



Published in final edited form in: Death Studies. 2007 Jul; 31(6):505.

**Toward the Development of an Inventory of Daily Widowed Life (IDWL): Guided by the
Dual Process Model of Coping with Bereavement**

Michael S. Caserta, Ph.D.
Dale A. Lund, Ph.D.

Gerontology Interdisciplinary Program & Center on Aging
University of Utah
10 S. 2000 E.
Salt Lake City, Utah 84112

This project was funded by a seed grant from the University of Utah College of Nursing Research Committee. Partial support also was provided by a grant from the National Institute on Aging (R01 AG023090). We acknowledge the contributions of Sarah Jane Obray, Katie Ross and Nathan Story who provided valuable assistance on this project and to Dr. Margaret Stroebe, who provided useful comments to an earlier version of this paper. Please direct correspondence to Dr. Caserta at michael.caserta@nurs.utah.edu or Dr. Lund at dale.lund@nurs.utah.edu.

Toward the Development of an Inventory of Daily Widowed Life (IDWL): Guided by the Dual Process Model of Coping with Bereavement

Abstract

The Dual Process Model of Coping with Bereavement (Stroebe & Schut, 1999) suggests that the most effective adaptation involves oscillation between two coping processes: loss-orientation (LO) and restoration-orientation (RO). A 22-item Inventory of Daily Widowed Life (IDWL) was developed to measure these processes and the oscillation between them, and assessed by examining 163 bereaved widow(er)s, ages 45 - 94 years. The LO and RO subscales produced alpha coefficients of .90 & .79, respectively. The more recently widowed demonstrated a high degree of oscillation balance between the two processes, while there was a greater emphasis on restoration-orientation among those bereaved longer. Both subscales generated significant relationships with the bereavement outcome measures used in this study. Furthermore, restoration-orientation was directly related to the level of self-care and daily living skills as well as personal growth. We identify six dimensions of oscillation that warrant further consideration and encourage others to help develop and refine all features of the IDWL and make it adaptable to other loss relationships.

Toward the Development of an Inventory of Daily Widowed Life (IDWL): Guided by the Dual Process Model of Coping with Bereavement

The loss of a spouse in mid and later life is often associated with a variety of disruptive and negative outcomes, as well as processes related to successful adaptation, positive emotions, resiliency and personal growth (e.g., Bennett, Hughes, & Smith, 2005; Bisconti, Bergman, & Boker, 2004; Boerner, Wortman, & Bonanno, 2005; Carr, 2004; Gallagher-Thompson et al, 1993; Lund, 1989; Lund & Caserta, 2002; Lund, Caserta, & Dimond, 1993; Ong, Bergman, & Bisconti, 2004; van Baarsen et al, 2002; Williams, 2002). Several conceptual models have emerged to describe these processes as well as provide direction for ways to facilitate adaptation—most notably Worden’s (2002) tasks of grief and other more general stress and coping models (Lazarus & Folkman, 1984).

Although these conceptual frameworks have made contributions to our understanding of bereavement adaptation and have informed the design of interventions, they are not without potential limitations. Grief interventions conceptually based on task models like Worden’s (2002) tend to focus on psycho-emotional consequences of bereavement, which might not allow for equal attention to the secondary stressors associated with new roles and responsibilities resulting from one’s new status and identity as a widow or widower. Furthermore, there has been some debate as to how necessary it is for the bereaved to consistently engage in “grief work” in order to achieve successful adaptation (cf. Stroebe, 1992). Meanwhile, although general stress and coping models acknowledge the role of secondary stressors that are precipitated by bereavement as a more global primary stressor, they have difficulty defining a process whereby simultaneous multiple challenges need to be confronted, perhaps while others need to be avoided at the time (Stroebe & Schut, 1999.)

The dual process model (DPM) of coping with bereavement (Stroebe & Schut, 1999) is a response to the limitations associated with these earlier models that emphasizes two concurrent types of stressors and coping processes: loss-orientation (LO) and restoration-orientation (RO). Loss-orientation, which includes the grief-work concept as a component, involves the coping processes directly focused on the stress attributed to the loss itself. It encompasses many of the grief-related feelings and behaviors that tend to dominate early but can re-emerge throughout the course of bereavement. Restoration-orientation refers to those processes the bereaved use to cope with the secondary stressors that accompany new roles, identities, and challenges related to their new status as a widow and widower. These often include the need to master new tasks, make important decisions, meet new role expectations, and take greater self-care initiative, which may be especially difficult for bereaved widow(er)s because of insufficient skills and neglect. As widows and widowers become more effective in meeting these challenges, self-efficacy beliefs emerge that facilitate greater confidence, independence, and autonomy needed to manage their daily lives (Arbuckle & de Vries, 1995; Caserta, 2003; Fry, 2001; Lund & Caserta, 2002; Lund, Caserta, Dimond, & Shaffer, 1989). Another desired outcome is a sense of personal growth, which often takes longer to emerge (Lieberman, 1996; Schaefer & Moos, 2001). Many bereaved persons report that as they learn to become more independent and have some success in developing new skills they benefit from gaining a sense of personal growth (Carr, 2004; Lund et al, 1989).

Especially unique to this model, and what distinguishes it from the more global stress and coping frameworks, is the recognition that the bereaved will oscillate between these two processes throughout the course of bereavement. The widowed will alternate between the two as demands arise in their daily lives, even on a moment-to-moment basis (Richardson &

Balaswamy, 2001; Stroebe & Schut, 1999). Furthermore, a key feature of restoration-orientation is the need to take brief periods of respite from grieving itself, whether to address these new tasks or demands or to keep busy with other diversionary meaningful activity to restore a sense of balance and well-being. There has been a growing body of literature suggesting that engaging in physical activity, hobbies and other leisure activities, as well as socializing and being involved with others can provide opportunities for time away from grieving (Anderson & Dimond, 1995, Fitzpatrick et al., 2001; Lee & Bakk, 2001; Lund et al., 1993; Richardson & Balaswamy, 2001; Utz, Carr, Nesse, & Wortman, 2002).

Although a variety of measures exist to assess grief (e.g., Bailey, Dunham, & Kral, 2000; Barrett & Scott, 1989; Faschingbauer, 1981; Guarnaccia & Hayslip, 1998; Hogan, Greenfield, & Schmidt, 2001; Prigerson et al, 1995; Sanders, Mauger, & Strong, 1985), there are no instruments designed specifically to measure the broader and primary features of the DPM (loss-orientation, restoration-orientation, and oscillation – Stroebe & Schut, 1999). Because this model will increasingly guide future bereavement research and clinical practice, it is important that we begin to develop measurement strategies and instruments to assess loss-orientation, restoration-orientation, and the various features of oscillation.

Accordingly, this paper reports on the initial development of an Inventory of Daily Widowed Life (IDWL), an instrument intended to measure the degree to which widows and widowers engage in the coping processes associated with loss-orientation, restoration-orientation, and the oscillation between them. We report on the instrument's psychometric properties, examining total and subgroup internal consistency, and we begin to address construct validity in terms of comparisons between the recently widowed and those widowed longer. We also explore common and differential associations between the IDWL's LO, RO, and oscillation components and often-used indicators of bereavement outcome. Although our focus is on widowhood or spousal bereavement situations, items in the scale might be adaptable to other losses and relationships with some modifications. We hope that this preliminary work will stimulate efforts by other researchers internationally so that the IDWL can be a useful instrument for studies and

clinical work guided by the DPM. We expect that this developmental process will require collaborative activity among many bereavement experts over time. We also anticipate that this increased attention to issues of measurement will stimulate critical thought about conceptual issues regarding the DPM, especially the oscillation feature.

