Gender Differences in the Relationship Between Marital Status Transitions and Life Satisfaction in Later Life

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This study examined life satisfaction among individuals who had undergone a transition in marital status and those whose marital status remained stable over a 7-year period. In particular, using data from a large-scale, longitudinal study we assessed life satisfaction as measured in 1983 and 1990 among 2,180 men and women between the ages of 67 and 102. Groups of individuals were identified on the basis of whether a spouse was present or absent at the two measurement points. This allowed for a classification of groups who experienced stability or transitions in marital status. Among those individuals whose marital status remained stable over the 7 years, women's life satisfaction declined and men's remained constant. Among those who experienced a transition—in particular, the loss of a spouse—a decline in life satisfaction was found for both men and women, decline being more predominant for men. In addition, men's life satisfaction increased over the 7-year period if they gained a spouse, whereas the same was not true for women. Generally, these findings imply that the relationship between marital status transitions or stability differs for men and women.

As people age, many face the traumatic experience of losing their spouses, either through death or institutionalization. Evidence suggests that individuals who lose a spouse are more likely to die than their counterparts who do not experience this stressful event (e.g., Bowling, 1987). An equally important issue is the quality of life following the loss of a spouse. Some individuals adjust well to the loss; others do not. Attempting to understand the experience, researchers have studied everything from bereavement (e.g., Herriott & Kiyak, 1981; Lund, 1989) and depression (e.g., Osterweis, Solomon, & Green, 1984; Stroebe & Stroebe, 1983) following the loss of a spouse to use of health services (e.g., Wolinsky & Johnson, 1992). This emphasis on widowhood, however, has overshadowed the need to study stability in marital status or marital status transitions other than the loss of a spouse. For example, marriage in later life, whether for the first time or following the loss of a spouse, has important implications for quality of life.

The goal of the present study was to explore life satisfaction among seniors who had undergone both types of transitions (i.e., those who gained spouses and those who lost spouses) and seniors who retained marital status stability. In particular, we examined life satisfaction among various groups of seniors differing in marital status, thereby adding to the literature on life satisfaction among those who are single (Chappell & Badger, 1989), divorced (Farnsworth, Pett, & Lund, 1989), remarried (Bulcroft, Bulcroft, Hatch, & Borgatta, 1989; Burks, Lund, Gregg, & Bluhm, 1988), or married and widowed (e.g., D'Amato, 1987; Fengler, Dangelis, & Little, 1983; Geis & Klein, 1990).

Marital Status and Well-Being

A large literature has emerged on the relationship between marital status and well-being, as measured by a variety of indicators including morale, depression, happiness, life satisfaction, and so forth (e.g., Allen, Ciambrone, & Welch, 2000; Holicky & Chariifue, 1999; Hong & Duff, 1997; Kehn, 1995; Morris, 1997; Ryff & Keyes, 1995). Overwhelmingly, the literature points to a positive association between having a marriage partner and being satisfied with life (e.g., Hong & Duff, 1997; Kehn, 1995). Much of the past work has focused exclusively on women (Bennett & Morgan, 1992; Day & Day, 1993; Kousha & Mohseni, 1997; Mookherjee, 1997), in part because they generally outlive men and have a greater likelihood of being widowed. Reinhardt and Fisher (1989), for example, compared reports of life satisfaction among women who were married and those who were widowed and found significantly higher life satisfaction among those who were married. Other researchers have directly examined gender differences, comparing married and widowed men and women. Connidis and McMullin (1993), for example, found that divorced men and women were less satisfied than their married counterparts. Lubben's (1989) results indicated that married men were more satisfied with life than either married or widowed women, and among men, those who were married had higher life satisfaction than those who were not. Moreover, in their extensive search of the literature, Stroebe and Stroebe (1983) reported that "married females were more depressed than married males and widowed males were more depressed than widowed females" (p. 284).

Taken together, these findings suggest that the presence of a marriage partner has positive implications for life satisfaction. As Dykstra (1995) pointed out, "Many activities are couple-companionate, undertaken as a couple, with other couples" (p. 321). Thus, to the extent that social interaction facilitates psychological well-being, the availability of a
spouse may offer a “protective” function. Interestingly, some of the existing research has pointed to the possibility that the presence of a spouse affords a relatively greater advantage for men than for women. For example, in a study of retirement satisfaction, the beneficial impact of marriage on satisfaction with retirement was greater for men than for women (Calasanti, 1996). Moreover, researchers have shown an increased risk of dying among widowers, but not among widows, following their spouses’ deaths (e.g., Biondi & Picardi, 1996; Bowling & Windsor, 1995; Martikainen & Valkonen, 1996). This implies that the implications of marriage and widowhood are different for men and women.

Although numerous studies of aging have explored the “loss-of-spouse” transition (i.e., death, divorce, institutionalization), fewer studies have examined the remarriage transition. This is, in part, because small numbers of people tend to remarry late in life (Zick & Smith, 1988). Likewise, with a few exceptions (e.g., Barrett, 1999; Bennett & Morgan, 1992; Dykstra, 1995; Strain & Payne, 1992), never-married seniors have been largely ignored when examining the relationship between marital status and well-being.

