
SINGLE OLDER WOMEN WHO APPLIED FOR THE GIVING LIFE MORE LUSTRE COURSE: ARE THEY THE TARGET GROUP THAT WAS AIMED FOR?

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The present study investigated whether the women who applied for the self-management of well-being course Giving life more LUSTRE can be considered the target group that was intended. By comparing the course applicants with a random sample of community dwelling single women, it was found that, as expected, course applicants scored worse on well-being, loneliness, and negative affect, but not on positive affect, nor on self-management ability. It is concluded that the target group was reached only partly and that—even though the course has shown to be effective—a more specific recruitment procedure may further enhance its effectiveness.

In the last decade, several psychosocial interventions have been designed for older people to reduce loneliness and social isolation, improve self-management abilities, or promote well-being (Andersson, 1985; Findlay, 2003; Frieswijk, Steverink, Buunk, & Slaets, in press; Stevens, 2001; Schuurmans, 2004; Stewart, Craig, MacPherson, & Alexander, 2001). One of the questions that need to be addressed when evaluating such interventions is whether the intervention has reached the people that are defined as the target population: does a loneliness intervention for older women indeed attract older women who are lonely, or does a support intervention for widowers indeed reach the

This study was made possible by a grant from St. Sluyterman van Loo.

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widowers who need support? Stewart et al. (2001), for example, studied the effects of a self-help/support intervention for widowed seniors. They strove at reaching lonely seniors who were low on affect and on perceived support. From former studies it is known that, in general, widows and widowers have lower levels of social support than married individuals (Thuen, Reime, & Skrautvoll, 1997), and that the death of a spouse often results in loneliness (Lichtenstein, Gatz, Pedersen, Berg, & McClearn, 1996). However, it is not known whether this was also true for the seniors in Stewart's study. Thus, an important question is whether interventions, as described, indeed reach the target group. That is, whether the target population and the actual subjects participating in the intervention are the same (Hulley, Gove, Browner, & Cummings, 1988). Most of the interventions that are referred to above were designed for subgroups of community dwelling older people (mostly women). Participants often are recruited via local newspapers, and no extensive intake procedure is followed. This makes it uncertain whether the target group has actually been reached.

In a former study (Kremers, Steverink, Albersnagel, & Slaets, 2006), a newly developed psychoeducational group intervention for single older women was described and tested. The target group was single older women suffering from loneliness, lack of well-being, and lack of control about their own situation. Because it is known that lonely people are difficult to reach, especially when focussing on their loneliness, it was decided to recruit the target group for the course under the slogan Giving life more LUSTRE. This title fits well to the content of the course, because the course focuses on improving positive self-management abilities and well-being (instead of on directly reducing loneliness). The LUSTRE course is based on the Self-Management of Wellbeing theory (SMW theory: Steverink, Lindenberg, & Slaets, 2005; Steverink, Lindenberg, & Ormel, 1998; Kremers et al., 2006). This theory aims to provide an explanation of how people manage to realize and sustain overall well-being when they grow older. The central assumption is that each individual strives to improve overall psychological well-being by realizing physical and social well-being by satisfying five basic human needs. According to SMW theory, two different kinds of resources are necessary: internal and external resources. External resources are external means to achieve well-being, and internal resources are skills and abilities that people need in order to manage their external resources. These abilities, i.e., self-management abilities, together with the important dimensions of well-being, form the basis of the LUSTRE intervention.

Women were recruited by self-selection through advertisements in local newspapers. Community-dwelling women aged 55 years and

older who were living alone were asked to respond by phone if they would like to give their life more lustre. After the first telephone contact, the women received a flyer with more information about the course (and the study) and an application form which they had to sign and return. Because reasons for a lack of lustre could be diverse (e.g., low levels of overall well-being, high levels of negative affect or feelings of loneliness, a lack of control), the flyer contained a few self-diagnostic questions for the women: whether they missed having people around them, would like to have more friends, were engaged in only a few leisure activities, or had trouble initiating activities. The covering text indicated that when one or more of these questions were answered with “yes,” then the course would probably be helpful.