METHOD

Instrument Development and Description

The Inventory of Daily Widowed Life (IDWL) was developed in two phases. During the first phase, we (MC & DL) generated 20 Likert-format items (10 corresponding to loss-orientation and 10 corresponding to restoration-orientation) that inquire into how frequently during the past week one spends on these activities. These items were created using face validity criteria derived from Stroebe and Schut's (1999) description of the facets of each of these processes. For instance, loss-orientation processes consist of elements of grief work, intrusion of grief into the daily life of the bereaved person, the relocation of bonds or ties with the bereaved, and denial or avoidance of those changes associated with restoration-orientation itself. Typical LO items included "Thinking about how much I miss my spouse," "Being preoccupied with my situation," "Feeling a bond with my spouse," and "Imagining how my spouse would react to my behavior." Restoration-oriented processes involve attention to life changes, doing new things, denial or avoidance of grief, and taking on new roles and/or relationships. Representative RO items included "Attending to my own health-related needs," "Visiting or doing things with others," "Focusing less on my grief," "Finding ways to keep busy or occupied." We were particularly concerned that each of the items reflected activities related to either a loss-oriented or restoration-oriented *process* as opposed to an *outcome* (the latter being typical for most grief measures). Therefore, we designed the instructions to direct the respondents to report the

amount of activity “during the past week” (process) rather than what they were “presently” *feeling*, which could more closely represent an outcome (or symptom). The instructions to the scale read as follows: *Below is a list of activities, tasks, or issues that widows and widowers sometimes need to confront or do in their daily lives. For each item, please indicate how much time you spent on it during the past week.*

After this initial 20-item scale was constructed, we assembled a panel that included a licensed grief counselor, two widows and two widowers who had been bereaved approximately 5 years and who had adapted reasonably well to their own bereavement experience, and three additional members of our research team who did not participate in the initial construction of the 20-item scale. Once the panel members were familiarized with the dual process model and its loss- and restoration-orientation features, they were asked to review the scale according to how understandable or clear the wording of the items were, if there were any items that should be eliminated, and to identify any facets of loss- or restoration-orientation that were not represented by the existing items. As a result of their review, some wording changes were recommended to improve clarity. Furthermore, although no items were recommended for deletion, the review and ensuing discussions resulted in two new items being added, one in each subscale. The additional LO item was “Feeling lonely,” and “Learning to do new things” was added to the RO subscale.

The final result, therefore, was a 22-item scale consisting of 11 LO and 11 RO Likert-format items, where 1 = rarely or not at all, 2 = once in a while, 3 = fairly often, and 4 = almost always. (The complete version of the scale appears in the Appendix.) The possible range of each subscale was 11 – 44 where a higher value represented a greater engagement in each process. According to the DPM, oscillation primarily refers to the bereaved individual’s movement back and forth between loss- and restoration-oriented coping (Stroebe & Schut, 1999). As we discuss later in

UU IR Author Manuscript

this report, oscillation could be quite complex with multiple dimensions. In this investigation, we begin to operationalize this feature by focusing first on oscillation *balance*, or the degree to which the bereaved person engages in equal amounts of both processes. Oscillation balance for each respondent was calculated by subtracting their total LO score from their total RO score (RO minus LO). Hence, the balance score can range from -33 (exclusively loss-orientation focus) to +33 (exclusively focused on restoration-orientation). A score equal to 0 indicates perfect balance between the two processes.

Procedure

UU IR Author Manuscript

Newspaper obituaries (available on line) were used to identify 2 groups of widows and widowers, age 45 and older who were mailed self-administered questionnaires: those recently bereaved (widowed 2-5 months) and those bereaved 12-15 months. The age 45 or older was chosen as an inclusion criterion for this study so the sample could adequately capture a sufficient range of those widowed in mid and later life. These two categories of bereaved persons were deliberately sought to insure a comparison of those early in the process (when loss-orientation is expected to be greater) with those bereaved one year or more (when restoration-orientation tends to be greater). The age of the surviving spouse was estimated from that of the deceased (≥ 50 years at the time of death) and then further screened once the questionnaires were returned. Each questionnaire was accompanied by a cover letter explaining the study's focus as one on widow(er)s' adaptation to the loss of their spouse but without any explicit mention of the IDWL scale, as well as assurances of voluntary participation and confidentiality. To maximize response rate the letter included a \$5 cash incentive as an acknowledgement of the potential respondent's time. A follow up letter was sent about 2 – 3 weeks following the initial letter in order to further

encourage participation and to thank the respondents if they had already returned the completed questionnaire.

Three hundred and six questionnaires were mailed (163 to those widowed 2 -5 months and 143 to those widowed 12-15 months). After accounting for those either returned as undeliverable or ineligible to participate (i.e. not widowed or they were identified as deceased), 277 questionnaires were assumed to have reached their intended recipients. Ninety-three (out of 152) questionnaires were completed by those in the recently bereaved group (62% response rate) and 81 (out of 125) questionnaires were returned from those identified as being widowed 12-15 months (representing a 65% response rate). Ninety percent ($n = 84$) of those returned by the recently bereaved group and 98% ($n = 79$) of those returned from the latter group were determined to be useable for this study, yielding a total sample size equal to 163.

Questionnaires, although completed, were not useable for this study if the respondents identified themselves as being too young (< 45 years old), or in a few instances they waited too long before they completed the questionnaire so that by the time it was returned they were outside the 2 – 5 month or 12 – 15 month criteria for either subgroup.

Sample

The recently bereaved group was widowed an average of 3.5 months ($SD = 0.9$) at the time they completed the questionnaire; those in the second group were widowed an average of 13.1 months ($SD = 0.8$). The average age of those widowed 2 – 5 months was 72.8 years ($SD = 10.4$, range = 45 - 92) and 34.5% ($n = 29$) of the group were men. Most ($n = 75$; 89.3%) were high school graduates, with almost 68% ($n = 57$) having some education beyond high school. Those bereaved 12 – 15 months reported an average age equal to 74 years ($SD = 8.8$, range = 45 - 94) and 25.3% of the group ($n = 20$) were men. Seventy-three (92.4%) graduated high school,

including 57 (72%) who had at least some college background (or other post high school education). On average, the widows and widowers in both groups were married approximately 47 years prior to their spouse's death. Twenty-six (31%) of the recently bereaved and 29 (35.4%) of those bereaved longer reported that their spouse had died suddenly. There were no statistically significant differences between the two groups of respondents with respect to these demographic characteristics. It also should be noted that although the average ages for both subsamples were above 70 years, we included 21 (13%) respondents between the ages of 45 and 60. Correlations between age and IDWL subscale scores ($r \leq .16$) were not statistically significant for either subsample, however. The inclusion of some younger widow(er)s did not impact the IDWL scores. We anticipate that future investigations would demonstrate the scale's utility among widows and widowers of all ages, not just those who are older.

Measures

In addition to demographic/background items and the IDWL scale, the self-administered questionnaires contained measures of commonly used bereavement outcomes grief, depression, loneliness, and bereavement coping self-efficacy. The questionnaire also included measures of perceived ability in a variety of self-care and daily living skills, and personal growth, both of which are potentially related to the restoration-oriented coping process. These additional scales were selected to facilitate validation of the LO and RO subscales in the IDWL measure.

Grief – The Texas Revised Inventory of Grief—Present Feelings (Faschingbauer, 1981) consists of 13 Likert-type items that when added together, produce a score ranging from 13 (low grief) to 65 (high grief). Faschingbauer, Zisook, and DeVaul (1987) established construct validity using a variety of discriminations according to age, sex, and relationship to deceased. They also reported a split-half reliability coefficient equal to .88 and an alpha coefficient equal to

.86. Although more improved scales have since been developed, the TRIG continues to be the most widely used grief measure in bereavement studies (Neimeyer & Hogan, 2001).

Depression -- The Geriatric Depression Scale -- Short Form (Sheikh & Yesavage, 1986) contains 15 dichotomous yes/no items yielding a potential range of 0 (none) – 15 (severe). This scale was developed with items from a longer 30-item version that produced the greatest item-total correlations and is equally effective in discriminating depressed from nondepressed older adults ($r = .84$) (Sheikh & Yesavage, 1986). The GDS is devoid of items regarding somatic complaints that are often included in other depression scales but can be confused with symptoms of common geriatric conditions. The GDS, however, still captures what Gann (2000) describes as “the most salient features” of depression – “persistent sadness and diminished interest in pleasurable activity” (p. 132), and was validated on a community-based sample of adults as young as age 45 (Sheikh & Yesavage, 1986). The sample in the present study yielded an alpha coefficient equal to .90 for this scale.

