

Leisure Activity and Depressive Symptoms of Widowed and Married Women in Later Life

Megan C. Janke, Ph.D., CTRS
University of Illinois at Urbana-Champaign

Galit Nimrod, Ph.D.
Ben-Gurion University of the Negev, Israel

Douglas A. Kleiber, Ph.D.
University of Georgia

Authors

Megan Janke is an Assistant Professor in the Department of Recreation, Sport and Tourism at the University of Illinois at Urbana-Champaign. Galit Nimrod is an Assistant Professor at Ben-Gurion University of the Negev in Israel, and Douglas Kleiber is a Professor at the University of Georgia.

Abstract

Relatively little evidence is available about how leisure involvement changes with spousal loss, and even less about how leisure activity is associated with the well-being of widows during this transition. Using data from the *Americans Changing Lives* (ACL) dataset, this study compared 148 widows with an equal number of continuously married women to investigate change in leisure involvement during the transition to widowhood and examine the relationship between leisure and depressive symptoms among the older women. Findings indicated that widows benefited from increased involvement in some activities while this was not necessarily the case for married women. This suggests that change in widows' leisure involvement may be related more to bereavement than to other aging-related changes such as health and disability.

KEYWORDS: *Aging, negative life events, well-being, health, activity*

Introduction

The loss of a spouse has been identified as one of the most stressful negative life events that can occur among adults (Bisconti, Bergeman, & Boker, 2004; Fry 2001). Widowhood has been found to adversely affect social functioning, life satisfaction, mood, and overall mental health (Arbuckle & de Vries, 1995; Murrell, Meeks, & Walker, 1991; Wilcox, Evenson, Aragaki, Wassertheil-Smoller, Mouton, & Loevinger, 2003). Becoming widowed may even affect an individual's will to live (Salahu-Din, 1996).

Leisure activities can provide opportunities for experiencing positive emotions, particularly during stressful and difficult times. The rate of adults' engagement in pleasant activities has been linked with subsequent levels of depressive symptoms (Lewinsohn, 1974; Lewinsohn & Graf, 1973). Research examining specific types of leisure

activities has indicated that informal, formal, and physical leisure activities are all separately associated with mental well-being among older adults. Low-demand informal activities, such as telephone contact and face-to-face interactions have been related to better mental health in older men and women (Everard, Lack, Fisher, & Baum, 2000). Studies have also found that formal leisure activities such as volunteer work and attending clubs and meetings have a significant positive effect on depressive symptoms (Herzog, Franks, Markus, & Holmberg, 1998; Musick & Wilson, 2003) and levels of happiness (Menec, 2003). Participation in physical and outdoor leisure activities have also been associated with lower levels of depressive symptoms (Morgan & Bath, 1998; Ruuskanen & Ruopilla, 1995) and increased happiness and life satisfaction (Menec, 2003). Given these findings, engagement in informal, formal, or physical leisure activities may be beneficial to the mental health and well-being of older adults, particularly as they are experiencing difficult or stressful life events such as widowhood.

Leisure activities offer widows a way to cope with their loss. Research on negative life events (NLEs) indicates that leisure interests and skills are important in maintaining, or possibly even reconstructing, a sense of self that has been disrupted by the event (see Kleiber, 1999, for a review). Familiar leisure activities that are personally expressive and promote the continuity of significant past relationships may be particularly important in recovering meaning and direction after NLEs. Such activities are also likely to nurture perceptions of competence, control and freedom (Hutchinson, Loy, Kleiber & Dattilo, 2003) qualities that are thought to moderate the impact of stress on well-being (Coleman & Iso-Ahola, 1993). The value of leisure activities in response to NLEs has been described in three areas - self-protection, self-restoration, and personal transformation - suggesting that leisure activities can buffer the impact of NLEs by being distracting, by generating optimism about the future, by aiding in the reconstruction of a life story that is continuous with the past, and by being vehicles for personal transformation (Kleiber, Hutchinson, & Williams; 2002; see also Iwasaki, 2003; Iwasaki & Schneider, 2003).

While widowhood has been widely recognized as a significant negative life event, little is known about the effect of spousal loss on leisure involvement or the influence of leisure activities on the health and well-being of widows. Losing a spouse in later life may constrain leisure participation due to the loss of a leisure partner, a decline in expendable income, or through the loss of transportation to and from activities. Research about the impact of widowhood on leisure is equivocal. A study from Australia suggested that widows in older adulthood reduce the number of activities that they engage in after the death of a spouse, and that their leisure shifts from community-based activities to home-centered activities (Patterson, 1996). However, a study in the United States by Utz and colleagues (2002) comparing older adults who were continuously married with those who became widowed found that social participation in formal settings during widowhood did not significantly fluctuate, and suggested that widows maintained or slightly increased informal social participation following spousal loss. Specifically this study found that participation in formal social leisure activities did not differ by marital status but that continuously married adults reported a significant decline in informal social participation compared with widowed adults whose social involvement was relatively constant over time. The differences in these findings may be reflective of the different locations of data collection and their sample size ($N =$

60 versus $N = 297$), as well as the use of different methodological approaches – one used mixed methods (Patterson, 1996) while the other used a sub-sample of a larger quantitative study (Utz et al., 2002).

