

Gender and Marital-History Differences in Emotional and Social Loneliness among Dutch Older Adults*

Pearl A. Dykstra¹ and Jenny de Jong Gierveld^{1, 2}

RÉSUMÉ

Dans cette étude, l'auteur développe la théorie émise par Weiss en 1973 sur les sources de la solitude affective et sociale; il étudie les gratifications asymétriques tirées du mariage, les conflits de loyauté liés au remariage et le choix d'un conjoint, pour comprendre les différences qui existent entre les femmes et les hommes face à la solitude dans le mariage et hors du mariage. Il examine les premiers mariages et remariages, ainsi que les perturbations matrimoniales et le célibat. Les données ($N = 3737$) sont tirées d'un sondage effectué aux Pays-Bas en 1992 sur les conditions de logement et les réseaux sociaux des aînés (NESTOR-LSN). Les antécédents conjugaux influent non seulement sur la solitude affective, mais aussi (au contraire de ce qu'indiquent les conceptualisations théoriques de Weiss) sur la solitude sociale. Les antécédents conjugaux influent davantage sur la solitude affective et sociale des hommes que des femmes. Être marié semble plus essentiel au bien-être affectif des hommes et joue un rôle central dans leurs rapports avec les autres. Les antécédents conjugaux expliquent le mieux les différences notées chez les hommes face à la solitude affective, et l'intégration sociale les différences relevées chez les femmes sur ce plan. Il semblerait que les hommes soient plus enclins à trouver un attachement intime dans le mariage, et que les femmes se protègent de la solitude affective en entretenant des liens étroits avec d'autres personnes. L'impact des antécédents conjugaux face à la solitude sociale dépendent pour une large part de l'intégration sociale, et s'expriment, en partie, de façon différente chez les hommes et chez les femmes. La sociabilité des hommes consiste à participer à des activités en dehors du foyer, tandis que celle des femmes passe davantage par leur rôle de mère.

ABSTRACT

In this study, Weiss's (1973) theorizing about the sources of *emotional* and *social loneliness* is elaborated – with notions about the asymmetric gratifications derived from marriage, about the conflicting loyalties that result from remarriage, and about selection into marriage – in order to reach an understanding of gender differences in loneliness, both in and outside of marriage. First and subsequent marriages are considered, as well as marital disruptions and never marrying. The data ($N = 3737$) are from the 1992 Dutch survey on older adults' living arrangements and social networks (NESTOR-LSN). Marital-history differences emerge, not only for emotional loneliness, but also (and contrary to Weiss's theoretical conceptualizations) for social loneliness. The marital-history differences in emotional and social loneliness are greater among men than women. For men, the marriage bond appears not only to be more central to emotional well-being than is the case for women but also to play a pivotal role in their involvement with others. Marital history offers the best explanation for differences in emotional loneliness among men, but social embeddedness characteristics also account for differences in emotional loneliness among women. Apparently, whereas men are more likely to find an intimate attachment in marriage, women also find protection from emotional loneliness in other close ties. The marital-history differences in social loneliness are largely mediated by social embeddedness characteristics, partly in different ways for men and women. Involvement in activities outside the home serves as the context for sociability for men, whereas parenthood plays a more important role in women's social engagements.

1 Netherlands Interdisciplinary Demographic Institute (NIDI), The Hague

2 Netherlands Institute for Advanced Study in the Humanities and Social Sciences (NIAS), Wassenaar

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Pearl A. Dykstra
NIDI, Postbox 11650
2502 AR Den Haag
The Netherlands
(dykstra@nidi.nl)

In 1973 Weiss introduced a situational theory of loneliness, in response to earlier work that had focused largely on personological determinants of loneliness. According to Weiss's theory, loneliness is attributable to specific relational deficits. He distinguished between the loneliness of emotional isolation, which arises in situations where an intimate attachment is lacking, and the loneliness of social isolation, which stems from situations where there is no engaging social network. *Emotional loneliness* is characterized by feelings of desolation, anxiety, and insecurity; whereas *social loneliness* is characterized by feelings of aimlessness, boredom, and exclusion. In Weiss's view, individuals are most likely to find an intimate attachment in marriage, although other kinds of close and exclusive relationships can prevent people from feeling emotionally lonely. Marriage is no safeguard against social loneliness, however. Protection from social loneliness comes from involvement in a network of friends and acquaintances. Weiss emphasizes the uniqueness of relational provisions: "The provisions of social integration are distinct from those of attachment in that neither can be substituted for the other" (Weiss, 1973, p. 148).

In this study we want to add to Weiss's work by looking more closely at the linkages between marriage and loneliness. Firstly, Weiss paid little attention to the socially integrative functions of marriage. We argue that marriage not only serves to protect individuals from emotional loneliness but also makes them less vulnerable to social loneliness, because marriage provides access to a wider circle of family members and friends and because much social activity takes place on a couple-companionate basis. For that reason, we will examine both emotional and social loneliness in relation to marriage. Secondly, Weiss focused on differences between the married and the non-married, largely overlooking differences within the two groups. In our view, it is not just the current presence or absence of a spouse that counts; information about the past should also be considered. A better understanding of the causes of loneliness is gained by taking people's marital history into account. Have they always been single? Are they in a first or a subsequent marriage? Thirdly, there is little discussion of gender in Weiss's work. Notions about the asymmetric gratifications derived from marriage, about the conflicting

loyalties that result from remarriage, and about selection into marriage, give reason to believe that, in and outside of marriage, men and women may be differentially vulnerable to loneliness. By jointly considering gender and marital history, we will examine whether the sources, and therefore the manifestations, of loneliness differ between men and women.

We focus on older adults. As people advance in age, they are more and more likely to outlive peers and to lose their spouses by death, experiences known to contribute to loneliness (de Jong Gierveld & van Tilburg, 1995; de Jong Gierveld, 1998). Moreover, concentrating on persons at the tail end of the life course affords an opportunity to study a comprehensive set of marital-history outcomes.

Hypotheses

We start by exploring differences between married and non-married men and women. Next, we consider differences among the married, looking at men and women in first and in subsequent marriages. Finally, we discuss differences among the non-married, distinguishing among never married, divorced, and widowed men and women. Each time, marital-history differences in loneliness are discussed first. Subsequently, variations by gender are considered. Table 1 provides a summary of the expected differences in emotional and social loneliness.

