

Cohort and Gender Differences in Psychosocial Adjustment to Later-Life Widowhood

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Objectives. Despite the large body of literature on bereavement, little is known about the impact of sociohistorical context on individual reactions to spousal loss. This study examines the effect of marital status, time period and gender on physical and mental health, and whether reported difficulties following spousal loss differ at 2 distinctive time periods.

Method. Two cohorts of older bereaved persons ($n = 753$) in Switzerland, surveyed in 1979 and 2011, were compared regarding their reports of difficulties related to marital loss. The bereaved spouses were also compared with a group of married contemporaries ($n = 1,517$) regarding subjective health and depressive symptoms.

Results. Marital status and gender each have independent effects on subjective health and depressive symptoms. The effects of widowhood on subjective health differed significantly at both time points. Widowed individuals in 2011, especially women, reported fewer social and financial difficulties than their counterparts in 1979. However, the effect of widowhood on depressive symptoms and psychological difficulties did not differ significantly across time points.

Discussion. Social changes in the late 20th century may be protective for older adults' physical, social, and financial well-being in the face of spousal loss, yet these changes do not alleviate widow(er)s' psychological distress.

Key words: Bereavement—Depressive symptoms—Gender—Marital status—Social change—Widowhood.

THE consequences of spousal loss on individuals' health and well-being are widely documented (Stroebe, Schut, & Stroebe, 2007). Compared to their married counterparts, bereaved persons evidence more somatic problems, depressive symptoms, and lower life satisfaction (Sasson & Umberson, 2014). Spousal loss has also social and behavioral consequences, often requiring a renegotiation of one's social roles, including significant changes in one's friendships and social relations in terms of reduced social networks and contacts (Bennett, 2008; Hollstein, 2002). These role shifts often are accompanied by feelings of loneliness, which are among the most difficult aspects of loss (Utz, Swenson, Caserta, Lund, & DeVries, 2014). Bereaved spouses also face shifts in their daily routines, as they manage alone the daily responsibilities that were once shared by both spouses (Carr, House, Wortman, Nesse, & Kessler, 2001). Such changes may be particularly challenging for widow(er)s who had traditional marriages in which men and women each specialized in gender-typed tasks, and possessed little knowledge of the tasks carried out by their partner (Utz, Reidy, Carr, Nesse, & Wortman, 2004).

Although population-based studies of bereavement document a broad range of negative consequences, more fine-grained analyses reveal that bereaved individuals vary considerably in their reactions to loss (Boerner, Wortman, & Bonanno, 2005). Gender differences have received

extensive attention, as psychosocial adjustment to widowhood is believed to reflect long-standing patterns of gender socialization and gendered practices over the life course. As such, most studies concur that men and women manifest different reactions to loss (Dykstra & de Jong Gierveld, 2004; Sasson & Umberson, 2014). Widowers generally evidence more emotional vulnerability than widows, in terms of loneliness and suicide rates (Lee & DeMaris, 2007; Stroebe et al., 2007), reflecting men's high levels of emotional and practical dependence on their wives, combined with relatively few close emotional ties outside the marriage (Carr, 2004). As such, widowers typically experience both higher rates of loneliness as well as higher rates of remarriage (Dykstra & de Jong Gierveld, 2004).

For widows, by contrast, the economic strains associated with spousal loss are an important contributor to distress levels (Halleröd, 2013). Among current cohorts of older women in the United States and Europe, paid employment and careers often were disrupted by family responsibilities (Ginn, 2003) and women often did not develop skills such as financial literacy, instead leaving such tasks to their husbands (Fonseca, Mullen, Zamarro, & Zissimopoulos, 2012). Consequently, widowhood often precedes a substantial decrease in one's absolute and relative income position, especially for older women, despite improvement of social security for bereaved spouses introduced in

the last three decades in most European countries including Switzerland, where the present study was carried out (Gorlé & van den Bosch, 2008). Given strong associations between socioeconomic resources and health, the reduction of financial resources in the face of spousal loss also may erode widow(er)s' physical and emotional well-being (Stroebe et al., 2007).

In sum, late-life spousal loss takes a toll on one's psychological, physical, and financial well-being, although the magnitude of the effect varies by gender and across outcomes. However, we know of no studies that investigate the extent to which these patterns are shaped by sociohistorical context. Many of the benefits afforded to married men (e.g., emotional and practical support from wife) and women (e.g., financial support from husband) are linked to traditional gender-based allocation of social roles in marriage, especially in the mid-20th century. Given considerable shifts in gendered roles and relations since the 1970s, including increases in women's educational attainment and earnings, and significant improvement in social security and health care in Northern and Western European countries, it is plausible that the impact of spousal loss on men's and women's well-being varies at different historical points (Bennett, 2008; Hollstein, 2002).