Determining the impact of leisure activities on health and well-being during the transition to widowhood is challenging in other respects. Certainly there is some logic to the idea that leisure activities would provide opportunities for widows to remain socially connected and physically active, thereby enhancing their physical and mental health. Yet increasing activity indiscriminately may be disintegrative in some respects (cf. Carstensen, 1993), and some relationship-based activities may be difficult and stressful to maintain in the absence of a spouse. The few studies conducted have indicated that leisure participation after the loss of a spouse is associated with higher levels of morale (Patterson & Carpenter, 1994; Sharp & Mannell, 1996; Utz et al., 2002); lower state and trait anxiety (Patterson, 1996); less guilt, sadness, and emotional stress (Sharp & Mannell, 1996), and fewer depressive symptoms and functional limitations (Janke, Nimrod, & Kleiber, 2007).

Another challenge when examining the role of leisure activities after spousal loss is that there are other confounding factors of this relationship. Participation in activities can change with age and the onset of disability; therefore, it is difficult to establish whether change in leisure activities is a function of marital status or other age-related changes. Research comparing widows with married individuals during later life has found that married individuals report less distress than recently widowed persons (Hagedoorn, van Yperen, Coyne, van Jaarsveld, Ranchor, van Sonderen, et al., 2006), and that widows and widowers are at greater risk of mortality and morbidity than their married counterparts (Goldman, Korenman, & Weinstein, 1995). It has been suggested that social connectedness may help mitigate some of the health differences between married and widowed older adults (Laditka & Laditka, 2003). Being married during later life has also been related to improved odds of engaging in positive health behaviors such as physical activity (Janke, Davey, & Kleiber, 2006; Schone & Weinick, 1998) which could subsequently influence adults' physical and mental health.

While there has been some research comparing the physical activity and social networks of widowed and married women, the impact of *changes* in leisure participation on the health and well-being for widowed and married women is relatively unknown. The relationship between leisure involvement and psychological well-being may differ for adults who become widowed. Perhaps change or stability in leisure involvement has more of an effect on the well-being of widows than for married women. It is possible, even likely, that becoming a widow changes the types of leisure activities that women engage in during later life. Thus, the purpose of this study is to investigate whether leisure participation differs between women who become widowed and those who remain married. The study also aims to explore whether leisure participation is related to the depressive symptoms of older women, and if the relationship between psychological well-being and leisure differs based on marital status.

Methods

This study compared women who became widowed with those who were continuously married. The data for this study were drawn from the *Americans Changing*

Lives (ACL) study conducted in 1986, 1989, and 1994 (House, 2003). A variety of information about adults' health and well-being, social and family relationships, marital transitions, and leisure involvement was collected in the ACL study. Women who became widowed between 1986 and 1989 or between 1989 and 1994 were included in this study. A similar group of continuously married women was also randomly selected from the dataset to use as a comparison group. For women who were married when interviewed in 1986 and widowed when contacted in 1989, Time 1 refers to data collected in 1986 and Time 2 refers to the data from 1989. For women who became widowed between the years of 1989 and 1994, Time 1 data refers to information collected in 1989 and Time 2 refers to data from 1994. All women included in this study were community-dwelling and present for both time points of data collection (i.e., no proxy respondents). Only those women aged 50 and over at Time 1 were included in the final sample.

The final sample included a total of 296 women, of which 148 were widows at Time 2. At Time 1, the mean age of these women was 68.5 years. Seventy-four percent of the sample was Caucasian, and almost 75% of the women were classified as having low or lower-middle socioeconomic status as defined by the ACL based on their reported household income and education levels. Classifications of these older adults as having low or lower-middle socioeconomic status is relative however, as basic measures of income adequacy involve the comparison of one's income to a threshold value that varies by age and household size (Crown, 2001). For older adults, lower income levels would be expected as these individuals have often left the workforce, and their income needs may not be as high with relatively few persons residing in a household and perhaps even lower household expenses (mortgage, etc). The average duration of widowhood in this sample was slightly over two years (range less than 1 to 5). The distribution of women widowed less than a year (5.8%) and widowed for five years (5.2%) was similar, with the majority of widows having been widowed for one to two years (58.7%). The descriptive characteristics of the sample are provided in Table 1.

TABLE 1
Descriptive Characteristics of the Married and Widowed Women.

	Married		Widowed	
	M	SD	M	SD
Age	67.89	5.25	69.00	8.07
White	.74	.44	.74	.44
SES	1.99	.88	1.97	.92
Years Widowed	—	—	2.19	1.98

Note. The variable "White" has been dummy-coded (White = 1, Non-White = 0).

Measurement

Women's involvement in leisure activities was self-reported. They were asked how frequently they participated in informal, formal and physical leisure activities. In this study, visiting and talking with friends and family were categorized as *informal* leisure. *Formal* leisure included participation in clubs, religious activities, and volunteering. Involvement in gardening, walking, or sports and exercise were categorized as *physical* leisure. Informal and formal leisure activities were measured on a 6-point scale (0 = never, 5 = more than once a week) except for volunteer activity which was measured as yes/no. The physical leisure activities were measured on a 4-point scale (0 = never, 3 = often).

