Social and Emotional Loneliness Among Divorced and Married Men and Women: Comparing the Deficit and Cognitive Perspectives

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Data from the 1998 survey "Divorce in the Netherlands" (N = 2,223) are used to analyze differences in loneliness among divorced and married men and women. The results indicate that it makes sense to distinguish social from emotional loneliness. This is consistent with the deficit perspective, which posits that the absence of specific types of relationships is associated with specific forms of loneliness. Whereas social loneliness is largely attributable to support network deficits, emotional loneliness is associated with the absence of a partner. In line with the cognitive perspective, the results show that greater insight into loneliness is obtained when discrepancies in relationships are considered. Divorcees who attach great importance to having a partner and people whose marriages are conflict ridden tend to have the highest levels of emotional loneliness. Our study shows that to explain loneliness, one should take not only characteristics of people's relationships into consideration, but also their relationship preferences. The investment hypothesis, which also follows from the cognitive perspective, is not supported by the data. There is no indication that those who attach greater importance to having a partner invest less in relationships with friends, relatives, and colleagues and therefore show high levels of social loneliness. Consistent gender differences are observed: Men, regardless of partner status, tend to attach greater importance to having a partner than do women, and they tend to have smaller support networks and higher levels of social loneliness. Among the divorced, men are more apt to suffer from emotional loneliness than are women.

Conceptualizations of loneliness (de Jong Gierveld, 1998; Fees, Martin, & Poon, 1999; Marangoni & Ickes, 1989; Margulis, Derlega, & Winstead, 1984; Perlman & Peplau, 1981; Rook, 1989) all agree that loneliness is the feeling people have that they lack personal relationships. The nature of this deficit differs, however (Peplau & Perlman, 1982). The central notion underlying the *deficit perspective* is that certain relationships in a person's social network are lacking. Needs for intimacy or companionship are not met, or are insufficiently met, and this results in feelings of loneliness. The *cognitive perspective* focuses on psychological processes that mediate between the participation in social networks and the subjective experience of loneliness. This perspective looks into the preferences, expectations, and desires for personal relationships among individuals and addresses the de-

gree to which actual relationships meet them. Whereas in the deficit perspective, loneliness is assumed to be the result of a lack of personal relationships, the cognitive perspective assumes that loneliness results from feelings of dissatisfaction with existing relationships.

In this article we will flesh out these two perspectives. Very little research provides a comparison of the relative merits of the deficit and cognitive models of loneliness. To our knowledge, the only study in which the two were compared was carried out by Archibald, Bartholomew, and Marx (1995) among a sample of high school students. They found that deficits in social contacts were better predictors of loneliness than were discrepancies from both personally defined and socially defined evaluation standards. Cognitive discrepancies added only minimally to the prediction of adolescent loneliness after controlling for actual levels of contact.

We examine the extent to which the deficit and cognitive perspectives explain differences in feelings of loneliness among individuals with different marital histories. We have included three groups in the analyses: People who are in their

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first marriage, people who have remained single following a divorce, and people who have remarried following a divorce.

THE DEFICIT PERSPECTIVE

The notion that a lack of certain types of relationships within a person's social network may result in feelings of loneliness is based on the assumption that different types of relationships serve different, more or less unique functions and that these types of relationships are not, or are only barely, interchangeable (Allan, 1979; Dykstra, 1993; Litwak & Szelenyi, 1969; Weiss, 1974). Weiss (1973) took the uniqueness of different types of personal relationships as the starting point of his conceptualization and distinguished two types of loneliness: The loneliness of social isolation and the loneliness of emotional isolation. He found that the feelings of loneliness experienced by married women who had recently moved differed from those experienced by single parents. The married women were found to suffer from social isolation: Although they were happily married, they lacked a wider circle of friends and acquaintances who could give them a sense of belonging, of companionship, and of being a member of a community. Weiss found that the sense of security offered by their marriage did not remedy their feelings of loneliness. However, the single parents, most of whom had put an end to an unhappy marriage, felt lonely because they no longer had a partner. They suffered from emotional isolation and the accompanying feelings of desolation and insecurity and of not having someone to turn to. Existing relationships with friends and colleagues were found to offer insufficient compensation for the absence of a partner.

In this study, we use Weiss's distinction between social and emotional loneliness. Very little research has been conducted into these two types of loneliness in the Netherlands, and it was only recently that the distinction regained the attention of Dutch scholars (van Baarsen, Smit, Snijders, & Knipscheer, 1999; van Baarsen, Snijders, Smit, & van Duijn, 2001; Dykstra & de Jong Gierveld, 2004; van Tilburg, Havens, & de Jong Gierveld, 2004). Like Weiss, we shall begin by assuming that the two types of loneliness are related to the absence of certain types of personal relationships. Social loneliness is likely to be more common among people with a relatively small social network, that is, whose network includes few or no relatives, colleagues, friends, neighbors, and so on. We also assume that the negative association between social loneliness and network size applies both to divorcees and to people who are in a first or subsequent marriage. There may be an indirect relationship between marital history and social loneliness. Past research has shown that divorce tends to result in a loss of personal relationships: Members of the former couple's network take the side of one of the two partners (Broese van Groenou, 1991; Milardo, 1987; Terhell, 2004). If divorcees do not succeed in substituting lost personal relationships, their networks are likely to be smaller

than the average networks of never-divorced people. Given that their networks tend to be smaller, they are more apt to suffer from social loneliness than are couples in a first marriage. According to Weiss, emotional loneliness is likely to be found primarily among divorcees because they do not have partners. Married people are less apt to suffer from emotional loneliness. Similarly, we do not expect to find differences in emotional loneliness between people in a first marriage and those in a subsequent marriage, because they all have partners. Therefore, whereas we expect to find differences in the degree of emotional loneliness between people who have a partner and those who do not, we do not expect to find any such differences with regard to social loneliness.

