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Aging & Mental Health

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713404778>

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C. M. S. Martina^a; N. L. Stevens^a

^a Centre for Psychogerontology, Radboud University Nijmegen, Nijmegen, The Netherlands

To cite this Article Martina, C. M. S. and Stevens, N. L.(2006) 'Breaking the cycle of loneliness? Psychological effects of a friendship enrichment program for older women', *Aging & Mental Health*, 10: 5, 467 — 475

To link to this Article: DOI: 10.1080/13607860600637893

URL: <http://dx.doi.org/10.1080/13607860600637893>

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ORIGINAL ARTICLE

Breaking the cycle of loneliness? Psychological effects of a friendship enrichment program for older women

C. M. S. MARTINA & N. L. STEVENS

Centre for Psychogerontology, Radboud University Nijmegen, Nijmegen, The Netherlands

(Received 26 May 2005; accepted 23 November 2005)

Abstract

The present study examines effects of participation in the friendship enrichment program, an intervention that is designed to stimulate improvement in friendship, self-esteem and subjective well-being, as well as reduction in loneliness among older women. The intervention group was compared to a control group of women who were interested in the program or in improving their friendships. All respondents had been studied at three points in time: at a baseline, prior to the program; three months later, and 9–10 months after baseline. The results indicate that the program was successful in attracting lonely older women who were willing to work on their friendships. Many participants reported improvement in the quantity and quality of their friendships. The program was moderately successful in stimulating improvement in subjective well-being and awareness of the need for an active stance toward achieving goals in social relations, especially in friendship. Loneliness among the participants was reduced, but it also declined in the control group, and both groups continued to experience loneliness. One conclusion is that an effective intervention to help older women reduce their loneliness should be multi-dimensional focusing not only on friendship but also on other personal and situational factors contributing to loneliness.

Introduction

‘The best way to break the cycle of loneliness is to get involved’ (Kallejian, 2003).

The aim of many interventions focusing on loneliness is to engage people in new social relationships or social activities. In later life, loneliness may be triggered by transitions such as retirement, the death of the partner or close friends, relocation, or chronic health problems (Peplau & Perlman, 1982; Pinquart & Sörensen, 2001). A variety of interventions designed to reduce or prevent loneliness among older people were developed during the last two decades (Andersson, 1985; Heller, Thompson, Trueba, Hogg, & Vlachos-weber, 1991; Van Lammeren & Geelen, 1995; Stevens, 2001). However, studies on the effectiveness of these interventions are scarce in gerontological literature, and when they are available the results are not always conclusive (Cattan & White, 1998; Cattan, White, Bond, & Learmouth, 2005; Findlay, 2003). This article examines the effectiveness of the friendship enrichment program, an intervention stimulating improvement in friendship and reduction of loneliness among older women.

Rook (1984) distinguished three general goals which are important in interventions focusing on the

problem of loneliness: (1) establishing interpersonal bonds; (2) enhanced coping with loneliness; and (3) prevention of loneliness. She also defined three levels of interventions namely individual, group and environmental approaches. Jerrome (1991) has argued that interventions at the group level are advantageous in working with older people who are vulnerable to loneliness. The group approach recognizes the value of interaction with peers and the benefits of mutual help. In their systematic review of 21 intervention studies, Cattan and White (1998) also conclude that group interventions were inclined to be more effective, while individual or dyadic interventions were ineffective. For example, a dyadic intervention involving socially isolated older women who telephoned one another weekly was not effective (Heller et al., 1991). Participation in the study may have enhanced morale but there was no significant change in social support for the women in the intervention compared to a control group.

In comparison, a structured group intervention organized for older women on a waiting list for housing for the elderly in Stockholm was more successful (Andersson, 1985). The program was designed to strengthen the social network by increasing: (1) the availability of a confidant; (2) the

availability of others for social comparison; and (3) personal control. Lonely women were identified from survey data and randomly assigned to the experimental or control group. Six months after the program, the intervention group had higher self-esteem and more social contacts, and experienced lower levels of loneliness than prior to the intervention; there was little change in the control group (Andersson, 1985).