**Stability versus transitions in marital status.**—The important distinction between marital status stability versus marital status transition has received little attention in past research. A potentially useful approach would allow for a two-dimensional classification that distinguishes between the presence of a spouse (present vs absent) and transitions in marital status (yes vs no). Within this framework, never-married and still-married individuals are similar on the transition dimension (i.e., they have not experienced a transition in marital status) and different on the presence dimension (i.e., never-married individuals do not have spouses present, and still-married individuals do have spouses present). This classification would allow for a consideration of whether undergoing a transition in marital status has more serious consequences for life satisfaction than the mere presence or absence of a spouse.

Longitudinal designs are essential in order to directly study the role of marital status transitions. However, in the few longitudinal studies that exist, it is difficult to summarize the impact of marital status transitions on changes in life satisfaction because the comparison groups differ across studies (e.g., married vs widowed; remarried vs widowed). In one study of seniors who had lost spouses, those who remarried displayed higher levels of life satisfaction after 2 years than those who did not (Burks et al., 1988). In another 10-year study, those who remarried were relatively happier with their lives than those who did not, but this happiness diminished with time (Bulcroft et al., 1989).

Finally, Bennett and Morgan (1992) found that patterns of psychological change over 4 years differed for women who had been widowed, had never married, or were still married. Overall, morale decreased; however, the magnitude of this decrease was strongest among widowed women. Also, those who experienced a transition (i.e., the widowed women) had significantly lower levels of morale after 4 years than those whose status remained stable (i.e., still-married and never-married women). Despite differences in the presence or absence of a spouse, the groups who experienced stability expressed similar levels of morale. In other words, morale appeared to be more affected by a transition than by the mere availability or presence of a spouse.

**The Present Study**

Using a longitudinal design, we directly addressed the question of whether patterns of life satisfaction differed for seniors who underwent a transition in marital status (e.g., death of spouse, remarriage) compared with those who experienced stability (i.e., remained married, remained never married, remained divorced or widowed). First, we predicted that, over time, life satisfaction would remain relatively unchanged among those who experienced stability in marital status. This prediction was based on Bennett and Morgan’s (1992) finding that those who experienced marital status stability expressed similar levels of morale over time and on the findings from several large-scale longitudinal studies of well-being, one involving a 9-year follow-up (Costa et al., 1987) and another involving a 14-year follow-up (Stacey & Gatz, 1991).

Second, we predicted that life satisfaction would change among those who underwent a marital status transition. In particular, within the marital status transition groups, we expected that those who lost spouses would experience a decline in life satisfaction, whereas those who gained spouses would enjoy heightened satisfaction. More important, we expected that, relative to women, for men the magnitude of change in life satisfaction would be larger. Women’s life satisfaction, on the other hand, was expected to be relatively more stable than men’s, despite changes in marital status. These predictions are in keeping with research that has shown an increased risk of dying among widowers but not among widows following the death of a spouse (e.g., Bowling & Windsor, 1995).

Of course, an evaluation of changes in life satisfaction would be inadequate without attention to other factors. For the present purpose, potentially important variables were identified by drawing from the literature on the predictors of life satisfaction (Davis, 1991; D’Amato, 1987; Fengler et al., 1983; Girzadas, Counte, Glandon, & Tancredi, 1993; Riddick, 1985; Spreitzer & Snyder 1974). We included measures of health, which is consistently shown to be the strongest predictor of life satisfaction (D’Amato, 1987; Farnsworth et al., 1989; Girzadas et al., 1993; Lubben, 1989; Morris, 1997). Also included were age (e.g., Geis & Klein, 1990; Lund, Caserta, & Dimond, 1986), education and income (e.g., Farnsworth et al., 1989), social support (e.g., Fengler et al., 1983; Strain & Chappell, 1982), and activities of daily living (Girzadas et al., 1993), variables that have been shown to predict life satisfaction.

The majority of the existing work in this area has used cross-sectional designs, obtaining only posttransition measures of well-being. Unlike these past studies, which do not allow for a direct analysis of marital status transitions and accompanying changes in well-being, the present study systematically assessed these changes across 7 years, from 1983 to 1990. Participants were part of the longitudinal Aging in Manitoba (AIM) Project, and because of the representative nature of the study sample, it was possible to track
those individuals who experienced both types of marital status transitions (e.g., widowed, remarried) as well as those who retained stability (e.g., married, never married, remained widowed or divorced). As such, our assessment expands on the previous work, which has only indirectly addressed marital status transitions versus stability primarily by comparing groups that are married versus widowed. As such, it provides an opportunity to extend the existing description of the relationship between marital status and life satisfaction that has arisen from these studies that focus on specific comparison groups.

Methods

AIM Database

The AIM database contains data from interviews conducted with older people in Manitoba at five points in time: 1971, 1976, 1983, 1990, and 1996. The individuals who agreed to participate (or in some cases proxies) were interviewed in their home, in their language of choice (e.g., Ukrainian, French, Italian, Icelandic, Yiddish, Portuguese, Polish, German, Chinese, Sioux, Chipewa, and Cree). The interviews lasted approximately 1 to 1.5 hr and assessed a variety of variables, including demographics, social networks, perceptions, health, well-being, and so forth.