THE COGNITIVE PERSPECTIVE

Conceptualizations of loneliness based on a cognitive perspective focus primarily on the differences between desired relationships and those actually achieved, rather than merely addressing the absence of personal relationships. This perspective assumes that loneliness results from an unacceptable discrepancy between the personal relationships people have and the relationships they would like to have. The notion of a discrepancy between people's desires and reality suggests that we should examine not only the actual networks of personal relationships but also the preferences people have in this respect to gain insight into differences in feelings of loneliness (Dykstra, 1990, 1995; Dykstra & de Jong Gierveld, 1994; van Tilburg, 1988). In this study, we analyze people's preferences with regard to partner relationships and how these relate to emotional loneliness. We do not address their preferences with regard to a wider circle of personal relationships, which are assumed to explain differences in social loneliness;1 we focus solely on discrepancies that relate to partner relationships. Divorcees and married people are addressed separately.

For the group of divorcees, we address their so-called partner-centeredness. We have assumed that people who attach great importance to having a partner and who have a strong aversion against living alone will be more prone to emotional loneliness than will people who are less partner centered. This may be explained by the fact that the discrepancy between desire (having a partner) and reality (not having a partner) is stronger among people who are partner centered.

For the group of married people, we address not only their partner-centeredness but also conflicts in partner relationships, assuming that people want to avoid serious con-

¹We do not have the data needed to test this assumption. During the interviews held for the 1998 survey "Divorce in the Netherlands," from which we drew information for this article, respondents were not asked questions about preferences regarding a wider circle of relationships.

flicts. We have assumed that where there is conflict, there is a discrepancy between ideal (a partner who boosts one's self-esteem, who has similar views on life, with whom one gets on well) and reality (a partner with whom one often argues). Similarly, we have assumed that couples who never or rarely have conflicts do not feel any discrepancy between ideal and reality. The occasional row, provided the partners make up, may even strengthen existing ties between partners. Note that there may be various reasons why partners never argue. For some couples, the absence of rows is indicative of a good relationship. For others, however, it may mean that their relationship has turned sour: The lack of communication between partners is a strategy to avoid conflicts. Unfortunately, this distinction cannot be made on the basis of the available data. As a rule, we expect that partners in relationships marred by serious differences of opinion and frequent arguments tend to be more prone to emotional loneliness than are people who never or rarely have conflicts with their partners.

Examining preferences is interesting because it sheds light on possible discrepancies between desired and actual situations. At the same time, an insight into people's preferences tells us more about why they behave in a given manner (Fishbein & Ajzen, 1975; Münch, 1972). Preferences may be seen as the driving force behind human behavior: People tend to invest time and energy in activities that they believe will contribute to the realization of their ideals. This notion helps us to make assumptions about people's participation in their social networks and related feelings of loneliness. People who attach great importance to having a partner tend to focus on finding a new partner. They will be less inclined to invest in relationships with friends, colleagues, and relatives. As a result, their networks are likely to be smaller. A small social network, in turn, will increase the likelihood of social loneliness. In other words, there is an indirect relationship between partner-centeredness and social loneliness. We have assumed that people who attach great importance to having a partner are more prone to social loneliness because they are less likely to have invested in relationships other than their relationship with their partner. We expect to find this association among both divorcees and married couples.

It is difficult to say in advance whether married couples who have serious conflicts with their partners are more or less likely to invest in relationships with members of their social networks. It is quite likely that married people in a troubled relationship seek support in their social networks and may well turn to others to talk about the conflicts they face. The severity of social loneliness they experience will depend on the degree to which the support they receive meets their needs. Conversely, couples in a troubled relationship may well avoid contacts with others because they believe it would be socially more appropriate to keep their problems to themselves. This kind of behavior could strengthen feelings of social loneliness. We therefore refrain from making any as-

sumptions about a possible indirect relationship among married people between conflicts in a partner relationship and social loneliness.

In summary, there are different, distinct hypotheses for social and emotional loneliness. The deficit hypothesis, which assumes that needs remain unfulfilled because of the absence of specific types of relationships, states that social loneliness is related to a small social network and that emotional loneliness is related primarily to the absence of a partner. On the basis of the discrepancy hypothesis, the main notion of which is the discrepancy between desire and reality, we might expect a relatively high degree of emotional loneliness among divorced people who attach great importance to having a partner and among people whose marriages are conflict ridden. Lastly, the investment hypothesis, which assumes that ideals shape behavior, would lead us to expect an indirect relationship—namely through the size of the network of personal relationships—between partner-centeredness and social loneliness. The underlying notion is that people who attach great importance to having a partner are more likely to invest time and energy in establishing a partner relationship than in fostering other types of relationships.