Loneliness -- The UCLA Loneliness Scale – Short Form (Russell, 1996) consists of a series of 4-point Likert items that describe facets of loneliness (possible range = 13 – 52 where a higher score indicates greater loneliness). It has been validated on a community-based older sample with an alpha equal to .89 and significant correlations with life satisfaction (-.36) and depression (.45). Although originally designed as a 20-item scale, the 13-item short form (that we used) was adapted using items that produced item-total correlations $>.50$ for an older sample (Russell, 1996).

Bereavement Coping Self-Efficacy -- The Coping Self-Efficacy Scale (Hayslip, Allen, & McCoy-Roberts, 2001) consists of 27 dichotomous (mostly true/mostly false) items that measure beliefs about one’s ability to cope with the loss of a loved one, whether physically, emotionally

or socially. Hayslip and colleagues reported the scale to be internally consistent ($\alpha = .89$) and that it correlated with a variety of well-being indicators among a bereaved sample. The possible range for this scale is 27 (low) to 54 (high).

Perceived Self-Care and Daily Living Skills -- The respondents completed a 23-item scale in which they were asked to rate their perceived skills in a variety of self-care and daily living tasks or activities. The items were scored using a 3-point Likert format (1 = not at all, 2 = somewhat, 3 = a lot). This scale was developed and used as part of the investigators' earlier work implementing and testing the effectiveness of a self-care and health education program for older widows and widowers (Caserta, Lund, & Obray, 2004). The instrument consists of five subscales, each representing a self-care or daily living skill set: (1) *active coping* ($\alpha = .88$), which corresponds to those skills used to manage time effectively, identify and use sources of help, and manage stress, (2) *health care participation* ($\alpha = .78$) or skills important to assuming an active role in one's health and health care, (3) *household management* ($\alpha = .64$), (4) *home safety* ($\alpha = .75$), and (5) *nutritional self-care* ($\alpha = .66$). The possible range for active coping is 9 – 27; for health care participation, 6 – 18, and for household management, 4 – 12. Both home safety and nutritional self-care subscales have a possible range of 2 – 6. A higher score reflects a greater perceived skill level for each of these 5 subscales.

Personal Growth -- The Stress-Related Growth Scale – Short Form (Park, Cohen, & Murch, 1996) measures positive outcomes from stressful circumstances. It consists of 15 Likert-format items (each scored from 0 – 2) for a potential range of 0 (no growth) to 30 (high level of growth). The scale is internally consistent ($\alpha = .94$), has acceptable test-retest reliability (.81) and it is not adversely impacted by social desirability or response set bias (Park et al, 1996).

RESULTS

Reliability Estimates, Subgroup Comparisons, and Intercorrelations among Subscales

The data in Table 1 present evidence that the LO and RO subscales of the IDWL were internally consistent for both subsamples of widows and widowers, as well as for the total sample. The alpha coefficient for the LO subscale ranged from .88 for those widowed 12 – 15 months, to .91 for the recently bereaved group. Both subsamples generated an alpha equal to .78 for the RO subscale. LO, RO, and oscillation balance scores were normally distributed; skewness and kurtosis measures for each of these distributions had absolute values < 1.

The two subsamples did not statistically differ with respect to loss-orientation according to the t-tests that were performed, although there was a trend to more loss-orientation among the recently bereaved ($M = 29.0$, $SD = 7.1$) versus those bereaved longer ($M = 27.5$, $SD = 6.2$). The recently widowed group, however, demonstrated a greater degree of oscillation balance ($M = 1.2$, $SD = 9.4$ vs. $M = 4.7$, $SD = 8.0$ for the 12 – 15 month group), whereas there was more emphasis on restoration-orientation among the latter group. We explored if the lack of statistically significant differences in loss orientation between the two subsamples was the result of an anniversary effect where the LO scores of those who were bereaved 12 months could have inflated the group mean for the entire 12 – 15 month subgroup. A one-way ANOVA comparing the mean LO score of the recently bereaved (2 – 5 months) to those widowed 12 months versus 13 – 15 months still revealed no statistically significant differences among these three groups of respondents ($F [2, 153] = 1.25$, n. s.). Those bereaved 12 months at the time they completed the questionnaire reported essentially similar (although slightly lower) levels of loss-oriented coping activity ($M = 26.7$, $SD = 6.1$) to those in the subsample bereaved 13 months or more ($M = 27.8$, $SD = 6.3$). The one-year anniversary of their spouses' deaths, therefore, did not appear to

influence the LO scores of those bereaved 12 months versus the more recently bereaved respondents as well as those whose one-year anniversary had passed.

- Table 1 about here -

There was virtually no correlation between the LO and RO subscales ($r = -.06$, n.s.), indicating that loss-orientation and restoration-orientation are highly independent dimensions of the DPM. Not surprisingly, however, both subscales were substantially correlated with oscillation balance ($r = -.78$ and $.67$ for LO and RO, respectively, both $p < .001$).

Relationships between IDWL Subscales and Selected Outcomes

In order to further address the construct validity of the inventory, we examined each subscale's explanatory power for a variety of outcomes commonly used in bereavement research (grief, depression, loneliness, and bereavement coping self-efficacy) and other outcomes that are conceptually linked to restoration-oriented processes (i.e., self-care and daily living skills and personal growth – Carr, 2004; Caserta et al, 2004; Lieberman, 1996; Lund et al, 1989; Schaefer & Moos, 2001).

Table 2 presents the results of a series of hierarchical regression analyses where LO and RO subscales were entered to examine their differential explanatory power regarding these outcome measures after controlling for length of widowhood. Both LO and RO were significantly related to grief, depression, loneliness, and coping self-efficacy. Higher loss-orientation and lower restoration focused coping were each associated with greater levels of grief, depression, and loneliness (all $p \leq .01$). Conversely, greater feelings of bereavement coping self-efficacy were associated with less investment in loss-orientation and more emphasis on restoration-orientation (both $p < .001$).

UU IR Author Manuscript

While loss-orientation generated no relationship with health care participation, household management, home safety, and nutritional self-care skills, the RO subscale generated significant relationships with each of the self-care and daily living skill measures (all $p < .001$). A higher level of restoration-focused coping was associated with more perceived competency in each of these areas. Active coping was the only self-care area where statistically significant coefficients were generated for both LO ($p < .01$) and RO ($p < .001$). Lower LO and higher RO scores were associated with greater perceived active coping ability. Finally, a statistically significant direct association was detected between restoration-orientation and personal growth ($p < .01$) but no relationship emerged between growth and loss-orientation.

- Table 2 about here -

Dimensions of Oscillation and Outcomes

UU IR Author Manuscript

Recall the oscillation balance measure is centered on a value equal to 0. Therefore, the most interpretable way to examine the relationship between oscillation balance and the study outcomes was to construct intervals based upon standard deviation units above and below the center point (0). The standard deviation for oscillation balance was 8.9, which was rounded to 9 to create the following balance categories: Those whose balance scores were > 1 SD unit below 0 (a score ≤ -10) were labeled *primarily loss-oriented* and those with balance scores between 0.5 and 1 SD below 0 (scores ranging from -9 to -5) were considered *moderately loss-oriented*. A *relatively balanced* coping process was indicated by a score equal to $0 \pm$ a distance of < 0.5 SD (a score between -4 and +4). *Moderately restoration-oriented* individuals had balance scores between 0.5 and 1 SD above 0 (scores between +5 and +9), while balance scores > 1 SD above 0 (scores $\geq +10$) represented *primarily restoration-oriented* coping. Although individuals with scores > 2 SD units below or above 0 could be considered to be extremely loss- or restoration-

oriented respectively, the cell sizes were too small to examine these as separate balance categories. Only 2 respondents (1.3%) had a balance score ≤ -19 while 4 (2.5%) had a balance score $\geq +19$. Oscillation balance for the entire sample ranged from -23 to +26.