Self-reported measures of depressive symptoms were available for each individual at Time 1 and Time 2. Depressive symptoms were measured by the Iowa short form (Kohout, Berkman, Evans, & Cornoni-Huntley, 1993) of the Center for Epidemiological Studies Depression (CES-D; Radloff, 1977) scale asking 11 of the original 20 questions with 3 rather than 4 response categories. These items were assessed with a possible score of 1 to 3 for each question, with higher scores indicating more depressive symptoms. Questions included items such as "In the past week I felt depressed", "In the past week I felt lonely", and "In the past week, I enjoyed life" (reverse coded). This depression scale demonstrated good internal reliability across time points as assessed by Cronbach alpha scores (T1: $\alpha = .80$, T2: $\alpha = .79$).

Data Analysis

Preliminary analyses established that the women who became widowed during this study were similar to the sample of continuously married women in terms of age, race, socioeconomic status, leisure participation, and depressive symptoms. Additional analyses were then conducted to establish whether time and marital status had an effect on women's leisure involvement and depressive symptoms at Time 2.

The next phase of the analysis used regression models to examine the relationship between leisure involvement and women's depressive symptoms. This relationship was examined by first determining: 1) the frequency of involvement in each activity at Time 1, and, 2) change in the frequency of participation in each activity between Time 1 and Time 2. Then in order to determine if involvement in leisure activities had varying effects on the depressive symptoms of married and widowed women, two interaction terms were included in the model: 1) marital status by frequency of involvement in each activity at Time 1, and, 2) marital status by change in frequency of participation for each activity between Time 1 and Time 2. For example, the regression model examining the relationship of gardening on depressive symptoms (CESD) was as follows: CESD T2 = age + white + marital status + years widowed + SES + CESD T1 + garden T1 + change in gardening (T2 - T1) + marital status x garden T1 + marital status x change in gardening.

Results

No significant differences in the age, race, gender, socio-economic status, leisure involvement, or health characteristics of these two groups of women were revealed at

Time 1 through independent t-tests. Repeated measures MANOVAs were conducted to examine the impact of time and marital status on the women's leisure involvement and depressive symptoms (See Table 2). The widows and continuously married women reported different patterns of involvement in informal, formal, and physical leisure over the course of this study (See Figures 1 - 3). Significant interactions were noted between time and marital status in three leisure activities – talking, visiting, and religious activities – as well as in depressive symptoms. In the aforementioned activities, widowed women increased their frequency of involvement from Time 1 to Time 2 in all leisure activities except gardening. Conversely, continuously married women tended to decrease their involvement in informal and formal leisure activities while reporting modest increases in walking and sports and exercise.

Time and marital status had only a direct effect on depressive symptoms. Widows reported a slightly higher level of depression at Time 1 than married women, but

TABLE 2
ANOVAs for Married ($n = 148$) and Widowed ($n = 148$) Women.

	Means				F-Statistic		
	Married		Widowed		Time	Marital Status	Interaction
	T1	T2	T1	T2			
Talking	4.07	3.85	3.97	4.06	.50	.16	5.52*
Visiting	3.34	3.17	3.17	3.49	.73	.43	6.18**
Clubs	2.12	2.06	1.97	2.19	.61	.10	1.57
Religion	3.10	2.95	2.72	2.97	.15	1.30	7.82**
Volunteering	.46	.39	.39	.39	.61	.55	2.62
Walking	1.71	1.76	1.66	1.73	1.03	.01	.08
Gardening	1.75	1.70	1.92	1.74	3.49 a	1.09	1.22
Sports/Exercise	1.20	1.28	1.03	1.22	3.21 a	.73	.56
Depressive Symptoms	14.84	14.73	15.35	16.30	4.76*	7.64**	6.76**

Note. $ap \leq .10$; $*p \leq .05$; $**p \leq .01$; $***p \leq .001$.

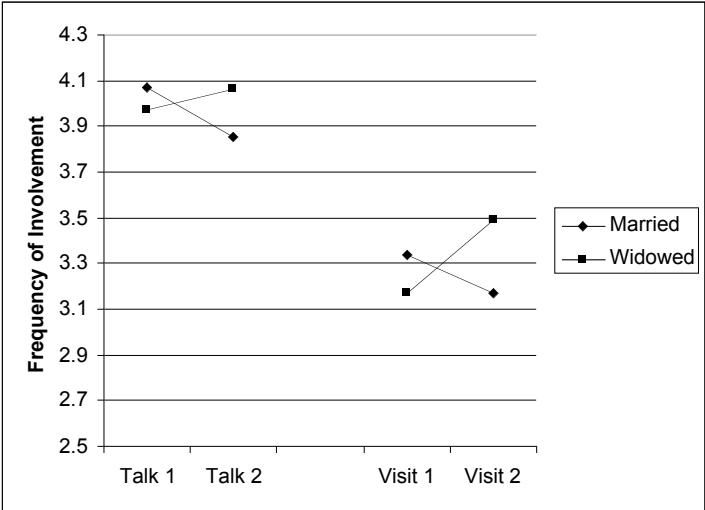


Figure 1. Change in informal leisure by marital status.