The preceding hypotheses shed light on gender differences described in the literature. Research has shown, for example, that men tend to find it more difficult to live without a partner than women do (Chipperfield & Havens, 2001). There is also evidence that marriage offers women less protection than it does men (Gove, Style, & Hughes, 1990; Thomson & Walker, 1989). In line with the latter, a meta-analytic review of older adult loneliness showed that married women reported higher levels of loneliness than did married men, whereas gender differences in nonmarried samples were not significant (Pinquart & Sörensen, 2001). Existing literature has not provided a satisfactory explanation for these findings. The research described here allows us to examine whether gender differences emerge for both social and emotional loneliness and whether they are attributable to differences in partner-centeredness and support network size. We therefore explicitly address gender differences in our analyses.

METHOD

Data

The hypotheses were tested with the aid of data provided by the research program "Divorce in the Netherlands," for which face-to-face interviews were held with 2,346 people aged between 30 and 76 in the autumn of 1998. Respondents received 25 guilders (approximately US \$15) for their cooperation. The respondents were selected on the basis of a stratified sample, which was taken in two steps. First, a selection was made of 19 municipalities representative of the Netherlands in terms of region and their degree of urbanization, the

political views of their inhabitants, and their demographic characteristics (Kalmijn, de Graaf, & Uunk, 2000). Random samples were subsequently taken from three demographic categories distinguished on the basis of their legal marital status: (a) first-married, (b) divorcees who had not remarried, and (c) divorces who had remarried. The divorces of the latter two groups did not necessarily relate to the dissolution of a first marriage. The divorces included in the study took place during a long period (1949-1998), hence marriages had ended longer ago for some people than for others. About 58% of the people approached and reached were willing to take part in the survey (Kalmijn et al., 2000). Nonresponse analyses show that response was slightly lower among single divorcees than among married and remarried people. This may be attributed to the fact that a relatively large number of single divorcees could not be reached. Response was also lower in urban areas, in the west of the Netherlands, among the elderly, and among men. After elimination of respondents for whom information about one or more variables was missing, the final sample used in our analyses totaled 2,223 people: 520 (23%) were in a first marriage (252 men and 268 women), 819 (37%) were divorcees living without a partner (274 men and 545 women), and 884 (40%) had remarried or entered into a new consensual union (419 men and 465 women). We refer to the three groups as in a first marriage, divorced, and remarried, respectively.

Measuring Instruments

Two separate scales were constructed for social and emotional loneliness—the two dependent variables in our study—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 five 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 six 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 answer categories are "yes!," "yes," "more or less," "no," and "no!" The scores on the positive items have been reversed. When constructing their scale, de Jong Gierveld and Kamphuis (1985) did not make a distinction between emotional and social loneliness because it was their intention to develop a unidimensional measure of the severity of feelings of loneliness. The items were, however, developed with Weiss's distinction in mind. The loneliness scale as a whole is moderately, yet sufficiently, homogeneous. The Mokken procedure yields two subscales: One scale with the positive items and one with the negative items. Because the two subscales are closely related (r = .50), we decided to base our measures on scores provided by an oblique factor analysis with principal component extraction where the number of components was left free to vary. An oblique factor analysis permits correlated factors. Social and emotional loneliness are related, theoretically, as is suggested by the heritability of

TABLE 1
Factor Loadings for Social and Emotional
Loneliness Items (Oblique Rotation; *N* = 2,223)

	Factor 1	Factor 2
Social loneliness		
There is always someone close by who I can confide in	.32	.70
There are plenty people I can lean on when I have problems	.41	.81
There are many people I trust completely	.31	.78
There are enough people to whom I feel very close	.41	.78
I can always fall back on my friends if I have to	.42	.80
Emotional loneliness		
I miss having a really close friend	.67	.45
I feel emptiness around me	.83	.37
I miss having company	.86	.35
I find my circle of acquaintances too small	.69	.42
I miss having people around me	.83	.37
I often feel people let me down	.75	.35
Eigen values	4.98	1.68
R^2 (in %)	45.26	15.23

loneliness (McGuire & Clifford, 2000), and empirically, as is evident in the correlation between the two Mokken subscales.

Table 1 presents the results. The first factor is called emotional loneliness, with scores ranging from -1.53 to 3.93; the scores of the second factor, social loneliness, range from -1.65 to 3.85. The correlation between the two factors is .48. Given this close relation, the effects of the one type of loneliness were held constant in the multivariate analyses of the other type of loneliness. Thus, the analyses of social loneliness controlled for the level of emotional loneliness and vice versa. Note that the distinction between social and emotional loneliness coincides with the distinction between the positively and the negatively formulated items. We may not exclude the possibility that the results tell us less about social and emotional loneliness than about the negative and positive attitudes toward one's personal relationships. Examining the content of the items, however, provides a certain level of confidence in the distinction.

To determine *partner-centeredness*, the respondents were presented with three statements: "With a partner life becomes meaningful," "Without a partner one is incomplete as a person," and "Life is empty without a partner." The answer categories were "yes!," "yes," "more or less," "no," and "no!," with scores ranging from 0 to 4. The scores on the "no partner" items were reversed. Analyses with the Mokken procedure show that the three items together form a homogeneous scale (H = .73) ranging from 0 to 12. A high score is indicative of a higher degree of partner-centeredness.