Jerrone (1991) emphasizes that in later life contact with friends serves to reduce loneliness and increase feelings of usefulness, unlike those with kin. Various studies have demonstrated the significance of others, especially a network of friends, to provide social integration and promote well-being among older persons (Hartup & Stevens, 1997; Rook, 1984). The contribution of friendship to well being in later life can be understood in terms of the provision of companionship and social support (Rook, 1990), as well as socialization to old age and maintenance of identity under changing circumstances (Hartup & Stevens, 1997).

An educational program on friendship for older women, which was developed in 1994–1995 at the Centre for Psychogerontology at the University of Nijmegen, also emphasizes the importance of friendship when striving to combat loneliness (Stevens & Van Tilburg, 2000; Stevens, 2001). This intervention focuses on older women due to a number of disadvantages that they experience in later life. Because they live longer, women are more likely to be widowed and live alone, which makes them more vulnerable to loneliness (Jerrome, 1981; Knipscheer, De Jong Gierveld, Van Tilburg, & Dykstra, 1995; Stevens, 1995). They also experience more chronic illnesses that lead to functional limitations and disability (Verbrugge, 1989). Their greater emotional vulnerability is evident in the higher incidence of depression and anxiety among older women compared to men (Deeg & Westendorp-de

Serièrè, 1994). A positive reason for the focus on women is that they continue to be interested in friendship (Field, 1995) and clearly benefit from interaction with friends throughout later life (Adams, 1987; Jerrome, 1981; Stevens, 1995).

The friendship program is based on principles of feminist therapy (Miller, 1988) and re-evaluation counselling, a self-help method developed by Jackins (1983). The aim of the friendship program is empowerment of participants through the realization of personal goals in friendship. It stimulates women to clarify their needs, desires and expectations in friendship, to analyze their current social networks to identify actual and potential friendships, and to formulate goals that involve improvement of existing friendships or development of new friendships. It also encourages participants to develop and implement strategies to achieve these goals. The program is based on the assumption that improvement in friendship will increase the availability of support and companionship in the social networks of the participants, and this should lead to reduction in loneliness and improvement in subjective well being (Stevens, 2001). The theoretical model for effects of participation in the friendship enrichment program is summarized in Figure 1.

The friendship enrichment program consists of 12 lessons focused on different topics related to friendship such as self-esteem as a basis for friendship, improving existing friendships, setting goals and boundaries in friendship (Stevens & Albrecht, 1995). The lessons include theory, practice in skills that are important in friendship, role-playing of difficult social situations and homework. At a follow-up meeting six months after the program, participants evaluate their success and redefine goals for the future.

This program differs from many previous interventions because its approach is multifaceted. It focuses on both development and improvement

