

## VU Research Portal

### **Partners and others: Social provisions and loneliness among married Dutch men and women in the second half of life.**

Stevens, N.L.; Westerhof, G.J.

#### ***published in***

Journal of Social and Personal Relationships  
2006

#### ***DOI (link to publisher)***

[10.1177/0265407506070474](https://doi.org/10.1177/0265407506070474)

#### ***document version***

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

#### ***citation for published version (APA)***

Stevens, N. L., & Westerhof, G. J. (2006). Partners and others: Social provisions and loneliness among married Dutch men and women in the second half of life. *Journal of Social and Personal Relationships*, 23(6), 921-941. <https://doi.org/10.1177/0265407506070474>

#### **General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

#### **Take down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

#### **E-mail address:**

[vuresearchportal.ub@vu.nl](mailto:vuresearchportal.ub@vu.nl)

# Journal of Social and Personal Relationships

<http://spr.sagepub.com/>

---

## **Partners and others: Social provisions and loneliness among married Dutch men and women in the second half of life**

Nan Stevens and Gerben J. Westerhof

*Journal of Social and Personal Relationships* 2006 23: 921

DOI: 10.1177/0265407506070474

The online version of this article can be found at:

<http://spr.sagepub.com/content/23/6/921>

---

Published by:



<http://www.sagepublications.com>

On behalf of:

[International Association for Relationship Research](#)

**Additional services and information for *Journal of Social and Personal Relationships* can be found at:**

**Email Alerts:** <http://spr.sagepub.com/cgi/alerts>

**Subscriptions:** <http://spr.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations:** <http://spr.sagepub.com/content/23/6/921.refs.html>

# Partners and others: Social provisions and loneliness among married Dutch men and women in the second half of life

Nan Stevens & Gerben J. Westerhof

*Radboud University*

---

ABSTRACT

The main goal of this article was to test whether the perceived availability of social provisions within and outside marriage in a representative Dutch sample of men and women in late adulthood would differ from findings from similar studies in the United States. We predicted that there would be more similarity between married men and women in self-reported social relationships, social provisions, and loneliness in the more feminine culture of The Netherlands than is often reported in research from the United States, where the dominant culture is more masculine. Data are from the Dutch Aging survey that involved a representative sample of 983 people between the ages of 40 and 85. As predicted, we found similarity between men and women in the size and composition of core networks, the provision of emotional support to and from the partner, and in the provision of instrumental support to others. Contrary to our hypothesis, women exchanged more emotional support with friends, children, and other family and identified these persons more often as companions in leisure activities. Despite the women's greater reported involvement in other relationships, these men were not lonelier than were women. For both men and women, social provisions from close relationships beyond the partner relation contributed to alleviating loneliness.

**KEY WORDS:** gender differences • late adulthood • loneliness • marriage • social provisions

---

Nan Stevens and Gerben Westerhof are both in the Center for Psychogerontology, Department of Psychology, at Radboud University. All correspondence concerning this article should be addressed to Nan Stevens, Center for Psychogerontology, Radboud University, P.O. Box 9104, 6500 HE Nijmegen, The Netherlands [e-mail: [stevens@psych.ru.nl](mailto:stevens@psych.ru.nl)].

*Journal of Social and Personal Relationships* Copyright © 2006 SAGE Publications  
([www.sagepublications.com](http://www.sagepublications.com)), Vol. 23(6): 921–941. DOI: 10.1177/0265407506070474

When asked what is most important in life, older men and women in The Netherlands rate *a good marriage* second only to *good health* (Deeg & Braam, 1997). Previous research has found that these two domains are linked, as being married is associated typically with better physical and mental health (Gove, Hughes, & Style, 1983; Joung et al., 1997, Ross, 1995). People who are married tend to be happier (Stack & Eshleman, 1998); they are also less prone to loneliness, early mortality, and suicide than are the nonmarried (De Jong-Gierveld & van Tilburg, 1987). The benefits of marriage that contribute to these positive outcomes include greater economic security, the promotion of health-related behaviors, and higher levels of social support among the married compared to the nonmarried (Joung et al., 1997; Ross, 1995). Married partners serve as companions and for the fulfillment of fundamental needs for intimacy, reassurance of worth, nurturance, and care, though other close relationships may also satisfy these needs (De Jong-Gierveld & van Tilburg, 1987; Weiss, 1974).

Whereas the unique importance of the partner relationship is acknowledged generally, the conclusion is drawn primarily from studies on marriage focusing on younger couples and factors leading to divorce. As the aging population continues to expand, however, the relevance of studies on older married persons increases (Acitelli, 1996). According to socio-emotional selectivity theory (Carstensen, 1991), for example, individuals become more and more selective in choosing social partners as they age, preferring those with whom interactions are predictable and who provide emotionally positive experiences. Such selectivity occurs not only for intimate partners but also for close relationships with family members and friends.

The present study compares social provisions by the partner and other close relationships for Dutch men and women in late adulthood. The association of various social provisions with loneliness is also examined. Loneliness was chosen as the indicator for wellbeing because of its focus on the domain of social relationships and because relatively little is known about loneliness within marriage in late adulthood.

Rook (1984, 1987) has emphasized the importance of distinguishing support and companionship when studying the impact of relationships on wellbeing, as well as the effect of negative interactions (Rook, 1984). What is known about the impact of various relationships is somewhat contradictory. For example, in an earlier Dutch study that compared the effect of support from a variety of relationships on loneliness, Dykstra (1993) found that when a partner was available, support from friends and children had little impact on loneliness in later life. Pinquart (2003), however, discovered that frequency of contact with friends (companionship) was inversely related to loneliness. By including support, companionship, and negative interactions in the social provisions that were studied, we hoped to add to knowledge on the differential effects of a variety of relationships beside the partner on the loneliness of married men and women in late adulthood.

### **Loneliness among the married**

Loneliness is defined as the ‘unpleasant experience that occurs when a person’s network of social relations is deficient in some important way, either quantitatively or qualitatively’ (Perlman & Peplau, 1981, p. 31). Despite the possibility of deficiencies in a variety of relationships, including the partner relationship, there has been little attention to loneliness among the married in later life. One reason may be that marital or partner status is a very strong predictor of loneliness. Those without partners score significantly higher on loneliness scales than do those who are married or living in a consensual union (De Jong Gierveld & Van Tilburg, 1995; Pinquart, 2003). Loneliness also occurs among the married, however. In a representative study of persons between the age of 15 and 80 in Sweden, Tornstam (1992) found that 40% of the married experienced loneliness sometimes or often. But not all partners are equally likely to be lonely: Using a meta-analysis of influences on loneliness in older adults, Pinquart and Sörenson (2001) found higher levels of loneliness among married women than among married men in a majority of the studies reviewed. Differences in loneliness between men and women were significantly larger in married samples than in unmarried samples.