Respondents who had a partner were presented with a list of 12 possible sources of *relational conflicts* in an effort to gain insight into the quality of their current relationship. They were asked the following question: "Please indicate whether you and your partner disagreed about any of the following issues

during the past year." Examples of such issues are partner's leisure time activities, whether or not to have children, partner's working hours, partner's spending habits, and partner's drinking habits/drug use. The answer categories were: "hardly ever," "sometimes," and "frequently," with scores from 0 to 2. Summing the answers yields a total score, ranging from 0 to 24. Because we were interested primarily in serious relational conflicts, we dichotomized the scores, distinguishing the top quartile from the rest. Total scores of 3 or less were downgraded to 0 (no or very infrequent relational conflicts). Respondents with a total score of 4 or more were given a score of 1 (serious relational conflicts).

Due to the limited space available in the questionnaire, the wider network of personal relationships was not examined in the "Divorced in the Netherlands" survey. Instead, the survey focused on the so-called core, or *support network*. The size of the support network was determined with the aid of two questions. The first addressed the emotional support received: "With whom did you discuss your personal problems this past year?" The second question looked into the practical assistance received: "Who helped you solve practical problems this past year, such as cleaning, preparing dinner, odd jobs around the home, tending your plants, childcare, and the like?" The respondents could list a maximum of five people over age 18 for each question. They were not allowed to nominate their partners because this would result in a systematic difference in network characteristics between respondents with a partner and those without a partner. The size of the support network was calculated by taking the number of different people listed in answer to the two questions. If people were listed twice, they were counted as one source of support. The total number of support givers therefore ranged from 0 to 10.

Several background variables were included. Among the divorced respondents the *length of the period* elapsed since the divorce was taken into account, given that, over time, divorcees tend to adjust their activities and preferences to their lives as single persons. The length of the period since divorce was taken as the number of years that had elapsed between the moment the couple started living apart and the time of the interview. The average time since divorce was 11.4 years. For the married respondents, the question whether they had *ever divorced* was included in the analyses. We included this variable to examine whether the remarried respondents differed from respondents in a first marriage. The average duration of marriage was 23.3 years, and that of remarriage was 10.4 years. Lastly, *age* and *gender* differences were taken into account (0 = male, 1 = female).

RESULTS

Descriptive Analyses

With the aid of a 2 (Gender) × 3 (Marital History) analysis of variance, we examined differences between men and women who were in a first marriage, divorced, or remarried in terms

of the background variable age; the explanatory variables partner-centeredness, relational conflicts, and size of support network; and the dependent variables emotional and social loneliness. Table 2 presents the results. As shown in the top row, groups differed by age. On average, the divorced respondents, both men and women, were the oldest. There were no differences in average age between respondents in a first marriage and remarried respondents; here too, this applies to both men and women. It is interesting to note that divorcees without a partner were on average older than divorcees who had remarried. Additional analyses show that this reflects the fact that the chance of finding a new partner diminishes as people grow older (Matthijs, 1987; Uunk, 1999). The age at divorce was younger among remarried respondents than among those who had remained single; the average ages among men were 34.7 and 41.1, respectively, t(686) = -9.7, p < .001, and among women 31.6 and 38.6, respectively, t(988) = -13.9, p < .001.

Table 2 also shows consistent differences in partnercenteredness between men and women as well as between people with disparate marital histories. Men were more partner centered than women in all three marital history categories. The gender differences were greatest among divorcees. On average, divorcees were the least partner centered. This finding may be interpreted in various ways (Lesthaeghe & Moors, 2002). First, it may be the result of selection: A weak partner orientation may facilitate divorce. The underlying notion is that divorced people constitute a special group, who tend to see the drawbacks of a partner relationship and the advantages of being single. Another explanation may be that divorcees are not inclined to enter into new relationships because of their weak partner-centeredness. Adaptation may also play a role. Divorced people have adjusted their desires to the fact that they are single: They have come to attach less importance to having a partner. People in a first marriage were most partner centered. This finding is hardly surprising: Their preferences regarding relationships were in line with reality. In terms of their partner-centeredness, the remarried respondents occupied a position in between divorcees and people in a first marriage. The fact that their former marriage ended in divorce may have led them to see the relativity of having a partner. We may not exclude the possibility, however, that these people always have been critical of the institution of marriage, even though this did not deter them from entering into yet another union.

For the respondents who lived with a partner, we examined the extent to which the partner relationship was characterized by serious conflicts. Table 2 shows there were no consistent differences between men and women, and no consistent differences were found between the married and remarried. Serious relational conflicts (as defined by us) were found in about one in every four marriages.

The support networks were found to be remarkably small: The respondents listed an average of no more than two support givers, even though they were given the possibility of nominating at most 10 people in the network identification

	In a First Marriage		Divorced		Remarried		Effects		
	Men (n = 252)	(n = 268)	Men (n = 274)	Women (n = 545)	Men (n = 419)	Women (n = 465)	Gender F	Marital History F	Interaction F
_									
Age (28–85)	49.09	47.39	51.27	50.57	49.15	46.10	11.0**	26.3***	2.6
Partner-centeredness (0–12)	5.71	5.03	4.74	3.39	5.35	4.51	117.2***	57.2***	3.4*
Relational conflicts (0–1)	.26	.31			.23	.26	2.3	3.0	.3
Size support network (0–10)	1.82	2.31	2.22	3.13	1.87	2.54	100.2***	20.5***	1.8
Social loneliness (-1.65-3.85)	.13	16	.43	.02	.05	29	56.6***	25.7***	.7
Emotional loneliness (-1.53-3.93)	17	14	.55	.33	28	29	.2	124.0***	3.4*

TABLE 2
Descriptive Data About Men and Women With Different Marital Histories

Note. N = 2,223.

questions. It is not clear why their support networks were so small. A possible explanation is that the respondents in our survey were highly self-reliant and were able to cope without the assistance of others. Another possibility is that many of the respondents had not faced any problems in the previous year and therefore did not have to turn to anyone for support. Yet another possibility is that the respondents were highly selective in their answers, giving only the primary people in their networks.