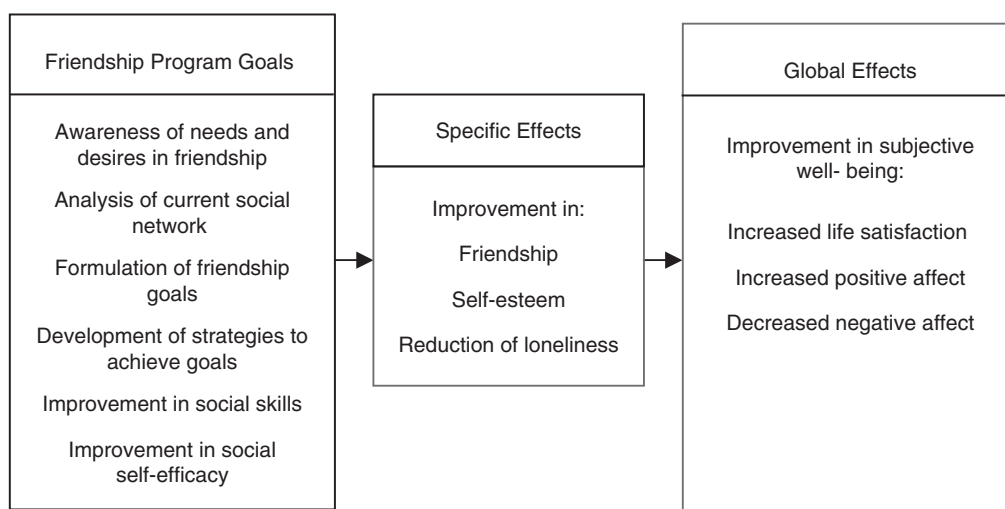


Figure 1. Model for effects of participation in the Friendship Enrichment Program.

of friendship, as well as self-esteem. It provides theoretical information on friendship, as well as reflection on personal experience to increase awareness of attitudes and behaviour that promotes friendship and those that interfere in friendship development (Young, 1986). Analysis of the personal network by means of the convoy model for personal relationships (Kahn & Antonucci, 1980) and reflection on personal needs and desires in relationships form the basis for formulating goals in friendship. The combined focus on emotions, cognitions, and behaviours relevant to friendship aims to provide participants with the motivation, insight, and social skills to develop the friendships that they desire. According to Cattan and White (1998) a variety of methods are necessary if an intervention is to be effective in reducing loneliness among older people.

Pilot studies on the friendship enrichment program examined the effects of participation in the program and revealed that many participants lived alone, had been widowed or divorced, and were initially quite lonely. A year after the program a majority of the women had been successful in developing new friendships, improving existing friendships, and reducing their loneliness (Stevens & Van Tilburg, 2000; Stevens, 2001).

- The present study concerns a larger group of participants in the friendship enrichment program and includes a control group for comparison of effects over time. The control group consists of women who were interested in the program or in improving friendships but who did not follow the program for various reasons. The prediction was that participants in the friendship enrichment program would be more successful in developing new friendships, improving existing friendships, and would experience more significant improvement in self-esteem and reduction of loneliness. Furthermore, they would experience more significant improvement in subjective well-being than women who had not participated in the program. The specific research questions examined in this study are as follows: are participants in the program successful in developing new friendships and improving friendships? Does participation in the friendship enrichment program result in significant improvements in self-esteem, and reduction of loneliness? Are participants in the program successful in improving their subjective well-being in terms of life satisfaction and frequency of positive and negative feelings?

Methods

Participants

In this study, the friendship enrichment program was organized by local senior service agencies in

four communities. Participants were recruited for the program through local newspaper articles and distribution of folders describing the program.

The experimental group consisted of 60 women over the age of 55 who had completed the friendship enrichment program. These women were compared to a control group of 55 women of the same age who had not participated in the friendship enrichment program but were interested in the program or in improving their friendships. Some were on a waiting list for the course; others expressed interest in the program after reading about it in a national women's magazine. Additional control group members were recruited through an announcement about the study on-line on the site of Seniorweb, a website for older persons.

The average age in both groups was 63, with an age range from 53–86. The proportion of married, widowed and divorced women was about 30% for each group. This means that married women were under-represented and divorced women were over-represented compared to the general population (CBS-Stateline, 2001). About two-thirds of the women lived alone, while one-third shared a household with a partner and/or children. The majority of the women had completed secondary school, and about a third had completed higher education. Two-thirds of the women experienced no financial stress and there were no significant differences in income. Most women considered their health to be good or excellent and about 75% did not use medication for physical and/or mental health. Nevertheless, significantly more participants in the friendship enrichment program reported mild health restrictions while more members of the control group reported no restrictions (see Table I).