### **Sex differences in social provisions within and outside of marriage**

Despite the relative advantage of being married overall, marriages vary in the quality of the support that they provide and the degree to which they meet fundamental needs for intimacy and companionship (Ross, 1995). The differences in loneliness among the married reported earlier are one indication that partner relationships may differ in *perceived quality* for men and women. That is, married women may be lonelier than married men because they experience deficiencies in the intimacy, companionship, or support that is available from their partner more often than is the case for men. Moreover, there is evidence that men are more satisfied with their marriages than are women overall (Antonucci & Akiyama, 1987). As for the provision of support within marriage, men appear to receive more instrumental support (Gurung, Taylor, & Seeman, 2003) as well as more emotional support from their partners than vice versa (Depner & Ingersoll-Dayton, 1985; Gurung et al., 2003; Walen & Lachman, 2000).

Further, the social environment in which marriages are embedded may vary in terms of social provisions that complement those provided by the marital partner. Various North American studies reveal that women have larger social networks than men (Antonucci, 1990). Women tend to have not only more family and friends in their networks, they have more frequent contact with others and exchange support with a greater variety of persons (Antonucci, 1990; Antonucci & Akiyama, 1987). Men appear to

be more reliant on their wives for emotional support than vice versa (Antonucci, 1990; Depner & Ingersoll-Dayton, 1985).

Whereas women benefit from their more intimate relationships, their more intense involvement in a greater variety of relationships also appears to make them more vulnerable to relational stress (Antonucci, 2001). Women report experiencing conflict, disagreement, and frustration with others more frequently than is the case for men; often their negative interactions are with the same people with whom they share positive experiences (Antonucci, 1990). Rook (2003), however, notes that evidence for sex differences in exposure to negative social interactions is inconsistent; sometimes no sex differences are found. In her research, Rook (1984) has shown that negative interactions have a greater impact on wellbeing than positive experiences in relationships. It is important, therefore, to include negative experiences when examining the differential association between diverse social provisions and the wellbeing of men and women.

### **Differential impact of partner support on wellbeing**

As a result of men's greater reliance on their wives for support and women's greater variety of close relationships, we would expect the perceived quality of the marital relationship to have a greater impact on men than on women. This has not been supported empirically, however. Gove, Hughes, and Style (1983) reported differences in the impact of being married and of marital happiness on overall happiness, mental health, and life satisfaction. Their frequently cited conclusion was that *marital status* is important for men's wellbeing, whereas *the affective quality* of the marriage is important for women's wellbeing. The authors did not ascertain if the differences found between men and women were significant, however, reducing some confidence in the overall claim (Stack & Eshleman, 1998).

In two other studies, however, marital quality appears to affect wives more than it affects husbands. Quirouette and Gold (1992) examined the extent to which older husbands' and wives' wellbeing was predicted by their partners' marital adjustment, that is, the subjective assessment of the quality of the marriage. As predicted, the husbands' marital adjustment contributed significantly to the wives' wellbeing, whereas the wives' assessment of marital quality did not predict the husbands' wellbeing. Likewise, Acitelli and Antonucci (1994) studied the link between marital support and satisfaction in older couples, in combination with their wellbeing. Receiving support from the partner, giving support to the partner, as well as the reciprocity of support exchanged contributed significantly to wives' wellbeing, whereas a negligible amount of variance in the husbands' wellbeing was explained by the same variables. The conclusion from these studies is that the quality of the marital relationship has a greater impact on women's wellbeing than it did on men's.

## Cultural differences in masculinity/femininity

The influence of sex or gender on social relationships across the life span is fundamental, yet it is complex and mediated by culture (Antonucci, Langfahl, & Akiyama, 2004). Most of the studies cited on loneliness in marriage, sex differences in social provisions within and outside of marriage, and the impact of the partner relationship on wellbeing have been conducted in the United States. An important goal of this study was to test whether the sex differences that appear to be rather consistent within the United States would be found in a representative sample of older adults in The Netherlands. According to Hofstede (2001), one dimension on which the Dutch and U.S. cultures differ is masculinity/femininity. In his comparative research on over 50 countries, the United States scores high on masculinity, which means that the predominant culture is characterized by relatively high differentiation of gender roles and male dominance in a significant portion of society, including the power structure. Masculine traits such as assertiveness, competitiveness, and material success are valued more highly in this type of culture. The Netherlands scores low on masculinity as do Denmark, Sweden, and Norway. These more feminine cultures tend to be more egalitarian, with less differentiation in gender roles; both men and women are concerned equally with relationships and quality of life and less with power and personal achievement, in Hofstede's view.

## Hypotheses

If Hofstede's (2001) typology of cultures is accurate, we would expect to find fewer differences between Dutch men and women in the ways in which they regulate their social relationships than are found among men and women in the United States. We would expect specifically to find that men and women derive similar benefits from marriage, as well as other close relationships outside of marriage. This leads to the following hypotheses:

- *H1: There will be no differences between married men and women in the size and composition of the social network, in the provision of support and companionship to and from the marital partner, and in the availability of support and companionship in other close relationships within a representative sample of older adults from The Netherlands;*
- *H2: Due to similarities between men and women in their involvement in social relationships, men will be as likely as women to report negative experiences in personal relationships;*
- *H3: There will be no difference between married men and women in the level of loneliness experienced in late adulthood;*
- *H4: The quality of marriage will have an association with men's loneliness that is similar to that of marital quality and women's loneliness;*
- *H5: Social provisions from persons other than the partner will be associated with lower levels of loneliness for both men and women.*

**Method**

**Sample**

A sample of 983 adults, aged 40–85 years old who were living independently, participated in the Dutch Aging Survey (Steverink, Westerhof, Bode, & Dittmann-Kohli, 2001). The study involved a random stratified sample of persons drawn from cities, towns, and rural communities in The Netherlands. The sample was stratified by sex and by age group (age 40–54, 55–69, and 70–85). The overall response rate was 48% in the two younger groups and 37% in the oldest group. According to contact protocols that were completed by the interviewers, older adults who refused to participate reported that they did so primarily because of illness or disability. Thus the final sample likely contains an overrepresentation of healthy people between age 70 and 85. The present study concerns the 723 of the 983 respondents who were married or cohabiting (409 men and 314 women). The average age of this group was 59.1. The means for background variables are reported for men and women in Table 1.

The men in this study were more highly educated than were the women; however, there was no significant difference in level of household income. Women reported more restrictions due to health problems than men did. There were clear differences in the work status of men and women. Most of the men were involved in paid work (44%) or were retired (45%), whereas the largest group of women identified themselves as housewives (58%). Only 28% of the women were involved in paid work, and 9% were retired, reflecting the lower participation of Dutch women in the labor market until recently.