To address this gap in the literature, in this contribution we examine: (a) the effects of marital status and gender on health and well-being; (b) the extent to which these effects differ at two time periods, 1979 and 2011; and (c) whether the difficulties reported following spousal loss differ at two time points, in a sample of bereaved older adults. Our analysis is framed by two complementary theoretical perspectives. The first, the traditional stress perspective, conceptualizes bereavement as a universal *individual issue or stressor*. Bereaved individuals suffer psychological and/or physical reactions and secondary stressors related to the loss, which challenge them independent of their sociohistorical context (Stroebe et al., 2007). Most research on determinants and outcomes of spousal loss in later life has been carried out from this perspective. Consistent with this approach, personal factors such as age, gender, health, personality, and social support are considered among the primary correlates of psychosocial adaptation after the loss of a spouse (Höpflinger, Spahni, & Perrig-Chiello, 2013). This is especially true in contemporary Western societies, where widowed individuals may not hold a recognizable social status, thus bereavement is considered an individual level or personal trouble rather than a social problem (Mills, 1959). This perspective is complemented by the life course approach, which emphasizes the way that macrosocial and contextual factors, such as one's birth cohort or the current historical period interact with personal characteristics to shape individual lives (Elder & Johnson, 2003; Mills, 1959). From this perspective, adjustment to widowhood

is a function of individual-level traits such as gender, yet it is also shaped by societal context and social structures (Hollstein, 2002). For instance, while gender may affect the ways that bereaved spouses adjust to their loss, these gendered reactions may be shaped by contextual factors such as the availability of economic opportunities for men and women, and public policies that provide a financial safety net for bereaved older adults.

THE PRESENT STUDY

We use a unique data set that enables us to explore the consequences of spousal loss (by comparing widowed with married persons), gender differences therein, and the extent to which similar patterns are evidenced for two distinctive cohorts of older bereaved persons (interviewed separately in 1979 and 2011) in Switzerland. We also identify the specific bereavement-related problems (e.g., psychological, social, and financial) reported at each time point, thus shedding light on how the bereavement experience has changed over the past three decades. We evaluate two hypotheses:

1. *Depressive symptoms* are affected by marital status and gender, where we expect more frequent symptoms among widowed individuals and women, relative to married persons and men. We do not expect that these effects will differ significantly for each of the two time periods (i.e., 1979 vs. 2011) since bereavement is expected to be a universal individual issue. By contrast, we expect that time period has an effect on *subjective health* (better health at more recent time period), along with marital status and gender (poorer health reported by widowed persons and women, relative to married persons and men).
2. Widowed persons' reports of *psychological difficulties* after spousal loss (lack of sense of purpose in life, assuming responsibilities alone, doing things all alone and feelings of loneliness) do not differ significantly at the two time points, consistent with theory suggesting that these outcomes reflect individual-level responses to loss. By contrast, we expect to find significant improvement with regard to *social and financial difficulties* after marital loss (less complaints about lacking social contacts and less reported financial difficulties) across the two time points since these outcomes are potentially shaped by social and socioeconomic context.

In testing our hypotheses for the outcomes of psychological versus social/financial outcomes of widowhood, we estimate multivariate models which control for age, educational attainment, number of children, duration widowed, cohabitation status, depressive symptoms, and health, as each of these is a well-documented correlate of both practical and emotional adjustment to loss (Bennett, Gibbons, & Mackenzie-Smith, 2010).

METHOD

Data

We use data from two parallel yet independent studies conducted among older adults in Switzerland; the study protocol was approved by the ethics committee of the University of Bern. The first survey was carried out in 1979, and parallel interviews were conducted for a separate sample in 2011 (further information: [Lalive d'Épinay, Cavalli, & Guillet, 2010](#); [Ludwig, Cavalli, & Oris, 2014](#)). Both samples were randomly drawn from the cantonal and federal Swiss administrative records, stratified by gender, 5-year age groups, and residential region. Structured face-to-face interviews were conducted in two regions of Switzerland, the Cantons Geneva and Valais, in order to enable comparisons between metropolitan and semirural areas. The sampling strategy and data collection in 1979 and 2011 followed the same methodological and practical rules, and were conducted under the direction of the same research center ([Lalive d'Épinay et al., 2010](#)). The response rates were better in 1979 than 2011, consistent with studies documenting declines in study response rates throughout the late 20th and early 21st centuries ([Tolonen et al., 2006](#)). Interviews were completed with 1,608 persons (response rate: 75%) in 1979, and 1,208 persons in 2011 (response rate: 53%) ([Oris & Nicolet, 2013](#)). Survey items were largely parallel in the two waves.

The comparison of 1979 and 2011 data allows us to partially test cohort and period effects; however, because each wave is cross-sectional and comprises a distinctive subsample, we cannot perform formal age period cohort analyses. Our analyses do provide suggestive evidence of how different cohorts of older adults, in different time periods, experience bereavement. Those interviewed in 1979 and 2011 were

born in the first decade of the 1900s and the 1930s, respectively. They experienced different sociohistorical contexts as they transitioned to widowhood, primarily in the 1970s and 2010s, respectively. Older adults in 1979 were affected by the economic crisis that struck during their young adult years during the 1920s and 1930s. By contrast, older adults in 2011 typically benefited from economic expansion, better work conditions, and improvement of the social and health care system during the late 20th century. While in 1979, the public social security and health system was still underdeveloped in Switzerland (lacking unemployment and health insurance), it expanded greatly during the 1980s and 1990s, reducing poverty rates and increasing healthy life expectancy among older adults ([Lindholm Eriksen, Vestergaard, & Andersen-Ranberg, 2013](#)). While 1982 about 15% of 70–79 years old were categorized as poor, this rate had dropped to just 7% for the same age group one decade later ([Burri & Leu, 1997](#)). Based on data from the [European Social Survey \(2012\)](#), the proportion of 70–79 years old considering themselves to live in an economically difficult situation is 9% ([European Social Survey, 2012](#)).