Contrary to expectations, divorcees did not have the smallest support networks. This result is possibly a methodological artifact, related to the way in which the question about the respondent's support network was formulated. To be able to compare the networks of divorced and married people, respondents were not allowed to list their partners as a support giver. Married respondents may well have mentioned few support givers other than their partners because they did not have to turn to others for assistance. Their partners, after all, tended to be their primary support givers. Here too, consistent gender differences were found: Men generally had smaller support networks than did their female counterparts.

The bottom two rows in Table 2 present information about loneliness. Clear gender differences in social loneliness emerged: Men were generally more socially lonely than women. Of the three marital history groups, divorcees had the highest mean level of social loneliness. The means were -.19 (SD = .87), .16 (SD = 1.11) and -.13 (SD = .95) for those in a first marriage, the divorced, and remarried, respectively. Divorcees were also characterized by a high level of emotional loneliness. The means were -.15 (SD = .80), .41 (SD = 1.13), and -.29 (SD = .83) for those in a first marriage, the divorced, and remarried, respectively. Gender differences in emotional loneliness varied by marital history group. Among the first married re-married the level of emotional loneliness did not differ between men and women. Among divorcees, men were more emotionally lonely than women.

Explanatory Analyses

The deficit perspective assumes that social loneliness is related primarily to the absence of a wider network of personal relationships and that emotional loneliness is related mainly to the absence of a partner. We examined the tenability of the *deficit hypothesis* using linear multivariate regression analysis. The results are presented in Table 3. The marital history variables included in the analysis were the presence of a partner in the household, a Gender × Partner interaction, and whether the respondent had ever divorced.

Consistent with what one would expect on the basis of the deficit hypothesis, social loneliness was not associated with the absence of a partner. The Gender × Partner interaction and whether the respondent had ever divorced were not related to social loneliness either. Network size was negatively correlated with social loneliness, which is in line with the deficit perspective. Respondents who listed a larger number of support givers were less prone to social loneliness than were respondents who listed fewer support givers.

There was a strong association between the presence of a partner and emotional loneliness. This is in line with the deficit perspective. People without a partner were more prone to

TABLE 3
Loneliness in Relation to Personal Relationships,
Standardized Regression Coefficients

	Social Loneliness ^a	Emotional Loneliness ^b
Gender (female = 1)	11***	02
Age	01	.03
Partner (no/yes)	02	31***
Gender* partner	02	.09*
Ever divorced (no/yes)	01	04
Size support network	20***	.02
Adjusted R^2	.29	.30

Note. N = 2,223.

^{*}*p* <.05, ***p* <.01, ****p* <.001.

 $[^]a$ Controlled for emotional loneliness. b Controlled for social loneliness. $^*p<.05,\,^{**}p<.01,\,^{***}p<.001.$

emotional loneliness than those with a partner. Table 3 also shows a significant interaction effect between the presence of a partner and gender: Among those without a partner, men were more emotionally lonely than women, whereas among those with a partner, men were less emotionally lonely than women. Whether the respondent had ever experienced divorce was not significant. Finally, Table 3 shows that emotional loneliness was unrelated to the size of the support network. This finding is also in line with the deficit hypothesis.

We then tested the discrepancy hypothesis to find out whether there was an association between partnercenteredness and emotional loneliness among divorcees. Results show that the greater the importance attached to having a partner, the higher the level of emotional loneliness: r = .45, p < .001. This is in line with the discrepancy hypothesis, at least as far as divorcees are concerned. People without a partner who have a strong desire to have a partner, that is to say, among whom there is a strong discrepancy between desire and reality, are more likely to suffer from emotional loneliness. Conversely, emotional loneliness was far less prevalent among people without a partner who preferred not to have a partner or who had no more than a slight preference to have a partner, that is to say, among people whose actual situation largely coincided with their ideal situation. We also tested the discrepancy hypothesis for married respondents. As expected, married people whose relationships were torn by serious conflicts tended to be more emotionally lonely (M =-.14, SD = .83) than those who did not or only rarely had differences of opinion with their partners (M = -.26, SD = .81). The differences were significant, t(1385) = 5.5, p < .001.

Finally, we tested the tenability of the *investment hypothesis*, which assumes that partner-centeredness is indirectly related to social loneliness. The idea is that when the data are controlled for differences in support networks, the correlation disappears. Stepwise multivariate regression analyses were carried out, separately for divorced and married respondents, to shed light on the degree to which partner-centeredness and differences in support networks related to social loneliness. The models included only main effects;

there were no significant interaction effects. For the sake of comparison, the same analyses were carried out for emotional loneliness. The latter analyses also show whether the associations (as predicted by the discrepancy hypothesis) between emotional loneliness and partner-centeredness and relational conflicts remain significant in a multivariate model.