**Procedure**

The study is a partial replication of the *German Aging Survey*, which covered a broad range of topics including demographic characteristics, occupational history, leisure activities, social relationships, personal meaning and wellbeing (Dittmann-Kohli, Bode, & Westerhof, 2001; Kohli & Kunemund, 2000). Face-to-face interviews were conducted in respondents' homes; during the interviews, respondents were asked to fill in several questionnaires. In the survey, attention was focused on the *core network* of respondents, which includes the most stable, most important relationships in a social network; it is comparable to the

**TABLE 1**  
**Means and Standard Deviations for background variables of men and women and *t*-values for sex differences**

|                     | Men      |           | Women    |           | <i>t</i> | <i>df</i> | <i>p</i> |
|---------------------|----------|-----------|----------|-----------|----------|-----------|----------|
|                     | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |          |           |          |
| Age                 | 59.93    | 11.54     | 57.78    | 11.51     | 2.57     | 721       | < .05    |
| Education           | 11.79    | 3.18      | 10.73    | 2.84      | 4.65     | 721       | < .001   |
| Income              | 8.46     | 2.28      | 8.34     | 2.37      | 0.68     | 674       | n.s.     |
| Health restrictions | 1.44     | 0.70      | 1.65     | 0.75      | -3.73    | 721       | < .001   |

*Note.* Measures used: Education: years completed (1–17), based on rescoring highest diploma; Income level: 1 = < 1251 guilders per month to 11 = > 5000 guilders per month; Health restrictions: 1 = none, 2 = slight, 3 = considerable.



inner circle of a personal convoy (Antonucci, 1990). Specifically, respondents were asked to name up to eight people who were important to them and with whom they had regular contact. They were then asked to identify the type of relationship they had with that person. Seventeen categories were offered for identification of type of relationship initially; however, broader categories were used for analysis. These included partner, children, friends, other family, and other nonkin. Neighbors, colleagues, professional helpers, and others were combined in the category 'other nonkin.'

Social support measures were designed to assess the availability and provision of two kinds of support: *Emotional support* and *instrumental support*. The three questions used to measure *sources of emotional support* were as follows: 'If you have to make important decisions, is there someone whom you can go to for advice?'; 'Is there someone you can go to when you feel a need to be comforted or cheered up, for example when you are sad?'; 'Is there anyone who often shows that he or she loves you?' For the *provision of emotional support by the respondent*, two questions were asked: 'Is there anyone who asks you for advice when he or she has to make personal decisions?' and 'Is there anyone who comes to you to be comforted or cheered up, for example when he or she is sad?' Questions designed to measure *instrumental support* focused on the provision of tangible assistance by persons outside of the respondent's household. These questions were as follows: 'Is there anyone from outside your home who helps you with housekeeping tasks, such as cleaning the house, making small repairs or doing the grocery shopping?'; 'Is there anyone from outside your home whom you can ask for help with personal care, for example, if you are no longer able to care for yourself?' For the *provision of instrumental support*, the questions were: 'Does anyone outside your household ask you for help with housekeeping tasks, like cleaning, repair work or grocery shopping?' and 'Does anyone outside your household ever ask for help with personal care, for example, when they cannot care for themselves?'

After each question about emotional and instrumental support, respondents were asked to categorize the relationships of those who were available to fulfill the relational function mentioned. They were not restricted to naming those identified in the core network, however. Possible categories included partner, children or grandchildren, other family, friends, neighbors, professional help, or others. The last three categories were combined into 'other nonkin.' The number of times a particular category was mentioned for each type of support was counted and used as the support score for that category.

Due to the small number of questions, inter-item correlations were used to estimate reliability; the optimal range is .20 to .40 (Briggs & Cheek, 1986). Inter-item correlations were between .19 and .40 for availability of emotional support from the partner, children, other family, and friends on the three items used. For provision of emotional support to others, inter-item correlations on the two items were: .40 for the partner, .37 for children, .44 for family, and .45 for friends. Both measures were not reliable for other nonkin with inter-item correlations clearly outside of the optimal range. For availability of instrumental support from others, inter-item correlations for different types of relationships were as follows: Children (.34), family (.32), other nonkin (.30), and friends (.11). For provision of instrumental support to others, the questions are reliable as indicated by inter-item correlations for family (.31), friends (.42), and other nonkin (.23); they were too low for children (.15). Categories were not included in the analysis when inter-item correlations were less than .19.

*Companionship* refers to pleasurable interactions that are engaged in for their own sake (i.e., through shared leisure activity and recreation; Rook, 1987). In the survey, respondents were asked whether or not they engaged in various leisure activities, whether they had companions for each activity, and who these companions were. The measure of companionship was the number of activities with the partner, friends, relatives, and other nonkin drawn from a selection of the most regular activities. The seven items included walking, other exercise, attending the theater or concerts, shopping, going on day trips, artistic activities, and playing games. Reliability for companionship with the partner was satisfactory: Cronbach's alpha was .70. Though it was lower for friends and family (.65), it was considered sufficient to include these categories in the analysis. Other nonkin were dropped from the analysis due to their infrequent mention as companions and subsequent low reliability.

To measure the *negative side of social interaction*, items were selected from the Relationship Support Inventory, developed for families of adolescents (Scholte, van Lieshout, & van Aken, 2001). The selected items referred to being criticized (two items), experiencing conflict, dishonesty, betrayal, and having others make decisions for oneself. Respondents were asked if they had been involved in a specific type of negative interaction, and if so, with whom. The reported relationships were classified according to the same categories described for support. There was satisfactory reliability on the six items for negative interactions with family ( $\alpha = .66$ ) and with other nonkin ( $\alpha = .70$ ). The measure was not reliable for the partner, friends, or children, however. A shorter version that included four items on general criticism, lying, betrayal, and conflict was used to measure negative interaction with the partner; inter-item correlations were between .20 and .40 on this measure, thus it was considered to be sufficiently reliable. For children and friends, the shorter version was not reliable so these relationships were not included in the analysis.

Correlations were computed between various measures of social provisions, including negative social contact. Most correlations were below .30. Higher correlations concern the availability of a type of relationship in the core network and a particular support provision by that type of relationship (e.g., for number of friends in the core network and emotional support from friend,  $r = .41$ ); however, these correlations were all below .50. None of the correlations between the measures was high enough to indicate a problem with multicollinearity. A full correlation matrix is available from the authors upon request.

*Loneliness* was measured with a Dutch loneliness scale (see Appendix 1) that includes five positive items and six negative items (De Jong Gierveld & Kamphuis, 1985). Responses were scored on a 5-point scale and then dichotomized, according to the procedure recommended by the authors of the scale. Scores ranged from 0 (not lonely) to 11 (extreme loneliness). By comparing scores on the scale to a direct question indicating the level of loneliness, De Jong Gierveld and Van Tilburg (1999) identified a cutting score of 3 that distinguishes lonely from not lonely, whereas a score of 9 distinguishes the very lonely from others. According to these authors, the reliability of the loneliness scale varies between .80 and .90, using Cronbach's alpha. In the current study, Cronbach's alpha for the loneliness scale was .88.