Two-way analyses of variance were conducted for each of the study outcomes using widowhood group (months widowed) and oscillation balance as between-group factors, the results of which are presented in Table 3. Although no statistically significant effects were observed for widowhood group nor the group x oscillation interaction, statistically significant differences related to oscillation balance as a main effect (all $p < .001$ or $< .01$) were detected for all but two of the study outcomes (home safety skills and personal growth). The largely linear pattern in the mean scores for those outcomes where statistical significance was attained suggests an important finding that those engaged in primarily loss-oriented coping typically reported less favorable adjustment outcomes compared to those who were either more balanced or those who were engaged in restoration-focused activity, independent of how long they were bereaved.

Scheffe post-hoc pairwise analyses (alpha set at .05) confirmed this further where a relatively balanced oscillation score was associated with better outcome levels than those who were primarily loss-oriented. A similar pattern also held true for comparisons between the relatively balanced category and those more moderately focused on loss-orientation, with respect to grief, depression, and coping self-efficacy. Likewise, in most cases, restoration focused coping was associated with more favorable outcome levels, even when compared to moderate levels of loss-orientation (loneliness and health care participation skills being the exceptions).

There also were some instances where a primary focus on restoration-oriented coping was associated with more positive adjustment outcome levels than a relatively balanced oscillation. Pairwise comparisons suggest that those whose coping was primarily restoration-

oriented had the lowest levels of grief, depression, and loneliness, and were more skilled in household management and nutritional self-care. In the remaining self-care and daily living skills, as well as coping self-efficacy, those with a greater emphasis on restoration-orientation had essentially (and statistically) similar levels to those who were relatively balanced between both processes.

- Table 3 about here -

DISCUSSION

The LO and RO subscales of the Inventory of Daily Widowed Life were found to be independent, normally distributed, and internally consistent measures for both the recently bereaved subsample and those widowed an average of 10 months longer. The IDWL also appears to be largely construct valid according to several criteria. Both subscales were associated with grief, depression, loneliness, bereavement coping self-efficacy and perceived active coping skills in expected directions. Individuals who focused more attention and activity on loss-orientation were found to be more depressed, lonely, and experienced greater feelings of grief. On the other hand, a greater degree of restoration-oriented coping was associated with higher levels of self-care and daily living skills as well as more reports of personal growth.

We also were interested in examining the ability of the IDWL to discriminate between recent and longer-term bereavement because Stroebe and Schut (1999) suggest that although both processes operate throughout the course of bereavement, there tends to be greater emphasis on loss-orientation early and restoration-orientation later. This was somewhat supported by the data from our study in that both groups of widows and widowers demonstrated statistically significant differences in restoration-orientation. RO and oscillation balance scores indicated

greater restoration-oriented activity among those widowed 12-15 months compared to the recently bereaved group.

The difference in loss-orientation between the two groups, however, although in a direction consistent with the DPM, was not statistically significant. While further study is warranted, it appears that there was a slightly lower level of loss-orientation for those widowed 12-15 months of bereavement but statistically significant differences might have emerged if data were available that enabled comparisons with those widowed longer – perhaps two years or more. Conversely, greater engagement in restoration-orientation could be even more pronounced after the early months of widowhood, especially if the bereaved perceive the need to confront or address these issues after the initial impact has passed. Finally, it is unknown if these patterns would be similar if the same individuals were followed over time instead of comparing two groups of people at different points in the process. Another advantage of a longitudinal design would be that it would allow an assessment of how present engagement in loss- or restoration-orientation processes (and the oscillation between them) influences later outcomes, controlling for baseline levels. While this study utilized two subsamples of widow(er)s who were at different points in the bereavement process, the findings are limited to cross-sectional relationships.

The oscillation between loss- and restoration-oriented processes appeared to be more balanced among the recently bereaved but, as mentioned above, tended to skew toward greater restoration-orientation among those bereaved a year or more. Therefore, the emphasis on one process over the other tends to be at least partially related to how long one is bereaved, which is somewhat consistent with how Stroebe and Schut (1999) describe the model.

The relationship between oscillation balance and the adjustment outcomes used in this study represented a mostly linear pattern. Clearly, having a balance between the two processes was associated with more positive outcomes than one that was unbalanced with more emphasis on loss-orientation. Perhaps even more important, however, is that an unbalanced oscillation that favored restoration-orientation was associated with the most favorable bereavement outcome levels (especially for grief, depression, and loneliness) as well as perceptions of greater competence in household management and nutritional self-care skills. On the other hand, the degree of perceived competence in the other self-care and daily living skills (active coping, health care participation, and home safety) were similar for those with either a relatively balanced oscillation or a greater emphasis on restoration-orientation. Mundane but regularly required tasks like housework, managing a household budget, and meal planning and preparation often could entail taking on new roles on the part of the bereaved if some of these tasks were primarily the responsibility of the deceased spouse or were at the most, shared (Utz et al, 2004). Restoration-focused activity sometimes corresponds to a need to assume new responsibilities (Stroebe & Schut, 1999). Being proficient in managing one's household and nutritional needs could require more investment in time and energy, than those skills required to meet one's health and safety needs or to use the resources in one's environment to address needs of a less persistent nature that arise. Even these things, however, would be more difficult when a disproportionate amount of energy and attention is focused almost solely on the emotional aspects of the loss.

The Inventory of Daily Widowed Life appears to be a promising, yet obviously not perfect measure of the features of the dual process model. In several instances, the data presented here provided evidence that the scale's properties are quite consistent with what the model would predict. In other instances, however, the data did not precisely match the model's assumptions in

every way we would have expected, although still suggesting useful potential with future research and refinement.

The IDWL's properties appeared to be most consistent with the model in the following ways: Greater loss-orientation and less restoration-orientation were associated with more grief, depression, and loneliness and lower bereavement coping self-efficacy. Restoration-orientation also was emphasized more among those in later widowhood and it was associated with greater perceived self-care and daily living abilities and personal growth. Furthermore, oscillation balance appeared to be linked to more favorable outcome levels, especially when compared to a greater emphasis on loss-orientation. Stroebe and Schut (1999) suggest that this coping process, including the oscillation between the two components, can continue for some time after the loss has occurred.

Where the scale's properties deviated slightly from what the model would predict is that no statistically significant differences in loss-orientation were observed between those who were recently widowed and those who were bereaved longer. Although trends in the data were in the expected direction of lower levels of loss-orientation among those widowed 12-15 months, we would have expected this difference to be more pronounced given the model posits a greater emphasis on loss-orientation earlier in the adjustment process.

Recommendations for Further Scale Development

Further work on the IDWL should focus on three major areas: minimizing potential conceptual overlap between the LO and RO subscales and commonly used bereavement outcome measures, a clearer assessment and distinction between engagement and avoidant features of loss- and restoration-orientation, and exploration into the nature and measurement of the dimensions of oscillation.

UU IR Author Manuscript

UU IR Author Manuscript

Although the scale's instructions were worded in a way that emphasized process as opposed to outcome, one potential concern in the present study is that some conceptual overlap between the IDWL's components and the outcome measures we used still could account for the statistically significant relationships between them (M. Stroebe, personal communications, April 2 & 18, 2005). We recently initiated a 5-year intervention study (NIA R01 023090) based on the DPM that included the IDWL among its battery of measures (See Lund, Caserta, de Vries, & Wright, 2004). In addition to the IDWL itself, we added two items that asked the extent to which the participants were aware that they were devoting their time and energy into loss- or restoration-oriented coping. One item asked, "During the past week to what extent have you focused your attention on issues related to grief, emotions, and feelings regarding your loss?" (loss-orientation), while the second item, using the same time frame, asked to what extent the participants "focused on new responsibilities, activities, and time away from grieving" (restoration-orientation). While the study is ongoing, baseline correlations (for the first 125 participants) between these two items and the LO and RO scores provide some (although certainly not definitive) evidence that these subscales are tapping into a process measure as opposed to outcomes, symptoms, and feelings. The first aforementioned loss-orientation item was highly correlated with the LO subscale ($r = .65, p < .001$). Although not as strong, there also was a significant correlation between the RO subscale and the extent to which the participants focused on new responsibilities, activities, and took time away from grief ($r = .35, p < .001$). These two items were specifically worded to indicate activity as opposed to feeling, which might provide some support that the IDWL itself also is tapping into the activity domain.