To obtain sufficient numbers of individuals who experienced marital status transitions and large enough numbers to examine each of the stability–transition groupings (e.g., see subsequent description of stability–transition groups), the present analysis focused on a subset of individuals who were interviewed over a 7-year period. This included AIM participants who were interviewed in 1983 and again in 1990. Thus, the following description is restricted to these two measurement points. A full description of the methodology of the AIM studies can be found elsewhere (Chipperfield, Havens, & Doig, 1997).

In 1983, a total of 5,273 individuals were interviewed; some of these (n = 2,780) were first-time participants. Using an age–gender stratified area-probability sampling technique, these first-time participants were randomly selected from Manitoba Health’s computerized registry, which contains information on all Manitoba residents (e.g., age, gender, and area of residence) who are covered under the universal medical insurance program. Because this registry represents the most comprehensive listing of residents available in the province of Manitoba, samples drawn from it can be considered representative of the overall provincial population. Other 1983 participants were part of a longitudinal follow-up panel (n = 2,403), having begun the AIM study at an earlier time (i.e., in 1971 or 1976). Again, the initial 1971 and 1976 samples were selected from Manitoba Health’s registry using the same age–gender stratified area-probability sampling technique. Interviews were completed by 95% of the potential surviving participants (Chipperfield et al., 1997).

In 1990, a second follow-up study was conducted, reinterviewing all of the individuals who had participated in 1983, excluding those who had died. At this time, interviews were again conducted with 95% (n = 3,218) of potential participants (Chipperfield et al., 1997). Rigorous steps were taken to determine the status of a small percentage of individuals (n = 170, or 5%) who could not be interviewed in 1990 for a variety of reasons and to compare these nonrespondents with respondents. No significant differences were found on a variety of demographic variables, indicating that the nonrespondents and respondents were similar (Chipperfield et al., 1997).

Present Study Sample

To consider the relationship between marital status and life satisfaction, only a subset of the 1990 AIM survivors were included. The sample was restricted to those individuals who, in 1983 and 1990, completed Neugarten, Havighurst, and Tobin’s (1961) Life Satisfaction Index A (LSIA), thus excluding individuals who were not interviewed at both times, those who required assistance from a proxy, and those who were cognitively incapable of responding to these items. The participants retained for analyses (n = 2,180) consisted of 1,321 women and 859 men ranging in age from 67 to 102 (M = 77.7). One half (50%) were married, 40% were widowed, 3% were divorced, and 7% were single. Formal education ranged from a low of 0 (2%) to a high of 16 or more years (2%). The majority lived in a house (68%) with at least one other person (56%) and described their ethnic descent as British (41%).

Measures

Demographic variables.—Age was calculated from year of birth as indicated on the Manitoba Health records (M = 77.7 years, SD = 6.9). Other demographic variables for the analyses were based on information obtained during the 1983 interview. Education was assessed by asking the participants, “How many grades did you complete in school?” The answers were coded into one of seven categories: 1 = 0 years (no school), 2 = 1 to 4 years, 3 = 5 to 8 years, 4 = 9 to 10 years, 5 = 11 to 12 years, 6 = 13 to 16 years, and 7 = 16 years or more. The median level of education was between 9 to 10 years. Income in 1983 was calculated by adding all the sources of reported income (i.e., pensions, salaries, rents, interest, insurance annuities, Old Age Security, Guaranteed Income Supplement, allowances, welfare, unemployment insurance, Old Age Assistance, Shelter Assistance for Elderly Renters, Manitoba Supplement for Pensioners, or cash from other sources). The mean level of monthly income in 1983 was $595.33 (SD = $552.54) in Canadian dollars.

Social support.—On the basis of Cumming and Henry’s (1961) Social Lifespace Measure, we created two variables to reflect monthly social interaction in 1983. These variables were constructed from respondents’ reports of the numbers of people they saw every day, once a week, a few times a month, once a month, and less than once a month. First, interaction with relatives was assessed by responses to the question “Of the relatives (including any in household) you feel closest to, how many do you see and how often?” As suggested by Cumming and Henry, the number of people seen was multiplied by a weighting factor so that a large score would mean more social contact. The mean
score for interaction with relatives in 1983 was 44.3 (SD = 47.18).

Second, *interactions with friends* was assessed by responses to the following question: “Of the friends (including any in household) you feel closest to, about how often do you get together with any of them?” Again, the number of people seen was multiplied by a weighting factor. The mean score for interaction with friends in 1983 was 48.6 (SD = 88.3).

Finally, an *interaction with neighbors* variable was assessed by responses to “How often do you get together with the neighbour which you see most frequently?” The respondents could choose between every day (1), at least once a week (2), a few times a month (3), about once a month (4), and anything less than once a month (5). Scores on this 4-point scale were reverse coded such that high scores reflected more interaction. The mean interaction-with-neighbor score was 3.8 (SD = 1.4) in 1983.