Control variables included in the analyses were age, education (years completed), income level, and health. The respondents were asked to identify their net monthly income, given a set of 11 income ranges. The health variable is a self-reported measure of limitations experienced due to health problems. These limitations are scored as: (1) No limitations due to health, (2) slight

limitation, and (3) considerable limitation due to health problems. This measure was selected because it had proven to be the most valid health measure of several used in the *German Aging Survey* (Kohli & Künemund, 2000).

## Data analysis and results

The first three hypotheses were addressed using descriptive statistics; *t*-tests for independent samples were used to determine whether or not sex differences in social relationships and loneliness were significant. Because of the large number of comparisons, Bonferroni's method of determining the confidence interval for *t*-tests was applied (Bland & Altman, 1995). In a regression analysis for the whole sample the controls described later were also entered.

Two-step ordinary least squares regression analyses were carried out for men and women separately to assess the predictive contribution of partner and other relational variables to loneliness (Hypotheses 4 and 5). In the first step, the partner variables were included together with age, income, educational level, and health as controls. In the second step, information on the composition of core networks, companionship, support, and negative relational experiences with persons other than the partner were added to answer the fifth research question. Only those variables that contributed significantly ( $p < .05$ ) in the regression solution for either men or women were included in the last model. The significance of the difference between the regression coefficients for men and women was computed by means of *F*-tests.

### Hypothesis 1

The first hypothesis predicted similarities between men and women in the size and composition of the core network of personal relationships, availability of support and companionship in the marital relationship, and the availability of support and companionship in other close relationships, based on self report. The results that are relevant to this hypothesis are presented in Table 2. These results reveal that the size and composition of the core network was similar for men and women in this sample. Children were named most frequently, followed by other family members (e.g., siblings, in-laws). Both men and women tended to name at least one friend in their core network as well as naming their partner. Other nonkin were named infrequently. None of the *t*-tests assessing differences in men's and women's reports were significant (see Table 2). For both men and women, the partner was named most frequently as the provider of emotional support, in the form of love and affection, comfort in the face of distress, and advice concerning problems. There was no difference in availability of emotional support from the partner,  $t(721) = 0.18, p > .001$  or in the provision of emotional support to the partner,  $t(721) = 2.75, p > .001$ .

When we examined emotional support exchange with other close relationships, differences between men and women did emerge. Although men named children, other family, and friends as sources of emotional support, women named them more often for this provision,  $t(721) = -6.22, p < .001$  for children,  $t(721) = -4.53, p < .001$  for other family, and  $t(721) = -3.71, p < .001$  for friends. Therefore it is not surprising that women reported having more providers of emotional support than men did,  $t(721) = -6.07, p < .001$ . Women also reported receiving more requests for emotional support from children and friends,  $t(721) = -3.41, p < .001$  and  $t(721) = -4.30, p < .001$ . Men were as likely as women

**TABLE 2**  
**Mean scores for core network composition, sources of emotional and instrumental support, companionship and negative relational experiences**  
**(n male = 409; n female = 314)**

|  | t-value |       |          |   | $\eta^2$ |
|--|---------|-------|----------|---|----------|
|  | Men     | Women | df = 721 | p |          |
| <i>Core network</i>                      |         |       |          |   |          |
| Partner                                  | 0.89    | 0.86  | 1.11     |   | 0.04     |
| Children                                 | 2.33    | 2.36  | -0.28    |   | 0.01     |
| Other family                             | 1.78    | 2.01  | -2.01    |   | 0.07     |
| Friends                                  | 1.17    | 1.34  | -1.56    |   | 0.06     |
| Other non-kin                            | 0.42    | 0.32  | 1.80     |   | 0.07     |
| Total                                    | 6.58    | 6.89  | -2.17    |   | 0.08     |
| <i>Source of emotional support</i>       |         |       |          |   |          |
| Partner                                  | 2.46    | 2.45  | 0.18     |   | 0.01     |
| Children                                 | 1.02    | 1.48  | -6.22    | * | 0.23     |
| Other family                             | 0.65    | 0.97  | -4.53    | * | 0.17     |
| Friends                                  | 0.71    | 0.99  | -3.71    | * | 0.14     |
| Total                                    | 4.84    | 5.88  | -6.07    | * | 0.22     |
| <i>Target of emotional support</i>       |         |       |          |   |          |
| Partner                                  | 1.05    | 0.88  | 2.75     |   | 0.10     |
| Children                                 | 0.83    | 1.04  | -3.41    | * | 0.13     |
| Other family                             | 0.61    | 0.79  | -3.00    |   | 0.11     |
| Friends                                  | 0.66    | 0.93  | -4.30    | * | 0.16     |
| Total                                    | 3.15    | 3.63  | -3.02    |   | 0.11     |
| <i>Source of instrumental support</i>    |         |       |          |   |          |
| Children                                 | 0.50    | 0.52  | -0.44    |   | 0.02     |
| Other family                             | 0.49    | 0.45  | 0.76     |   | 0.00     |
| Other non-kin                            | 0.71    | 0.76  | -0.78    |   | 0.03     |
| Total                                    | 1.69    | 1.73  | -0.36    |   | 0.01     |
| <i>Target of instrumental support</i>    |         |       |          |   |          |
| Other family                             | 0.40    | 0.43  | -0.63    |   | 0.02     |
| Friends                                  | 0.33    | 0.25  | 2.00     |   | 0.07     |
| Total                                    | 0.73    | 0.68  | 0.73     |   | 0.03     |
| <i>Companions for leisure activities</i> |         |       |          |   |          |
| Partner                                  | 3.14    | 2.70  | 3.78     | * | 0.14     |
| Family                                   | 0.89    | 1.46  | -6.05    | * | 0.22     |
| Friends                                  | 0.83    | 1.29  | -4.56    | * | 0.17     |
| Total                                    | 4.86    | 5.46  | -2.81    |   | 0.10     |
| <i>Negative experiences</i>              |         |       |          |   |          |
| Partner                                  | 0.04    | 0.06  | -0.86    |   | 0.03     |
| Other family                             | 0.29    | 0.57  | -4.26    | * | 0.16     |
| Other non-kin                            | 0.38    | 0.16  | 4.23     | * | 0.16     |
| Total                                    | 0.71    | 0.79  | -0.80    |   | 0.03     |

\* $p < .05$  (including Bonferroni correction  $p[.05] = .05/31 = .00161$ ).

to report that other family members requested emotional support from them. There was no difference between men and women in the total number of persons requesting emotional support.

The reported exchange of instrumental support with persons outside the household revealed no significant differences between men and women. Men were as likely as women to receive and provide instrumental support to a variety of persons. For companionship in leisure activities, however, there were differences between married men and women. Women reported more leisure activities with other family (including children),  $t(721) = -6.05$ ,  $p < .001$ , and with friends,  $t(721) = -4.56$ ,  $p < .001$ , than was the case for men. Though both men and women named the partner most frequently as a companion in leisure activities, men named more activities shared with the partner than was the case for women,  $t(721) = 3.78$ ,  $p < .001$ .