We do acknowledge, however, that some of the items, as presently worded, still potentially could be interpreted by a bereaved individual to report a "feeling" rather than a loss-

or restoration-oriented “activity.” This is one of the places where the scale would benefit from further development and refinement. (For example, “Feeling a bond with my spouse” could be modified to more clearly indicate loss-orientation coping by stating “I do specific things to feel a bond with my spouse.”). Furthermore, the IDWL’s LO and RO subscales do not account fully for widow(er)s’ pre-loss dependence on their deceased spouse for completing some of the tasks requiring restoration-focused efforts. For example, we were unable to know if the bereaved spouse already had financial, housekeeping, or nutritional skills or if he or she acquired them as a consequence of widowhood. Engaging in activities like these would be more conceptually connected to restoration-orientation if these tasks were clearly pursued as a coping strategy directed toward a new source of stress. If the bereaved individual had routinely done these things before becoming widowed, then each responsibility would not necessarily be viewed as a new bereavement stressor requiring a deliberate coping effort. (Although, any restoration-oriented activity, whether involving a newly acquired or already existing skill, can influence positive adaptation if it involves turning one’s focus – even temporarily – away from grief itself [Stroebe & Schut, 1999].) Therefore, further refinement of the RO subscale would benefit from modifications that would allow a determination of whether the activities are directed toward new challenges associated with widowhood or simply the continuation of previous activities.

The dual process model acknowledges that the bereaved can cope by using avoidant or distracting strategies as well as active engagement in order to directly confront stressors (Stroebe & Schut, 1999; 2001). Some of the items in the IDWL were designed to reflect distraction from grief (“Engaging in leisure activities,” and “Finding ways to keep busy or occupied” as examples), but it can be argued that they may not necessarily tap into a “denial or avoidance of grief” (Stroebe & Schut, 1999: 213) per se without further qualification. Similar to what we are

suggesting regarding how the LO component of the scale could be further developed, RO items could be modified so that any distracting activity is indeed meant as a clear strategy to avoid the experience of grief. Similarly, LO items could be further refined to reflect an avoidance of addressing those new secondary stressors associated with one's new identity as a widow or widower. In light of this, the scale's future development should result in an even clearer measure of how one either confronts or avoids primary and secondary bereavement-related stressors as part of an overall loss- or restoration-orientation coping process. One approach could be to have each item distinguish between engagement and avoidance. This is a potentially important future modification to pursue because engaging in one activity could be a loss-oriented coping strategy while avoiding it could be restoration-oriented, or the opposite could be true depending on a person's motive (M. Stroebe, personal communications, April 2 & 18, 2005).

Dimensions of Oscillation – Further Conceptualization and Measurement

We discovered some intriguing findings related to the oscillation feature of the DPM. Stroebe and Schut (1999) suggested that the most effective adaptation occurs with oscillation between loss and restoration-orientation but it is not clear how balanced this oscillation needs to be at all times. There were occasions where we found that a greater emphasis on restoration-orientation was associated with even more favorable outcome levels than when there was a relative balance between the two processes. There may be good reason to prefer an unbalanced oscillation between loss-orientation and restoration-orientation with much greater effort devoted to the latter throughout the entire course of bereavement. We believe, however, that future research on the model should focus attention on determining the optimal LO and RO levels at different points in time (and the most preferable patterns of oscillation between them) that result in the most positive adaptation. Bonanno and colleagues (Boerner et al, 2005; Bonanno, 2004)

for instance, suggested that the course of bereavement could progress over several different trajectories ranging from resiliency to prolonged or chronic difficulty. Further work on the IDWL could examine ways the measure discriminates between these trajectories as well as LO, RO, and oscillation scoring ranges or cut-offs associated with them.

We believe that when Stroebe and Schut (1999) presented the DPM, the oscillation feature was less developed than the LO and RO components. We hope that our work and that of others who use the DPM will give more attention to the complexity and dynamic nature of oscillation. We identify five more dimensions of oscillation besides balance (which we addressed in this study) that should be considered for future investigations. In order to do so, additional questions would need to be added to the IDWL. First, we suggest a focus on what we call oscillation *depth*. Two bereaved individuals could have a similar level of balance but one could be quite engaged in both coping processes while the other is minimally engaged. While *balance* focuses on the extent to which the widow(er) engages in equal amounts of both processes, oscillation *depth* reflects the overall oscillation activity in both processes. An assessment of oscillation *depth* cannot simply be a total of both LO and RO scores because we need to know that a relatively high degree of oscillation balance also is taking place. Therefore, *depth* needs to be combined with balance in a numerical expression that meaningfully conveys a variety of configurations using both dimensions.

Second, oscillation also could be assessed in terms of *frequency* or how often a bereaved individual moves back and forth between loss- and restoration-oriented coping within specified time frames like days, weeks or months. This may be difficult to obtain with conventional survey methodologies like self-administered questionnaires but could potentially be assessed using qualitative reports from diaries and journals that would capture these fluctuations in their daily

lives. These largely qualitative approaches, however, can present their own challenges, particularly with respect to data coding and interpretation, but nonetheless should be explored.

Third, it might be important to know if bereaved persons' *awareness* of their oscillation makes a difference in their adjustment outcomes. It may prove to be beneficial to be aware of engaging in both loss- and restoration-orientation. Additionally, if they are aware of their oscillation it may contribute to a desire to control both of these processes so that when they feel a need or perceive a benefit for one type of coping effort over the other, they have the ability to do so. We could call this fourth feature *perceived control* over oscillation. As we mentioned previously, we already developed an assessment of oscillation awareness and we have recently added another item to begin assessing control in our 5-year intervention study. We ask the participants in that study to indicate (using a 5-point scale) if they are "able to freely move back and forth between grief and dealing with other things like new responsibilities and activities when (they) need to." We anticipate that the measurement of oscillation awareness and control eventually will evolve into approaches using multiple indicators. This work needs to continue because both these factors could prove to be important features of bereavement interventions based on the DPM.

Finally, we believe it would be worthwhile to examine the *motive or intent* one has for engaging in loss- or restoration-orientation coping. It might not be sufficient to merely assess the degree of movement back and forth between the two processes but also what purpose the bereaved individual has in mind for doing so. As we discussed earlier, Stroebe and Schut (1999; 2001) suggest there are confrontational and avoidant features within both loss- and restoration-orientation. The question then becomes why does one directly confront a stressor in one instance but avoid it in another? Being unsure of one's ability to perform certain tasks that were once the

responsibility of the deceased spouse is itself a potential source of stress (Lund et al, 1989; Stroebe and Schut, 1999). Bereaved individuals could engage in certain activities related to household, financial, or legal responsibilities (especially if they are new), not only because they simply need to be addressed, but to prove to themselves that they are able to be more independent. Others could be motivated by the opportunity to occupy themselves with something other than sadness, loneliness, and ruminations about circumstances surrounding their spouses' deaths. Conversely, the bereaved can choose to immerse themselves in the grief experience, with its full array of emotions, either to obtain a sense of catharsis and relief as an anticipated outcome, or to provide themselves a reason to avoid addressing a new set of responsibilities that are too overwhelming at the time to face. This could be illustrated with a comment like, "I just don't want to deal with these things right now. The only thing I need to do is have a 'good cry.'" While information as to whether any facet of loss- or restoration-orientation involves active engagement or avoidance might be able to be obtained quantitatively, the motive associated with any engagement or avoidant strategy most likely would need to be examined in a more open-ended qualitative way at first in order to identify specific categories of oscillation motive or intent.