Sample

We focus on individuals aged 65 and older from two surveys (1979 and 2011), and initially contrast those who report their marital status as “widowed” versus “currently married.” The 1979 sample included 1,305 persons, 850 (65%) of whom were married, and 455 of whom were widowed (35%). The 2011 sample included 955 persons, 657 (69%) of whom were married, and 298 (31%) of whom were widowed. Consistent with the sampling strategy, the proportion of individuals living in an urban versus rural areas is similar for the two groups at both time points (48%). Religious composition also is consistent across the

Table 1. Means (*SDs*) or Proportion Values for Independent and Dependent Variables by Time Period and Marital Status

	1979			2011			1979 vs. 2011		
	Total (<i>N</i> = 1,305)	Widowed (<i>n</i> = 455)	Married (<i>n</i> = 850)	Total (<i>N</i> = 955)	Widowed (<i>n</i> = 298)	Married (<i>n</i> = 657)	Total	Widowed	Married
Independent variables									
Age	72.83 (5.99)	75.60 (6.49)	71.35 (5.12)***	78.11 (8.33)	82.23 (7.88)	76.23 (7.84)***	***	***	***
Female	0.49	0.74	0.35***	0.46	0.72	0.34***			
Education									
Primary level	0.67	0.76	0.62*	0.22	0.32	0.18***	***	***	***
Secondary level	0.23	0.18	0.26*	0.50	0.50	0.49	***	***	***
Tertiary level	0.10	0.06	0.12**	0.28	0.18	0.33***	***	***	***
Number of children	2.70 (2.18)	2.76 (2.27)	2.67 (2.14)	2.54 (1.30)	2.70 (1.50)	2.47 (1.20)			*
Living in urban area (vs. rural)	0.48	0.47	0.48	0.48	0.49	0.47			
Years since loss	—	19.60 (12.76)	—	—	14.61 (12.31)	—	—	***	—
Remarried (formerly widowed)	—	—	0.05	—	—	0.03	—	—	*
Living with a partner	0.64	0.00	0.98***	0.68	0.04	0.96***	***	***	*
Dependent variables									
Subjective health (1–5)	3.41 (1.02)	3.33 (1.01)	3.46 (1.03)*	3.59 (0.84)	3.48 (0.89)	3.64 (0.81)**	***	*	***
Depressive symptoms (1–4)	1.77 (0.49)	1.85 (0.51)	1.70 (0.47)***	1.74 (0.39)	1.80 (0.42)	1.68 (0.37)***			
Psychological difficulties (1–4)	—	1.89 (0.83)	—	—	1.80 (0.75)	—	—	—	—
Social and financial difficulties (1–4)	—	1.79 (0.83)	—	—	1.42 (0.61)	—	—	***	—

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

two survey waves. A detailed comparative description of the sample is presented in the Results section and Table 1.

Measures

Dependent variables.—First, we contrast the well-being of married and widowed persons in 1979 and 2011 using self-rated physical and mental health. *Subjective health* was assessed with the question “How are you presently doing health wise?” Response categories range from 1 = very badly to 5 = very well. *Depressive symptoms* were measured using the Wang Self-Assessing Depression Scale (SADS) (Wang, Treul, & Alverno, 1975). Respondents indicated how frequently in the past week they experienced the following symptoms: lost appetite, sadness, crying fits, sleep difficulties, self-confidence (reverse-coded), interest in doing things (reverse-coded), irritability, being hopeful about the future (reverse-coded), anxiety, and tiredness. Response categories ranged from “never” (= 1) to “always” (= 4). Scale alphas were 0.80 and 0.73 in 1979 and 2011, respectively.

Second, we focus on the widowed subsample and examine outcomes related directly to spousal loss. *Reported difficulties related to spousal loss* were assessed with six items: four focused psychological problems (lack of sense of purpose in life, need to do everything oneself, shouldering responsibility all alone, and feelings of loneliness), and two items captured social and financial problems (lack of social contacts and perceived financial strain). The severity of each difficulty was rated on a four-point scale (no problem at all = 1 to serious problem = 4). Cronbach’s Alpha for the psychological problems scale is 0.76 in 1979 and 0.75 in 2011, indicating good construct reliability. The correlation between the two items assessing social and financial problems of widowhood is moderate (1979: 0.35, 2011: 0.29).

Independent variables.—Our key independent variables are marital status (1 = widowed; 0 = married), time period (1 = 1979; 0 = 2011), and gender (female = 1; male = 0).

Control variables.—All multivariate analyses are controlled for sociodemographic factors that have been found to be associated with adjustment to spousal loss, including age (in years), number of children, and education (Carr, Nesse, & Wortman, 2006). Educational attainment refers to whether one has a primary level (primary school), secondary level (apprenticeship, middle/high school), or tertiary level (college, university) of education. Because the effects of bereavement attenuate as time passes (Bonanno et al., 2002), we control for years since loss; we calculated this by subtracting the year of spousal loss from year of participation. The average duration of widowhood was 19.60 years ($SD = 12.76$) in 1979 and 14.61 years ($SD = 12.31$) in 2011.

Analytic Strategy

In the first part of our analysis, we examine the extent to which the effects of spousal loss differ across the two time

periods. We contrast subjective health and depressive symptoms scores by marital status and time period using *t*-tests (continuous measures) or Chi-squared tests (categorical variables). The effect sizes Cohen’s *d* are reported as standardized measures of the magnitude of the observed outcome effects. In order to test for main effects and possible interaction effects between time period, marital status and gender on depressive symptoms and subjective health simultaneously, we conducted three-way analyses of variance (ANOVA).