Married vs. Non-married

Following Weiss, we expect to find emotional loneliness primarily among older adults who are not married because they are less likely to have an intimate attachment than the married. Again following Weiss, we expect social loneliness to be more common among people who are not well embedded socially, that is to say, among people who have relatively few ties with relatives, colleagues, friends, neighbours, and so on. We assume that the negative correlation between social embeddedness and social loneliness applies to both the non-married and the married. Having said that, there may be an indirect relationship between marital status and social loneliness, given that single older adults tend to have smaller networks than those who are married (van Tilburg, 1995).¹

Table 1: Expected differences in mean levels of loneliness by marital history and gender

Mechanism	Emotional Loneliness	Social Loneliness
Married^a vs. Non-married		
Absence of intimate attachment	married < non-married	married = non-married
Asymmetric gratifications from marriage	married men < married women non-married men > non-married women	married men = women non-married men > non-married women
First vs. Subsequent Marriage		
Remarriage as stressful event	in first marriage < remarried	—
Remarriage as expansion of network	—	in first marriage > remarried
Conflicting loyalties through remarriage	—	in first marriage < remarried remarried men < remarried women
Differences among Non-married:		
Stability in life	never married < divorced / widowed	never married < divorced / widowed
Selection into marriage	never-married men > never-married women	never-married men > never-married women
Nature of losses suffered	divorced < widowed	divorced > widowed

a *Married* includes those in both first and subsequent marriages.

Our basic premise is that gender differences in loneliness are linked with the differential provisions of marriage for men and women. In other words, we will be examining the ways in which “his” marriage differs from “hers” – to adopt Bernard’s (1972) phrase – in providing protection against loneliness in old age. There is a large body of research suggesting that men and women derive *asymmetric* emotional and social gratifications from marriage (Antonucci, 1994; Bernard, 1972; Gove, Style, & Hughes, 1990; Thomson & Walker, 1989), providing arguments for assuming gender differences in emotional and social loneliness by marital status. In marriage, women do more of the “relationship work” than men do. The pattern that emerges from the literature is that wives more often serve as sounding boards for their husbands’ disclosures than vice versa, and wives tend to be the ones who organize and manage the social agenda of the couple. For example, men more often report that they rely on their wives for confidant support than women report relying on their husbands (Antonucci & Akiyama, 1987; Lowenthal & Haven, 1968; Rubin, 1983). In marriage, women often adopt the role of *kinkeeper* (Rosenthal, 1985) or social secretary, organizing family get-togethers and social events with friends and neighbours and keeping the husband informed about the ups and downs of the various members of the social network.

One point of view is that women develop greater skills in attentiveness, disclosure, and empathy to compensate for their lack of material power and social

privilege (Hochschild, 1983). Linked with this perspective is the functionalist view that task specialization contributes to stability in marriage (Parsons, 1955; Becker, 1991): Husbands perform the instrumental functions because they tend to do them best, whereas wives engage in the expressive or nurturing functions because that is where their expertise lies. Chodorow (1978), combining insights from psychodynamics and gender stratification, focuses on gender differences in needs and capacities for intimacy. Her argument is that in order to develop an independent sense of self, boys must separate themselves from their mothers and suppress desires for intimacy, while girls can continue to identify with their mothers, keeping strong needs for intimacy and attachment. As adults, men achieve the return to the mother–infant bond in an exclusive heterosexual relationship. Women, according to Chodorow, have more complex internal lives than do men and more complex affective needs, in which “an exclusive relationship to a man is not enough” (p. 199).

The notion of women being more open to relational needs suggests that, in marriage, men are more likely to find emotional fulfilment than are women. Men’s greater orientation towards an exclusive partner relationship for the fulfilment of emotional needs implies that, outside of marriage, men are more likely to have unmet affective needs. For that reason, we expect to find lower levels of emotional loneliness among married men than among married women but higher levels of emotional loneliness among single men than

among single women. Note, however, that among both men and women, we expect to find that the married are less emotionally lonely than the non-married. The notion of kinkeeping women suggests that, as long as men are married, they can depend upon their wives for the maintenance of ties with social network members and thus for protection against social loneliness. In other words, whereas we do not expect gender differences in social loneliness among the married, we do expect to find them among the non-married. More specifically, we expect to find higher levels of social loneliness among single men than among single women. In line with what was described earlier for marital-status differences in social loneliness, we expect that gender differences in social loneliness will be mediated by social network differences. In other words, once differences in the number, range, and quality of ties to others are taken into account, there should be no gender differences in social loneliness.

First vs. Subsequent Marriage

A second marriage tends to be a more complex transition than marrying for the first time. From a life history perspective, the individual carries more emotional baggage into the relationship – the feelings, both positive and negative, surrounding the loss of a loved one or the disruption of an intimate relationship. From a social network perspective, remarriage means that previously separate family networks are brought together, resulting in an expansion of ties and requiring the negotiation of respective loyalties, responsibilities, and obligations. In other recent work, remarriage has been characterized as a *stressful* event (Henry & Lovelace, 1995). For members of the new household, it is stressful because new routines, shared activities, and rules must be developed. Remarriage may be particularly stressful in late life because old habits and behavioural patterns acquired over many years must be accommodated to the lifestyle of the other partner (de Jong Gierveld, 2001).

On the basis of the preceding considerations, we predict differences in emotional loneliness between older adults in first marriages and those in second marriages. More specifically, given the notion of remarriage as a stressful event, we expect to find lower levels of emotional loneliness among those in first marriages than among the remarried. Assuming that in due time those who enter a new marriage manage to establish mutually acceptable living routines, we predict higher levels of emotional loneliness among the more recently remarried than among those who remarried a longer time ago.

It is difficult to say in advance what the nature of differences in social loneliness between the remarried

and those in first marriages is likely to be. On the one hand, remarriage is likely to result in an *expansion* of the social network and thus provide greater opportunities for socializing, exchanging support, and developing a sense of belonging. On the basis of this consideration, one would expect to find higher levels of social loneliness among those in first marriages than among the remarried. On the other hand, the complex of biological and stepfamily ties may be the source of insecurity about allegiances and *conflicting loyalties*, resulting in a sense of detachment. On the basis of this consideration, one would expect to find lower levels of social loneliness among those in first marriages than among the remarried. We shall, therefore, refrain from making a general prediction about differences in social loneliness between older adults in first and in subsequent marriages, presenting two competing predictions instead.

As was the case for older adults in first marriages, we expect to find lower levels of emotional loneliness among remarried men than among remarried women. This prediction follows from the presumed asymmetry in capacities and needs for intimacy and attachment, which implies that men are more likely than are women to find emotional fulfilment in exclusive, heterosexual relationships.