We believe that greater attention needs to be focused on each of the six features of oscillation (including balance) that we identified. As we do so, we will benefit by having a clearer, more detailed, and hopefully, more useful model, measurement tool, and eventually more effective intervention strategies to assist bereaved persons.

Conclusion

In conclusion, our findings indicate that the Inventory of Daily Widowed Life appears to capture the loss- and restoration-orientation coping features of the DPM (Stroebe & Schut, 1999) and it would do so even more effectively with further development and refinement. Also, we have identified six dimensions of the oscillation feature and believe that oscillation merits much greater attention in explaining and predicting bereavement outcomes. Although we initially developed the IDWL to focus on widowhood, it is likely that it could be modified to fit many other types of adult bereavement situations, including the losses of siblings, children, friends, and significant others. Ideally, the IDWL could eventually evolve into an Inventory of Daily Bereaved Life (IDBL). We look forward to collaborating with others who are interested in future development of the IDWL.

REFERENCES

- Anderson, K. L., & Dimond, M. F. (1995). The experience of bereavement in older adults. *Journal of Advanced Nursing*, *22*, 308-315.
- Arbuckle, N. W., & de Vries, B. (1995). The long-term effects of later life spousal and parental bereavement on personal functioning. *The Gerontologist*, *35*, 637-647.
- Bailley, S. E., Dunham, K., & Kral, M. J. (2000). Factor structure of the Grief Experience Questionnaire (GEQ). *Death Studies*, *24*, 721-738.
- Barrett, T. W., & Scott, T. B. (1989). Development of the Grief Experience Questionnaire. *Suicide and Life-Threatening Behavior*, *19*, 201-215.
- Bennett, K. M., Hughes, G. M., & Smith, p. T. (2005). Psychological response to later life widowhood: Coping and the effects of gender. *Omega*, *51*, 33-52.
- Bisconti, T. L., Bergeman, C. S., & Boker, S. M. (2004). Emotional well-being in recently bereaved widows: A dynamical systems approach. *Journal of Gerontology: Psychological Sciences*, *59B*, P158-P167.
- 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. *Journal of Gerontology: Psychological Sciences*, *60B*, P67-P73.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, *59(1)*, 20-28.
- Carr, D. (2004). Gender, preloss marital dependence, and older adults' adjustment to widowhood. *Journal of Marriage and the Family*, *66*, 220-235.

- Caserta, M. S. (2003). Widowers. In R. Kastenbaum (Ed.), *Macmillan encyclopedia of death and dying* (vols. 1 & 2). New York: Macmillan Reference USA.
- Caserta, M. S., Lund, D. A., & Obray, S. J. (2004). Promoting self-care and daily living skills among older widows and widowers: Evidence from the *Pathfinders* demonstration project. *Omega*, 49, 217-236.
- Faschingbauer, T. R. (1981). *Texas revised inventory of grief manual*. Houston, TX: Honeycomb.
- Faschingbauer, T. R., Zisook, S., & DeVaul, R. (1987). The Texas revised inventory of grief. In S. Zisook (Ed.), *Biopsychosocial aspects of bereavement* (pp. 111-124). Washington, DC: American Psychiatric Press, Inc.
- Fitzpatrick, T. R., Spiro, A., Kressin, N. R., Greene, E., & Bosse, R. (2001). Leisure activities, stress, and health among bereaved and non-bereaved elderly men: The normative aging study. *Omega*, 43, 217-245.
- Fry, P. S. (2001). Predictors of health-related quality of life perspectives, self-esteem, and life satisfactions of older adults following spousal loss: An 18-month follow-up study. *The Gerontologist*, 41, 787-798.
- Gallagher-Thompson, D., Futterman, A., Farberow, N., Thompson, L., & Peterson, J. (1993). The impact of spousal bereavement on older widows and widowers. In M. S. Stroebe, W. Stroebe, & R. O. Hansson (Eds.), *Handbook of bereavement: Theory, research, and intervention* (pp. 227-239). New York, NY: Cambridge University Press.
- Gann, J. D. (2000). Assessment of emotions in older adults: Mood disorders, anxiety, psychological well-being, and hope. In R. L. Kane & R. A. Kane (Eds.), *Assessing older*

persons: Measures, meaning, and practical applications (pp. 129-169). New York, NY: Oxford University Press.

Guarnaccia, C. A., & Hayslip, B. (1998). Factor structure of the Bereavement Experience Questionnaire: The BEQ-24, a revised short-form. *Omega*, *37*, 303-316.

Hayslip, B., Allen, S.E., & McCoy-Roberts, L. (2001). The role of gender in a three-year longitudinal study of bereavement: A test of the experienced competence model. In D. A. Lund (Ed.), *Men coping with grief* (pp.121-146). Amityville, NY: Baywood.

Hogan, N. S., Greenfield, D. B., & Schmidt, L. A. (2001). Development and validation of the Hogan Grief Reaction Checklist. *Death Studies*, *25*, 1-32.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.

Lee, C. D., & Bakk, L. (2001). Later-life transitions into widowhood. *Journal of Gerontological Social Work*, *35*, 51-63.

Lieberman, M. A. (1996). *Doors close, doors open: Widows grieving and growing*. New York, NY: G. P. Putnam's Sons.

Lund, D. A. (Ed.). (1989). *Older bereaved spouses: Research with practical applications*. Washington, DC: Taylor-Francis/Hemisphere Press.

Lund, D. A., & Caserta, M. S. (2002). Facing life alone: The loss of a significant other in later life. In K. Doka (Ed.), *Living with grief: Loss in later life*. Levittown, PA: Brunner/Mazell.

Lund, D., Caserta, M., de Vries, B., & Wright, S. (2004). Restoration after bereavement. *Generations Review*, *14*, 9-15.

Lund, D. A., Caserta, M. S., & Dimond, M. F. (1993). The course of spousal bereavement in later life. In M. S. Stroebe, W. Stroebe, & R. O. Hansson (Eds.), *Handbook of bereavement: Theory, research and intervention* (pp. 240-254). London: Cambridge University Press.

- Lund, D. A., Caserta, M. S., Dimond, M. F., & Shaffer, S. K. (1989). Competencies: Tasks of daily living and adjustments to spousal bereavement in later life. In D. A. Lund (Ed.), *Older bereaved spouses: Research with practical applications* (pp. 135-156). Washington, DC: Taylor-Francis/Hemisphere Press.
- Neimeyer, R. A., & Hogan, N. S. (2001). Quantitative or qualitative? Measurement issues in the study of grief. In M. S. Stroebe, R. O. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of bereavement research: Consequences, coping, and care* (pp. 89-118). Washington, DC: American Psychological Association.
- Ong, A. D., Bergeman, C. S., & Bisconti, T. L. (2004). The role of daily positive emotions during conjugal bereavement. *Journal of Gerontology: Psychological Sciences, 59B*, P168-P176.
- Park, C. L., Cohen, L. H., & Murch, R. L. (1996). Assessment and prediction of stress-related growth. *Journal of Personality, 64*, 71-105.
- Prigerson, H. G., Maciejewski, P. K., Reynolds, C. F., Bierhals, A. J., Newsom, J. T., Fasiczka, A., Frank, E., Doman, J., & Miller, M. (1995). Inventory of complicated grief: A scale to measure maladaptive symptoms of loss. *Psychiatry Research, 59*, 65-79.
- Richardson, V. E., & Balaswamy, S. (2001). Coping with bereavement among elderly widowers. *Omega, 43*, 129-144.
- Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment, 66*, 20-40.
- Sanders, C. M., Mauger, P. A., & Strong, P. N. (1985). *A manual for the Grief Experience Inventory*. Palo Alto, CA: Consulting Psychologists Press.