*Change in health status variables.*—On the basis of participants’ responses to the interview questions, three measures were created to assess changes that occurred in health status over 7 years. *Perceived health* was assessed both in 1983 and in 1990 by asking, “For your age, would you say, in general, your health is good, fair, or poor?” The responses were provided on a 5-point scale ranging from 1 (excellent) to 5 (bad for your age). These scores were subsequently reverse coded such that high scores reflected excellent health and low scores, poor health. By subtracting the 1983 score from the 1990 score, a variable was created to measure change in perceived health (M = -0.1, SD = 0.88). Scores ranged from -3.0 to 4.0, with higher (i.e., positive) scores reflecting improvements in perceived health.

*Morbidity* was assessed in 1983 and again in 1990 by summing the number of health problems. Individuals identified these problems from a list of problems or diseases encountered within the past year: arthritis or rheumatism; palsy; problems with eyes, ears, teeth, stomach, feet, skin, and other areas; heart-related problems (e.g., hardening of arteries, hypertension, heart attack); lung problems (e.g., emphysema, tuberculosis, breathing problems); stroke; kidney problems; and diabetes. A low score reflected low morbidity and a high score, high morbidity. Again, the 1983 score was subtracted from the 1990 score to create a change in morbidity score. Higher scores indicated increased morbidity; lower scores, decreased morbidity (M = 1.01, SD = 2.24).

*Functional independence* was determined by asking the participants about their ability to perform basic activities of daily living as identified in other standardized measures (Branch, Katz, Kniepman, & Papsidero, 1984; Branch & Myers, 1987; Katz, Ford, Moskowitz, Jackson, & Jaffee, 1963): going up and down the stairs; getting about the house; getting in and out of bed; washing or bathing or grooming; dressing and putting shoes on; and eating. A functional independence score was created by summing the activities that respondents were able to perform independently. Thus, higher scores reflected greater independence. By subtracting the 1983 score from the 1990 score, a change score was created such that higher scores reflected increasing independence and lower scores, decreasing independence (M = -0.16, SD = 0.89).

*Stability–transition groups.*—The major independent variable, marital stability–transition, was determined by asking respondents about who lived in their households in 1983 and again in 1990. For the purposes of this study, four groups were identified on the basis of presence (P) or absence (A) of a spouse. Spousal presence obviously referred to the presence of a spouse who lived in the home. Spousal absence from the household could be due to having never been married, the death or institutionalization of a spouse, or divorce or separation. The P or A groups were further classified as having stability in marital status or as having experienced a transition.

Table 1 shows the four groups identified in the present study, separately for women and men. The *present–present (PP)* stability group included those who reported living with a spouse in both 1983 and 1990. These individuals experienced stability in the sense that they remained married over the 7-year period of this study. As shown in Table 1, a greater proportion of men (27.34) relative to women (19.40) were classified into the PP stability group.

Respondents who were not living with a spouse in either 1983 or 1990 were classified into the *absent–absent (AA)* stability group. The absence of a spouse was for a variety of reasons (e.g., never married, divorced or widowed before 1983; see Appendix, Note 1). Although some of these individuals had undergone a transition before 1983, they had all retained at least recent stability in marital status.

The *present–absent (PA) transition* group included individuals who were living with a spouse in 1983 but not in 1990. The loss of a spouse was most often due to death (87%). However, for a small percentage of the participants, it was due to divorce (3%) or other reasons (11%) such as institutionalization of a spouse.

The final, *absent–present (AP) transition* group consisted of those respondents who were not living with a spouse in 1983 but were in 1990. In the majority of cases (83%), the presence of a spouse in 1990 was due to remarriage or being reunited with a separated spouse, although for 5 individuals (17%) the presence of a spouse in 1990 was indicative of a first marriage. It is worth noting that fewer than 1% of both men and women in this study gained a spouse in late life.

*Life satisfaction.*—The dependent variable, life satisfaction, was measured in 1983 and 1990 using Neugarten and associates’ (1961) LSIA. The LSIA was administered to

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<th>Table 1. Marital Status Group Sizes (Frequencies and Percentages)</th>
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study participants who were capable of responding to 20 statements (i.e., proxy responses were not obtained). These statements included such items as “I have gotten more of the breaks in life than most of the people I know” and “As I grow older, things seem better than I thought they would be.” Respondents were asked to tell the interviewer whether they agreed, disagreed, or were not sure whether each statement was true for them. Only a small percentage (under 9%) of individuals had missing values on more than 10 of the 20 LSIA items (see Appendix, Note 2). A mean LSIA score was created for each individual, ranging from 0 to 1. In 1983, the mean LSIA index score was .71 (SD = .18), with a Cronbach’s alpha of .77. In 1990, the mean LSIA index score was .67 (SD = .20), with a Cronbach’s alpha of .74.