We come to competing predictions regarding gender differences in social loneliness among the remarried. The argument that there are asymmetric gratifications from marriage leads us to expect that, as there were no differences in social loneliness between married men and women, there will be no differences in social loneliness between remarried men and women. The underlying assumption is that women's role as kinkeeper and social secretary does not differ between first and subsequent marriages. However, the argument that remarriage results in conflicting loyalties does lead us to expect gender differences. Presumably, women are more sensitive than men to the way remarrying can affect relationships with friends and family members – with children, in particular. Remarriage is likely to mean there is less undivided time, energy, and attention available for those other than the partner, which may give rise to feelings of frustration and concern. Such feelings are more likely to plague remarried women than their male counterparts. As Antonucci (1994) has pointed out, women appear more likely to be made vulnerable by or burdened by their close ties. Close ties can be an invaluable source of support, but they can also represent cumulative and numerous demands for attention. "In reality, it may be more accurate to say that women are both advantaged and disadvantaged by their numerous and close ties" (p. 263). On the basis of the conflicting loyalties argument, we expect to find lower

levels of social loneliness among remarried men than among remarried women.

Never Married vs. Divorced vs. Widowed

The lives of never-married older adults are characterized by greater stability than are the lives of those who have experienced divorce or widowhood. They are long accustomed to being on their own and to fending for themselves. Research findings consistently show that never-married older adults tend to be less lonely than formerly married singles (Dykstra, 1995; Essex & Nam, 1987; Peters & Liefbroer, 1997). One explanation is that they have had fewer experiences of grief, anger, disappointment, and desolation (Gubrium, 1974), implying that they should have lower levels of emotional loneliness than the divorced and widowed. Another is that, in the course of their lives, the never married have become highly self-reliant (de Jong Gierveld, 1969) and that they have developed more intensive relationships with siblings, friends, and colleagues (Dykstra, 1993). The latter suggests that the never married should generally be less socially lonely than the divorced or widowed.

We expect that the lower levels of emotional and social loneliness of the never married in comparison to the formerly married will be observed among both men and women. Nevertheless, among the never married we expect to find lower levels of emotional and social loneliness for women than for men, on the grounds of differential *selection* into marriage. Women tend to marry “upward” – that is, they find marriage partners with a social status greater than their own – while men tend to marry “downward” (Bernard, 1972). Those who remain unmarried tend to be high-resource females and low-resource males. Given their greater resourcefulness – in terms of educational attainment, income, and social and interpersonal skills – we predict that never-married women will generally be less emotionally and socially lonely than never-married men.

The loss of partner support is common to divorce and widowhood. In that sense, both transitions contribute to a greater likelihood of psychological problems (Gove & Shin, 1989). However, there are also differences between the two transitions as regards the nature of the *losses* suffered. Divorce marks the end of a relationship that no longer brings pleasure and is the source of conflict. Widowhood often means the end of a longstanding relationship that was characterized by feelings of affection and warmth. It is not unlikely that the loss is felt more deeply in the latter case. For that reason, we assume that divorce leads to lower levels of emotional loneliness than does widowhood. As regards social loneliness, we expect the opposite: higher levels among the divorced than

among the widowed. The underlying assumption is that divorce leads to greater social losses than does widowhood. Research has shown, for example, that whereas, in the event of bereavement, friends and family actively join forces – at least during the period of mourning – to help, comfort, and assist the person who has suffered the loss (Stevens, 1989), in the event of a marital break up, they feel pressured to side with one of the partners (Broese van Groenou, 1991; Milardo, 1987; Rands, 1988). That is why divorce leads to greater disruptions in the social network than does widowhood. Another reason why divorce may be more consequential than widowhood pertains to socially shared expectations about the life course. Divorce is not part of the “normal expectable” life script (Neugarten, 1969); widowhood – at least in late life – is. People who enter into an exclusive partnership do not expect it to be dissolved by divorce, whereas, with advancing age, the loss of the partner by death becomes part of the expectations for the further course of life. Deviations from the “normal expectable” life script tend to have negative consequences (de Jong Gierveld & Dykstra, 1994). Those experiencing unexpected transitions are in a deviant position relative to their peers, a situation accompanied by feelings of marginalization and social exclusion. We expect that the lower levels of emotional loneliness and the higher levels of social loneliness of the divorced in comparison to the formerly married will be observed among both men and women.

Design of the Study

Source of Data

The data used for this analysis were collected as part of a 1992 Dutch study titled “Living Arrangements and Social Networks of Older Adults” (NESTOR-LSN) (see Knipscheer, de Jong Gierveld, van Tilburg, & Dykstra, 1995). Interviews were held with 4,494 men and women aged 55 to 89 (birth cohorts 1903–1937). Respondents were obtained by drawing samples from the population registers of 11 municipalities in three regions of the Netherlands: the city of Amsterdam and two rural communities in the western part of the country, one city and four rural communities in the northeastern part, and one city and two rural communities in the south. The regions and municipalities were selected to make the sample as representative as possible of the Dutch population above the age of 55. To facilitate comparisons across age groups and between males and females, the sample was stratified according to sex and year of birth, and approximately equal numbers of men and women within each 5-year cohort from 55 to 89 were drawn from the population registers. Older adults in private households as well as institutions were

included in the sample. The overall response rate was 61.7 per cent, which is comparable to response rates for the general population in the Netherlands in surveys conducted by the Dutch Central Bureau of Statistics (de Heer, 1992). More detailed information on data collection and non-response can be found in Broese van Groenou, van Tilburg, de Leeuw, and Liefbroer (1995).

Respondents were interviewed in their homes using CAPI (computer-assisted personal interviewing) techniques. On the average, the interviews lasted 1 hr 37 min. Questions were posed on a wide variety of topics, including life histories, social networks, supportive exchanges, organization memberships, and physical and psychological well-being. The analyses were based on the 3,737 respondents for whom full marital history and loneliness data were available and who were not in so-called "alternative" partnerships, such as unmarried cohabitation or living apart together (LAT) relationships at the time of the interview (less than 3% of the sample). Alternative partnerships are considered in separate papers (de Jong Gierveld, 2001; Dykstra, 2004).

Measures

Loneliness

Two separate scales were constructed for social and emotional loneliness, with the aid of the loneliness-measuring instrument developed by de Jong Gierveld and Kamphuis (1985). This instrument consists of 11 items, none of which uses the word *loneliness*. The 6 negatively formulated items express feelings of desolation and of missing an attachment relationship. An example of such an item is "I often feel rejected". The 5 positively formulated items express feelings of social embeddedness, a sense of belonging. For example, "There are plenty of people I can lean on when I

have problems." The answer categories are *yes, more or less*, and *no*. The scores on the positive items are reversed. The de Jong Gierveld loneliness scale was designed not to assess types of loneliness but rather to measure the severity of feelings of loneliness. The items were, however, developed with Weiss's distinction in mind. The aim was to construct a unidimensional measure, and the loneliness scale as a whole is moderately, yet sufficiently, homogeneous.