The second part of the analysis focuses on widowed persons only, in order to explore gender differences in loss-related difficulties at the two points in time (1979 and 2011). We further conduct multivariate ordinary least squares regressions to assess the effects of time period and gender on psychological and on social and financial difficulties, after controlling for age, education, time since loss, subjective health, and depressive symptoms. All analyses were conducted with SPSS Statistics 19.0 for Mac OS X (IBM).

RESULTS

Descriptive Statistics

Means and *SDs* (or proportions) for all variables are presented in Table 1. In both the 1979 and 2011 samples, women were overrepresented among the widowed subsamples (74% and 72%, respectively, both $p < .001$), reflecting women’s longer life expectancy than men, their tendency to marry older partners and men’s greater odds of remarrying following spousal loss. Widowed persons were significantly older than their married counterparts at both time points (both $p < .001$), although the gap was larger in the later wave. In 1979, married individuals were on average age 71, compared to their widowed counterparts who were 75 years old. By 2011, married individuals were age 76, while their bereaved counterparts were ages 82. The educational level of respondents is significantly lower in 1979 than 2011, with similar patterns evidenced for widowed and married individuals (both $p < .001$). This finding is consistent with well-documented patterns of educational expansion and increases in educational attainment throughout the late 20th century (Heidenheimer, 1993). The average duration widowed is rather long in both cohorts, 19.60 in 1979 versus 14.61 in 2011 ($p < .001$). This might primarily reflect men’s earlier age at death in the first cohort and a narrowing of the age gap between husbands and wives over time. The proportion of widowed individuals cohabiting with a partner increased from 0 in 1979 to 4% in 2011 ($p < .001$). Accordingly, the percentage of married individuals who indicated that they have ever been widowed is higher in 1979 than in 2011 (5% vs. 3%, $p < .05$). The number of children reported by widowed persons was similar at both time points (2.7 children), although a slight decrease was found among the married sample (from 2.67 to 2.47, $p < .05$).

Subjective Health and Depressive Symptoms in Widowed and Married Persons 1979 and 2011

The results presented in Table 1 reveal that in both the 1979 and 2011 samples, married persons reported significantly better health than their widowed counterparts (3.46 vs. 3.33 in 1979; 3.64 vs. 3.48 in 2011). Self-rated health is also significantly better in 2011 than in 1979 for both widowed (3.48 vs. 3.33, $p < .05$, $d = 0.15$) and married persons (3.64 vs. 3.46, $p < .001$, $d = 0.19$), perhaps reflecting advances in health care in recent decades. In both 1979 and 2011, widowed individuals reported significantly more depressive symptoms than their married counterparts (1979: 1.85 vs. 1.70, $p < .001$, $d = 0.25$; 2011: 1.80 vs. 1.68, $p < .001$, $d = 0.19$).

We next explored whether marital status and time period have independent effects on depressive symptoms and subjective health when taking into account gender. Results of the analyses of variance (Table 2) with subjective health as dependent variable show significant main effects for all three categories: time period, marital status, and gender. As expected, participants in 2011 reported better subjective health compared to those in 1979 ($M = 3.58$ vs. 3.41; $F(1, 2225) = 13.33$, $p < .001$). Also as hypothesized, married persons reported better health than their widowed counterparts ($M = 3.53$ vs. 3.39; $F(1, 2225) = 4.55$, $p < .05$) and men had better subjective health than women ($M = 3.55$ vs. 3.42; $F(1, 2225) = 5.11$, $p < .05$). We found no evidence of statistically significant interaction effects, suggesting that time period, marital status, and gender each have independent effects on subjective health.

We also found significant main effects of marital status and gender on depressive symptoms (Table 2). Depressive symptoms were significantly higher among widowed versus married persons ($M = 1.84$ vs. 1.69; $F(1, 2232) = 13.23$, $p < .001$) and women versus men ($M = 1.84$ vs. 1.66; $F(1, 2232) = 61.59$, $p < .001$). Consistent with our expectations there was not a significant effect of time period, indicating that depressive symptoms in 2011 did not differ significantly from those reported in 1979. As with subjective health, we found no evidence of a significant interaction term, suggesting that the effects of marital status and gender on depressive symptoms are independent from each other.

Reported Difficulties Related to Spousal Loss in 1979 and 2011

We next explore whether the difficulties reported by widows and widowers changed across the two time periods. The results presented in Table 3 show that in 1979 widows reported significantly more difficulties than widowers regarding financial strain (1.99 vs. 1.40, $p < .001$, $d = 0.57$) and shouldering responsibility all alone (1.79 vs. 1.38, $p < .001$, $d = 0.41$). In 2011, widows still reported more financial difficulties than widowers (1.47 vs. 1.06, $p < .001$, $d = 0.50$), while widowers exhibited more problems with loneliness (2.34 vs. 2.00, $p < .05$, $d = 0.34$) and with doing everything oneself (2.00 vs. 1.73, $p < .06$, $d = 0.27$). Feelings of loneliness were the most serious difficulties reported at both time points and by both sexes, especially by men. The time comparison reveals significant changes in difficulties reported, especially among women. In 2011,

Table 2. Three-Way Analyses of Variance (ANOVA) with the Factors Time Period, Marital Status, and Gender for Subjective Health and Depressive Symptoms as Dependent Variables