Procedures

This study involved a pre-test/post-test follow-up control group design, with the exception that assignment to groups did not occur randomly. Both the experimental group (program participants) and the control group were drawn from the same population of women above the age of 55 who were interested in participating in the friendship program or in improving their friendships. When the study took place, the friendship enrichment program had been implemented for several years. Both the researchers and the agencies involved considered it unethical to recruit participants, who tend to be quite lonely, by offering them an intervention designed to reduce loneliness, and then assign them to a waiting-list control group for the duration of the study, which was 9–12 months (Stevens & Van Tilburg, 2000).

All respondents had been studied at three points in time: a baseline measurement (T_0), directly after the program or three months after the first measurement (T_1), and six months after the program had

Table I. Comparison of background characteristics and loneliness at T₀ of the intervention group and control group, (significance of differences according Chi-square test).

Background characteristics	Intervention group N = 60	Control group N = 55	Overall N = 115	Exp vs. Contr
Age (average years)	M 63.2 %	M 63.1 %	M 63.0 %	Sig. <i>t</i> = ns χ^2 ns
Marital Status				
Married	30.0	32.1	31.3	
Never Married	6.7	7.1	7.0	
Divorced	30.0	33.9	32.2	
Widowed	33.3	26.8	29.6	
Household composition				ns
Single household	68.3	66.1	67.0	
Couple	26.7	28.6	27.8	
Partner & child(ren)	3.3	3.6	3.5	
Other	1.7	1.8	1.8	
Educational level				ns
Elementary	11.7	5.4	8.7	
Secondary	58.4	57.2	57.5	
Higher education	30.0	37.6	33.8	
Subjective evaluation of Health				ns
Excellent	13.3	21.4	17.4	
Good	65.0	55.4	60.9	
Average	20.0	21.4	20.0	
Poor	1.7	1.8	1.7	
Income (in Euros)				ns
Did not tell	11.7	7.1	9.6	
≤ 750	28.6	26.7	27.8	
≥ 750	64.3	61.7	62.6	
Experience financial stress				ns
Never	66.7	76.8	71.3	
Some times	26.7	16.1	21.7	
Regularly	6.7	3.6	5.2	
Constantly	–	3.6	1.7	
Use of medication				ns
No medication	33.3	35.7	34.8	
Medication for physical complaints	41.7	51.8	47.0	
Medication for mental health	10.0	1.8	6.1	
Medication for physical & mental	15.0	10.7	12.2	
Restriction in activity due to health				
No restrictions	31.7	51.8	41.7	4.41*
Mild restrictions	41.7	16.1	28.7	9.03*
Major restriction	26.7	32.1	29.6	ns

**p* < 0.05; ns = not significant.

finished (T₂; 9–10 months after the baseline). The timing of measurements was based on the assumption that developing or improving friendships involves a process that takes time (Stevens, 2001). We did not expect change in friendships or loneliness immediately following the course, but did expect change within six months.

At each time, data was collected by semi-structured interviews, with an average duration of two hours, at the respondent's home. The respondents were asked to fill in questionnaires that included several standardized, valid scales for the dependent variables after the interview. At the end of each interview respondents received a gift voucher of 12.50 euros as a token of appreciation. This study involved six groups that followed the friendship enrichment programs in 2000–2003; the response rate for participation in the study was 82%.

Excluding dropouts due to natural causes (5%), the non-response rate for both groups at the second round of interviews was 6%. At the third round of interviews, the non-response rate was 2%.

Measures

Interviews. The semi-structured interviews included questions on background (age, marital status, number of children, income, education, work history, subjective health), as well as questions about stability and change in friendship.

Friendship. Friendship availability and development were studied using the Personal Convoy Model of relationships (Kahn & Antonucci, 1980), in addition to questions in the interview. The personal convoy is visually represented by three

circles surrounding the individual, in which relationships are arranged according to their importance and closeness. In the first interview the respondents filled in the names of important persons in their social networks in the three circles. During the third interview, the respondents filled in a new personal convoy. Then they were asked to compare their first and second convoys and to describe any changes that had taken place, especially in friendship.