As Perlman (1987) has pointed out, the categories of emotional and social loneliness may at times overlap, and this could be one of the reasons why the 11 de Jong Gierveld loneliness items fit one underlying continuum. DiTomasso and Spinner (1993), who developed the "social and emotional loneliness scale for adults" (SELSA), also argue that social and emotional loneliness have a common core. Their subscales showed moderately sized intercorrelations (r s between 0.21 and 0.50).

The MOKKEN procedure for the 11 de Jong Gierveld items yields two subscales: one scale with the positive items and one with the negative items. Since the two scales are closely related ($r = 0.42$), we decided to construct two scales, based on scores provided by an orthogonal factor analysis. The first factor was called *emotional loneliness*, with scores ranging from -1.5 to 3.7; the scores of the second factor, *social loneliness*, ranged from -1.5 to 3.8. Note that the distinction between social and emotional loneliness coincides with the distinction between the positively and the negatively formulated items (see Table 2). We cannot exclude the possibility that the results tell us less about social and emotional loneliness than about negative and positive attitudes towards personal relationships. Examining the content of the items, however, provides a certain level of confidence in the distinction.

Table 2: Factor scores for items assessing social and emotional loneliness (Varimaxrotation; N = 3,737)

Item	Factor 1	Factor 2
Emotional Loneliness		
I miss having a really close friend.	0.63	0.22
I experience a general sense of emptiness.	0.80	0.07
I miss the pleasure of the company of others.	0.83	0.11
I find my circle of friends and acquaintances too limited.	0.61	0.34
I miss having people around.	0.82	0.09
I often feel rejected.	0.56	0.27
Social Loneliness		
There is always someone I can talk to about my day-to-day problems.	0.16	0.56
There are plenty of people I can lean on when I have problems.	0.13	0.75
There are many people I can trust completely.	0.15	0.75
There are enough people I feel close to.	0.21	0.72
I can call on my friends whenever I need them.	0.14	0.71
R^2 (%)	28.92	24.86

Marital History

We expected to find substantial differences in emotional and social loneliness by marital history. NES-TOR-LSN has complete information on the year and month in which marital and non-marital unions started and ended and on the type of union dissolution. Respondents are categorized into seven mutually exclusive marital-history categories, with three pertaining to the officially married (in first marriage, remarried after divorce and remarried after widowhood) and four pertaining to the single (never married; divorced; widowed early – i.e., before the age of 60 for women and the age of 65 for men; and widowed late). The most recent type of marital disruption is used to categorize respondents who have experienced both divorce and widowhood.

Social Embeddedness

Presumably, differences in social loneliness are attributable to the number, range, and quality of ties to others. The first indicator of older adults' social embeddedness is network size. Members of the social network were identified through a so-called "domain contact approach" (see van Tilburg, 1995, for details). Seven relationship domains were specified: household members; children and their partners; other kin; neighbours; colleagues; organizational contacts; and others. For each domain, the respondent was requested to specify the names of those with whom they were "in touch regularly" and who were "important" to them. The definitions of "regular contact" and "important" were left to the respondents. Only people above the age of 18 were eligible as network members. The size of the social networks ranged from 0 to 71. Four measures assessed the quality of the social network: mean emotional support (i.e., sharing personal experiences and feelings) *received* across all relationships in the social network, mean emotional support *given* across all relationships in the social network, mean instrumental support (i.e., helping with daily chores in and around the house, such as meal preparation, house cleaning, transportation, small repairs, and filling in forms) *received* across all relationships in the social network, and mean instrumental support *given* across all relationships in the social network. Scores for each support variable ranged from 0 to 3. A measure assessing the frequency of contact with children was also included. It is a dichotomous variable, contrasting those who had weekly contact with at least one child with those who interacted with their children less often. Older adults without living children were identified via a separate variable. Finally, several measures for community involvement were used: active membership in voluntary organizations (*no/yes*), active participation in volunteer work (*no/*

yes), and weekly attendance at religious services (*no/yes*).

Controls

Age, health, and socio-economic status served as control variables. The analyses included three assessments of health. The first was an indicator of functional capacity: the sum-score of the responses to four items enquiring into difficulties in performing personal activities of daily living (walking up and down stairs, walking for five minutes without resting, getting up from and sitting down in a chair, dressing and undressing). Scale scores ranged from 4 (no ADL-capacity) to 20 (full ADL-capacity). The second was an indicator of vision: the ability to read and the ability to see at a distance, taking into account the possible use of glasses. Scores range from 2 (poor vision) to 8 (good vision). The third was an indicator of the ability to hear the other person in a private conversation, taking into account the possible use of a hearing aid, with scores ranging from 1 (not at all) to 4 (good hearing). The first indicator of socio-economic status was educational attainment, as measured by the level of schooling implicit in the number of years of school attendance; the number of years ranged from 5 (incomplete elementary education) to 18 (university education). The second was monthly net household income. Income categories were converted into an interval scale by assigning the median income value for each income category to individuals in that grouping. In order to make the household incomes of those who lived alone comparable to those of older adults co-residing with a spouse, a family equivalence factor was used. The monthly incomes of the married were multiplied by a factor of 0.7, in accordance with research conducted by Schiepers (1988). One should note that these data provided only an approximation of differences in household income. The missing cases for household income were recoded using mean substitution for the sex/marital-history groups.

Descriptive information on the explanatory variables incorporated into the analyses is provided in Table 3.

Results

Tests for mean differences in loneliness reveal that men tend to be less emotionally lonely than women ($t_{(3735)} = -7.9$, $p < 0.001$) and more socially lonely ($t_{(3735)} = 6.0$, $p < 0.001$). The mean scores for emotional loneliness were -0.13 and 0.12 for men and women, respectively. For social loneliness, they were 0.09 and -0.10. The overall gender difference in emotional and social loneliness masked differences within the two groups. Table 4 shows scores for emotional and social loneliness, for men and women, in the 7 marital-history categories.