	Subjective health			Depressive symptoms		
	df	MS	F	df	MS	F
Time period (0 = 2011)	1	11.93	13.33***	1	0.66	3.44
Marital status (0 = married)	1	4.08	4.55*	1	2.53	13.23***
Gender (0 = male)	1	4.58	5.11*	1	11.76	61.59***
Time period * marital status	1	0.00	0.00	1	0.12	0.61
Time period * gender	1	0.25	0.28	1	0.22	1.15
Marital status * gender	1	1.07	1.19	1	0.03	0.13
Time period * marital status * gender	1	0.19	0.21	1	0.03	0.18
Error	2,225	0.90		2,232	0.19	

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

Table 3. Means (SDs) of Reported Difficulties Following Spousal Loss by Time Period and Gender

	1979		2011		1979 vs. 2011	
	Women	Men	Women	Men	Women	Men
Lack sense of purpose in life	1.74 (1.02)	1.72 (1.08)	1.66 (0.86)	1.76 (0.97)		
Sole responsibility	1.79 (1.05)	1.38 (0.82)***	1.71 (0.94)	1.55 (0.88)		
Doing things alone	1.77 (1.07)	1.73 (0.98)	1.73 (0.99)	2.00 (1.07)		
Loneliness	2.25 (1.18)	2.44 (1.18)	2.00 (1.03)	2.34 (1.03)*	*	
Lack of social contacts	1.68 (0.96)	1.84 (1.02)	1.40 (0.72)	1.58 (0.93)	***	
Financial problems	1.99 (1.13)	1.40 (0.86)***	1.47 (0.88)	1.06 (0.29)***	***	**

Notes. Possible range for all six items is 1–4 (1 = no problem at all to 4 = serious problem).

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

women reported significantly fewer problems with regard to financial resources (1.99 vs. 1.47, $p < .001$, $d = 0.51$), lack of social contacts (1.68 vs. 1.40, $p < .001$, $d = 0.30$), and feelings of loneliness (2.25 vs. 2.00, $p < .05$, $d = 0.24$), relative to 1979. For men, only one significant change was found between the two time periods: In 2011, they reported less financial difficulties (1.40 vs. 1.06, $p < .01$, $d = 0.43$) than in 1979. Taken together, our data show that the financial and social problems reported by bereaved persons have abated across the two time points, yet psychological symptoms have persisted and remain relatively stable.

Finally, we examine the role of time period and gender as predictors for loss-related difficulties, adjusted for age, education, duration of widowhood, subjective health, and depressive symptoms. Table 4 shows the results of two hierarchical regression analyses, both including all widowed participants in 1979 and 2011. The outcomes considered were a composite of psychological difficulties (lack of sense of purpose in life, being solely responsible, doing things alone, feelings of loneliness) and a composite of social and financial difficulties (lack of social contacts, financial problems). We tested three models: model 1 contained time period and gender, model 2 further controlled for age, education and duration of widowhood, and model 3 also incorporated subjective health and depressive symptoms. This third model was added in order to control for potential confounds, since one's perception of difficulties could be related to the actual physical and psychological well-being (Angermeyer, Holzinger, Matschinger, & Stengler-Wenzke, 2002).

Results reveal that, as expected, psychological difficulties were not predicted by time period. Among the control variables, age, subjective health, and depressive symptoms were significant predictors. Younger age, poorer

subjective health, and more depressive symptoms were associated with more psychological difficulties. The full model explained 14% of the total variance in psychological difficulties. In contrast to the psychological difficulties, the perceived social and financial problems were significantly predicted by time period and initially by gender. Women and bereaved persons in the 1979 sample reported more difficulties. After controlling for age, education, years widowed, subjective health and depressive symptoms, only the predictive effect of time period remained statistically significant. Among the controls, time since spousal loss, subjective health, and depressive symptoms were significant predictors. A longer duration since loss, poorer health, and more depressive symptoms were associated with more reported social and financial difficulties. The amount of the total variance explained by all predictors is 18%.

DISCUSSION

Our goal was to examine the extent to which well-documented gender differences in the effect of widowhood on psychological and physical health change across two time periods, and to explore historical shifts in the specific psychosocial, financial, and behavioral adaptations required by widows and widowers. Little is known about the ways that one's reaction to spousal loss is shaped by sociohistorical context, a subject on which this study expands existing research in two different ways:

First, we used data from widowed persons gathered with the same instruments and procedures at two different time periods. The individuals interviewed in 1979 and 2011 represent two different cohorts of older adults, one born in the first decade of the 20th century, the other born in the 1930s. We contrasted the data collected at both time points and investigated whether there are changes over time with

Table 4. OLS Regression Models Predicting Reported Psychological, and Social/Financial Difficulties After Spousal Loss

	Psychological difficulties ($N = 672$)			Social and financial difficulties ($N = 671$)		
	Model 1 β	Model 2 β	Model 3 β	Model 1 β	Model 2 β	Model 3 β
Time period (0 = 2011)	0.06	-0.01	-0.03	0.23***	0.17***	0.16***
Gender (0 = male)	0.01	-0.02	-0.07	0.12**	0.07	0.04
Age		-0.09*	-0.10*		-0.05	-0.07
Educational level						
Primary ^a						
Secondary		-0.03	-0.01		0.01	0.03
Tertiary		-0.04	-0.02		-0.03	-0.01
Years widowed		0.07	0.06		0.22***	0.21***
Subjective health			-0.11**			-0.16***
Depressive symptoms			0.31***			0.14**
R^2	0.00	0.02	0.15	0.07	0.12	0.19
Adjusted R^2	0.00	0.01	0.14	0.07	0.11	0.18
Change in R^2	0.00	0.01	0.14	0.07	0.05	0.07
F (change)	1.23	2.18	53.66	25.13	9.26	27.25
df	2	4	2	2	4	2
p	.29	.07	.00	.00	.00	.00

Notes. Standardized coefficients (β) are reported. OLS = ordinary least squares.