Table 4 presents the results for divorcees. The time that elapsed since the divorce was entered as a control variable. The left panel in Table 4 shows that, contrary to what the investment hypothesis suggests, partner-centeredness was not associated with social loneliness. Differences in the degree of social loneliness among divorcees were best explained by differences in the size of their support networks (see Model 3). When the size of the support network was added to Model 3, the regression coefficient for the time elapsed since divorce was no longer significant. Respondents who divorced longer ago tended to be more socially lonely than those who divorced more recently. This may be attributed to the fact that on average their support networks were smaller.

Whereas the partner-centeredness of divorcees did not explain differences in social loneliness, it did influence feelings of emotional loneliness. The right-hand panel of Table 4 shows that partner-centeredness is the main factor explaining differences in emotional loneliness among divorcees (which is of course in line with the discrepancy hypothesis). Differences in size of the support network, however, did not contribute to differences in emotional loneliness. Emotional loneliness was related to the time elapsed since divorce (see Model 1): The further in the past, the lower their degree of emotional loneliness. The results of Model 2 suggest that the declining level of emotional loneliness over time is related primarily to changes in partner-centeredness. It seems that the longer the period that has elapsed since divorce, the less partner centered divorcees become and the more they appreciate or accept their single lives. As a result, one would expect their emotional loneliness to decline over time. Panel data are needed to test the tenability of this hypothesis. It is interesting to note that the time elapsed since divorce was negatively associated with emotional loneliness, yet posi-

TABLE 4
Loneliness Among Divorcees in Relation to Partner-Centeredness and Support Network Size,
Standardized Regression Coefficients

	Social Loneliness ^a				Emotional Loneliness ^b		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	
Gender (female = 1)	15***	16***	10**	.01	.09**	.08**	
Age	01	01	02	.09*	.07	.07	
Time elapsed since divorce	.11**	.10*	.06	16***	10**	10**	
Partner-centeredness		04	04		.38***	.38***	
Size support network			26***			.04	
Change adj. R^2		.00	.07***		.12***	.01	
Total adj. R^2	.24	.24	.31	.23	.35	.36	

Note. N = 819.

^aControlled for emotional loneliness. ^bControlled for social loneliness.

^{*}p < .05, **p < .01, ***p < .001.

TABLE 5
So, Loneliness Among Married People in Relation to Partner-Centeredness, Relational Conflicts,
and Support Network; Standardized Regression Coefficients

	Social Loneliness ^a			Emotional Loneliness ^b		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Gender (female = 1)	18***	18***	16***	.09***	.11***	.11***
Age	.01	.02	01	.06**	.04	.04
Ever divorced	02	02	02	04	03	03
Relational conflicts	.05*	.05*	.07**	.10***	.10***	.10***
Partner-centeredness		06*	07**		.15***	.15***
Size support network			17***			.00
Change adj. R^2		.01	.02***		.02***	.00
Total adj. R^2	.25	.26	.28	.24	.26	.26

Note. N = 1,404.

tively associated with social loneliness. The longer divorcees had lived single lives, the less likely they were to suffer from emotional loneliness and the more likely they were to be socially lonely.

Table 5 presents the results of a stepwise regression analysis among married people. Relational conflicts were addressed in addition to partner-centeredness. Before carrying out the analysis, we did not have any explicit expectations about possible links between relational conflicts and social loneliness because it is difficult to assess the implications of such conflicts for interactions with members of one's network other than one's partner.

The left-hand panel in Table 5 shows that, contrary to what the investment hypothesis suggests, partner-centeredness was negatively rather than positively related to social loneliness among married people. The association remained significant after taking into account the size of the support network. Relational conflicts were positively associated with social loneliness. A comparison of Models 2 and 3 shows that the association between relational conflicts and social loneliness is not attributable to differences in married people's support networks. When the size of the support network was introduced in Model 3, the regression coefficient for relational conflicts remained virtually unchanged. In a separate analysis, we examined whether centeredness moderated the effects of conflict. The underlying idea was that the effects on social loneliness of relational conflicts might be greater for the highly partner centered than for the less partner centered.2 The Partner-centeredness × Conflict interaction was not significant, however ($\beta = -.05$, R^2 -change = 0). Taken together, the social loneliness findings in Table 5 provide no support for the investment hypothesis.

As the right-hand panel of Table 5 shows, differences in emotional loneliness among the married were primarily related to the severity of their relational conflicts and their partner-centeredness. Differences in the size of their support networks did not account for the variance in emotional loneliness among married couples. As was the case among divorcees, married people who attached great importance to having a partner were more prone to emotional loneliness. In addition, serious conflicts within a partner relationship increased the likelihood of emotional loneliness. In a separate analysis we tested whether the effects of relational conflicts on emotional loneliness were moderated by partner-centeredness. The test failed to show significant differences ($\beta = .02$, R^2 -change = 0). The findings in the right-hand panel of Table 5 show that the associations (as predicted by the discrepancy hypothesis) between relational conflicts and emotional loneliness remain significant in a multivariate model.

A comparison of Tables 4 and 5 shows that the variance in loneliness was better explained among divorces than among married people. In the case of social loneliness, 31% and 28% of the variance, respectively, was explained; in the case of emotional loneliness, 36% and 26%, respectively. The difference is possibly attributable to the greater variance in loneliness among the divorced compared to the married.

Gender Differences

In Table 2, we pointed out that men were generally more partner centered and had smaller support networks than their female counterparts. Do these differences account for gender differences in loneliness?