Table 3: Descriptive characteristics of the men (N = 1,800) and women (N = 1,937) in the sample

Descriptive Characteristics	Men	Women	<i>t</i>
Age (54–89)	72.5	71.9	2.0*
Functional capacity (4–20)	18.9	18.4	6.3***
Vision (2–8)	7.6	7.4	7.3***
Hearing (1–4)	3.6	3.8	-3.4***
Education (5–18 years)	9.3	7.9	13.3***
Income (f 1125 – f 5750) ^a	1,989	1,795	7.3***
Network size (0–71)	12.8	13.0	-0.4
Mean emotional support received (0–3)	1.4	1.6	-6.7***
Mean emotional support given (0–3)	1.3	1.5	-8.6***
Mean instrumental support received (0–3)	0.7	0.7	1.0
Mean instrumental support given (0–3)	0.6	0.4	8.7***
Weekly contact with children (no/yes)	78.6	78.3	0.3
Childless (no/yes)	12.8	15.7	-2.6**
Active member voluntary association (no/yes)	53.1	50.5	1.6
Works as volunteer (no/yes)	30.7	22.8	5.6***
Weekly church attendance (no/yes)	36.0	41.1	-3.0**

a Income is measured in Dutch guilders (florins). One guilder is approximately \$ 0.70 CDN.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 4: Mean loneliness scores by marital history of older men (N = 1,800) and women (N = 1,937)

Marital History	Total Population		Emotional Loneliness (-1.5–3.7)			Social Loneliness (-1.5–3.8)		
	Men (N)	Women (N)	Men (M)	Women (M)	<i>t</i>	Men (M)	Women (M)	<i>t</i>
Married								
In first marriage	1,279	881	-0.37	-0.21	-5.0***	0.02	-0.16	5.0***
Remarried after divorce	59	27	-0.42	0.11	-2.2*	0.67	0.12	2.2*
Remarried after widowhood	65	21	-0.43	0.18	-2.4*	0.02	0.29	-0.9
Non-married								
Never married	91	116	0.23	-0.12	2.4*	0.55	0.06	3.0**
Divorced	46	101	0.27	0.38	-0.5	0.72	0.16	2.3*
Widowed early	79	396	0.76	0.37	2.9**	-0.09	-0.05	-0.3
Widowed late	181	395	0.92	0.61	2.8**	0.01	-0.11	1.2

Higher positive numbers reflect greater loneliness.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

The findings for emotional loneliness are discussed first. In marriage, men were less emotionally lonely than are women. This observation, which held for both first and subsequent marriages, is in accordance with the asymmetric-gratification-from-marriage prediction that men are more likely to find fulfilment of their emotional needs in marriage than are women. We had predicted gender differences in emotional loneliness among the non-married, with men generally more emotionally lonely than women. The underlying notion was that, outside of marriage, men are more likely to have unmet emotional needs because of their

greater inclination towards an exclusive partner relationship. The findings for the never married and the widowed were consistent with that prediction; those for the divorced were not. Among the divorced, there was no gender difference in emotional loneliness. We should note that the gender difference among the never married was also consistent with Bernard's (1972) theorizing about differential selection into marriage. The married were generally less emotionally lonely than those who were single ($t_{(3735)} = 22.3$, $p < 0.001$), a finding that is consistent with Weiss's

(1973) theoretical conceptualizations about the lack of an intimate attachment.

Consistent differences in social loneliness between the married and the non-married were not observed ($t_{(3735)} = 1.6, p > 0.10$), a finding that is in agreement with Weiss's argument that social loneliness is attributable to deficits in the wider social network and not to the absence of an attachment figure. Contrary to expectations, we found that men in first marriages were more socially lonely than women in first marriages. Our assumption had been, based on the notion of asymmetric gratifications, that, in marriage – be it a first or a subsequent marriage – there would be no gender differences in social loneliness because men could depend upon their wives for the maintenance of ties with social network members. Among the remarried, there was no consistent gender difference in social loneliness. Men who remarried after divorce were generally more socially lonely than their female counterparts, whereas there was no difference in social loneliness between men and women who remarried after widowhood. These results underscore the necessity of unravelling the effects of remarriage from those of the preceding marital disruption (which is done in the multivariate analyses).

Among the never married and those who remained single after divorce, Table 4 also shows higher levels of social loneliness for men than for women. This pattern is as expected: presumably, single women are better equipped to organize and manage social agendas than are their male counterparts. Contrary to expectations, there was no gender difference in social loneliness among the widowed who remained single. The findings for the never married were also consistent with the notion of differential selection of men and women into marriage.

The results of multivariate regression analyses for emotional loneliness are reported in Table 5; and for social loneliness, in Table 6. The analyses were carried out separately for men and women to find out whether the sources of loneliness differed between the two groups. Identical procedures were used for the two types of loneliness. In Model 1, marriage-history characteristics were entered into the regression equation, distinguishing those with stable marital statuses over the course of their adult lives (i.e., the never married and those in first marriages) from those who had experienced either divorce or widowhood. This procedure provided insight into whether undergoing a transition in marital status was more consequential

for well-being than the mere presence or absence of a spouse (cf., Chipperfield & Havens, 2001). Model 2 incorporates measures of the current marital status, distinguishing those in first marriages from the remarried and the non-married. Model 3 introduces social embeddedness characteristics. Controls for age, health, and socio-economic status were incorporated at each step.

As the results for Model 1 in Table 5 show, marital disruption was associated with higher levels of emotional loneliness. The pattern of findings was similar for men and women. Respondents who had experienced divorce or widowhood tended to be more emotionally lonely than those who had not gone through such an experience. The effects for widowhood were greater than those for divorce, a finding that is consistent with the view that the emotional losses accompanying widowhood are felt more deeply than those brought on by divorce. The results for Model 2 show clear differences between men and women. Whereas current marital status bore no relation to the emotional loneliness of women, it was strongly associated with men's emotional loneliness. Taking marital disruptions into account, remarried men were shown to be less lonely than men in first marriages, whereas single men were significantly more lonely. The relatively low level of emotional loneliness among remarried men is contrary to the idea that remarriage, as a stressful event, gives rise to higher levels of emotional loneliness. In a separate analysis, we put the notion of widowhood as a stressful event to a closer test. More specifically, we examined whether the levels of emotional loneliness were higher among the recently remarried than among those who had remarried a longer time ago. Though the correlation between the time that had passed since remarriage and emotional loneliness was in the predicted direction, it was not significant: $r = -0.05, n = 124, p > 0.10$ for remarried men; and $r = -0.21, n = 48, p > 0.10$ for remarried women. The results for Model 3 also show clear differences between men and women. Among men, there was no association between emotional loneliness and social embeddedness. Among women, however, emotional loneliness was inversely related to network size, instrumental support given to others, weekly contact with children, childlessness, and weekly church attendance. Here, we seem to have evidence for women's orientation towards a wider range of relationships for the fulfilment of emotional needs.