Overall, there is partial support for the first hypothesis that predicted similarity between Dutch men and women in the size and composition of the core network and the social provisions exchanged within the partner relationship. They are also similar in reported exchange of instrumental support. Women reported, however, that they are more intensely involved in exchange of emotional support and in companionship with children, family, and friends.

## Hypothesis 2

The second hypothesis predicted similarities between men and women in the likelihood of reporting negative experiences in relationships. Both similarities and differences emerged in the analysis of negative interactions, however (Table 2). First, there were similarities between men and women regarding their infrequent reports of negative interactions with the partner, when assessed with questions on conflicts, criticism, lying, and betrayal. Women reported negative interactions with family members more often than men did, however,  $t(721) = -4.26$ ,  $p < .001$ . Men, on the other hand, reported negative interactions with nonkin such as colleagues and neighbors,  $t(721) = 4.23$ ,  $p < .001$ . There was no difference in the total number of negative experiences in relationships that were reported by men and women. Thus, the second hypothesis on similarity in the likelihood of reporting negative experiences is supported, though the sources of negative interactions differ for men and women.

## Hypothesis 3

The third hypothesis predicted that there would be no difference in reported loneliness between married men and women. There was a sizeable group of married (and cohabiting) persons who scored as lonely in this sample: 34%. The majority, however, did not report that they were lonely according to the loneliness scale, with average scores of 2.4 ( $SD = 2.4$ ) for men and 2.2 ( $SD = 2.8$ ) for women. The difference between men and women was not significant,  $t(712) = 0.92$ ,  $p = 0.36$ . When controlling for the observed sex differences in background variables and social provisions, there is no difference in loneliness (Table 4, first column). Thus, the results confirm the second hypothesis on similarity in levels of loneliness between men and women.

## Hypothesis 4

The fourth hypothesis predicted similarity in the association between quality of the partner relationship and loneliness for men and women. The reported availability of emotional support and companionship from the partner, the

provision of emotional support to the partner, and negative experiences in the relationship with the partner were the indicators for quality of the partner relationship. As noted, several control variables were entered into the equation to control for differences in age, educational level, income, and health restrictions (see Table 3).

For both men and women, the emotional support provided by the partner and negative experiences with the partner were related to loneliness. Perceived availability of emotional support from the partner is related to lower levels of loneliness, whereas negative interactions contribute to loneliness. For women, the partner’s companionship was also inversely related to loneliness, thus those women sharing in more leisure activities with the partner reported being less lonely. The only significant difference between men and women was on the role of companionship with the partner, as indicated in the last column of Table 3, such that companionship with the partner has a greater association with loneliness for women than for men. Providing emotional support to the partner was not related to loneliness for men or women in this study.

Review of the control variables indicates that age and education were not related to loneliness for men and women; health restrictions influenced loneliness for both groups, while income was inversely related to loneliness for women. The difference in the variance explained is striking: 21% of the variance in women’s loneliness was explained by the indicators of marital quality, compared to 8% of the variance in men’s loneliness. The hypothesis is supported in that 3 out of 4 regression coefficients for qualities of the partner relationship do not differ for men and women. Companionship in leisure activities did differ in its apparent impact on loneliness; women are more vulnerable to loneliness when they report lower levels of companionship with the partner.

**Hypothesis 5**

The final hypothesis was that social provisions from people other than the partner will be associated with loneliness for married men and women. Standardized regression coefficients for various types of relationships and their provisions on loneliness are presented in Table 4 for men and women separately.

**TABLE 3**  
**Standardized regression coefficients for control variables and partner variables on loneliness for men and women (n male = 388; n female = 283)**

|                                | Men   |    | Women |     | F(1,650) | p |
|--------------------------------|-------|----|-------|-----|----------|---|
|                                | Beta  | p  | Beta  | p   |          |   |
| Age                            | -0.06 |    | -0.02 |     | 0.85     |   |
| Education                      | 0.01  |    | 0.08  |     | 1.31     |   |
| Income                         | -0.03 |    | -0.13 | *   | 1.25     |   |
| Health restrictions            | 0.13  | *  | 0.17  | **  | 0.49     |   |
| Emotional support from partner | -0.18 | ** | -0.21 | *** | 0.22     |   |
| Emotional support to partner   | -0.07 |    | 0.03  |     | 1.34     |   |
| Companionship partner          | -0.05 |    | -0.23 | *** | 5.03     | * |
| Negative experiences partner   | 0.11  | *  | 0.21  | *** | 0.23     |   |
| R <sup>2</sup> (adjusted)      | 0.08  |    | 0.21  |     |          |   |

\*p < .05; \*\*p < .01; \*\*\*p < .001.

The table has been pared down to include provisions of relationships for which the *p*-value is .05 or less in at least one analysis. The last column indicates which regression coefficients differ significantly for men and women. As in the previous analysis, companionship with the partner demonstrates a significant sex difference in its relationship with loneliness; the association of companionship with the partner on loneliness is greater for women than for men. The effects of other social provisions on loneliness did not differ significantly for men and women.

An immediate conclusion when examining Table 4 is that perceived availability of support to and from various other relationships besides the partner contributed significantly to loneliness for married men and women, in slightly varying patterns of significance. For men, being engaged in the provision of emotional support to children was inversely related to loneliness, along with having more family members in the core network. Providing instrumental support to friends and companionship with friends were also inversely related to loneliness as was the number of friends in the core network. The importance of friends in the core network was comparable to the effect of emotional support by the partner. That is, both types of relationships demonstrate a highly

**TABLE 4**  
**Standardized regression coefficients for control variables, partner variables,**  
**and other relationship variables for men and women on loneliness (*N* = 671)**

|                                 | Total | <i>p</i> | Men   | <i>p</i> | Women | <i>F</i> (1,630) | <i>p</i> |
|---------------------------------|-------|----------|-------|----------|-------|------------------|----------|
| Sex                             | 0.03  |          |       |          |       |                  |          |
| Age                             | -0.06 |          | -0.06 |          | -0.03 | 0.09             |          |
| Education                       | 0.10  |          | -0.03 |          | 0.15  | **               | 2.67     |
| Income                          | -0.08 | *        | -0.04 |          | -0.12 | *                | 0.96     |
| Health restrictions             | 0.15  | ***      | 0.12  | *        | 0.19  | ***              | 0.89     |
| Emotional support from partner  | -0.17 | ***      | -0.17 | ***      | -0.19 | ***              | 0.08     |
| Companionship partner           | -0.06 |          | 0.03  |          | -0.15 | **               | 5.39     |
| Negative experiences partner    | 0.15  | ***      | 0.11  | *        | 0.19  | ***              | 0.02     |
| Emotional support to children   | -0.07 | *        | -0.13 | **       | 0.01  |                  | 3.25     |
| # children in core network      | -0.13 | **       | -0.10 |          | -0.22 | **               | 2.12     |
| Emotional support from family   | -0.07 |          | 0.00  |          | 0.13  | *                | 2.32     |
| # family in core network        | -0.09 | *        | -0.12 | *        | -0.07 |                  | 0.10     |
| Emotional support from friends  | -0.12 | **       | -0.07 |          | -0.15 | *                | 0.72     |
| Instrumental support to friends | -0.05 | *        | -0.10 | *        | 0.02  |                  | 2.31     |
| Companionship friends           | -0.06 |          | -0.11 | *        | -0.02 |                  | 1.57     |
| # friends in core network       | -0.16 | ***      | -0.18 | ***      | -0.18 | **               | 0.13     |
| Negative exchanges other nonkin | 0.13  | ***      | 0.19  | ***      | 0.01  |                  | 3.21     |
| R 2(adjusted)                   | 0.22  |          | 0.18  |          | 0.27  |                  |          |