In the present study it is investigated whether, and to what extent, the women who applied for the LUSTRE course can truly be considered the target group that was intended. Therefore, the women who applied for the course will be compared with a random sample of community dwelling single, older women. It is hypothesized that the course applicants would score lower on self-management abilities, overall well-being, and positive affect and higher on loneliness and negative affect when compared to single, older women of the general population. In order to discover other possible differences of the groups, we will also look at the demographic characteristics, marital status (divorced or widowed), number of children and the quality of the relationship with children, income, and level of education.

METHODS

Samples and Study Design

The LUSTRE course applicants were the single women aged 55 years and older who applied to take part in a study in which the LUSTRE course was to be evaluated (see Kremers et al., 2006). The women were recruited through advertisements in local newspapers in the Netherlands (two regions) in 2004. Note that we here focus on all *applicants* of the LUSTRE course evaluation study. This means that we focus on the women who actually took part in the course *and* on the women who were randomized into the control group (and thus did not get into the course). At the moment of application, all women received the pretest questionnaire. Only after they returned this questionnaire were they randomized into the “course” group or the control group. Thus, at the time of this first measurement, all women had indicated that they would like to participate in the course, but none knew whether she would actually be randomized into the course

group or into the control group. Therefore, at the first measurement moment, all women can be considered *applicants* for the course. The group of applicants consisted of 142 single women aged 55 years and older (for more details see Kremers et al., 2006).

The comparison sample of single women in the general population consisted of 105 women aged 65 years and older. These women took part in the second wave (in 2004) of a two-wave longitudinal aging study, that started in 2001 (first wave). This study is based on a random sample of people aged 65 years and older whose addresses were drawn from the registers of six municipalities in the north of the Netherlands. The six municipalities consist of smaller and larger villages and cities, and the average income was comparable to the national mean. A comparison on gender between the sample and the Dutch population of persons aged 65 years and over (CBS, 2003) showed that the proportion of males to females in the sample and in the population was equal. Approximately 42% was male.

In the first wave, 2,000 people (men and women) were approached. Of these 44% ($N = 883$) agreed to participate. In the second wave, three years later, 47% ($N = 415$) agreed to participate again. This response rate might seem low, and there is the potential danger of nonresponse bias. However, it is similar (Picavet, 2001), or even quite high (Bor, Mallandain, & Vetere, 1998; Buttle & Thomas, 1997), compared to that in similar studies in which the respondents received a questionnaire by mail. In order to check for possible response biases, a number of control analyses on the completers and drop-outs of the second wave have been executed. The outcomes of these analyses will be shown in the results section of this paper.

Because the measurements that were used in the LUSTRE course study corresponded most to the measurements used in the second wave, it was decided to use the second wave sample as the comparison group. The two-wave community study contained men and women. However, in order to compare the LUSTRE course applicants—single women—adequately, we selected into the community sample only the single women (i.e., living alone and without a partner). This is more appropriate because married older adults happen to have higher rates of social participation, a larger social network, and more intensive supportive exchanges than those without a partner (Barron, Foxall, VonDollen, Jones, & Shull, 1994; Knipscheer & Dykstra, 1995). Of the 415 persons that participated in the second wave, 105 persons (25%) were single women.

An additional remark should be made here. There is a difference in the age ranges of the two study groups that are compared here: the LUSTRE course women are 55 years of age and older; the

community women are 65 years and older. This difference is due to different initial study objectives, and it needs to be taken into consideration when interpreting the results.

Measures

Well-Being

The SPF-IL (Social Production Function Index Level Scale) (Nieboer, Lindenberg, Boomsma, & Van Bruggen, 2005) was used to assess overall well-being and its five dimensions (i.e., comfort, stimulation, affection, behavioral confirmation, and status). The overall scale consists of 15 items ($\alpha = .84$ in the course applicants, and $\alpha = .87$ in the sample of community women), with three items for each of the five subscales. Comfort refers to the satisfaction of basic physical needs like food, drink, rest, and the absence of pain. Stimulation refers to participation in challenging and interesting events and the absence of boredom. Affection is the feeling that others and oneself do care. Behavioral confirmation is the feeling of doing the right thing in the eyes of others and oneself. Finally, status refers to the feeling of being better than others in the eyes of others and oneself. The following are examples of items: "Are your activities challenging to you?" (stimulation), "Do you feel useful to others?" (behavioral confirmation), "Do people find you an influential person?" (status). All subscales have a 4-point Likert scale for scoring ranging from never to always. The scale has been extensively tested and has shown good psychometric properties (Nieboer et al., 2005).