**RESULTS**

**Preliminary Analyses: Identifying Covariates**

Before addressing the major question of whether changes in life satisfaction varied depending on the stability of or transition in marital status, preliminary correlational analyses were undertaken to identify potential covariates. Potential variables included demographics (age, education, and income), social support (interaction with relatives, neighbors, and friends), and health status (perceived health, morbidity, and functional capacity). Each of these variables was assessed in relation to the change in LSIA scores over time, which was measured by subtracting a respondent’s LSIA score in 1990 from his or her LSIA score in 1983. A positive difference score indicated an increase and a negative difference score indicated a decline in life satisfaction over time.

Because the relationships between each potential covariate and the LSIA change might differ by gender and stability-transition group, we examined correlations separately for men and women in the four groups (i.e., PP, PA, AP, AA). It should be noted that, owing to missing values on the potential covariates, the sample sizes for the calculation of a given coefficient may differ from those presented in Table 1. For example, in examining the correlations between potential covariates and the LSIA change score for women within the AP group, correlations were based on as few as 15 individuals, whereas Table 1 shows 17 individuals in the AP group.

Table 2 shows that none of the demographic or social support variables correlated significantly with change in life satisfaction. Some large correlations emerged for women in the AP group; however, due to the very small sample (n = 15), these are nonsignificant and likely to be quite unreliable. In contrast, there was some evidence for associations between changes in health and in life satisfaction. Table 2 shows that this relationship was most apparent for the perceived health variable: Those who perceived their health to be deteriorating over the 7 years of the study showed more evidence of declining satisfaction with life. This was especially true for women, with three of the correlations exceeding .20. Changes in independence on activities of daily living, although significantly correlated with LSIA changes for women in the PP and AA groups, were low (.127 to .154).

**Repeated Measures**

We conducted repeated measures analyses with Proc Mixed (SAS Institute, Inc., 1992, p. 229) to examine differences in patterns of life satisfaction as they related to gender and marital status stability-transition. The design was a split plot, involving a gender (male or female) × stability-transition group (PP, AA, PA, or AP) × year (1983 or 1990) 2 × 4 × 2 analysis of covariance model with repeated measures on life satisfaction. Change in perceived health and independence were initially retained as covariates because of their correlations (p < .05) with change in life satisfaction (Table 2). However, the subsequently reported analysis excludes these covariates because, when included, they did not alter the overall effects of other independent variables (see Appendix, Note 3).

A significant main effect emerged for the between factor, Stability-Transition Group, F(3,2172) = 30.79, p < .0001 (Table 3). However, the main effect for Stability-Transition

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<th>Table 2. Correlations Between Changes in Life Satisfaction Scores and Selected Variables for Women and Men</th>
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*Note: PP = present-present; AA = absent-absent; PA = present-absent; AP = absent-present.

*Health status measures reflect changes in health status over the 7 years of the study. Positive correlations indicate that increasing life satisfaction over time was associated with improved perceived health, independence, and morbidity.

*p < .01.
(ST) Group is qualified by its interaction with Year, $F(3,2172) = 16.70, p < .0001$, and by a three-way interaction between ST Group, Gender, and Year, $F(3,2172) = 7.20, p < .0001$. This three-way interaction, as illustrated in Figures 1 and 2, indicates that changes in life satisfaction over time were not equivalent for women and men within specific stability–transition groups.

To consider the nature of the interaction, further tests were carried out to assess the significance of treatment–contrast interactions and simple main effects (Kirk, 1982). The treatment–contrast interactions involved a comparison of the mean LSIA scores over time for men and women, separately within each of the four stability–transition groups. In other words, these tests examined gender differences in the longitudinal patterns of life satisfaction for those who experienced stability in marital status. Simple main effect tests revealed a significant decline in life satisfaction for women, both those women in the PP category (i.e., those women who, over time, remained married), $t = 4.30, p < .0001$, ES = .209, and those in the AA category (i.e., those who remained widowed or single), $t = 4.96, p < .0001$, ES = .194. In contrast, for men, no significant declines were found in the AA group, $t = 0.37, p = .714$, or in the PP group, $t = 3.07, p = .002$, ES = .126. Rather, as shown in Figure 1, men’s pattern of life satisfaction was one of constancy. Thus, significant declines in life satisfaction among those who experienced stability in marital status were restricted to women. Moreover, the treatment–contrast interaction for the AA group was significant, $t = -2.49, p = .01$, ES = -.224, SEs = .007 for women, .015 for men, indicating that the slopes of the lines were significantly different for men and women. This was not true in the case of the PP group, where the slopes did not differ significantly, $t = -1.31, p = .19$, SEs = .009 for women, .008 for men.

Transitions in marital status.—Figure 2 shows the longitudinal patterns of life satisfaction for those who experienced a transition in marital status. Simple main effects of the decline in life satisfaction were conducted first for the PA group (i.e., the group with a spouse present in 1983 but absent in 1990; see Figure 2a). The results indicated that the decline was significant for both men, $t = 6.91, p < .0001$, ES = .714 and women, $t = 4.11, p < .0001$, ES = .272. Furthermore, the magnitude of the effects differed for men and women, as suggested by the significant test of the treatment–contrast interaction, $t = 3.62, p = .0003$, ES = .445, SEs = .012 for women, .019 for men. Thus, for those who lost their spouses the decline in LSIA over time was significantly greater for men than women.