^aReference category.

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

regard to psychological and health outcomes. Second, we considered multiple aspects of psychosocial adjustment. In the first step, we contrasted physical and mental health outcomes for widowed and married individuals; in the second step, we focused on outcomes specific to bereaved older adults, namely psychological, social, and financial problems.

Confirming our expectation, we found that psychological distress in the face of loss, particularly depressive symptoms, are evidenced at both time points and unaffected by historical context, whereas behavioral and physical health consequences are much more closely tied to sociohistorical context. Levels of depressive symptoms reported by widowed persons in both 1979 and 2011 were significantly worse than their married counterparts, and the magnitude of the difference did not vary over time. This suggests that the loss of a spouse is a major psychological challenge, whose effects are apparent even many years after the loss, and regardless the sociohistorical context. Most bereavement research focuses on the time period shortly after the loss (Carr et al., 2001), leading researcher to debate the persistence of its negative emotional impact (Mancini, Bonanno, & Clark, 2011). Our results provide insights into this debate, and shows that spousal loss carries detrimental effects even years after the event, and that widowed persons (remarried or not) report poorer physical and mental health than married persons (see also Hughes & Waite, 2009).

By contrast, we find that subjective health improved over time for both married and widowed individuals, although widowed persons still fared worse than their married counterparts at both time points. These results are consistent with the large body of work documenting negative consequences of spousal loss on psychological and physical health outcomes (Stroebe et al., 2007). Our results also suggest that subjective health, in contrast to depressive symptoms, reflects not only individual-level experiences, but macrosocial factors (Phelan, Link, & Tehranifar, 2010).

Gender differences persisted at both time points and for multiple outcomes. Women reported more frequent depressive symptoms and poorer health than men in both the widowed and married samples. This gender difference—documented in the general population across all ages—may be exacerbated in older cohorts by the fact that men have a significant higher risk for suicide, which probably reduces the number of depressive men (Erlangsen, Jeune, Bille-Brahe, & Vaupel, 2004).

We also found pronounced gender differences in the specific symptoms experienced by widowed persons. Confirming our expectation, we found that the magnitude of these disparities varied across the two time periods. The harmful effects of widowhood on financial and social well-being are less pronounced in widowed individuals interviewed in 2011 relative to 1979. Out of the six items capturing difficulties experienced after spousal loss, only two showed clear declines from 1979 to 2011 and both

items relate primarily to social conditions. First, the proportion of respondents reporting financial problems significantly decreased, particularly among widows, who in both periods expressed more financial problems than their male counterparts. The declining proportion of widows lacking financial security in old age is essentially due to improvements in the social security system in Switzerland after 1979 (Wanner & Fall, 2011). Secondly, a lack of social contacts was reported less frequently in 2011 than in 1979, but only among women. This suggests that women may take greater advantage of new and enhanced social service provisions for elderly people created over the last decades, such as organizations providing educational, recreational, and psychological services for older people.

In contrast, we found that psychological distress following spousal loss has not changed across the two time periods. We did not observe period effects with regard to psychological challenges such as lack of sense of purpose in life, burden of sole responsibility, and doing all things alone. We detected just one historical difference for psychological challenges: widows in 2011 reported significantly less loneliness than their counterparts in 1979. Gender differences also emerged. Men reported more complaints about loneliness than women at both time points, and more complaints about doing things alone in 2011 only. These results are consistent with other research showing that widowers are at greater risk for loneliness than widows (Hawkey et al., 2008). Women's superior social networks and more frequent social contacts than men (McLaughlin, Vagenas, Pachana, Begum, & Dobson, 2010) may account for this gender gap.

These findings are confirmed by the results of the multivariate regression analyses, which reveal that psychological difficulties do not differ significantly by time period, whereas social and financial difficulties do. Our data strongly suggest that psychological experiences related to spousal loss are not affected by macrosocial factors. Psychological difficulties are predicted by depressive symptoms, poorer health, and younger age at widowhood. These results are consistent with prior studies showing that widowhood in younger age (i.e., "off-time" loss) is more distressing than in older age (Sasson & Umberson, 2014), and they underscore the interdependence of subjective health and psychological well-being (Diener & Chan, 2011).

Taken together, our results offer support for both the stress paradigm, which emphasizes individual-level responses to stress (Stroebe, 2007), and life course approaches, which underscore the ways that sociohistorical context shapes human experiences (Elder & Johnson, 2003; Mills, 1959). Our work heeds the call of prior research, which noted the necessity of differentiating between effects specific to bereavement as an individual issue and those to widowhood as a social phenomenon (Bennett & Soulsby, 2012). On the one hand, the loss of a spouse can be considered a universally distressing experience, where the levels

of distress experienced are linked with individual-level resources. On the other hand, our results show that widowhood is associated with specific problems depending on the sociohistorical context. Our findings mirror the significant improvement of health and social system, and financial situation for the elderly in Switzerland throughout the late 20th century. These favorable conditions may help to promote older adults' better health and social participation, but are not sufficient for relieving the psychological distress in bereaved individuals.