Table 5: Determinants of emotional loneliness (standardized regression coefficients)

	Men (N = 1,800)			Women (N = 1,937)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Marital History						
Ever divorced	0.05*	0.08*	0.10**	0.11***	0.10**	0.09*
Ever widowed (vs. no change)	0.36***	0.27***	0.29***	0.30***	0.25***	0.27***
Marital Status						
Remarried		-0.15***	-0.17***		-0.02	-0.03
Single (vs. in first marriage)		0.23***	0.20***		0.07	0.05
Social Embeddedness						
Network size			-0.01			-0.07**
Emotional support, received			-0.02			-0.02
Emotional support, given			-0.02			0.03
Instrumental support, received			0.04			-0.02
Instrumental support, given			-0.03			-0.05*
Weekly contact with children			-0.04			-0.17***
No living children			-0.01			-0.12**
Active in voluntary associations			0.04			-0.00
Active in volunteer work			0.01			-0.01
Church attendance			0.00			-0.05*
Controls						
Age	0.04	0.03	0.02	-0.08**	-0.09**	-0.13***
Functional capacity	-0.13***	-0.10***	-0.10***	-0.08**	-0.09***	-0.08**
Eyesight	-0.06**	-0.05*	-0.05*	-0.08***	-0.08***	-0.08**
Hearing	0.01	0.00	0.00	-0.11***	-0.11***	-0.10***
Education	-0.01	0.01	0.01	-0.02	-0.03	-0.03
Income	-0.03	-0.04	-0.03	-0.01	-0.01	-0.01
R ² (adjusted)	0.19***	0.26***	0.26***	0.13***	0.13***	0.15***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ **Table 6: Determinants of social loneliness (standardized regression coefficients)**

	Men (N = 1,800)			Women (N = 1,937)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Marital History						
Ever divorced	0.15***	0.09**	0.04	0.07**	0.02	0.03
Ever widowed (vs. no change)	-0.06*	-0.05	-0.05**	-0.03	-0.03	0.00
Marital Status						
Remarried		0.04	0.04		0.06*	0.01
Single		0.18***	0.07***		0.08*	0.00

Table 6 cont.

(vs. in first marriage)

Social Embeddedness

Network size			-0.23***			-0.25**
Emotional support, received			-0.08**			-0.03
Emotional support, given			-0.07*			-0.15***
Instrumental support, received			-0.06**			-0.03
Instrumental support, given			0.02			0.03
Weekly contact with children			-0.05			-0.17***
No living children			-0.01			-0.09*
Active in voluntary associations			-0.07**			0.00
Active in volunteer work			-0.03			-0.02
Church attendance			-0.09***			-0.09***

Controls

Age	0.15***	0.15***	0.08**	0.02	0.02	-0.06
Functional capacity	-0.04	-0.03	-0.00	-0.16***	-0.16***	-0.15***
Eyesight	-0.04	-0.03	-0.03	-0.04	-0.04	-0.03
Hearing	-0.04	-0.05*	-0.04	-0.04	-0.04	-0.04
Education	0.00	0.00	0.04	-0.01	-0.02	-0.01
Income	-0.02	-0.02	-0.01	-0.01	-0.02	0.01
R ² (adjusted)	0.05***	0.06***	0.17***	0.04***	0.04***	0.17***
R ² -change	0.05***	0.01***	0.11***	0.04***	0.00	0.13***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

The results for Model 1 in Table 6 indicate that divorce was associated with higher levels of social loneliness. Though this association was found among both men and women, it was stronger for the former. Model 1 also shows that widowhood was inversely associated with social loneliness among men. In interpreting this result, it is important to keep in mind that the reference group consisted of men in first marriages (who tend to have relatively low levels of social loneliness), as well as never-married men (who tend to have relatively high levels of social loneliness). With the introduction of marital status in Model 2, the results for men show that the coefficient for widowhood lost significance, whereas the coefficient for divorce decreased in size but remained significant. Among women, the coefficient for divorce was no longer significant in Model 2. The findings suggest that current marital status was a more important determinant of differences in social loneliness among men and women than were past marital disruptions. The results also show that the differences in social loneliness by marital status were greater among men than women. Model 3 further reduced the size of the coefficient

for divorce among men; the differences by divorce became insignificant. For both men and women, the coefficients for remarriage and being single decreased in size after characteristics of older adults' social embeddedness were introduced into the analysis. Among men, the coefficient for singlehood remained significant, whereas both coefficients lost significance in the analysis of women's social loneliness. The findings for Model 3 suggest that marital status differences in social loneliness are largely attributable to older adults' involvements with social network members and in the community. Striking parallels, but also a number of differences, between men and women emerged in Model 3. Among both men and women, social loneliness was inversely related to the number of social network members, to supportive exchanges, and to weekly church attendance. Active participation in voluntary organizations made men less vulnerable to social loneliness; but among women, no significant differences as a result of active membership were observed. Parenthood was a determinant of women's social loneliness, but not of men's. Women who interacted with one or more of

their children on at least a weekly basis were generally less socially lonely than those who did not. Childless women also tended to be less socially lonely than those who did not interact with their children frequently.

Discussion

In this study, Weiss's (1973) theorizing about the sources of emotional and social loneliness was elaborated with several theoretical notions to reach an understanding of gender and marital-history differences in loneliness. We did not stop after having confirmed that, among both men and women, emotional loneliness was strongly linked to the absence of an intimate attachment whereas social loneliness was strongly linked to deficits in the wider circle of personal and community ties. Rather, we drew upon the literature to identify when men and women in different marital-history categories might be differentially vulnerable to emotional and social loneliness.

The first set of predictions was based on the notion that men and women have *asymmetric* relationship needs and capacities. In marriage women do most of the relationship work. Concomitantly, we predicted that wives, being more open to the husband's affective needs than vice versa, would be more emotionally lonely than men. The findings – for both first and subsequent marriages – were in line with this prediction. We also predicted that with wives organizing the couple's social agenda, there would be no differences in social loneliness between married men and women. This prediction was not borne out by the data: Married men – and more specifically, those in first marriages and those who remarried after divorce – were more socially lonely than their female counterparts.

Given their strong orientation toward a heterosexual partner relationship, men were assumed to have greater difficulty finding fulfilment of their relational needs outside of marriage than women. Support for the prediction that non-married men would be more emotionally lonely than non-married women was found for the never married and widowed, but not for the divorced. We also expected higher levels of social loneliness among non-married men compared to non-married women. The findings for the never married and divorced were consistent with this prediction. However, no gender differences in emotional loneliness were observed among the widowed.

The notion of remarriage as a *stressful* event served as the basis for predicting higher levels of emotional loneliness among the remarried in comparison to older adults in first marriages. The prediction was not supported by the data. Among women, there were no

differences in emotional loneliness between those in first and those in subsequent marriages. Among men, those in first marriages were more, rather than less, emotionally lonely than those in subsequent marriages. The lack of support for the notion of remarriage as a stressful event might be attributable to the specific characteristics of the remarried in our sample. Many had entered their second and third marriages a long time ago. On average, it was over 22 years since the wedding. It is not unlikely that remarriage is particularly stressful during the first years. Presumably, the remarried men and women in our sample had resolved the tensions and pressures of the first years – if there were any. Moreover, the remarriages in our sample were “surviving” marriages, implying that they were successful and were a source of satisfaction rather than stress for the partners. This appears to have been particularly so for the men in our sample.