For the AP group (Figure 2b), the treatment–contrast interaction was not significant, implying that the increase in life satisfaction for men was not significantly greater than the increase in life satisfaction for women, $t = -1.32, p = .187$, SEs = .054 for women, .045 for men. However, tests of the simple main effects in the AP group showed that the increase in life satisfaction was significant for men, $t = -3.68, p = .0002$, ES = -.893, but not for women, $t = -1.37, p = .17$. Taken together, these findings suggest that gaining a spouse has positive consequences for men’s life satisfaction but not for women’s.

Subsequent Analyses

One explanation for the relatively stronger decline in life satisfaction that emerged for men (Figure 2a) following the loss of a spouse is that the loss had occurred more recently (Barer, 1994), thereby leaving men less time than women to have adapted. This possibility was addressed in a subse-
quently analysis of those who lost a spouse between 1983 and 1990 (i.e., those in the PA group). Men, on average, had not lost their spouses more recently than women, \( t(318) = -1.80, p > .05 \). Thus, recency of loss was not a viable explanation for the relatively stronger decreases in life satisfaction for men compared with women.

An analysis was also conducted for the subset of individuals (the AP group) who gained a spouse between 1983 and 1990. This permitted an evaluation of whether an increase in life satisfaction for men was due to a “honeymoon effect” resulting from their having been married more recently than women. No significant gender differences emerged in the length of time since marriage, \( t(16) = -1.73, p > .05 \). Thus, the increase in men’s life satisfaction following marriage does not appear to be explained by recency of marriage.

A final issue that we addressed involved a more refined analysis to consider possible differences between the “always single” (AS) and those who were only “recently single” (RS), that is, those who had lost a spouse before 1983. In our basic group classification, all of these individuals were classified as AA because they had no spouse in 1983 or 1990. However, recent research has suggested the importance of studying always single or never married individuals as a special group of interest (e.g., Barrett, 1999; Ferguson, 2000).

We compared these two groups (AS, RS) by using an analysis similar to that shown in Table 3; however, the four-level stability–transition group variable was replaced with the two-level AS–RS group variable. The results revealed a significant effect for the AS–RS comparison, \( F(1,806) = 6.47, p < .05 \); AS seniors reported significantly higher levels of life satisfaction than their RS counterparts. However, no differences between the groups emerged in their patterns of LSIA change over time, \( F(1,806) = 1.04, p = .301 \), nor did LSIA changes over time between the groups interact with gender, \( F(1,806) = 2.38, p = .124 \).

**DISCUSSION**

The results from the present study add to the growing research on the relationship between marital status and well-being (e.g., Lubben, 1989; Lund and colleagues, 1986). Some of our results suggest that transitions and stability in marital status have different implications for older men and women. Among men, life satisfaction remained constant for those whose marital status remained stable over 7 years, and it changed for those who experienced marital status transitions. The pattern was not as simple for women.

**Transitions in Marital Status**

The overall examination of life satisfaction among those who lost a spouse and those who gained a spouse produced a nearly mirror-image pattern (Figure 2a and 2b), suggesting an overall decline in life satisfaction for those who lost a spouse and an increase for those who gained a spouse. However, further exploration of the patterns provided some evidence for gender differences. The decline in life satisfaction following the loss of a spouse was found to be significantly more pronounced for men than for women, with a correspondingly large effect size (.445). This may suggest that the loss of a spouse is relatively more detrimental to men than women. Although men typically experience widowhood at a later age than women, leaving them relatively less time to adjust to their loss (Barer, 1994), the recency of loss in the present study could not account for men’s more pronounced decline in life satisfaction following the loss of their wives.

This gender difference in declining well-being following the loss of a spouse is entirely consistent with empirical evidence from the field of social support. Unlike women, men often view their spouse as their only close confidant (ChapPELL, 1989; Strain & Chappell, 1982) or the first in their companion network (Connidis & Davies, 1990). In other
words, women's spouses may be one among several rather than one among few confidants. If men's emotional well-being is partly determined by access to a confidant relationship, widowhood may result in the loss of their only confidant. In addition, men's social interactions with other family members could be undermined by the loss of a wife who has been the kin-keeper, "the one who attempts to keep family members in touch with one another" (C. J. Rosenthal, 1985, p. 965). Without a "kin-keeper" to foster family interactions, widowed men may be prone to greater degrees of isolation and loneliness than women who have undergone a similar loss. Finally, social support at a broad level appears to buffer the negative impact of widowhood (Lin & Ensel, 1989), and as women typically have more extensive support networks, social support may protect them from some of the negative consequences of widowhood.

Although men may suffer more psychological consequences than women following the loss of a spouse, our results suggest that, unlike women, they derive benefit when marrying late in life. It must, however, be noted that the small cell size of this group who gained a spouse in late life limits our ability to draw conclusions. Nonetheless, the large effect size (−.893) suggests the importance of the finding that men experience an increase in life satisfaction with remarriage late in life. In addition, it is interesting that the magnitude of increases in men's life satisfaction after gaining a spouse (AP group) appeared to be approximately equal to the magnitude of their declines in satisfaction after losing a spouse (PA group), as is illustrated in Figure 2 by the mirror-image patterns of changing life satisfaction for men who experienced opposing transitions in marital status.