Affect

The affective component of well-being was measured with the Positive and Negative Affect Scale (PANAS) (Watson, Clark, & Tellegen, 1988) that consists of two scales: one scale measuring 10 positive emotions (positive affect) and one scale measuring 10 negative emotions (negative affect). Respondents were asked to rate the extent to which each emotion is generally experienced on a 5-point Likert-type scale. The following are examples of items of positive affect and negative affect, respectively: "During the past few months, how often did you feel...excited, enthusiastic, alert, inspired?" and "...sad, upset, afraid, nervous, scared?" Answer categories ranged from "never" to "very often" on a 5-point scale. The internal consistency coefficients in the present study were .85 and .85 for positive and negative affect in the course applicants. It was .82 and .85 for positive and negative affect in the sample of community single women.

Loneliness

The loneliness questionnaire developed by De Jong-Gierveld and Kamphuis (1985) was administered to measure the degree of loneliness. The questionnaire consists of 11 items: 5 positively and 6 negatively phrased items. The positive items assess a sense of belonging and the absence of a discrepancy in the area of desired relationships (social loneliness). An example of such a statement is "I can rely on my friends whenever I need them." Examples of negative items (emotional loneliness) are "I experience a sense of emptiness" and "I miss having a real close friend." Three answering categories were used: "yes," more or less," and "no." Scores were dichotomized according to the procedure suggested by the authors of the scale. This resulted in a scale ranging from 0 (not lonely) to 11 (extremely lonely). The overall scale's internal consistency was .89 in the course applicants and .92 in the sample of community women. The scale has been used in several surveys and has proven to be a reliable and valid instrument (Van Tilburg & De Leeuw, 1991).

Self-Management Abilities

Self-management abilities were measured using the Self-Management Ability Scale (SMAS-30) (Schuurmans et al., 2005). The scale consists of 30 items and six subscales, each referring to a specific self-management ability. The six subscales are as follows: Taking initiatives (regarding resources for realizing well-being), Investment behavior (regarding resources for long-term benefits), variety (realizing various resources for the same dimensions of well-being), multifunctionality (realizing various dimensions of well-being with the same resources), self-efficacy (being self-efficacious regarding resources for well-being), and positive frame of mind (having a positive expectation regarding resources in the future) (cf. SMW theory). Note that the subscale self-efficacy was not analyzed in the present study. This is because the answer categories in the version used for the course applicants were not the same as those used in the community sample. Therefore, in the present study the focus will be on the other five subscales. The following are examples of items: "The activities I enjoy, I do together with others" (multifunctionality), and "Do you have different ways to relax when necessary?" (variety). Because some subscales have a 5-point Likert scale for scoring and others have a 6-point scale, all scores were transformed to a 100-point scale. The overall scale's internal consistency was .90 in the course applicants and .89 in the sample of community women. The scale has been tested in several studies and showed good psychometric properties (Schuurmans et al., 2005).

Note that some of the measurements used in the community sample are only administered to a random subsample (about half of the

total sample). This was done to reduce the burden on the respondents. Therefore, the analyses of these scales contain about half of the cases. This concerns the scales for positive and negative affect, loneliness and self-management ability. In the particular analyses this situation will be indicated.

Other Variables

Other variables were each measured with one single question. These were marital status, level of education (i.e., low education refers to no education, primary, or secondary school; intermediate education refers to high school; and high education refers to more than high school), income, the presence of children, the relationship with children, and subjective health.