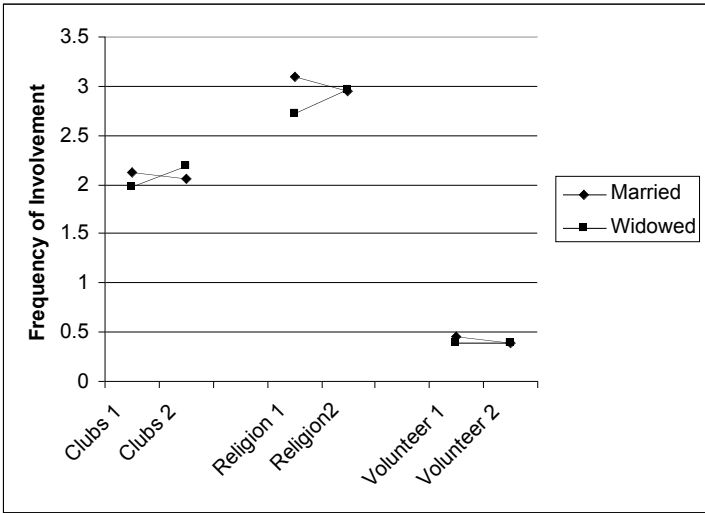


Figure 2. Change in formal leisure by marital status.

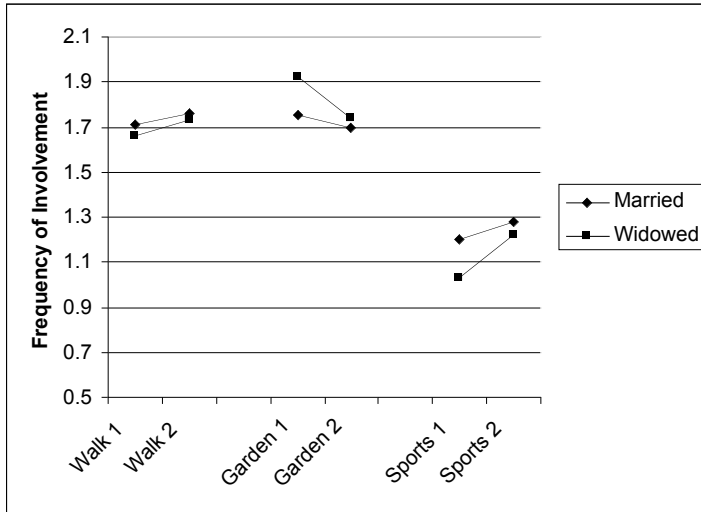


Figure 3. Change in physical leisure by marital status.

their symptom level increased significantly subsequent to the death of their spouses. Depressive symptoms in married women remained essentially the same over time. While the Time 2 differences may be attributable to widowhood itself, a point we take up further in the discussion section, the marginal Time 1 difference may be explained by a greater likelihood that widows were in caregiving roles prior to the deaths of their spouses. However, the difference was not statistically significant.

Separate regression models were tested to examine the relationship between the leisure activity variables and depressive symptoms at Time 2 (See Tables 3 - 5). Level of depressive symptoms at Time 1 was the most significant predictor of depressive symptoms at Time 2 in these models. Predictably, losing a spouse was also significantly associated with more depressive symptoms in each of these models. The length of widowhood was also a significant predictor in almost all of the models; more recent loss of a spouse was associated with more depressive symptoms. With the capacity to hold these influences constant through regression procedures, unique contributions of the leisure activity variable to depressive symptomatology could then be examined.

Contribution of Leisure Activities

The relationship between talking with friends and family and depressive symptoms was significantly different for these women based on their marital status (See Figure 4). When widowed women reported that they were never involved in talking with friends and family, or reported talking less than once a week, they reported lower levels of depressive symptoms than married women. However, as frequency of talking increased for widowed women, they reported increasingly more depressive symptoms. For married women, this pattern was similar; however, these women reported a sharp decrease in depressive symptoms when talking with friends and family more than once

TABLE 3
Standardized Beta Weights from Informal Leisure Regression Models of Depressive Symptoms at Time 2.

	Talk	Visit
Widowed	-.23	.44**
Years Widowed	-.20*	-.21*
Age	.04	.04
White	-.02	-.10
SES	-.09	-.08
Depressive Symptoms T1	.44***	.41***
Leisure Variable (LV) T1	-.03	.02
Δ LV (T2-T1)	-.02	.04
Widow x LV1	.61**	-.10
Widow x Δ LV	.07	-.09
F	11.36***	9.92***
Adjusted R ²	.27	.24

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

TABLE 4
Standardized Beta Weights from Formal Leisure Regression Models of Depressive Symptoms at Time 2.

	Club Participation	Religious Activities	Volunteering
Widowed	.45***	.33**	.40***
Years Widowed	-.17*	-.21**	-.18*
Age	.04	.04	.04
White	-.02	-.02	-.02
SES	-.06	-.09	-.07
Depressive Symptoms T1	.40***	.41***	.39***
Leisure Variable (LV) - T1	.05	-.05	.03
Δ LV (T2-T1)	.18*	.02	.03
Widow x LV1	-.20a	.03	-.16a
Widow x Δ LV	-.29***	-.07	.03
F	11.40***	10.05***	11.00***
Adjusted R ²	.27	.24	.26

Note. *p ≤ .10, **p ≤ .05, ***p ≤ .01, ****p ≤ .001.