The gain in life satisfaction for men following the attainment of a spouse may also be due to changes in the social relationships that accompany the presence of a spouse. Whether the role of a wife is direct (e.g., access to a confidant) or indirect (promotion of interactions outside the spousal relationship), the enhanced exposure to social networks and increased social activity may foster a more fulfilling social experience for men. The potential for psychological gain is consistent with the fact that men are more likely than women to remarry (Burch, 1990) and they remarry more quickly than women (Wu, 1995), implying, perhaps, a greater motivation to do so.

Although the positive benefit in life satisfaction for men is likely partly due to the social facilitation effect of a wife, other factors are surely involved. For example, although we did not find age to relate significantly to life satisfaction and we did statistically adjust for health, we cannot entirely rule out the possibility that our results partly reflect a selection bias in which younger and healthier men may be more likely to remarry. Another interesting possibility is that men marry more compatible mates than women and therefore are happier and more content in their late-life marriages. This "compatibility" hypothesis is derived from the work of Wu (1995) and others who have pointed out that, due to the cultural norms that dictate that men marry younger women who are often less educated, there is an oversupply of available mates from which men can select. In contrast, for women, who tend to marry older, more educated men, there is an undersupply of men in the potential late-life marriage-partner pool. This implies that men have more opportunity than women to select a compatible mate, thereby enhancing their satisfaction with life.

Still another possible reason for men's gains in life satisfaction following late-life marriage is that a wife may have a health-promoting influence, in turn leading to greater life satisfaction. This is consistent with the findings of a recent study (Steinberg Schone & Weinick, 1998) in which marriage had a relatively larger positive impact on health behaviors for elderly men than for elderly women. In short, there are numerous potential explanations for men's gains in life satisfaction following late-life marriage that are worth examining in future research.

Stability in Marital Status

The present findings also showed that among those individuals whose marital status remained stable, men's life satisfaction remained consistent over time, whereas women's declined. The stability in men's life satisfaction is congruent with the results from several large-scale longitudinal studies of well-being, one involving a 9-year follow-up (Costa and colleagues, 1987) and another, a 14-year follow-up (Stacey & Gatz, 1991). The declining life satisfaction for women in the present study is congruent with some findings, such as the declining life satisfaction over a 12-year period (1971 to 1983) in our earlier analyses of very old women in the AIM study. On the other hand, the declining satisfaction is incongruent with findings from Costa and colleagues' and Stacey and Gatz's studies. Age variation in samples may partly explain the inconsistency in findings across these studies; the present study focused on older individuals compared with Costa and associates' study of 25- to 74-year-olds and Stacey and Gatz's study of 15- to 100-year-olds. In fact, Barrett's (1999) analysis of never-married adults showed that the effects of never being married were greatest among elderly individuals, suggesting inconsistent findings may well occur across studies of different age groups.

Clearly, our findings suggest that life satisfaction deteriorates for older women who remain in a stable marital condition (i.e., never married, always married). What would explain their deterioration in life satisfaction over the 7 years of this study? One explanation is based on women's roles as caregivers and the burdens associated with caregiving. Providing care in later life is associated with severe psychological burdens (Jones & Peters, 1992; Wijeratne & Lovestone, 1996; Zanetti, Magni, Sandri, Frisoni, & Bianchetti, 1996), and women are more likely than men to be in caregiver roles (e.g., Davis, 1991) and to suffer from the burden (Grafstrom, Fratiglioni, & Winblad, 1994). Thus, women's declining reports of life satisfaction could be a reaction to the psychological costs of providing care. A related possible explanation for women's declining satisfaction is that they may have increasing unmet needs. This is consistent with the finding that women report more unmet needs for help than men (Chipperfield, 1996).

Cautions

For several reasons, caution is required in the interpretation of our finding. First, our interpretation of the social facilitation effect of women on their spouses' life satisfaction,
which is based on a substantial literature in this field (e.g., see Lubben, 1989, for a review), was not totally supported by subsequent analyses of our social interaction variables. Among men, those who were married did have more interactions with relatives \( (M = 52.52) \) compared with their unmarried counterparts \( (M = 39.85) \); however, this difference was not significant. Moreover, married men did not have higher levels of interaction with neighbors or friends than their unmarried counterparts. Perhaps more surprising, overall comparisons of men and women revealed that men had significantly more interactions with family \( (M = 49.05 \) vs \( 43.37) \), \( t(1910) = 2.23, p < .05 \), and with friends \( (M = 144.61 \) vs \( 120.00) \), \( t(1749) = 1.99, p < .05 \). Although these supplemental preliminary analyses did not support the interpretations outlined earlier, it may be that different findings would emerge from further detailed analyses of the relationships between marital status stability—transitions and social support. Analyses of measures other than frequency of interactions (e.g., perceived support, confidant support) that are beyond the scope of this study might reveal findings more consistent with the past literature.