- Schaefer, J. A., & Moos, R. H. (2001). Bereavement experiences and personal growth. In M. S. Stroebe, R. O. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of bereavement research: Consequences, coping, and care* (pp. 145-167). Washington, DC: American Psychological Association.
- Sheikh, J. I., & Yesavage, J. A. (1986). Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. In T. L. Brink (Ed.), *Clinical Gerontology: A guide to assessment and intervention* (pp. 165-173). New York, NY: Haworth Press.
- Stroebe, M. (1992). Coping with bereavement: A review of the grief work hypothesis. *Omega*, 26, 19-42.
- Stroebe, M., & Schut, H. (1999). The dual process model of coping with bereavement: Rationale and description. *Death Studies*, 23, 197-224.
- Stroebe, M. S., & H. Schut (2001). Models of coping with bereavement: A review. In M. S. Stroebe, R. O. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of bereavement research: Consequences, coping, and care* (pp. 375-403). Washington, DC: American Psychological Association.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn & Bacon.
- 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. *The Gerontologist*, 42, 522-533.
- Utz, R. L., Reidy, E. B., Carr, D., Nesse, R., & Wortman, C. (2004). The daily consequences of widowhood: The role of gender and intergenerational transfer on subsequent household performance. *Journal of Family Issues*, 25, 683-712.

van Baarsen, B., van Duijn, M. A. J., Smit, J. H., Snijders, T. A. B., & Knipscheer, K. P. M.

(2002). Patterns of adjustment to partner loss in old age: The Widowhood Adaptation Longitudinal Study. *Omega*, *44*, 5-36.

Williams, J. R. (2002). Effects of grief on survivor's health. In K. J. Doka, (Ed.), *Living with grief: Loss in later life* (pp. 191-206). Washington, DC: Hospice Foundation of America.

Worden, J. W. (2002). *Grief counseling and grief therapy: A handbook for the mental health practitioner* (3rd ed.). New York: Springer.

Table 1. IDWL Subscales: Subgroup and Total Reliability Estimates and Descriptive Data

Subscales	<u>2-5 Mos Bereaved</u>			<u>12-15 Mos Bereaved</u>			<i>t</i>-test	(df)	<u>Total Sample</u>		
	Alpha	M	(SD)	Alpha	M	(SD)			Alpha	M	(SD)
Loss-orientation ^a	.91	29.0	(7.1)	.88	27.5	(6.2)	1.45	154	.90	28.2	(6.7)
Restoration-orientation ^a	.78	30.0	(5.6)	.78	32.2	(5.4)	2.43*	154	.79	30.9	(5.6)
Oscillation Balance ^b	--	1.2	(9.4)	--	4.7	(8.0)	2.48**	153	--	2.3	(8.9)

* $p < .05$ ** $p < .01$

^a possible range = 11 - 44

^b possible range = -33 (exclusively loss-orientation) to + 33 (exclusively restoration-orientation). A score of 0 = perfect oscillation balance.

Table 2. Hierarchical Regression Estimates^a: Loss-orientation and Restoration-orientation on Selected Bereavement Outcomes (after controlling for how long respondents were widowed)

Outcomes	<u>Months Widowed^b</u>			<u>Loss-orientation</u>			<u>Restoration-orientation</u>			R ²
	<i>b</i>	Beta	<i>t</i>	<i>b</i>	Beta	<i>t</i>	<i>b</i>	Beta	<i>t</i>	
Grief	0.94	.05	0.78	1.13	.72	12.65***	-0.31	-.17	2.92**	.55
Depression ^c	0.24	.03	0.44	0.03	.51	7.04***	-0.30	-.44	5.99***	.43
Loneliness	0.99	.07	0.99	0.32	.30	4.23***	-0.53	-.43	6.04***	.28
Coping Self-Efficacy ^d	-0.06	-.07	0.95	-0.02	-.33	4.44***	0.03	.47	6.12***	.32
Perceived Active Coping Skills	-0.47	-.06	0.94	-0.12	-.21	3.21**	0.37	.56	8.37***	.36
Health Care Participation Skills	-0.81	-.02	0.25	-0.20	-.06	0.81	0.17	.45	5.96***	.20
Household Management Skills	-0.17	-.06	0.75	-0.02	-.07	0.97	0.13	.47	6.29***	.22
Home Safety Skills	-0.27	-.14	1.78	-0.01	-.03	0.42	0.06	.33	4.13***	.11
Nutritional Self-Care	0.09	.04	0.54	-0.20	-.12	1.56	0.08	.38	4.95***	.17
Personal Growth	0.73	.05	0.59	0.04	.03	0.40	0.42	.31	3.82***	.10

** p < .01 *** p < .001

^a Order of entry : Block 1 = Widowhood group; Block 2 = LO and RO subscales

^b Dummy coded: 1 = Widowed 12 - 15 months; 0 = Widowed 2 – 5 months

^c Log-transformed due to positive skew

^d Raw Score (x) reflected and inversed [1/55-x)] due to negative skew (Tabachnick & Fidell, 2001)

Table 3 Mean Outcomes by Degree of Oscillation Balance (Subgroups and Total Samples)

Outcome/Oscillation Category	Bereaved 2-5mos		Bereaved 12-15mos		Total sample		F- ratio ^a (df)		
	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>	<u>Group</u>	<u>Oscil</u>	<u>GxO</u>
<u>Grief</u>									
Primarily loss-oriented ^b	53.8	(7.1)	51.5	(12.0)	53.5	(7.4) ^{g,h,i}	1.16	22.27 ^{***}	0.83
Moderately loss-oriented ^c	47.4	(6.9)	55.0	(8.7)	51.2	(8.5) ^{j,k,l}	(1, 137)	(4, 137)	(4, 137)
Relative balance ^d	41.8	(7.8)	41.5	(7.6)	41.6	(7.6) ^{g,j,m}			
Moderately restoration-oriented ^e	36.5	(9.6)	39.0	(6.7)	37.8	(8.2) ^{h,k,n}			
Primarily restoration-oriented ^f	29.5	(9.2)	31.3	(7.2)	30.7	(7.9) ^{i,l,m,n}			
TOTAL:	41.3	(11.0)	39.9	(9.8)	40.6	(10.4)			
<u>Depression</u>									
Primarily loss-oriented ^b	10.4	(4.2)	11.0	(1.4)	10.5	(3.9) ^{g,h,i}	0.10	23.96 ^{***}	0.56
Moderately loss-oriented ^c	7.4	(3.9)	7.7	(3.8)	7.6	(3.7) ^{j,k,l}	(1, 139)	(4, 139)	(4, 139)
Relative balance ^d	3.7	(3.3)	3.7	(3.0)	3.7	(3.1) ^{g,j,m}			
Moderately restoration-oriented ^e	1.5	(1.4)	2.6	(3.5)	2.1	(2.7) ^{h,k}			
Primarily restoration-oriented ^f	1.5	(1.9)	0.5	(0.6)	0.9	(1.3) ^{i,l,m}			
TOTAL:	4.2	(4.3)	3.2	(3.6)	3.7	(4.0)			
<u>Loneliness</u>									
Primarily loss-oriented ^b	33.3	(8.2)	34.0	(8.5)	33.4	(7.9) ^{g,h,i,j}	0.21	8.46 ^{***}	0.37
Moderately loss-oriented ^c	26.1	(5.5)	25.0	(4.9)	25.6	(5.1) ^g	(1, 139)	(4, 139)	(4, 139)
Relative balance ^d	24.0	(4.8)	25.8	(6.0)	24.9	(5.5) ^{h,k}			
Moderately restoration-oriented ^e	20.8	(6.2)	23.1	(7.0)	22.1	(6.7) ⁱ			
Primarily restoration-oriented ^f	20.1	(5.8)	20.0	(5.5)	20.2	(5.5) ^{k,j}			
TOTAL:	24.5	(7.3)	23.8	(6.6)	24.2	(6.9)			

Table 3 (Continued)

Mean Outcomes by Degree of Oscillation Balance (Subgroups and Total Samples)