TABLE 5
Standardized Beta Weights from Physical Leisure Regression Models of Depressive Symptoms at Time 2.

	Walking	Gardening	Sports/Exercise
Widowed	.40***	.41***	.34***
Years Widowed	-.19*	-.20*	-.19*
Age	.03	.02	.03
White	-.01	.02	.00
SES	-.09	-.10a	-.05
Depressive Symptoms T1	.40***	.39***	.41***
Leisure Variable (LV) - T1	.01	-.07	-.13
Δ LV (T2-T1)	.07	.01	-.13
Widow x LV1	-.08	-.11	-.03
Widow x Δ LV	-.12	-.18*	.02
F	10.13***	11.13***	10.58***
Adjusted R ²	.25	.27	.26

Note. * $p < .10$, * $p \leq .05$, *** $p \leq .001$.

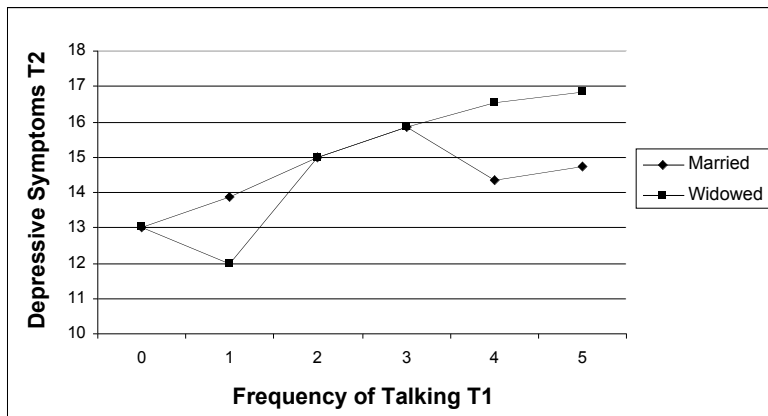


Figure 4. The relationship between talking and depressive symptoms by marital status.
 (Values for talking frequency: 0 = never, 1 = less than once a week, 2 = about once a week,
 3 = 2 or 3 times a week, 4 = once a day, 5 = more than once a day.)

a day. For widows, this difference may be attributable to the recent death of a loved one, changing the context and purpose of family’s interactions. Perhaps because widowed women were more depressed than continuously married women, family and friends increased their telephone contact with them. None of the visiting leisure variables predicted depressive symptoms in these models.

Change in the frequency of club involvement was a predictor of depressive symptoms for all of these women, but the relationship between change in club participation and depressive symptoms differed by marital status (See Figure 5). An increase in club involvement over time was surprisingly predictive of *more* depressive symptoms at Time 2 among married women while depressive symptoms were significantly higher for widows who decreased involvement in this activity. The influence of the interaction of volunteering and marital status in predicting depressive symptomology after loss of a spouse approached significance in this study ($p = .09$), suggesting that depressive symptoms for married women did not seem to depend on whether they volunteered or not, while for widows those who were involved in volunteering reported lower levels of depressive symptoms. None of the religious participation variables predicted depressive symptoms in these models.

Of the physical leisure activities, only gardening was significantly related to depressive symptoms in this sample, and this relationship was affected by the women’s marital status (See Figure 6). This relationship appeared to be more complex for the widowed women with much more variation in the relationship. For widows, low levels of depressive symptoms were associated with increasing involvement in gardening

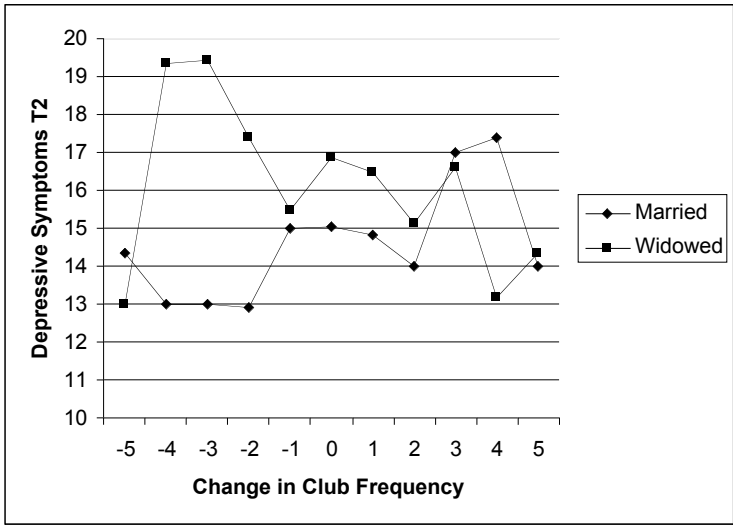


Figure 5. The relationship between change in club participation and depressive symptoms by marital status

Note. Change in club frequency is calculated as Club T2 – Club T1. Positive scores indicate increases in frequency while negative scores reflect decreases in frequency of participation over time. The larger the absolute value of the number, the larger the reported change in participation during the study period.

over time, while for married women decreasing involvement in this activity was related to fewer depressive symptoms. This suggests that for some widows, gardening may serve as a coping mechanism to deal with the loss of their spouse.