Second, as in all quasi-experimental and field research, we were unable to rule out potentially important third variables that may be responsible for a spurious relationship between marital status stability—transitions and life satisfaction. For example, the stress of coping with a spouse’s debilitating arthritis might lead to divorce, and the documented decline in life satisfaction may be due to the stress rather than the divorce (i.e., the marital status transition). In short, we cannot rule out a variety of third-variable explanations for the reported relationships in our study.

Third, as previously pointed out, the group who remarried consisted of a very small number of individuals. This may, in part, explain why we did not find the predicted greater increase in life satisfaction for men who remarried than for women. On the other hand, the increase in life satisfaction after remarriage was restricted to men. Women did not experience a similar increase in life satisfaction, which is consistent with the view that men’s life satisfaction may be beneficially affected by late-life marriage, but women’s may not.

Fourth, our study did not allow for an in-depth analysis of the many possible explanations for gender differences in patterns of life satisfaction. To understand how marital status stability and transitions relate to life satisfaction in later life, it is essential to consider the complexity of the spousal relationship. A variety of factors are important, from basic marital compatibility (Wu, 1995) to perceptions of relationship standards and opportunities for future improvements (see Dykstra, 1995). Although the present study did not allow for an analysis of the complexity of spousal relationships, it documented patterns of life satisfaction in a unique way, considering both spousal presence versus absence and stability versus transitions in marital status.

Fifth, selective mortality complicates our understanding of how life satisfaction changes over time, just as it does in any research that examines survivors. Because measures of 1990 life satisfaction were obviously unavailable for those AIM participants who died before 1990, they were excluded from the present analysis. Nonetheless, due to rigorous attempts to acquire representative samples, the present AIM sample of survivors remains representative of survivors in the overall provincial and national population (Chipperfield et al., 1997). Thus, the patterns of life satisfaction that emerged in this study are likely to generalize to the broader population of survivors.

Finally, our analysis is subject to the same criticism made about studies that examine predictors of living arrangement. In particular, Wilmoth (1998) has argued that multiple transitions may be obscured when living arrangements are assessed at two interview dates. In other words, “respondents could have experienced several transitions during the period but only the difference between the beginning state and ending state is modeled” (Wilmoth, 1998, p. 434). To consider this possibility of multiple transitions, we examined the reported length of time married for the group of individuals who reported having a spouse in 1983 and also in 1990 (i.e., the PP group). In fact, there were individuals who reported being married fewer than 3 years, suggesting that a transition was obscured in our PP classification. However, the percentage of misclassification was extremely small (2%), indicating that this was a minor concern in the present study. Moreover, given the low rate of remarriage in later life, this does not become a particularly compelling concern.

Conclusions

Our study demonstrated different patterns of life satisfaction for men and women, for both those who experienced marital status transitions and those who retained stability in their marital status. These results can be interpreted pessimistically or optimistically. With respect to women, the pessimistic view is that life satisfaction generally declined over time, the declines occurring for those women who lost their husbands but also for those whose marital status remained stable over the study. Thus, for the majority of women, life satisfaction may be at risk in old age. The optimistic view of our findings is that life satisfaction did not decline among older women who marry, suggesting that later life marriage may offset the expected decline in life satisfaction. For men, the pessimistic view is that they appear to be at a relatively greater risk than women for suffering psychological consequences following the loss of a spouse. This finding is consistent with the reported gender differences in survival following the death of a spouse (e.g., Biondi & Picardi, 1996; Bowling & Windsor, 1995). The need to assist men in their adjustment to the loss of a spouse is underscored by the elevated rate of widowhood among men that has occurred in the past decade (Martin Matthews, 1994) and that will likely continue in the future. Ultimately, men’s ability to adapt to widowhood will likely also influence their physical health in later life and perhaps their longevity. On a more optimistic note, with the exception of those who lost spouses, men generally experienced either stability or increased life satisfaction over the 7 years of our study. This implies that, with the exception of those men who lost spouses, men are likely to maintain their psychological health in later life.

Taken together, these findings are consistent with the notion that the presence of a spouse buffers men against de-
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Appendix

Notes

1. Within the AA group, 20% (n = 161) had never married and 79% (n = 636) had either been widowed or divorced before 1983. Fewer than 1% (n = 8) indicated that they were married in 1990 but that they had not lived with their spouse in 1983 or 1990. In the latter case, it is assumed that the spouse was still alive but living elsewhere, perhaps in a long-term care facility.

2. The major analyses were also conducted excluding the individuals who had responded to fewer than 10 of the 20 LSIA items. The results did not differ from those reported in Table 3.

3. In the expanded analysis, the effect was not significant for the covariate, perceived health, F(1,2146) = 0.31, p = .58, but was significant for independence, F(1,2146) = 14.30, p < .001. Consistent with the reported findings in Table 3, a significant main effect did emerge for Stability–Transition Group, F(3,2146) = 27.90, p < .0001, and significant interactions emerged for Stability–Transition Group × Year, F = 15.32, p = .0001, and for Stability–Transition Group × Year × Gender, F(3,2146) = 5.31, p < .005.