There were competing predictions regarding the consequences of remarriage for social loneliness. One prediction, based on the notion of remarriage as resulting in an *expansion* of the social network and thus more sources of companionship and belonging, was that the remarried would be less socially lonely than those in first marriages. The alternative prediction, focusing on *conflicting loyalties* and the resulting feelings of being torn between the new marriage and the consequences it has for relationships with other loved ones, was that the remarried would be more socially lonely than those in first marriages. The results showed that remarriage was associated with higher levels of social loneliness for women, but not for men. Among men, there were no differences in social loneliness by number of marriages. The findings suggest, as predicted, that women are more sensitive to the conflicting loyalties that arise when new partnerships are forged.

The last set of predictions focused on differences among the non-married; that is, among the never married, divorced, or widowed. A contrast that immediately comes to mind is that the lives of the never married have been more stable than those of the divorced or widowed. They have not experienced the desolation of those whose marriages have ended, and for that reason, are presumably less prone to emotional loneliness. Furthermore, they have not experienced the kind of upset in their social networks that tends to be created by divorce or widowhood. For that reason, we also assumed that the never married would have lower levels of social loneliness than the divorced or widowed. The predictions were only partially borne out by the data. It was only among women that the never married clearly distinguished themselves from other marital-history groups in terms of their low levels of emotional loneliness.

Among men, such a pattern was not observed. As regards social loneliness, the never married – both men and women – did not clearly distinguish themselves in terms of relatively low scores.

Note that there is an alternative explanation for the finding that never-married women were not very vulnerable to emotional loneliness, and that is differential *selection* into marriage. The notion is that never-married women, particularly in the cohorts we are investigating, are a relatively advantaged group, who can cope well on their own. Differential selection into marriage pertains specifically to gender differences among the never married. Presumably, because never-married men are less resourceful than their female counterparts, they are more likely to be emotionally and socially lonely. The findings were in line with this expectation.

Finally, we looked more closely at differences among the formerly married, predicting lower levels of emotional loneliness and higher levels of social loneliness among the divorced than among the widowed. Differential *losses* served as the basis of the prediction. As regards differences in emotional loneliness, our assumption was that the loss of an intimate attachment – that is, the loss of a warm and supportive partner – was less apt as a characterization of a marriage ending in divorce than of a marriage that remained intact to the end. As regards differences in social loneliness, the underlying reasoning was that divorce has greater repercussions for people's social embeddedness. As predicted, the divorced were generally less emotionally lonely than the widowed, a finding that was observed among both men and women. However, the higher level of social loneliness predicted for the divorced, as compared to the widowed, was observed only for men.

In the general pattern of findings, we see evidence of the need for greater consideration, in Weiss's (1973) model, of (a) the socially integrative role of marriage and (b) gender differences. Marital-history differences emerged for emotional loneliness – which is, of course, consistent with Weiss's theoretical conceptualizations – but also for social loneliness – which is not suggested by his work. Generally speaking, though, the differences in emotional loneliness by marital history were greater than are those in social loneliness – a pattern observed among both men and women. Interestingly, marital-history differences in emotional and social loneliness were greater among men than among women. For men, the marriage bond appears not only to be more focal to emotional well-being than is the case for women but also to play a pivotal role in their involvements with others. What is of further interest is that marital history offered the best explanation for

differences in emotional loneliness among men, while social embeddedness characteristics also accounted for differences in emotional loneliness among women. Apparently, whereas men are more likely to find an intimate attachment in marriage, women also find protection from emotional loneliness in other close ties. This finding is consistent with Chodorow's (1978) arguments that women have more complex affective needs than men and that their fulfilment is sought in a wider circle of personal relationships.

The marital-history differences in social loneliness were largely mediated by characteristics of older adults' social embeddedness. In other words, differences in levels of social loneliness between the married and non-married and differences among the non-married could be traced to differences in the number, range, and quality of ties to others. The social embeddedness characteristics contributing to differences in social loneliness showed not only parallels but also clear contrasts between men and women. Network size, supportive exchanges, and weekly church attendance were inversely associated with social loneliness among both men and women. However, active participation in voluntary associations, such as sports and hobby clubs, political movements, and senior citizens' organizations made men less vulnerable to social loneliness, but among women it did not make a difference. It seems then, that for men, involvement in activities outside the home serves as a context for sociability and for generating feelings of belonging and of being part of a community. Of course, these kinds of activities can also be seen as a continuation of earlier pursuits, the years of gainful employment. Our findings suggest that for the alleviation or prevention of feelings of social loneliness among older men, it is helpful if they engage in the kinds of activities that they typically will have done over the course of their lives.

Whereas gainful employment will have been more central to the lives of the men in the cohorts under investigation, parenthood will have played a larger part in the lives of the women (Liefbroer & Dykstra, 2000). Interestingly, the results of this study showed linkages between parenthood and social loneliness among women but not among men. They also showed linkages with emotional loneliness among women but not among men. More specifically, women who saw one or more of their children on at least a weekly basis were less socially and less emotionally lonely than women who did not interact with their children that often. Furthermore, childless women were shown to be less socially and emotionally lonely than women who did not interact with their children on at least a weekly basis. It is conceivable that the loneliness of mothers in our sample can be traced to a discrepancy

between what is expected in terms of support and companionship from children and what is experienced as forthcoming.

Drawing upon the literature, we identified several mechanisms to help gain insight into the relationship of marital history and gender to loneliness, such as asymmetric gratifications in marriage, conflicting loyalties as a result of remarriage, and selection into marriage. It is important to note the absence of direct measures of these mechanisms in our study. For that reason, we feel that future efforts should be aimed at more directly verifying the processes involved. We would like to speculate on ways this might be done. A test of the asymmetric gratifications in marriage might involve an analysis of the reciprocity of exchanges between partners or an evaluation of the quality of the marital relationship. Ideally, data from both partners should be collected. The tenability of conflicting loyalties as an explanation for loneliness in second marriages would require an assessment of the (perceived) consequences of remarriage for old friendships, children from the first marriage, and so forth. In what ways have feelings been affected? How have interaction patterns changed? To examine processes of selection, one might consider personality characteristics, attractiveness ratings, or measures of social skills. A nice spin-off of efforts aimed at more directly verifying the mechanisms underlying marital history and gender differences in loneliness would be an increased knowledge base for interventions and self-help programs for the lonely.

Note

- 1 *Single* refers to non-married adults. In other words, the term includes never married, divorced, and widowed.