Discussion

The present study was consistent with previous research which argued that the loss of a spouse may affect psychological well-being (e.g., Arbuckle & de Vries, 1995; Murrell, Meeks, & Walker, 1991; Wilcox et al., 2003). It also provided some support for studies that indicated that leisure participation after the loss of a spouse is associated with enhanced well-being (e.g. Patterson, 1996; Patterson & Carpenter, 1994; Sharp & Mannell, 1996; Utz et al., 2002). However, the current study's main contribution to the knowledge regarding leisure and marital status in later life is through its focus on *changes* in leisure: how leisure participation changes over time, and what impact change and stability have on the psychological well-being of widowed and married older women. In addition, this study examined whether the relationship between leisure involvement and depressive symptoms was different for women who *become* widowed.

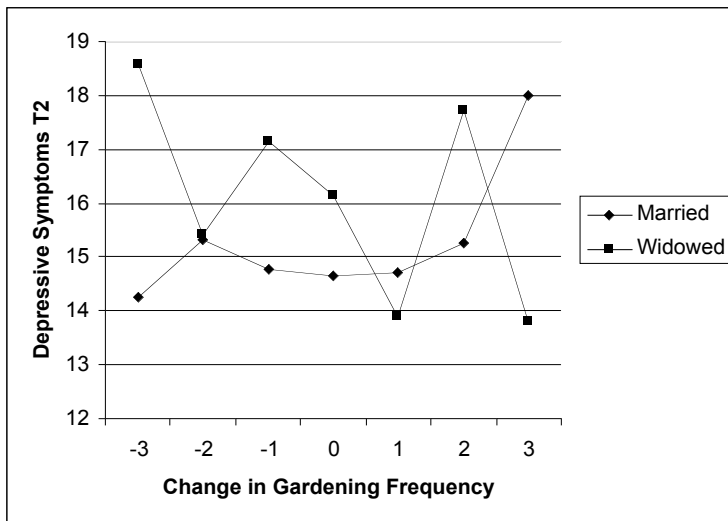


Figure 6. The relationship between change in gardening and depressive symptoms by marital status.

Note. Change in gardening frequency is calculated as Garden T2 – Garden T1. Positive scores indicate increases in frequency while negative scores reflect decreases in frequency of participation over time. The larger the absolute value of the number, the larger the reported change in participation during the study period.

The longitudinal data set utilized in this investigation had the advantage of allowing us to study change in leisure and depressive symptoms, as well as to track the transition to widowhood among a sample of older women. Although our data were limited to eight leisure activities, we can still say with some certainty with respect to the population studied that the relationships between changes in leisure involvement and psychological well-being vary with marital status. However, the directionality or causality of the relationship between leisure involvement and depressive symptoms cannot be determined due to the use of only two waves of data in this study. Research has consistently acknowledged that the relationship between leisure and health is reciprocal (Payne, 2002). Further research will be necessary to isolate causal influence and directionality. Depression may limit activity to some extent; however, the data reported here also suggest the converse.

Widowed and continuously married older women reported different changes in their leisure participation. While continuously married women decreased their involvement in informal and formal leisure activities, widows generally increased or maintained their involvement in these types of activities. The latter findings are consistent with previous research in the United States showing an increase in informal social participation following spousal loss (Utz et al., 2002). This may be related to the widows' increased need for social support and contact with others after spousal loss. It is possible that older married women have the opposite patterns of engagement in informal and formal leisure activities because they are receiving adequate social support from their spouse and therefore selectively disengage from less important social interactions and leisure activities as proposed by the socio-emotional selectivity theory (Carstensen, 1993). There was a trend toward increasing involvement in sports and exercise among both widowed and continuously married women between Time 1 and Time 2. Although these findings are still consistent with other studies suggesting that older adults engage more frequently in lower intensity physical activities such as walking and gardening (DiPietro, 2001; Lee & King, 2003; Menec, 2003), this increase in active sports and exercise is an interesting trend considering the current movement to engage older adults in more physical activity.

The association of change and stability in leisure activity with depressive symptoms varied for widowed and married women. Increasing involvement in gardening and clubs appeared to have a positive effect on widows' well-being (i.e. associated with fewer symptoms of depression at Time 2). However, for married women the effects were the opposite: increasing involvement appeared to be negatively associated with well-being in some respects and decreasing involvement in some activities may even have been beneficial. Widows and continuously married women also varied with regard to the association between the frequency of talking with friends and families and depressive symptoms. While for married women there was a positive association between these variables, for widows higher frequency predicted more depression. It is likely that when friends and family talk to widows frequently they are "checking up" on the widows due to the difficulty, perhaps for all family members, in dealing with the loss; however, continuously married women may be using the phone more as a means of socialization. The association between volunteering and depressive symptoms appeared to be different by marital status as well, with higher levels predicting less depression among widows but having no impact on married women's well-being.

There are a few possible explanations of our findings that marital status is a significant influence in the relationship between leisure involvement and depressive symptoms. Research has shown that most widowed persons consider increased social activity an effective way to combat the psychological distress associated with spousal loss (Utz et al., 2002). For married women, increasing social involvements may be considered more stressful than helpful as they may not need the additional social support and social interaction that these activities provide and the time commitments and responsibilities associated with these activities may not be wanted. Similarly, the absence of positive emotions is a characteristic feature of depression (Clark & Watson, 1991) and positive emotions, such as those brought on by meaningful leisure involvement, appear to play an important role in the regulation of ongoing depression during spousal bereavement (Ong, Bergeman, & Bisconti, 2004). It may be that the discontinuity in social activities after the loss of a spouse leads to fewer opportunities to experience positive emotions, and thus those widows who find ways to increase or maintain their leisure involvement report fewer depressive symptoms.