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001.

significant inverse relationship with loneliness which suggests that they are most important for the alleviation of loneliness. Finally, reporting negative experiences with nonkin, such as colleagues, contributed to men's loneliness; the association is also highly significant. The total variance explained is 18%; an additional 10% in the variance of loneliness for married men is explained by adding other relationships and their provisions to the equation.

For women, reporting more children and more friends in the core network were both inversely related to loneliness; the effects are relatively strong and comparable to the effects of marital quality. The availability of emotional support from the friends and from family was also inversely related to loneliness. The expanded equation accounts for an additional 6% of the variance in married women's loneliness. These results generally support the fifth hypothesis: That social provision from close relationships other than the partner relationship contributes to alleviation or exacerbation of loneliness for both men and women.

## **Discussion**

The main goal of this article was to test whether the perceived availability of social relationships and social provisions within and outside of marriage in a representative Dutch sample of older adults would differ from findings from North American studies. We predicted that there would be more similarity between men and women in social provisions available within the partner relationship and in close relationships outside of marriage in the more feminine culture of The Netherlands than is reported in research on late adulthood in the United States, a culture that is characterized by a more masculine style (Hofstede, 2001). We also predicted similarities in levels of loneliness and significant contributions of both the partner relationship and other relationships to the alleviation of loneliness for men and women.

The results revealed that, unlike previous studies based largely in the US, Dutch men and women reported being equally involved in marriage in terms of exchange of emotional support. There was also a similarity in the low incidence of negative experiences in the partner relationship as reported by men and women. Though the partner was the primary companion in leisure activities for both men and women, men reported more companionship with their partners than did women. The core networks that consisted of those relationships that were considered most important were equal in size and composition for men and women. Women reported more intense involvement with children, other family, and friends in terms of exchange of emotional support and companionship in leisure activities, however.

Nevertheless, there were no differences in the loneliness levels of these Dutch men and women. The quality of the partner relationship was more strongly related to loneliness in women, however, with high levels of companionship predicting lower levels of loneliness in women. The availability of emotional support from the partner had a similar effect on loneliness for men and women, as did negative interactions with the partner.



Finally, social provisions from relationships outside the partner relationship were not differentially related to loneliness for men and women. Thus, we conclude that there are more similarities than differences in the relationships and relational provisions of married men and women in this Dutch sample, suggesting that culture plays a role in determining the relationship between marriage and wellbeing.

Some of our results are supported by findings from the Longitudinal Aging Study of Amsterdam (LASA), which involves a representative sample of about 4000 persons, aged 55 to 85. In the LASA, the personal networks derived from a role-delineation method were similar in size for men and women in general (van Tilburg, 1995) and, specifically, for married men and women (De Jong Gierveld & Dykstra, 1998). Recent analysis of longitudinal data from the LASA found, as in our study, no differences between men and women in the availability of emotional support from the partner (Korporaal, Broese van Groenou, & van Tilburg, 2005). When the flow of support to others than the partner was analyzed, women reported that they provided more emotional support to others (van Tilburg, Broese van Groenou, & Thomese, 1995), as we found. The authors emphasize that 'the differences are consistent but not very sizeable. In other words there are also many men who are highly involved in emotional exchanges' (p. 148). Finally, there are also no significant differences in loneliness between married men and women in the LASA study; the same result occurred for men and women living in consensual unions (De Jong Gierveld & Dykstra, 1998). The similarity between findings from the LASA study and from the Dutch Aging Survey not only supports the validity of our findings, but it also provides support for the argument that The Netherlands is a more feminine culture with less differentiation in the ways in which men and women organize their social relationships than is found within a more masculine culture.

The differences between our findings and those reported in studies from the United States concern the larger size of women's networks in late adulthood in American studies (e.g., Antonucci, 1990; Antonucci & Akiyama, 1987), the imbalance in receiving support from the partner in favor of married men in the United States (e.g., Antonucci, 1990; Depner & Ingersoll-Dayton, 1985; Gurung et al., 2003; Walen & Lachman, 2000), and a relative lack of influence of support from the wife or any other measures of marital quality on married men's wellbeing in North American studies (e.g., Acitelli & Antonucci, 1994; Gove et al., 1983; Quirouette & Gold, 1992). Further, according to many studies that have been conducted in the United States, married women are lonelier than married men in late adulthood (Pinquart & Sörensen, 2001). These systematic differences between men and women in the United States can be interpreted as empirical support for Hofstede's (2001) description of the dominant culture within the United States as a masculine culture, which is characterized by a relatively high differentiation between gender roles, at least among older generations. The finding that marriage benefits men more than women, whereas marital quality has more influence on women's

wellbeing, also supports the contention of a power structure that favors men.

Nevertheless, there are also similarities between our findings and those often reported from studies in the United States. Dutch women in late adulthood, like North American women, reportedly exchange more emotional support and share companionship more often with children and friends than men report sharing; they also report more negative experiences in relationships with family than is the case for Dutch men. Women's role as 'kinkeepers' and their more intense emotional involvement in friendship appears to be similar in both cultures, with the mixed blessings that the role of kinkeeper entails (Antonucci, 2001; Gallagher & Gerstel, 1993).

Finally, in our study the quality of the partner relationship appears more important in preventing loneliness among women than among men, a finding that is consistent with conclusions from North American studies that indicate that marital quality affects women more than it does men (Acitelli & Antonucci, 1994; Gove et al., 1983; Quirouette & Gold, 1992). Cutrona (1996) has offered several explanations for this finding. She proposes that men's relational skills are more varied than are women's, thus there is more variation in the levels of support that they provide their partners. As women are generally better sources of support, there may be a kind of 'ceiling effect' of their support on their husband's wellbeing. The problem with this explanation, however, is that perceived availability of emotional support by the partner was associated with men's wellbeing in our study.