Self-esteem. Self-esteem is defined as an overall affective evaluation of one's own worth, value, or importance (Blascovich & Tomaka, 1991). For the measurement of self-esteem, 10 items from an assertiveness scale (Brinkman, 1977) were used. This scale has been used in various studies in the Netherlands (e.g., De Jong-Gierveld, 1984; Van Tilburg, Dykstra, Liefbroer, & Broerse van Groenou, 1995). Scores on the scale range from 10–50; a higher score indicates a more positive view of one's self. For the present study the internal consistency (Cronbach's α) of this scale was 0.91.

Loneliness. Loneliness is defined as 'a situation experienced by the individual as one of an unpleasant or unacceptable discrepancy between the amount and quality of social relationships as realized, compared to the relationships as desired' (De Jong Gierveld & Van Tilburg, 1995, p. 161). Loneliness was measured using an 11-item questionnaire, which consists of five positive and six negative items, assessing a sense of belonging, and discrepancies in desired relationships (De Jong Gierveld & Kamphuis, 1985). Scores on the scale range from zero (not lonely) to 11 (extremely lonely); a score between three and eight indicates moderate loneliness, while a score above nine indicates severe loneliness. This scale has been used in several studies and has proven to be a reliable and valid instrument with older persons (De Jong Gierveld & Van Tilburg, 1999). For the present study, the internal consistency of this scale was 0.93.

Subjective well-being. Subjective well-being was assessed with two measures, the Satisfaction with Life Scale (Pavot & Diener, 1993), and the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988), both of which are widely used. The Satisfaction with Life Scale consists of five items that reflect a cognitive evaluation of life. Scores on the scale range from 5–25; a higher score indicates a higher level of satisfaction with life. This scale has good psychometric properties and the internal consistency coefficient for the present study was 0.80. The PANAS measures two mood dimensions, positive affect (PA), and negative affects (NA) using 20 items. High PA reflects a state of high energy, full concentration, and pleasurable engagement. Low PA is characterized by sadness and lethargy. Negative affects is a general dimension of subjective

distress and unpleasant engagement, which include aversive mood states like anger, contempt, disgust, guilt, fear, and nervousness. Low NA reveals a state of calmness and serenity. The internal consistency coefficients for the present study were 0.80 for positive affect and 0.84 for negative affect.

Data analysis. An analysis of variance using repeated measures was done to test the hypotheses that participants in the friendship enrichment program would experience significantly more improvement in self-esteem and general well being than women who have not participated in the program. The measures of the concepts of self-esteem, positive and negative affect, satisfaction with life and loneliness were considered to be repeated measures of the within-subjects factor time of measurement. The between-subjects factor was the condition, coded +1 for the intervention condition and -1 for the control condition. A paired-sample *t*-test was conducted to evaluate the impact of the intervention on changes in friendship, loneliness, and subjective well-being.

Results

Friendship

Six months after completing the program almost two thirds (63%) of the participants reported that they had made new friends and they had met these new friends through social and educational activities. As we expected fewer respondents in the control group (33%) had made new friends. The difference between the intervention group and the control group was significant ($\chi^2 = 9.569$, $p < 0.005$). Six months after the program had ended about half of the participants (55%) reported that they still had contact with other women from the program. When reporting on their personal convoys 22 women (37%) included fellow-group members as friends or acquaintances in their convoys six months after the group had ended. Thus some but not all of the new friendships developed with fellow group members.

The difference between the experimental and control group was less evident regarding reported improvements in friendship. Almost two-thirds of the participants (62%) reported that existing friendships had improved, compared to almost half of the women in the control group (46%). Improvements included contacting friends more often and initiating personal conversations more often with friends. The number of women reporting improvements in the two groups did not differ significantly; $\chi^2 = 2.418$, $p = 0.120$.