As reported in Table 2, higher levels of social loneliness were found for men than for women, regardless of marital history. As the left-hand panels of Tables 4 and 5 show, men's higher levels of social loneliness were not attributable to their stronger partner-centeredness. Differences in support network size provided a partial explanation of gender differences in social loneliness among divorcees. The results of Models 2 and 3 (left-hand panel of Table 4) suggest that part

^aControlled for emotional loneliness. ^bControlled for social loneliness.

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

²We thank one of the anonymous reviewers for suggesting this idea.

of the reason why divorced men were more prone to social loneliness than were divorced women is that they had smaller support networks. Gender differences in social loneliness among the married were poorly explained (left-hand panel of Table 5). With the introduction in Model 3 of support network size, the magnitude of the gender coefficient dropped only slightly.

In Table 2, the mean level of emotional loneliness was higher among divorced men than among divorced women. Model 2 (right-hand panel of Table 4) shows that once differences in partner-centeredness were taken into account, divorced women were more prone to emotional loneliness than were divorced men. This finding suggests that partnercenteredness accounts for emotional loneliness among divorced men, but not among their female counterparts. In Table 2, gender differences in emotional loneliness among the married were not observed, although gender differences did emerge in multivariate analyses. As the right-hand panel of Table 5 shows, after controlling for age, having ever divorced, and relational conflicts, married women were more emotionally lonely than married men. The magnitude of the gender coefficient increased slightly after introducing partner-centeredness and support network size.

In summary, support network size helped explain the greater social loneliness of divorced men compared to divorced women, and partner-centeredness helped explain the greater emotional loneliness of divorced men compared to divorced women. Support network size and partner-centeredness failed to help explain the greater social loneliness of married men compared to married women and the greater emotional loneliness of married women compared to married men.

DISCUSSION

Merits of the Deficit and Cognitive Perspectives

As noted in the introduction, very little research has compared the deficit and cognitive perspectives on loneliness. We found support for both. To explain loneliness, one should not only take characteristics of people's network of relationships into consideration, but also their relationship preferences.

According to the deficit perspective on loneliness, the absence of specific types of relationships gives rise to specific types of loneliness. In this study we distinguished social loneliness from emotional loneliness. The results show that social loneliness can be attributed primarily to unfulfilled needs in the wider network of support givers. Emotional loneliness, however, is associated primarily with the absence of a partner, that is, with the absence of an exclusive, close, and intimate tie. These results support the deficit hypothesis.

The cognitive perspective draws attention to the role of relationship preferences. We stipulated that preferences might play a two-part role in explaining differences in loneliness (cf. Stevens, 1995): First, as an evaluation criterion (the discrepancy hypothesis) and second, as the driving force behind behavior (investment hypothesis). A focus on preferences implies the use of inferred rather than direct discrepancy measures. Inferred measures tap ideals, desires, or standards, whereas direct measures (see Archibald et al., 1995, for an example) assess whether actual circumstances meet the person's ideals, desires, or standards. The reason for using an inferred discrepancy measure was to find out whether preferences contribute to an explanation of loneliness over and above characteristics of the network of relationships.

To examine the role of preferences we first focused on partner-centeredness, that is, the importance people attach to having a partner. In line with the discrepancy hypothesis, the results indicated that divorces with a strong partner orientation were most prone to emotional loneliness. Surprisingly, findings also showed that married people with a strong partner orientation were more likely to suffer from emotional loneliness. A possible explanation for this unexpected finding is that married people with a strong partner orientation have extremely high expectations of partner relationships. Presumably, their expectations are difficult to fulfill and are therefore likely to result in disappointment. Another possible explanation is that partner centered married people tend to depend heavily on their partners, which makes them emotionally vulnerable.

The second way in which we examined whether loneliness results from a discrepancy between desire and reality was by comparing the emotional loneliness of married individuals who do not, or only rarely, have conflicts with their partners to that of married individuals whose relationships are marred by serious conflict. The finding that married people in conflict-ridden relationships are more prone to emotional loneliness than those in harmonious relationships is in line with the discrepancy hypothesis.

We found no support for the investment hypothesis, which posits that partner-centeredness is indirectly related to social loneliness and that this association disappears when characteristics of the social network are taken into account. The idea underlying this hypothesis is that people who attach great importance to having a partner invest very little in establishing and nurturing personal relationships other than a partnership and that this makes them more prone to social loneliness. The investment hypothesis found no support among either the divorced or the married. An unexpected finding was that among the married, partner-centeredness was negatively associated with loneliness: The greater the importance married people attached to having a partner, the less socially lonely they tended to be. This finding suggests that people invested in a marriage are also invested in other types of relationships. Whereas the investment hypothesis rests on a compensation model of relationships (effort and time invested in partnerships goes at the expense of other relationships), the social loneliness findings among the married suggest that a generalization model might be more appropriate.³ People with a strong partner orientation might be generally oriented toward ties with others. In short, they might be gregarious people.

We were unable to say in advance whether we expected to find an association between relational conflicts and social loneliness. These factors were, in fact, related. Our findings show that married people who faced serious relational problems were more likely to suffer from social loneliness than were married couples in harmonious relationships. The differences in social loneliness were not attributable to differences in the size of the support network. Apparently, being in a conflict-ridden relationship gives rise to a general sense of social isolation. Relational conflicts not only affect the couple's feelings toward each other, but also seem to negatively color the views people have of other relationships in their networks.