Another possibility is that women have higher standards by which they judge the quality of the marital relationship due to their experience in other close relationships, for example with friends (Cutrona, 1996). Having higher standards would make women more likely to be disappointed in the marital relationship. This may apply to companionship with the partner, as this is the one provision which differentially affects men and women's loneliness in our study. Cutrona (1996) also proposes that women are more emotionally invested in relationships than are men, including their investment in their marriages. Rossi (1993) has likewise described women's greater awareness of their interdependence with others throughout the life cycle, which she relates to their socialization for and experience with childbearing as well as with being helped or helping others deal with adversity. Women may therefore be more aware of their interdependence with their partner, monitoring their interactions more closely and being more strongly affected by them, as Cutrona's (1996) own research has demonstrated.

The more 'feminine' orientation of Dutch men is apparent in findings on the equal importance of emotional support from the partner, on the importance of having friends in the core network and companionship with them, as well as the positive effect of supportive engagement with children for prevention of loneliness. There is also similarity between men and women in the association of negative interactions with the partner on loneliness. In late adulthood, Dutch men appear to be more androgynous, that is, more

similar to women, than are men in the United States. In another article, we compared married men and women in The Netherlands and Germany, which like the United States has a more masculine culture (Hofstede, 2001). In that study, we were able to identify a kind of continuum of social integration versus privatization in marriage, with Dutch women at one end due to their high degree of involvement in a variety of relationships and German men at the other end given their primary focus on the partner, and to a lesser degree their children, for social provisions. Dutch men were located in the middle of this continuum (Stevens & Westerhof, 2006).

### **Shortcomings**

It is important to note that the *Dutch Aging Survey* includes married persons as individuals not couples; therefore no direct comparison of men and women in the same partner relationship was possible, a strategy that is highly recommended for this type of research (Acitelli, 1996). Another point is that we were not able to draw direct comparisons between countries since we did not have access to data using the same instruments from the United States, as we had in the comparison with Germany (Stevens & Westerhof, 2006).

The measures involved in this study are typical of those used in large surveys (Acitelli & Antonucci, 1994; Gurung et al., 2003). Respondents were asked to identify providers and receivers of specific kinds of support, as well as companions in leisure activities, after earlier identifying members of the core network. Such questions may be influenced by social desirability. Our measures are inventories of support providers and receivers, companions and sources of negative interactions in which no restrictions were placed on who was named. According to Kendig, Koyano, Tatsuto, and Takatoshi (1999) 'asking "who" provides different kinds of support limits the extent to which respondents are cued to provide socially desirable responses and encourages responses based on individual perceptions' (p. 201). One result of using open-ended measures, however, is that they are not reliable for all the categories of relationships that are identified, for example, when a category is mentioned infrequently. Several categories had to be dropped from our analysis as a result. Unfortunately, the questions on instrumental support referred to persons outside the household, so we were not able to compare provision of instrumental support to and from partners for men and women. The measures for instrumental support were unreliable for children, some of whom lived at home and some of whom no longer lived at home due to the age range of our sample.

Finally, the measure that we used for negative experiences was made up of items from the Relationship Support Inventory (Scholte et al., 2001); on the original scale negative items are used in combination with positive items to measure specific dimensions of support for specific categories of relationships using 5-point Likert-type scales. The list of six negative items only with open-ended answers was not reliable for children, friends and the partner. A shorter version using four items was reliable for partners, however, whereas the six-item scale was reliable for nonkin and other

family. Clearly, the measure for negative experiences in relationships could be improved. A general problem in this kind of survey research is also the influence of social desirability on willingness to admit negative experiences in general and in closer relationships (e.g., with the partner or children) versus less close relationships.

The dependent variable loneliness was measured with a scale that has proven to be valid and reliable in The Netherlands (De Jong Gierveld & Kamphuis, 1985). Pinquart and Sörensen (2001) report that they found no sex difference in loneliness in a small number of studies using the same scale and suggest that this result may be an artifact of the scale. However, *post hoc* analyses of data on those *without partners* in our own data from the *Dutch Aging Survey*, revealed significant sex differences in loneliness, with men scoring as lonelier than women,  $t(204) = 2.34, p < .05$ . Similar differences between divorced, widowed, and never-married men and women have also been reported based on data from the LASA study (De Jong Gierveld & Dykstra, 1998). We conclude, therefore, that the similarity of loneliness among the married and cohabiting men and women is not an artifact of the scale, but a valid finding that differs from results of many North American studies (Pinquart & Sörensen, 2001).

## Conclusion

Our findings generally support the predictions that there would be greater similarity between married men and women in late adulthood in The Netherlands, both in sources of social provisions and their impact on loneliness, than is generally found in research on late adulthood in the United States. As Stack and Eshleman (1998) have pointed out, 'research based disproportionately on one nation is in need of replication. Further work is needed to see if the findings will replicate in nations with different institutional and cultural frameworks' (p. 527). Whereas the results in this article are provocative, more direct cross-cultural comparisons are necessary to determine which findings are more universal and which are culture specific when gender differences in social relationships, their provisions, and their influence on wellbeing in different phases of the life cycle are studied.

## REFERENCES

- Acitelli, L. K. (1996). The neglected links between marital support and marital satisfaction. In G. B. Sarason, B. R. Sarason, & I. G. Sarason (Eds.), *Handbook of social support and the family* (pp. 83–103). New York: Plenum Press.
- Acitelli, L. K., & Antonucci, T. C. (1994). Gender differences in the link between marital support and satisfaction in older couples. *Journal of Personality and Social Psychology*, *67*, 688–698.
- Antonucci, T. (1990). Social supports and social relationships. In R. H. Binstock & L. K. George (Eds.), *Handbook of aging and the social sciences* (3rd ed.) (pp. 205–226). San Diego, CA: Academic Press.