There were also deterioration in relationships and loss of friends. More than two-thirds of the women in both groups (intervention group 72%, control group 69%) reported deterioration in friendships

due to conflicts, unfulfilled expectations, or a lack of reciprocity. Slightly more than one-third (35%) of the participants in the program and almost half (46%) of the women in the control group also reported experiencing the loss of friendships due to death, illness, or relocation. Neither deterioration nor loss of friends demonstrated significant differences between the two groups.

Changes in friendship were also evident in the personal convoys of the participants, which they completed prior to and six months after the program (see Table II).

All respondents in the control group included friends in their convoy in the pre-test, contrary to the second post-test when 5% of the women named no friends in their convoy. In the intervention group 15% of the participants named no friends in their convoy in the pre-test. Six months after the course this percentage was reduced significantly to 5% ($t = -2.19, p = 0.033$).

In both the experimental and control groups, most friends were assigned to the middle circle of the convoy. However there was an increase in the number of women in both the intervention group (+12%) and the control group (+14%) who assigned friends to the inner circle during the second post-test (see Table II). Both groups demonstrated an increase of 8% naming friends in the middle circle, and a smaller increase naming

friends in the outer circle (2% and 4%). These changes were not significant.

Self-esteem, well-being and loneliness

The second and third research questions concerned the extent to which participation in the friendship enrichment program resulted in significant improvements in self-esteem and subjective well-being, and reduction in loneliness in comparison to women who have not participated in the program. An analysis of variance using repeated measures showed that the main effects of condition were statistically significant for self-esteem, life satisfaction, negative affect, and loneliness (see Table III).

There was a slight increase in self-esteem for the experimental group, while the control group's scores were quite stable. However an interaction effect between time of measurement and condition was not found, thus this trend cannot be interpreted as an effect of the friendship program. For the concepts of subjective well-being, there was a significant interaction effect for positive affect and negative affect. The interaction effect was found, for both positive affect and negative affect, when the second post-test was contrasted with the pre-test (PA: $F(1, 112) = 53.09, p < 0.05$; NA: $F(1, 112) = 23.45, p < 0.05$). This means that the control group did not experience the same increase in positive affect and

Table II. Percentage of participants including friends in their personal convoys at the time of the pre-test (T_0), and the second post-test (T_2).

Personal convoy	Condition	<i>n</i>	T_0	T_2
Including friends in one of the circles	Intervention	60	85%	95%
	Control	55	100%	95%
Including friends in the inner circle	Intervention	60	42%	54%
	Control	55	53%	67%
Including friends in the middle circle	Intervention	60	65%	73%
	Control	55	72%	80%
Including friends in the outer circle	Intervention	60	30%	32%
	Control	55	42%	46%

Table III. Multiple repeated measures MANOVA of the differences between the intervention and the control condition on the dependent variables at the time of the pre-test (T_0), the first post-test (T_1), and the second post-test (T_2).

Variables	Condition	<i>n</i>	T_0		T_1		T_2		Test results		
			M	SD	M	SD	M	SD	Condition	Time	Interaction
Self-esteem	Intervention	60	32.31	7.77	33.86	6.49	34.56	6.35	$F = 11.97$	$F = 3.03$	$F = 2.83$
	Control	55	37.53	6.48	37.62	6.68	37.56	6.54	$p = 0.001$	$p = 0.052$	$p = 0.063$
Life satisfaction	Intervention	60	14.08	4.19	14.71	3.71	15.19	3.93	$F = 14.56$	$F = 0.081$	$F = 3.06$
	Control	55	17.24	3.48	17.15	3.52	16.84	3.99	$p = 0.000$	$p = 0.449$	$p = 0.051$
Positive affect	Intervention	60	30.83	4.19	31.39	3.89	31.34	3.82	$F = 1.07$	$F = 4.44$	$F = 78.18$
	Control	55	34.60	8.17	34.07	3.67	26.95	2.60	$p = 0.303$	$p = 0.000$	$p = 0.000$
Negative affect	Intervention	60	29.46	5.37	27.64	5.41	28.14	5.10	$F = 4.43$	$F = 19.86$	$F = 11.77$
	Control	55	25.98	4.65	25.20	4.20	29.25	3.44	$p = 0.037$	$p = 0.000$	$p = 0.000$
Loneliness	Intervention	60	7.49	3.52	7.17	3.43	6.63	3.59	$F = 12.20$	$F = 2.14$	$F = 0.680$
	Control	55	4.96	4.16	4.82	4.04	4.71	3.93	$p = 0.001$	$p = 0.123$	$p = 0.509$