The findings did not indicate any significant differences between informal, formal and physical activities, as significant relationships were found in specific activities, rather than in the categories of leisure per se. However, the findings raised an important general question: *were the changes in leisure participation characterized by each group adaptive?* In general, widows increased their participation in activities after the loss of a spouse, although this change in participation was only related to depressive symptoms with certain leisure activities, specifically volunteerism and club involvement. Gardening was another activity where increasing involvement appeared to have a positive impact on the widows' well-being, yet this was the only activity that the mean level of involvement among widows declined across the study. This decline may be age related, specifically due to increased difficulties with fine motor skills as a result of chronic illnesses such as arthritis; the other physical leisure activities included in this study (walking, sports/exercise) that utilize more gross motor skills did not show the same drop during this period. Leisure interests and skills are important in creating and maintaining a sense of self (cf. Kleiber, 1999; Kleiber, Hutchinson, & Williams; 2002). Increased involvement in clubs and volunteering may serve as a coping mechanism for women who lost their spouses, while providing both social interaction and an opportunity to contribute and help others. Such activities may change the self perception of widowed women, from someone who *needs others* (as in her informal relationships) to someone who is *needed by others*. These activities may also give the widow's life new direction and meanings. Gardening may be used as a coping mechanism, perhaps because the activity provides the opportunity to "nurture", or perhaps even to connect with their deceased spouse through a memorial garden. Increased participation in these activities could mitigate the effects of spousal loss on the widows' psychological well-being. Unfortunately, most widows did not increase involvement in these activities.

In general continuously married women did not report an increase in depression from Time 1 to Time 2, but this could not be attributed to maintaining leisure activity involvement. In fact, while they tended to try to maintain involvement in most activities, decreased involvement in some activities (gardening and clubs) was otherwise associated with fewer depressive symptoms. This suggests that married women may benefit from reducing the number of unsatisfying social commitments as is argued

in terms of socio-emotional selectivity (Carstensen, 1993). Such reduction may offer them an opportunity to focus more on themselves, their inner growth, and on those family and friends with whom they are closest rather than on more superficial social relationships that they may have largely maintained out of habit or obligation. However, this response proved to be more the exception than the rule.

Thus, the main finding of this study is that widowed and married older women may benefit from different changes in leisure participation. While widows may benefit from increased participation, continuously married women may actually benefit from decreased participation in some cases. The reasons older people do and do not make changes in their leisure involvement in ways that will be of most benefit to their psychological well-being need to be examined further.

References

- Arbuckle, N. W., & de Vries, B. (1995). The long-term effects of later life spousal and parental bereavement on personal functioning. *Gerontologist*, 35, 637-647.
- Bisconti, T. L., Bergeman, C. S., Boker, S. M. (2004). *Journals of Gerontology Series B: Psychological Sciences & Social Sciences*, 59B(4), P158-P167
- Carstensen, L. L. (1993). Motivation for social contact across the life span: A theory of socio-emotional selectivity. In J.E. Jacobs (Ed.) *Developmental perspectives on motivation: Nebraska Symposium on Motivation*, 40 (pp. 2090 – 254). Lincoln, NE: University of Nebraska Press.
- Clark, L. A., & Watson, D. (1991). General affective dispositions in physical and psychological health. In C. R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology: The health perspective* (pp. 221-245). Elmsford, NY: Pergamon Press.
- Coleman, D., & Iso-Ahola, S. E. (1993). Leisure and health: The role of social support and self-determination. *Journal of Leisure Research*, 25, 111-128.
- Crown, W. (2001). Economic status of the elderly. In R. H. Binstock & L. K. George (Eds.), *Handbook of aging and the social sciences* (5th ed., pp. 352-368). New York: Academic Press.
- DiPietro, L. (2001). Physical activity in aging: Changes in patterns and their relationship to health and function. *Journals of Gerontology*, 56A, 13-22.
- Everard, K. M., Lack, H. W., Fisher, E. B., & Baum, M. C. (2000). Relationship of activity and social support to the functional health of older adults. *Journal of Gerontology*, 55B, S208-S212.
- Fry, P. S. (2001). The unique contribution of key existential factors to the prediction of psychological well being of older adults following spousal loss. *Gerontologist*, 41, 69-81.
- Goldman, N., Korenman, S., & Weinstein, R. (1995). Marital status and health among the elderly. *Social Science and Medicine*, 40, 1717-1730.
- Hagedoorn, M., Van Yperen, N. W., Coyne, J. C., van Jaarsveld, C. H., Ranchor, A. V., van Sonderen, E., & Sanderman, R. (2006). Does marriage protect older people from distress? The role of equity and recency of bereavement. *Psychology and Aging*, 21(3), 611-620.
- Herzog, A. R., Franks, M. M., Markus, H. R., & Holmberg, D. (1998). Activities and well-being in older age: Effects of self-concept and educational attainment. *Psychology and Aging*, 13, 179-185.
- House, J. S. (2003). *Americans' Changing Lives: Waves I, II, and III, 1986, 1989, and 1994*. [Computer file]. ICPSR version. Ann Arbor, MI: University of Michigan, Institute for Social Research, Survey Research Center [producer], 2002. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2003.
- Hutchinson, S. L., Loy, D. P., Kleiber, D. A., & Dattilo, J. (2003). Leisure as a coping resource: Variations in coping with traumatic injury and illness. *Leisure Sciences*, 25, 143-161.