RESULTS

Participants

Eligible participants for the LUSTRE course were women aged 55 years and older living alone. A total of 142 women was included. The community sample consisted of 105 women 65 years and older living alone. Characteristics of both samples are shown in Table 1. The community sample consisted of the participants of a second wave that showed a substantial nonresponse. For this reason, we investigated whether the second wave single women differed on demographic characteristics from the single women who decided to drop out of the second wave. Drop-outs ($n = 152$) and completers ($n = 105$) did not differ on the presence and number of children, marital status (divorced and widowed), educational level or income. They did, however, differ on age. The drop-outs were somewhat older ($M = 78.1$) than the completers ($M = 75.9$), $t(1, 255) = 2.68$, $p < .01$, indicating that the actual sample of single community women considered in the present study may contain an overrepresentation of younger women.

Demographic Characteristics

The course applicants were compared with the sample of community single women on the above specified demographic characteristics. As can be seen in Table 1, the course applicants were significantly younger than the community sample of single women, $t(1, 246) = -17.18$, $p < .001$. This, however, was to be expected due to the initial differences in the age ranges of the two samples (55 years and older vs. 65 years and older). Another remarkable difference

Table 1. Characteristics of the LUSTRE course applicants and the community dwelling single women

	Course applicants (<i>N</i> = 142)	Community women (<i>N</i> = 105)
Age	64.3 (<i>SD</i> 7.4)***	79.8 (<i>SD</i> 5.9)***
Marital status, ^a		
Divorced	65 (45.8%)	8 (7.6%)
Widowed	50 (35.2%)	85 (81.0%)
No children	31 (21.8%)	15 (14.3%)
Number of children	1.7 (<i>SD</i> 1.3)**	2.7 (<i>SD</i> 2.0)***
Relationship with children:		
Very good	41 (28.9%)**	54 (51.4%)**
Good	48 (33.8%)	29 (27.6%)
Neutral	13 (9.2%)	2 (1.9%)
Not very good	5 (3.5%)	2 (1.9%)
Bad	2 (1.2%)	1 (1.0%)
Level of education:		
Low	29 (20.4%)***	57 (54.3%)***
Intermediate	71 (50.0%)	41 (39.0%)
High	40 (28.2%)	5 (4.8%)
Income:		
Low	9 (6.3%)	9 (8.6%)
Intermediate	115 (81.0%)	84 (80.0%)
High	14 (9.9%)	7 (6.7%)

Note: Minor discrepancies in column totals are due to missing values.

^aDifferent measures were used for questioning marital status, therefore this difference could not be tested.

** $p < .01$, *** $p < .001$.

is found regarding marital status: the course applicants mainly appeared to be divorced women, whereas the community sample comprised relatively few divorced women and many widowed women. Also, for the remaining demographic characteristics, significant differences emerged between the groups except for childlessness, $t(1, 246) = 1.51$, $p = .13$, and for income, $t(1, 237) = 1.06$, $p = .29$. The course applicants had fewer children than the community women, $t(1, 237) = -4.44$, $p < .001$. Also, the quality of the relationship the course applicants had with their children differed. Fewer of these women reported to having a very good relationship with their child(ren) compared to the community sample, $\chi^2 = 14.07$, $p < .01$. Finally, the course applicants differed regarding level of education: the course applicants were higher educated than the community women, $\chi^2 = 39.66$, $p < .001$.

Table 2. Mean scores on well-being, affect, loneliness, self-management ability and subjective health in the course applicants and in the community sample