Gender and Loneliness

The finding that divorced men were more prone than women to social loneliness tallies with the view that men find it harder to live single lives. In part, the greater vulnerability of divorced men to social loneliness was attributable to their having smaller support networks. Our findings suggest either that women are better able to build new networks following divorce or that they lose fewer contacts as a result of divorce. It is also conceivable that these women had bigger and more varied social networks before their marriages broke up. Our study showed larger support networks for married women than married men, a finding that is often observed in the literature (Antonucci & Akiyama, 1987; Philipson, 1997).

The higher level of emotional loneliness among divorced men compared to divorced women also tallies with the view that life without a partner is more difficult for men than it is for women. It is interesting to note that when partner-centeredness was taken into account, divorced women were more prone to emotional loneliness than their male counterparts. Apparently, the explanation of differences in emotional loneliness among divorced women should be sought in factors other than partner orientation. We have not examined what these factors are, however. They could include feelings of grief, disappointment, impotence, or of having little scope for a better life. All these express that having to cope on one's own is not easy. Our findings seem to suggest that feelings of this sort do not necessarily give rise to the desire to have a partner.

Among the married, gender differences in loneliness were less consistent than they were among divorcees. Married men were found to be more prone to social loneliness compared to their female counterparts. We were unable to account for this gender difference in terms of differences in support network

size, partner-centeredness, or relational conflicts. In bivariate analyses, no gender difference in emotional loneliness among the married was observed. However, after controlling for age, ever having divorced, and relational conflicts, married men were found to be less prone than married women to emotional loneliness. This gender difference was not attributable to differences in support network size or partner-centeredness. Apparently, to understand gender differences in loneliness among the married, a different set of predictors is required. Regarding differences in social loneliness, we suggest looking at ways in which marriage differentially structures men's and women's social interactions (Dykstra & de Jong Gierveld, 2004). Notions of kinkeeping (Rosenthal, 1985) where wives are the organizers of family get-togethers and social events, and of task-specialization (Becker, 1991), where husbands engage in instrumental functions and wives in expressive and nurturing functions, are likely to be helpful here. Regarding gender differences in emotional loneliness, the view that men derive more affective gratifications from marriage than do women provides a clue as to what the predictors might be. We should look more carefully at the functions of partner relationships. As Antonucci (1994) argued, men are more likely than women to see their partners as their sole support in times of need, and they are more inclined than women to indicate that their needs for intimacy and a sense of security are sufficiently met by their partners.

Gender differences in emotional loneliness varied by partner status, but those in social loneliness did not. A point to consider here is that social loneliness may be common to men and characterize male lifestyles. In this context, Wister and Strain (1986) spoke of the "stoic" attitude of many men to their social lives. This attitude has its roots in early childhood, is a product of their upbringing, and influences the way in which men respond to personal problems and interact with their friends and families. This stoicism is manifested in their belief that they can meet their own needs, can stand on their own feet, and do not need to turn to others for support.

Limitations

We drew attention in the preceding to the possible bias resulting from the method we used to measure social and emotional loneliness. In our measuring instrument, all items representing social loneliness were positively formulated, whereas all emotional loneliness items were negatively formulated. The results, however, provided few grounds for doubting the validity of the method used. Substantively, the pattern of results is convincing. The social loneliness items showed the strongest links with the support network relationship variables, whereas the emotional loneliness items showed the strongest links with the partner variables.

A second point to consider with regard to the loneliness measure is the possibility of a gender bias, particularly with regard to the social loneliness items. The results indicated

³We thank one of the anonymous reviewers for suggesting this alternative model.

higher levels of social loneliness for men than for women, regardless of partner status. One explanation is that the gender difference in social loneliness is real and attributable to gender differences in relationship characteristics and preferences. An alternative explanation is that men are less likely than women to endorse agreement with the items measuring social loneliness. Recall that all the social loneliness items were positively formulated. Disagreement with a positive item was taken as an indication of social loneliness. Presumably, men are less able than women to identify themselves with the items because such items represent what might be considered to be typically female aspects of personal relationships (leaning on others, talking to others) rather than stereotypical male characteristics (camaraderie). An earlier publication (van Baarssen et al., 2001) underlined the need to carry out research into possible gender biases in the items of the de Jong Gierveld loneliness scale.

Puzzling findings such as the inability to fully explain differences in social loneliness between (a) divorced men and women, (b) married people with and without relational conflicts, and (c) married men and women in terms of differences in the size of support networks are the reason for doubting the appropriateness of the social network measure. Social networks were defined on the basis of support received during the past year when problems were experienced. This need-based measure has its drawbacks. Firstly, it provides no indication of the everyday quality of people's relationships. Secondly, it tells us little about the networks of those who did not experience problems. In retrospect we would have preferred a measure with information on the quality of daily contacts with friends, neighbors, colleagues, and relatives.

In this study only preferences regarding the partner relationship were considered. Given the absence of relevant measures in the "Divorce in the Netherlands" survey, we were unable to examine the role of preferences regarding a wider range of relationships. Future work should analyze the importance attached to different kinds of support or different kinds of relationships in explaining differences in social loneliness. A joint consideration of partner-centeredness and other relationship preferences can also shed light on people's propensity to invest in different types of relationships. Presumably, some will focus on specific relationships at the expense of others (as suggested by a compensation model), whereas others will be more generally gregarious (as suggested by a generalization model).

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