decrease in negative affect that was found in the intervention group at the second post-test. The interaction effect for life satisfaction was on the borderline of significance ($F(2,111) = 3.059$, $p = 0.051$); thus the increase in life satisfaction found among the participants, does differ slightly from the decline found in the control group and can be considered to some extent as an effect of the intervention. For loneliness, there was no significant interaction between time of measurement and condition. Thus, the average decline in loneliness in the intervention (-0.86) and control group (-0.25) did not differ significantly.

A paired comparison of the first and third measurement moment (T_0 - T_2) in the intervention group showed a significant increase in life satisfaction ($t = -2.60$, $p = 0.012$) and self-esteem ($t = -3.38$, $p = 0.001$), and a significant decline in negative affect ($t = 2.274$, $p = 0.027$), and loneliness ($t = 2.094$, $p = 0.041$). In the control group the increase in the negative affect ($t = -4.31$, $p = 0.000$) and the decrease in positive affect ($t = 7.27$, $p = 0.000$) were significant. The average score on loneliness in both the intervention and control groups remained within the range of moderately lonely.

Discussion

The majority of the participants in the program reported that they were successful in developing new friendships and improving existing friendships in the half year following the program. They were more successful in expanding friendships than respondents in the control group, according to their self-reports. Furthermore, a pattern of modest improvement in self-esteem, life satisfaction, and positive and negative affect was found for the intervention group on the standardized scales that were employed in the study. The control group did not demonstrate improvement on the same measures. According to the analysis, the slight reduction in loneliness among participants in the program cannot be attributed to the intervention.

The results suggest that the friendship enrichment program is successful in its endeavour to stimulate improvement in the quantity and/or quality of friendships among participants, according to their own evaluations, and moderately successful in terms of improvements in subjective well-being. The most significant effects of the intervention six months after the program was finished are related to improvement in mood. The participants clearly experience more pleasure and less distress than they did prior to the program. Rook (1990) emphasizes that the benefits of companionship with friends will be apparent on measures that assess positive dimensions of functioning, such as happiness and life satisfaction.

Though the decline in loneliness among participants in the friendship enrichment program was significant, in this study it was much smaller than in the pilot study in which loneliness declined from 7.2-4.3 (Stevens, 2001). However in the pilot study loneliness was measured one year after the program had ended. Though many women developed new friendships in this study, it may take longer than six months for friendships to develop a degree of intimacy necessary to compensate for losses of long-standing relationships. We expect that loneliness will continue to decline among participants in the friendship enrichment program and hope to demonstrate this in the future. Another explanation for the difference may be the lower response in the pilot study, 65% versus the response of 82% in this study. The greater decline in loneliness in the pilot study may be due to self-selection of the more successful participants.

The modest decline in average loneliness scores in this study is partially due to the increase in loneliness that was experienced by about 25% of the participants in the friendship enrichment program. The program may have raised the participants' expectations of friendship, which in turn made them more critical in friendship. Regularly women reported that they had decided to end those friendships that were no longer satisfactory. These changes may contribute to a higher intensity of loneliness, at least until new relationships are developed that fulfil their social needs and desires. Women may have also tried to develop new friendships or improve an existing friendship and not succeeded, an experience that would explain higher loneliness scores following the program. About one-third of the women had not developed new friendships. It is important to note that a similar percentage of women in the control group experienced an increase in loneliness, that is, about 25%.