	Course applicants	Community women
SPF-IL total	20.4 (SD 5.8)***	24.7 (SD 6.9)***
Affection	4.4 (SD 1.7)***	6.3 (SD 2.1)***
Behavioral confirmation	5.1 (SD 1.6)**	5.7 (SD 1.6)**
Status	2.7 (SD 1.5)	2.7 (SD 1.8)
Comfort	3.8 (SD 2.0)**	4.5 (SD 2.1)**
Stimulation	4.5 (SD 1.9)***	5.7 (SD 2.3)***
Positive affect	3.2 (SD 0.6)	3.3 (SD 0.5)
Negative affect	2.6 (SD 0.7)*	2.4 (SD 0.6)*
Total loneliness	7.9 (SD 3.1)***	6.4 (SD 1.4)***
Emotional loneliness	4.6 (SD 1.7)***	5.9 (SD 0.8)***
Social loneliness	3.3 (SD 1.8)***	0.5 (SD 1.1)***
SMAS-30 total	46.7 (SD 10.0)	44.5 (SD 9.5)
Taking initiatives	55.7 (SD 14.3)	52.7 (SD 10.9)
Investment behavior	59.0 (SD 15.4)	59.7 (SD 12.5)
Variety	48.7 (SD 16.1)	50.4 (SD 16.5)
Multifunctionality	34.4 (SD 13.3)	36.3 (SD 14.8)
Positive frame of mind	68.7 (SD 15.5)**	58.0 (SD 14.8)***
Subjective health:		
Excellent	11 (7.7%)	2 (3.7%)
Very good	10 (7.0%)	3 (5.6%)
Good	68 (47.9%)	27 (50.0%)
Not very good	47 (33.1%)	20 (37.0%)
Bad	6 (4.2%)	1 (1.9%)

Note: SPF-IL-Social Production Function Index Level Scale; SMAS-30-Self-Management Ability Scale.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Well-Being

The women who applied for the course were compared with the community single women regarding their reported levels of well-being (SPF-IL). A total of 133 course applicants and 84 women in the community sample filled out the SPF-IL completely. Mann-Whitney tests were conducted for all variables because of nonnormality of the data. It appeared that the course applicants had significantly lower SPF-IL scores ($Mdn = 20.0$) than the community women ($Mdn = 24.5$), $U = 3608.50$, $p < .001$. More specifically, it was found that the course applicants scored lower on all subscales (dimensions) of the SPF-IL except on the subscale status, $U = 6317.50$, $p = .74$. On the subscale affection, the course applicants ($Mdn = 4.0$) scored lower than the community women ($Mdn = 7.0$), $U = 3342.50$, $p < .001$. The same was true for the subscale behavioral confirmation ($Mdn = 5.0$ vs. $Mdn = 6.0$),

$U = 5479.00$, $p < .01$; for the subscale comfort ($Mdn = 3.0$ vs. $Mdn = 4.0$), $U = 5736.00$, $p = .01$; and for the subscale stimulation ($Mdn = 4.0$ vs. $Mdn = 6.0$), $U = 4522.00$, $p < .001$.

Affect

Differences in positive and negative affect were studied between the course applicants and the sample of community single women. A total of 139 course applicants and a subsample of 52 women in the community sample filled out the positive affect and negative affect scale (PANAS) completely. As expected, the course applicants scored higher on negative affect ($Mdn = 2.6$) than the community sample ($Mdn = 2.5$), $U = 3055.50$, $p = .05$. However, in contrast to the expectations, the course applicants did not score significantly lower on positive affect ($Mdn = 3.3$) than the community sample ($Mdn = 3.4$), $U = 3060.00$, $p = .10$.

Loneliness

Another comparison was made on loneliness scores. A total of 142 course applicants and a subsample of 54 women in the community sample filled out the loneliness questionnaire completely. The course applicants were significantly more lonely ($Mdn = 9.0$) than the community sample ($Mdn = 6.0$), $U = 2404.00$, $p < .001$. When specifying emotional and social loneliness, the course applicants reported more feelings of social loneliness ($Mdn = 4.0$) than the community sample did ($Mdn = 0.0$), $U = 839.50$, $p < .001$. Regarding emotional loneliness, however, a different pattern emerged. Here, the course applicants reported less emotional loneliness ($Mdn = 5.0$) than the community women ($Mdn = 6.0$), $U = 1782.00$, $p < .001$.

Self-Management Abilities

Finally, the scores on five subscales of the SMAS-30 and the overall SMA scores (i.e., the sumscore of the five subscales) were compared. The comparison was again made between the course applicants and a subsample of the community sample ($n = 45$). Contrary to our expectations, the course applicants ($Mdn = 47.0$) did not report lower overall SMAS scores than the community sample ($Mdn = 44.9$), $U = 2616.5$, $p = .11$. A similar pattern was found for the subscales, except for the subscale positive frame of mind. No differences were found on the subscales taking initiatives, $U = 3198.5$, $p = .21$; investment behavior, $U = 3213.0$, $p = .75$; variety, $U = 3182.5$, $p = .79$; and Multifunctionality, $U = 2944.5$, $p = .28$. On the subscale positive

frame of mind, however, the course applicants ($Mdn = 70.0$) scored higher than the community sample ($Mdn = 55.0$), $U = 2060.0$, $p < .001$.