- Iwasaki, Y. (2003). Examining rival models of leisure coping mechanisms. *Leisure Sciences*, 25, 183-206.
- Iwasaki, Y., & Schneider, I. (2003). Leisure, stress, and coping: An evolving area of inquiry. *Leisure Sciences*, 25, 107-114.
- Janke, M., Davey, A., & Kleiber, D. (2006). *Leisure Sciences*, 28, 285-303.
- Janke, M.C., Nimrod, G., & Kleiber, D.A. (2007). Leisure patterns and health among recently widowed adults. Unpublished Manuscript. University of Illinois Urbana-Champaign, Champaign, IL.
- Kleiber, D.A. (1999). *Leisure experience and human development*. New York: Basic Books.
- Kleiber, D. A., Hutchinson, S. L., & Williams, R. (2002). Leisure as a resource in transcending negative life events: Self-protection, self-restoration, and personal transformation. *Leisure Sciences*, 24, 219-235.
- Kohout, F. J., Berkman, L. F., Evans, D. A., & Cornoni-Huntley, J. C. (1993). Two shorter forms of the CES-D depressive symptoms index. *Journal of Aging and Health*, 5, 179-192.
- Laditka, J. N., & Laditka, S. B. (2003). Increased hospitalization risk for recently widowed older women and protective effects of social contacts. *Journal of Women & Aging*, 15, 7-28.
- Lee, R. E. & King, A. C. (2003). Discretionary time among older adults: How do physical activity promotion interventions affect sedentary and active behaviors? *Annual in Behavioral Medicine*, 25, 112-119.
- Lewinsohn, P. M. (1974). Clinical and theoretical aspects of depression. In K. S. Calhoun, H. E. Adams, & K. M. Mitchell (Eds.), *Innovative treatment methods in psychopathology*. New York: Wiley.
- Lewinsohn, P. M., & Graf, M. (1973). Pleasant activities and depression. *Journal of Consulting and Clinical Psychology*, 41, 261-268.
- Menec, V. H. (2003). The relation between everyday activities and successful aging: A 6-year longitudinal study. *Journal of Gerontology*, 58, 74-82.
- Morgan, K., & Bath, P. A. (1998). Customary physical activity and psychological well being: A longitudinal study. *Age and Ageing*, 27, 35-40.
- Murrell, S. A., Meeks, S., & Walker, J. (1991). Protective functions of health and self-esteem against depression in older adults facing illness or bereavement. *Psychology and Aging*, 6, 352-360.
- Musick, M. A., & Wilson, J. (2003). Volunteering and depression: The role of psychological and social resources in different age groups. *Social Science and Medicine*, 56, 259-269.
- Ong, A. D., Bergeman, C. S., & Bisconti, T. L. (2004). Unique effects of daily perceived control on anxiety symptomatology during conjugal bereavement. *Personality and Individual Differences*, 38(5), 1057-1067.
- Patterson, I. (1996). Participation in leisure activities by older adults after a stressful life event: The loss of a spouse. *International Journal of Aging and Human Development*, 42, 123-142.
- Patterson, I., & Carpenter, G. (1994). Participation in leisure activities after the death of a spouse. *Leisure Sciences*, 16, 105-117.
- Payne, L. (2002). Progress and challenges in repositioning leisure as a core component of health. *Journal of Park and Recreation Administration*, 20(4), 1-11.
- Radloff, L. S. (1977). The CES-D scale: A self report depression scale for research in general population. *Applied Psychological Measurement*, 1, 385-401.
- Ruuskanen, J. M., & Ruopilla, I. (1995). Physical activity and psychological well-being among people aged 65 to 84 years. *Age and Ageing*, 24, 292-296.
- Salahu-Din, S.N. (1996) *Journal of Death & Dying*, 33, 103-120.

- Schone, B. S., & Weinick, R. M. (1998). Health-related behaviors and the benefits of marriage for elderly persons. *Gerontologist*, 38(5), 618-627.
- Sharpe, A., & Mannell, R. C. (1996). Participation in leisure as a coping strategy among bereaved women. In *Proceedings of the Eight Canadian Congress on Leisure Research* (pp. 241-244), Ottawa, ON: University of Ottawa.
- Utz, R. L., Carr, D., Nesse, R., & Wortman, C. B. (2002). The effect of widowhood on older adults' social participation: An evaluation of activity, disengagement, and continuity theories. *Gerontologist*, 42, 522-533.
- Wilcox, S., Evenson, K. R., Aragaki, A., Wassertheil-Smoller, S., Mouton, C. P., & Loevinger, B. L. (2003). The effects of widowhood on physical and mental health, health behaviors, and health outcomes: The women's health initiative. *Health Psychology*, 22, 513-522.