The comparison of data on the personal convoys of women in this study and data on well-being, including loneliness suggests that deficits in friendship may not be the major cause of loneliness in this group. A majority (85%) of women who participated in the program and all of the women in the control group were able to name friends in their personal convoys at the baseline measurement. Nevertheless they experienced high or very high levels of loneliness. Even though more than half of the participants and two-thirds of the control group had a friend in their inner circles at the second measurement point, the reported levels of loneliness at this time remained higher than average scores for widows or divorced women over the age of 55 and living alone in the general population (De Jong Gierveld & van Tilburg, 1995). There are two possible explanations for this phenomenon. Women may have friendships available but may not utilize these relational resources sufficiently to meet their social needs. Another possibility is that these women

experience deficits in social relationships that cannot be met by friendships. Though there is some evidence that friends help compensate for absence of a partner (Stevens, 1995), we know of no evidence indicating that companionship and support by friends can compensate for dissatisfactory relationships, for example, with children.

The high loneliness scores among participants in the friendship enrichment program suggest that a combination of personal and situational factors contribute to their loneliness. A successful intervention not only requires change in the behaviour of the individual but also an environment that facilitates the maintenance of newly acquired patterns of behaviour (Pick, Poortinga, & Givaudan, 2003). The Friendship Enrichment Program will be more successful if it is embedded in a program of activities and interventions that promote social contact on the one hand and supports meaningful ways of spending time alone, on the other hand (Rook, 1984). A complementary intervention may be one that focuses on improving family relationships of older persons, as suggested by Rook (1991). Having sufficient resources is also important for maintaining social relationships. One problem is the current austerity policy that has contributed to a lowering of income among the elderly in the Netherlands; a lack of funds to participate in social activities represents a basic constraint for elderly women in their efforts to combat loneliness.

We must be cautious in drawing general conclusions about the effectiveness of the friendship enrichment program. The recruitment of a group that was comparable to those participating in the intervention was only partially successful. The experimental and control group were similar on most background variables, but differed at baseline with respect to loneliness and other indicators of subjective well-being. On the loneliness scale developed by De Jong Gierveld and Kamphuis (1985), a score above two indicates loneliness. Although both groups were on average lonely according to the scale, the women who participated in the friendship enrichment program scored significantly higher on loneliness than those who were recruited for the control group. The intervention group was not only lonelier; the women also demonstrated lower levels of self-esteem, life satisfaction, and higher level of negative affect than the control group that was recruited for comparison. As a result, the changes in the intervention group cannot be attributed entirely to the intervention, but may also be caused by regression to the mean.

In conclusion there was evidence of change in friendship in both the intervention and control group, with the participants reporting the development of more new friendships within six months after the program had ended. Although we cannot rule out the possibility of social desirability influencing their reports of improvements in friendship,

the changes in affect balance and life satisfaction support the notion that positive changes have occurred. Participants appear to take a more active stance toward friendship after the program. Developing new friendships may help compensate for the attrition in friendship networks as people age (Van Tilburg, 1998). An advantage of the friendship enrichment program is that it enables the participants to share and compare their experiences in friendship with others who also experience relational deficits, thus providing them with the sense that they are not the only women whose relationships are not ideal. It provides many opportunities for social comparison and for learning from one another's experience and to practice social skills that are important in friendship and other relationships.

The differential outcomes among the participants with respect to loneliness point to the compelling need for further analysis to determine who does and who does not benefit from participation in a friendship enrichment program. This should provide useful information for developing an intervention program for extremely lonely older women, which will involve a combination of individual and group interventions.

Acknowledgements

The study *Friendship, Autonomy and Well-being in Later Life* was conducted at the Centre for Psychogerontology, at the Radboud University of Nijmegen, the Netherlands. This study was made possible by a grant from ZonMw; the Netherlands Organization for Health Research and Development.

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