Subjective Health

On the question of how they rated their own general health, about half of the women reported that their health was “good.” There were no differences between the course applicants and the community women, $U = 3593.00$, $p = .60$.

DISCUSSION

In the present study we investigated whether, and to what extent, the single older women who applied for participation in the LUSTRE course (i.e., the actual subjects) could correctly be considered the target group that was aimed for. In order to investigate this question, we compared the course applicants with a random sample of single women in the general older population. It was hypothesized that the course applicants—women who are considered to be willing to learn how to give their life somewhat more LUSTRE—would score lower on self-management abilities, well-being, and positive affect, and score higher on loneliness and negative affect than single women in the community.

As expected, women who had signed up for the course reported lower levels of overall well-being than the community women. This was specifically true for the well-being dimensions comfort, stimulation, affection, and behavioral confirmation. The course applicants, however, did not score lower on the dimension status than the community single women. Possibly, this is due to the fact that, in general, older single women are relatively low on status (see Steverink & Lindenberg, 2006), which then may have caused a floor effect. However, the course applicants were of age 55 and older, whereas the community sample comprised women aged 65 and older. Given the finding that status is negatively associated with age (Steverink & Lindenberg, 2006), the community women should be lower on status than the course applicants (because of the average younger age of the course applicants). Therefore, it may well be that the course applicants were, in fact, relatively low on status.

Furthermore, women who had signed up for the course reported higher levels of negative affect, but they did not report lower levels of positive affect. It is known that positive and negative affect are not just the inverse of each other (Taylor, 1991), a finding that is

supported by the results of the present study. It appears that one of the problems the applicants have is high negative affect. Individuals with high negative affect tend to view themselves and the world more negatively, and they tend to experience greater distress than individuals with low negative affect, even in the absence of stressors (Watson & Clark, 1984). Kahn, Hessling, and Russell (2003) even found that respondents who reported a high amount of negative affect reported perceiving less social support, poorer health, and well-being than low negative affect individuals. This is partly in accordance with the results of the present study: the course applicants scored higher on negative affect, and they also scored higher on social loneliness and lower on overall well-being. However, they did not score lower on subjective health. Our measure of health was a single-item measure of subjective health, which may be a restricted measure of health status. A more extended measure including objective aspects of health would possibly have yielded more differentiated results. Future research should investigate other health measures more thoroughly.

The women who had applied for the course were, in general, more lonely than the community single women (cf. Van Tilburg & De Jong-Gierveld, 1999). However, when loneliness was specified in emotional and social loneliness, it appeared that this difference was mainly due to more feelings of social loneliness in the course applicants, not to more emotional loneliness. The course applicants rather reported fewer feelings of emotional loneliness compared to the community sample. This is an indication that the recruitment procedure for the LUSTRE course yielded a group of women that felt very lonely socially rather than emotionally. Social loneliness is characterized by a lack of social integration and embeddedness (Weiss, 1973, 1993). Emotional loneliness relates to the absence of a reliable attachment figure, such as a partner. Bereaved individuals tend to be especially vulnerable for emotional loneliness (Weiss, 1973; Van Baarsen, Smit, Snijders, & Knipscheer, 1999). Because in the present study most of the women in the community sample were widowed, whereas the course applicants mainly consisted of divorced women, this difference in marital status possibly explains the differences found in the type of loneliness. On the other hand, it may be argued that divorced women also feel "bereaved," just like widowed women. In addition, it is a remarkable finding that the course applicants scored relatively low on affection but also low on emotional loneliness since these two concepts can be assumed to be closely (although negatively) related. Possibly, this divergence can be explained by the fact that affection was measured with only positive questions such as "Do you feel that people really love you?" or "Do people help you if

you have a problem?" By contrast, emotional loneliness was measured with only negative questions like "I miss having people around" or "Often I feel rejected." It appears that the course applicants experienced a lack of (positive) affection, but at the same time did not experience the deficits of emotional loneliness. Nevertheless, this unexpected finding may need to be clarified in future studies. In addition, it may be questioned whether social and emotional loneliness are actually two distinct dimensions of loneliness (see Van Baarsen, Snijders, Smit, & Van Duijn, 2001). This also needs further clarification in future research.