The fact that this study was carried out in Switzerland could be seen as a limitation with regard to the generalizability of the results, given our focus on one specific national context. However, we believe that the focus on Switzerland provides a unique opportunity to study bereavement during a context of dramatic social change, including the overhaul of a national welfare system. We know of no other studies to explore the effects of spousal loss on two distinctive birth cohorts, against an historical backdrop marked by educational expansion, expanding opportunities for women, and the development of a major pension system. These results may carry implications for other social, cultural, and historical contexts marked by comparable changes. We encourage researchers to continue to pursue questions regarding macrosocial–microsocial linkages with respect to spousal bereavement, for instance, among the Baby Boom cohort. Understanding the ways that macrosocial factors shape the context of bereavement may shed light on policy interventions that may help to ameliorate the psychological, physical, and financial strains widely associated with late-life spousal loss.

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REFERENCES

- Angermeyer, M. C., Holzinger, A., Matschinger, H., & Stengler-Wenzke, K. (2002). Depression and quality of life: results of a follow-up study. *The International Journal of Social Psychiatry*, *48*, 189–199. doi:10.1177/002076402128783235
- Bennett, K. M. (2008). Widowhood. In D. S. Carr (Ed.), *Encyclopedia of the Life course and human development* (pp. 438–444). Farmington Hills, MI: Gale.
- Bennett, K. M., Gibbons, K., & Mackenzie-Smith, S. (2010). Loss and restoration in late life: An examination of dual process model of coping with bereavement. *Omega*, *61*, 317–334. doi: 10.2190/om.61.4.d
- Bennett, K. M., & Soulsby, L. K. (2012). Wellbeing in bereavement and widowhood. *Illness, Crisis, & Loss*, *20*, 321–337. doi: 10.2190/IL.20.4.b
- Boerner, K., Wortman, C. B., & Bonanno, G. A. (2005). Resilient or at risk? A 4-year study of older adults who initially showed high or low distress following conjugal loss. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *60*, P67–P73. doi:10.1093/geronb/60.2.P67
- Bonanno, G. A., Wortman, C. B., Lehman, D. R., Tweed, R. G., Haring, M., Sonnega, J., Carr, D., & Neese, R. M. (2002). Resilience to loss and chronic grief: A prospective study from pre-loss to 18 months post-loss. *Journal of Personality and Social Psychology*, *83*, 1150–1164. doi:10.1037/0022-3514.83.5.1150
- Burri, S., & Leu, R. E. (1997). Armut und Lebensbedingungen im Alter. In Schweiz. Gesellschaft für Gerontologie (Ed.), *Späte Freiheit/Agé et libéré*, Jahrestagung 5.-7. Nov. 1997, Gwatt-Zentrum (pp. 120–126). Bern, Switzerland: Gesellschaft für Gerontologie.
- Carr, D. (2004). Gender, pre-loss marital dependence and older adults' adjustment to widowhood. *Journal of Marriage and Family*, *66*, 220–235. doi:10.1111/j.0022-2445.2004.00016.x
- Carr, D., House, J. S., Wortman, C., Nesse, R., & Kessler, R. C. (2001). Psychological adjustment to sudden and anticipated spousal loss among older widowed persons. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *56*, S237–S248. doi:10.1093/geronb/56.4.S237
- Carr, D., Nesse, R., & Wortman, C. B. (2006). *Spousal bereavement in late life*. New York, NY: Springer.
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, *3*, 1–43. doi: 10.1111/j.1758-0854.2010.01045.x
- Dykstra, P. A., & de Jong Gierveld, J. (2004). Gender and marital-history differences in emotional and social loneliness among Dutch older adults. *Canadian Journal on Aging*, *23*, 141–155. doi:10.1353/cja.2004.0018
- Elder, G. H. Jr., & Johnson, M. K. (2003). The life course and aging: challenges, lessons and new directions. In R. Settersten (Ed.), *Invitation to the life course: toward a new understanding of later life* (pp. 49–81). Amityville, NY: Baywood.
- Erlangsen, A., Jeune, B., Bille-Brahe, U., & Vaupel, J. W. (2004). Loss of partner and suicide risks among oldest old: a population-based register study. *Age and Ageing*, *33*, 378–383. doi:10.1093/ageing/afh128
- European Social Survey (2012). *Round 6 data file edition 1.0. Norwegian Social Science Data Services*. Norway: Data Archive and distributor of ESS data.
- Fonseca, R., Mullen, K. J., Zamarro, G., & Zissimopoulos, J. (2012). What explains the gender gap in financial literacy? The role of household decision making. *The Journal of Consumer Affairs*, *46*, 90–106. doi:10.1111/j.1745-6606.2011.01221.x
- Ginn, J. (2003). *Gender, pensions, and the lifecourse*. Bristol, UK: Polity Press.
- Gorlé, S., & van den Bosch, K. (2008). Inequality, life-course transitions, and income position. In A. Börsch-Supan, A. Brugiavini, H. Jüges, et al. (Eds.), *First results from the survey of health, ageing and retirement in Europe (2004–2007). Starting the longitudinal dimension* (pp. 297–305). Mannheim, Germany: Mannheim Research Institute for the Economics of Aging.
- Halleröd, B. (2013). Gender inequality from beyond the grave: intra-household distribution and wellbeing after spousal loss. *Ageing and Society*, *33*, 783–803. doi:10.1017/S0144686X12000268
- Hawley, L. C., Hughes, M. E., Waite, L. J., Masi, C. M., Thisted, R. A., & Cacioppo, J. T. (2008). From social structural factors to perceptions of relationship quality and loneliness: the Chicago health, aging, and social relations study. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *63*, S375–S384. doi:10.1093/geronb/63.6.s375
- Heidenheimer, A. J. (1993). External and domestic determinants of education expansion: how Germany, Japan, and Switzerland have varied. *Governance*, *6*, 194–219. doi:10.1111/j.1468-0491.1993.tb0014