- Antonucci, T. (2001). Social relations: An examination of social networks, social support and sense of control. In J. E. Birren, K. W. Schaie, & R. B. Abeles (Eds.), *Handbook of the psychology of aging* (pp. 427–453). San Diego, CA: Academic Press.
- Antonucci, T., & Akiyama, H. (1987). An examination of sex differences in social support among older men and women. *Sex Roles, 17*, 737–749.
- Antonucci, T., Langfahl, E. S., & Akiyama, H. (2004). Relationships as outcomes and contexts. In F. R. Lang & K. L. Fingerman (Eds.), *Growing together: Personal relationships across the life span* (pp. 24–44). Cambridge: Cambridge University Press.
- Bland, J. M., & Altman, D. G. (1995). Multiple significance tests: The Bonferroni method. *British Medical Journal, 310*, 170.
- Briggs, S. R., & Cheek, J. M. (1986). The role of factor analysis in the development and evaluation of personality scales. *Journal of Personality, 54*, 106–148.
- Carstensen, L. L. (1991). Selectivity theory: Social activity in life-span context. *Annual Review of Gerontology and Geriatrics, 11*, 195–217.
- Cutrona, C. E. (1996). *Social support in couples: Marriage as a resource in times of stress*. Thousand Oaks, CA: SAGE Publications.
- Deeg, D. J. H., & Braam, A. W. (1997). Het belang van kwaliteit van leven voor ouderen zelf: Een kwantitatieve benadering. [The importance of quality of life for the elderly: A quantitative approach]. *Medische Antropologie, 9*, 136–149.
- De Jong Gierveld, J., & Dykstra, P. A. (1998). Eenzaam of niet eenzaam? Identificatie van risico-groepen onder oudere mannen en vrouwen. [Lonely or not lonely? Identification of risk groups among older men and women.] In M. I. Broese van Groenou, D. J. H. Deeg, C. P. M. Knipscheer, & G. J. Ligthart (Eds.), *VU-Visies op veroudering*. Amsterdam: Thela Thesis.
- De Jong Gierveld, J., & Kamphuis, F. (1985). The development of a Rasch-type loneliness scale. *Applied Psychological Measurement, 9*, 289–299.
- De Jong-Gierveld, J., & Van Tilburg, T. (1987). The partner as source of social support in problem and non-problem situations. *Journal of Social Behavior and Personality, 2*, 191–200.
- De Jong Gierveld, J., & Van Tilburg, T. (1995). Social relationships, integration and loneliness. In C. P. M. Knipscheer, J. de Jong Gierveld, T. van Tilburg, & P. A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 155–172). Amsterdam: VU University Press.
- De Jong Gierveld, J., & Van Tilburg, T. (1999). *Manual of the loneliness scale*. Amsterdam: Free University.
- Depner, C. E., & Ingersoll-Dayton, B. (1985). Conjugal social support: Patterns in later life. *Journal of Gerontology, 40*, 761–766.
- Dittmann-Kohli, F., Bode, C., & Westerhof, G. J. (Eds.) (2001). *Die zweite Lebenshälfte: Psychologische Perspektiven – Ergebnisse des Alters-survey*. [The second half of life: Psychological perspectives – Findings of the German Aging Survey.] Stuttgart: Kohlhammer.
- Dykstra, P. A. (1993). The differential availability of relationships and the provision and effectiveness of support to older adults. *Journal of Social and Personal Relationships, 10*, 355–370.
- Gallagher, S. K., & Gerstel, N. (1993). Kinkeeping and friend keeping among older women: The effect of marriage. *Gerontologist, 33*, 675–681.
- Gove, W. R., Hughes, M., & Style, C. B. (1983). Does marriage have positive effects on the psychological wellbeing of the individual? *Journal of Health and Social Behavior, 24*, 122–131.
- Gurung, R. A. R., Taylor, S. E., & Seeman, T. E. (2003). Accounting for changes in social support among married older adults: Insights from the MacArthur studies of successful aging. *Psychology and Aging, 18*, 487–496.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Joung, I. M. A., Stronks, K., Van de Mheen, H., Van Poppel, F. W. A., Van der Meer, J. B. W., & Mackenback, J. P. (1997). The contribution of intermediary factors to marital status differences in self-reported health. *Journal of Marriage and the Family, 59*, 476–490.

- Kendig, H., Koyano, W. U., Tatsuto, A., & Takatoshi, A. (1999). Social support of older people in Australia and Japan. *Ageing and Society, 19*, 185–207.
- Kohli, M., & Künemund, H. (Eds.). (2000). *Die zweite Lebenshälfte: Gesellschaftliche Lage und Partizipation im Spiegel des Alters-survey*. [The second half of life: Societal positions and participation – Findings of the German Aging Survey.] Opladen: Leske & Budrich.
- Korporaal, M., M. Broese Van Groenou, & T. Van Tilburg (2005). *Dynamics of support exchanges within the marital relationship in late life*. Manuscript submitted for publication.
- Perlman, D., & Peplau, L. A. (1981). Towards a social psychology of loneliness. In R. Gilmour & S. W. Duck (Eds.), *Personal relationships in disorder* (pp. 31–56). London: Academic Press.
- Pinquant, M. (2003). Loneliness in married, widowed, divorced, and never-married older adults. *Journal of Personal and Social Relationships, 20*, 31–53.
- Pinquant, M., & Sörensen, S. (2001). Influences on loneliness in older adults: A meta-analysis. *Basic and Applied Social Psychology, 23*, 245–266.
- Quirouette, C., & Gold, D. P. (1992). Spousal characteristics as predictors of wellbeing in older couples. *International Journal of Aging and Human Development, 34*, 257–269.
- Rook, K. (1984). The negative side of social interaction: Impact on psychological wellbeing. *Journal of Personality and Social Psychology, 46*, 1097–1108.
- Rook, K. (1987). Social support versus companionship: Effects on life stress, loneliness, and evaluation by others. *Journal of Personality and Social Psychology, 52*, 1132–1147.
- Rook, K. (2003). Exposure and reactivity to negative social exchanges: A preliminary investigation using daily diary data. *Journal of Gerontology: Psychological Sciences, 58B*, P100–P111.
- Ross, C. E. (1995). Reconceptualizing marital status as a continuum of attachment. *Journal of Marriage and the Family, 57*, 129–140.
- Rossi, A. (1993). Intergenerational relations: Gender, norms and behavior. In V. L. Bengtson & U. W. A. Achenbaum (Eds.), *The changing contract across generations* (pp. 191–217). New York: Aldine de Gruyter.
- Scholte, R. H. J., Van Lieshout, C. F. M., & van Aken, M. A. G. (2001). Relational support in adolescence: Factors, types and adjustment. *Journal of Research in Adolescence, 11*, 71–94.
- Stack, S. J., & Eshleman, J. R. (1998). Marital status and happiness: A 17-nation study. *Journal of Marriage and the Family, 60*, 527–536.
- Stevens, N., & Westerhof, G. J. (2006). Marriage, social integration and loneliness in the second half of life: A comparison of Dutch and German men and women. *Research on Aging, 28*, 713–729.
- Steuerink, N., Westerhof, G. J., Bode, C., & Dittmann-Kohli, F. (2001). *Dutch Aging Survey: Onderzoeksdesign en instrumenten*. [Research and design instruments.] Nijmegen: University of Nijmegen, Centre for Psychogerontology.
- Tornstam, L. (1992). Loneliness in marriage. *Journal of Social and Personal Relationships, 9*, 197–217.
- Van Tilburg, T. (1995). Delineation of the social network and differences in network size. In C. P. M. Knipscheer, J. de Jong Gierveld, T. van Tilburg, & P. A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 83–96). Amsterdam: VU University Press.
- van Tilburg, T., Broese van Groenou, M., & Thomese, F. (1995). Flow of support. In C. P. M. Knipscheer, J. de Jong Gierveld, T. van Tilburg, & P. A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 131–154). Amsterdam: VU University Press.
- Walen, H. R., & Lachman, M. E. (2000). Social support and strain from partner, family and friends: Costs and benefits for men and women in adulthood. *Journal of Social and Personal Relationships, 17*, 5–30.
- Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others: Joining, molding, conforming, helping loving* (pp. 17–26). Englewood Cliffs, NJ: Prentice Hall.

**APPENDIX 1**  
**Loneliness Scale items**

---

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

*Source.* De Jong Gierveld and Kamphuis (1985).