for perhaps six meetings and perhaps five or six participants in each group. Occasional absence might then not have resulted in cancelled meetings as it did. Also, according to the assistants, some participants regretted that they did not have enough time to get acquainted with other members with whom they would have liked to keep in touch. Otherwise, an intentional advantage of the proposed model is the lack of a definite termination of contacts. The social workers (or in other cases perhaps volunteers) encourage the participants to go on seeing each other, therefore the contacts do not necessarily end when the assistants leave. The eventual continuation of contacts depends on the participants themselves.

Was any social contact then being maintained six months after the intervention? Answers show that at least on some occasion, slightly less than half of the participants have talked to another participant and 17% were still seeing at least one of the other participants.

SUMMARY

This intervention was directed at a group with a hypothesized maladaptive and problem-focused coping with loneliness. Compared with nonparticipants, the participants were found to be higher in socioeconomic status, better off in physiological competence, but worse off in self-esteem. Perhaps this is reflected in the assistants' perception of the subjects' participation in the intervention as both active and disengaged.

The CCC design (comparison, control, confidant) seems to work and would probably function even more flexibly in a natural situation without the experimental restrictions.

For the assistants, changing to more fieldwork seems to involve some strain. There is also an information problem regarding research/researchers and fieldwork/practitioners. More information about research seems to be required in an experimental situation like the present one. On the other hand, the assistants' skepticism in this project minimized the risk of a positive bias when interpreting the participants' views. It also indicates that the CCC design does not depend on enthusiasts. Successful replication has not been achieved in many projects on account of a dependence on an enthusiastic leader or, as Rossi (1978, p. 579) puts it:

> Human services treatments that are given by exceptionally devoted persons are as likely to be efficacious because of the devotion expressed in the delivery as because of the treatment.

The great majority of the participants reported an appreciation of the intervention. This attitude was accompanied at the follow-up by some interesting differences between the intervention and control groups, with the former group rating more favorably on loneliness and several of its correlates, particularly social contacts, leisure activities, and blood pressure. These results will be presented elsewhere in an article on the impact of the intervention.

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