- Hollstein, B. (2002). Struktur und Bedeutung informeller Beziehungen und Netzwerke. Veränderungen nach dem Tod des Partners im Alter. In A. Motel-Klingebiel, H.-J. von Kondradowitz, & C. Tesch-Roemer (Eds.), *Lebensqualität im Alter. Generationenbeziehungen und öffentliche Servicesysteme im sozialen Wandel* (pp. 13–40). Opladen, Germany: Leske + Budrich.
- Höpflinger, F., Spahni, S., & Perrig-Chiello, P. (2013). Persönliche Bilanzierung der Herausforderungen einer Verwitwung im Zeit- und Geschlechtervergleich. *Zeitschrift für Familienforschung*, *25*, 267–285.
- Hughes, M. E., & Waite, L. J. (2009). Marital biography and health at mid-life. *Journal of Health and Social Behavior*, *50*, 344–358. doi:10.1177/002214650905000307
- Lalive d'Épinay, C., Cavalli, S., & Guillet, L. A. (2010). Bereavement in very old age: Impact on health and relationships of the loss of a spouse, a child, a sibling, or a close friend. *Omega: The Journal of Death and Dying*, *60*, 301–325. doi:10.2190/OM.60.4.a
- Lee, G. R., & DeMaris, A. (2007). Widowhood, gender, and depression: A longitudinal analysis. *Research on Aging*, *29*, 56–72. doi:10.1177/0164027506294098
- Lindholm Eriksen, M., Vestergaard, S., & Andersen-Ranberg, K. (2013). Health among Europeans – a cross-sectional comparison of 16 Share countries. In A. Börsch-Supan, M. Brandt et al. (Eds.), *Active ageing and solidarity between generations in Europe. First results from the SHARE after the economic crisis* (pp. 149–159). Berlin, Germany: De Gruyter.
- Ludwig, C., Cavalli, S., & Oris, M. (2014). “Vivre/Leben/Vivere”: An interdisciplinary survey addressing progress and inequalities of aging over the past 30 years in Switzerland. *Archives of Gerontology and Geriatrics*, *59*, 240–248. doi:10.1016/j.archger.2014.04.004
- Mancini, A. D., Bonanno, G. A., & Clark, A. E. (2011). Stepping of the hedonic treadmill: Individual differences in response to major life events. *Journal of Individual Differences*, *32*, 144–152. doi:10.1027/1614-0001/a000047
- McLaughlin, D., Vagenas, D., Pachana, N. A., Begum, N., & Dobson, A. (2010). Gender differences in social network size and satisfaction in adults in their 70s. *Journal of Health Psychology*, *15*, 671–679. doi:10.1177/1359105310368177
- Mills, C. W. (1959). *The sociological imagination*. New York, NY: Oxford University.
- Oris, M., & Nicolet, M. (2013). *Mesures et capture de la vulnérabilité dans une enquête sur les conditions de vie et de santé des personnes âgées. L'expérience de VLV (Vivre-Leben-Vivere) en Suisse*. Conférence Universitaire de Démographie et d'Étude des Populations. XVIIe Colloque international de Démographie. Les populations vulnérables. Aix-en-Provence.
- Phelan, J. C., Link, B. G., & Tehranifar, P. (2010). Social conditions as fundamental causes of health inequalities: theory, evidence, and policy implications. *Journal of Health and Social Behavior*, *51* (Suppl), S28–S40. doi:10.1177/0022146510383498
- Sasson, I., & Umberson, D. J. (2014). Widowhood and depression: new light on gender differences, selection, and psychological adjustment. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *69*, 135–145. doi:10.1093/geronb/gbt058
- Stroebe, M., Schut, H., & Stroebe, W. (2007). Health outcomes of bereavement. *Lancet*, *370*, 1960–1973. doi:10.1016/S0140-6736(07)61816-9
- Tolonen, H., Helakorpi, S., Talala, K., Helasoja, V., Martelin, T., & Prättälä, R. (2006). 25-year trends and socio-demographic differences in response rates: Finnish adult health behaviour survey. *European Journal of Epidemiology*, *21*, 409–415. doi:10.1007/s10654-006-9019-8
- Utz, R. L., Reidy, E. B., Carr, D., Nesse, R., & Wortman, C. (2004). The daily consequences of widowhood: The role of gender and intergenerational transfers on subsequent housework performance. *Journal of Family Issues*, *25*, 683–712. doi: 10.1177/0192513X03257717
- Utz, R. L., Swenson, K. L., Caserta, M., Lund, D., & deVries, B. (2014). Feeling lonely versus being alone: loneliness and social support among recently bereaved persons. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *69*, 85–94. doi:10.1093/geronb/gbt075
- Wang, R. I., Treul, S., & Alverno, L. (1975). A brief self-assessing depression scale. *Journal of Clinical Pharmacology*, *15*, 163–167. doi:10.1002/j.1552-4604.1975.tb02351.x
- Wanner, P., & Fall, S. (2011). *La situation économique des veuves et des veufs*. Genève, Switzerland: Laboratoire démographique de l'Université de Genève.