Because the LUSTRE course was meant for women who would like to improve on both well-being *and* self-management ability, it was expected that women who had applied for the course would score lower on the different self-management abilities and overall self-management ability. However, contrary to the expectations, no difference was found between the course applicants and the community sample of older single women on most of the self-management abilities. Only on the subscale positive frame of mind was a difference found. But this difference was in the unexpected direction: the course applicants had a more positive frame of mind than the community women. How can these findings be explained? One possible explanation is the higher average age of the community women. It has been shown that the level of self-management ability as measured here relates negatively with age (Schuurmans, Steverink, Lindenberg, Frieswijk, & Slaets, 2004). Therefore, the older community women may have a lower level of self-management ability than the course applicants because of their age. In order to check for such an age effect, a control analysis with age was conducted. This, however, did not change the results. The indication is that the lack of differences between the course applicants and the community women is not due to age differences. Another explanation could be found in differences regarding level of education: there is a positive correlation between level of education and self-management ability. Because the course applicants were significantly higher educated, it is possible that the lack of differences between the two groups on self-management ability may be due to differences in level of education. This we also checked by controlling in the analyses for educational level. Again, no effect was found.

Could the group differences be explained by differences in other demographic variables? The course applicants and the community sample differed on several demographic variables. Compared to the community sample, the course applicants were more often divorced, had fewer children, and rated the contact with their child(ren) less

often as very good. Adult children are the most important sources of social support for older parents in emotional, informational, and financial aspects (McMullin, & Marshall, 1996). Therefore, it is not surprising that studies found significant differences in well-being between childless older adults and older parents (Kandel, Davies, & Raveis, 1985; but see Zhang & Hayward, 2001). Because the course applicants had significant fewer children than the community sample, and because they rated the contact with their child(ren) less often as very good, this could be one of the factors explaining the difference we have found in the present study in well-being and loneliness.

Groups also differed in marital status: women who had signed up for the course were more often divorced compared to the community sample in which more women were widowed. Losing a spouse by divorce is obviously different from separation by death. It is known that divorced persons have a lower level of well-being than widowed persons (Mastekaasa, 1994). This finding is in line with the findings of the present study, in which the divorced scored lower on well-being and higher on loneliness.

The findings of the present study need to be interpreted in the light of some limitations. A first point of concern is the difference in age ranges and age means of the two samples. The course applicants were 55 years of age and older, whereas the community sample comprised women aged 65 and older. This difference in age may have affected the results, especially regarding status and self-management ability. However, a correction for age on status and self-management ability did not change the results. Another limitation is the possible nonresponse bias and drop-out in the community sample. In the second wave of that study, on which the results of the present study were based, a relatively large proportion of people decided not to join the study anymore. Although we found that the drop-out was not very selective—drop-outs only were older—it may have caused limitations to the generalizability of the results. This should be kept in mind when interpreting the results.

It can be concluded that the target group for the LUSTRE course was reached effectively with regard to well-being indicators. The women who applied for the course were, as intended, relatively low on overall well-being, high on negative affect, and very lonely. However, with regard to level of self-management ability, it appears that the target group was not reached adequately. Contrary to our expectations, the women who applied for the course did not report lower levels of self-management abilities than women living in the community. The women who participated in the LUSTRE course improved on most of the self-management abilities and on overall

well-being compared to a control group (see Kremers et al., 2006), but the course applicants were not initially lower on self-management ability than their “sisters” in the general community. A more specific recruitment procedure—focussing more on low self-management abilities—may be needed to better reach the women who are intended as the target group for the LUSTRE course. A more focused recruitment procedure may even increase the effectiveness of the course. An improved course would support ever more women in giving their life more LUSTRE.

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