References

- Antonucci, T.C. (1994). A life-span view of women's social relations. In B.F. Turner & L. Troll (Eds.), *Women growing older: Psychological perspectives* (pp. 239–269). London: Sage.
- Antonucci, T.C., & Akiyama, H. (1987). An examination of sex differences in social support among older men and women. *Sex Roles, 17*, 737–749.
- Becker, G.S. (1991). *A treatise on the family* (Enlarged ed.). Cambridge, MA: Harvard University Press.
- Bernard, J. (1972). *The future of marriage*. New York: Bantam Books.
- Broese van Groenou, M.I. (1991). *Gescheiden Netwerken: De Relaties met Vrienden en Verwanten na Echtscheiding [Separate networks: The relationships with friends and kin after divorce]*. Unpublished dissertation, Universiteit Utrecht.
- Broese van Groenou, M.I., van Tilburg, T.G., de Leeuw, E., & Liefbroer, A.C. (1995). Appendix: Data collection. In C.P.M. Knipscheer, J. de Jong Gierveld, T.G. van Tilburg, & P.A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 185–197). Amsterdam: VU University Press.
- Chipperfield, J.G., & Havens, B. (2001). Gender differences in the relationship between marital status transitions and life satisfaction in later life. *Journal of Gerontology: Psychological Sciences, 56B*, P176–P186.
- Chodorow, N. (1978). *The reproduction of mothering: Psychoanalysis and the sociology of gender*. Berkeley: University of California Press.
- de Heer, W. (1992). *International survey on non-response*. Netherlands Central Bureau of Statistics.
- de Jong Gierveld, J. (1969). *De Ongehuwden [The unmarried]*. Alphen aan den Rijn: Samson.
- de Jong Gierveld, J. (1998). A review of loneliness: Concept and definitions, determinants and consequences. *Reviews in Clinical Gerontology, 8*, 73–80.
- de Jong Gierveld, J. (2001, June). *Older adults' strategies following bereavement and divorce: Starting a new partnership?* Paper presented at the European Population Conference, Helsinki.
- de Jong Gierveld, J., & Dykstra, P.A. (1994). Life transitions and the network of personal relationships: Theoretical and methodological issues. In D. Perlman & W.H. Jones (Eds.), *Advances in personal relationships* (Vol. 4, pp. 195–227). London: Kingsley.
- 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.G. (1995). Social relationships, integration, and loneliness. In C.P.M. Knipscheer, J. de Jong Gierveld, T.G. van Tilburg, & P.A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 155–172). Amsterdam: VU University Press.
- DiTomasso, E., & Spinner, B. (1993). The development and initial validation of the social and emotional loneliness scale for adults (SELSA). *Personality and Individual Differences, 14*, 127–134.
- 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.
- Dykstra, P.A. (1995). Loneliness among the never and formerly married: The importance of supportive friendships and a desire for independence. *Journals of Gerontology Social Sciences, 50b*, S321–S329.
- Dykstra, P.A. (2004). Diversity in partnership histories: Implications for older adults' social integration. In C. Phillipson, G. Allan, & D. Morgan (Eds.), *Social networks and social exclusion* (pp. 117–141). London: Ashgate.
- Essex, M.J., & Nam, S. (1987). Marital status and loneliness among older women: The differential importance of close family and friends. *Journal of Marriage and the Family, 49*, 93–106.
- Gove, W.R., & Shin, H.-C. (1989). The psychological well-being of divorced and widowed men and women: An empirical analysis. *Journal of Family Issues, 10*, 122–144.

- Gove, W.R., Style, C.B., & Hughes, M. (1990). The effect of marriage on the well-being of older adults: A theoretical analysis. *Journal of Family Issues, 11*, 4–35.
- Gubrium, J.F. (1974). Marital desolation and the evaluation of everyday life in old age. *Journal of Marriage and the Family, 36*, 107–113.
- Henry, C.S., & Lovelace, S.G. (1995). Family resources and adolescent family life satisfaction in remarried family households. *Journal of Family Issues, 16*, 765–786.
- Hochschild, A.R. (1983). *The managed heart*. Berkeley, CA: University of California Press.
- Knipscheer, C.P.M., de Jong Gierveld, J., van Tilburg, T.G., & Dykstra, P.A. (Eds.). (1995). *Living arrangements and social networks of older adults*. Amsterdam: VU University Press.
- Liefbroer, A.C., & Dykstra, P.A. (2000). *Levenslopen in Verandering: Een Studie naar Ontwikkelingen in de Levenslopen van Nederlanders Geboren tussen 1900 en 1970 [Changing lives: Developments in the life courses of the Dutch 1900–1970 birth cohorts]* (WRR Voorstudies en Achtergronden V107 [Netherlands Scientific Council for Government Policy (WRR) Preliminary and Background Studies V107]). Den Haag: Sdu Uitgevers.
- Lowenthal, M.F., & Haven, C. (1968). Interaction and adaptation: Intimacy as a critical variable. *American Sociological Review, 33*, 20–30.
- Milardo, R.M. (1987). Changes in social networks following divorce: A review. *Journal of Family Issues, 8*, 78–96.
- Neugarten, B.L. (1969). Continuities and discontinuities of psychological issues into adult life. *Human Development, 12*, 121–130.
- Parsons, T. (1955). The American family: Its relation to personality and social structure. In T. Parsons & R.F. Bales (Eds.), *Family, socialization, and interaction process* (pp. 3–21). Glencoe, IL: Free Press.
- Perlman, D. (1987). Further reflections on the present state of loneliness research. In M. Hojat & R. Crandall (Eds.), *Loneliness: Theory, research and applications*. [Special Issue]. *Journal of Social Behavior and Personality, 2*, 17–26.
- Peters, A., & Liefbroer, A.C. (1997). Beyond marital status: Partner history and well-being in old age. *Journal of Marriage and the Family, 59*, 687–699.
- Rands, M. (1988). Changes in social networks following separation and divorce. In R.M. Milardo (Ed.), *Families and social networks* (pp. 127–146). London: Sage.
- Rosenthal, C. (1985). Kinkeeping in the familial division of labor. *Journal of Marriage and the Family, 47*, 965–974.
- Rubin, L.B. (1983). *Intimate strangers*. New York: Harper and Row.
- Schiepers, J.M. (1988). *Huishoudensequivalentiefactoren volgens de Budgetverdelings-methode [Family equivalence scales using the budget distribution methods]*. *Sociaal-Economische Maandstatistiek, 2* (Suppl.), 28–36.
- Stevens, N.L. (1989). *Well-being in widowhood: A question of balance*. Unpublished dissertation, Katholieke Universiteit Nijmegen.
- Thomson, L., & Walker, A.J. (1989). Gender in families: Women and men in marriage, work and parenthood. *Journal of Marriage and the Family, 51*, 845–871.
- van Tilburg, T. (1995). Delineation of the social network and differences in network size. In C.P.M. Knipscheer, J. de Jong Gierveld, T.G. van Tilburg, & P.A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 83–96). Amsterdam: VU University Press.
- Weiss, R.S. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, MA: MIT Press.