Outcome/Oscillation Category	Bereaved 2-5mos		Bereaved 12-15mos		Total sample		F- ratio ^a (df)		
	M	(SD)	M	(SD)	M	(SD)	Group	Oscil	GxO
<u>Coping Self-Efficacy</u>									
Primarily loss-oriented ^b	41.3	(7.7)	39.0	(8.5)	40.9	(7.5) ^{g,h,i,j}	0.29	17.01 ^{***}	0.37
Moderately loss-oriented ^c	44.8	(7.5)	46.7	(2.3)	45.8	(5.2) ^{g,k,l,m}	(1, 120)	(4, 120)	(4, 120)
Relative balance ^d	51.6	(3.1)	51.0	(4.2)	51.3	(3.6) ^{h,k}			
Moderately restoration-oriented ^e	51.8	(2.7)	50.5	(4.9)	51.1	(4.1) ^{i,l}			
Primarily restoration-oriented ^f	53.3	(1.4)	53.1	(2.0)	53.2	(1.8) ^{j,m}			
TOTAL:	49.6	(6.1)	50.7	(4.7)	50.1	(5.4)			
<u>Perceived Active Coping Skills</u>									
Primarily loss-oriented ^b	17.4	(3.3)	17.5	(2.1)	17.4	(3.1) ^{g,h,i}	0.04	10.77 ^{***}	1.68
Moderately loss-oriented ^c	19.6	(2.8)	21.0	(4.3)	20.3	(3.6) ^j	(1, 142)	(4, 142)	(4, 142)
Relative balance ^d	24.0	(3.2)	22.0	(3.4)	23.0	(3.4) ^g			
Moderately restoration-oriented ^e	22.9	(2.8)	23.6	(3.2)	23.3	(3.0) ^h			
Primarily restoration-oriented ^f	24.6	(2.6)	25.1	(2.4)	24.9	(2.4) ^{i,j}			
TOTAL:	22.4	(3.9)	22.9	(3.5)	22.7	(3.7)			
<u>Healthcare Participation Skills</u>									
Primarily loss-oriented ^b	14.6	(2.7)	12.5	(5.0)	14.3	(2.9) ^{g,h,i}	0.39	5.17 ^{**}	0.70
Moderately loss-oriented ^c	15.9	(2.0)	16.4	(2.1)	16.1	(2.0)	(1, 141)	(4, 141)	(4, 141)
Relative balance ^d	16.7	(2.5)	16.4	(2.2)	16.6	(2.3) ^g			
Moderately restoration-oriented ^e	16.5	(1.9)	17.1	(1.6)	16.8	(1.7) ^h			
Primarily restoration-oriented ^f	17.5	(1.0)	17.3	(1.2)	17.4	(1.1) ⁱ			
TOTAL:	16.4	(2.3)	16.7	(2.0)	16.5	(2.2)			

Table 3 (Continued) Mean Outcomes by Degree of Oscillation Balance (Subgroups and Total Samples)

Outcome/Oscillation Category	Bereaved 2-5mos		Bereaved 12-15mos		Total sample		F- ratio ^a (df)		
	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>	<u>Group</u>	<u>Oscil</u>	<u>GxO</u>
<u>Household Management Skills</u>									
Primarily loss-oriented ^b	9.8	(1.6)	8.5	(2.1)	9.6	(1.7) ^{g,h,i}	0.60	5.48 ^{***}	0.37
Moderately loss-oriented ^c	10.1	(1.8)	10.1	(1.5)	10.1	(1.6) ^j	(1, 142)	(4, 142)	(4, 142)
Relative balance ^d	10.6	(1.9)	10.4	(1.5)	10.5	(1.7) ^{g,k}			
Moderately restoration-oriented ^e	10.9	(1.3)	11.1	(1.5)	11.0	(1.4) ^h			
Primarily restoration-oriented ^f	11.6	(0.9)	11.7	(0.8)	11.6	(0.8) ^{i,j,k}			
TOTAL:	10.7	(1.7)	10.8	(1.5)	10.7	(1.6)			
<u>Home Safety Skills</u>									
Primarily loss-oriented ^b	4.8	(0.7)	4.5	(0.7)	4.8	(0.7)	0.61	2.22	0.83
Moderately loss-oriented ^c	4.7	(1.3)	5.3	(0.8)	5.0	(1.0)	(1, 142)	(4, 142)	(4, 142)
Relative balance ^d	5.4	(1.1)	5.0	(0.9)	5.2	(1.0)			
Moderately restoration-oriented ^e	5.6	(0.6)	5.4	(1.0)	5.4	(0.9)			
Primarily restoration-oriented ^f	5.8	(0.6)	5.3	(1.1)	5.5	(0.9)			
TOTAL:	5.3	(0.9)	5.2	(1.0)	5.3	(1.0)			
<u>Nutritional Self-Care</u>									
Primarily loss-oriented ^b	4.7	(1.0)	3.0	(1.4)	4.4	(1.2) ^{g,h,i,j}	0.68	5.92 ^{***}	2.19
Moderately loss-oriented ^c	4.9	(1.2)	4.9	(1.5)	4.9	(1.3) ^{g,k}	(1, 144)	(4, 144)	(4, 144)
Relative balance ^d	5.0	(1.2)	5.1	(1.1)	5.1	(1.1) ^{h,l}			
Moderately restoration-oriented ^e	4.9	(1.3)	5.7	(0.6)	5.3	(1.1) ⁱ			
Primarily restoration-oriented ^f	5.8	(0.6)	5.7	(0.8)	5.7	(0.7) ^{j,k,l}			
TOTAL:	5.0	(1.2)	5.3	(1.0)	5.2	(1.1)			

Table 3 (Continued) Mean Outcomes by Degree of Oscillation Balance (Subgroups and Total Samples)

Outcome/Oscillation Category	Bereaved 2-5mos		Bereaved 12-15mos		Total sample		F- ratio ^a (df)		
	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>	<u>Group</u>	<u>Oscil</u>	<u>GxO</u>
<u>Personal Growth</u>									
Primarily loss-oriented ^b	12.3	(5.8)	12.5	(13.4)	12.4	(6.5)	0.21	2.02	0.26
Moderately loss-oriented ^c	19.3	(4.9)	20.6	(4.6)	20.1	(4.5)	(1, 136)	(4, 136)	(4, 136)
Relative balance ^d	18.5	(8.5)	17.7	(7.7)	18.1	(8.0)			
Moderately restoration-oriented ^e	20.4	(5.7)	21.1	(8.3)	20.8	(7.1)			
Primarily restoration-oriented ^f	17.4	(9.1)	20.1	(7.0)	19.0	(7.8)			
TOTAL:	17.8	(7.7)	19.3	(7.6)	18.6	(7.7)			

p < .01 *p < .001

^a F-ratio based on 2-way analysis of variance

^b Oscillation balance score > 1 SD below zero (score ≤ -10)

^c Oscillation balance score ≥ 0.5 SD and ≤ 1 SD below zero (score range = -9 to -5)

^d Oscillation balance score < 0.5 SD ± 0 (score range = -4 to +4)

^e Oscillation balance score ≥ 0.5 SD and ≤ 1 SD above zero (score range = +5 to +9)

^f Oscillation balance score > 1 SD above zero (score ≥ +10)

^{g-n} Total sample pairwise differences indicated by similar superscripts within each outcome. Means with common superscripts differ at p < .05 according to Scheffe post hoc analyses.

Appendix -- Inventory of Daily Widowed Life (IDWL)

Below is a list of activities, tasks, or issues that widows and widowers sometimes need to confront or do in their daily lives. For each item, please indicate how much time you have spent on it during the past week.

	Rarely or not at all	Once in a while	Fairly often	Almost always
1. Thinking about how much I miss my spouse.	1	2	3	4
2. Thinking about the circumstances or events associated with my spouse's death.	1	2	3	4
3. Yearning for my spouse.	1	2	3	4
4. Looking at old photographs and other reminders of my spouse.	1	2	3	4
5. Imagining how my spouse would react to my behavior.	1	2	3	4
6. Imagining how my spouse would react to the way I handled tasks or problems I faced.	1	2	3	4
7. Crying or feeling sad about the death of my spouse.	1	2	3	4
8. Being preoccupied with my situation.	1	2	3	4
9. Engaging in fond or happy memories about my spouse.	1	2	3	4
10. Feeling a bond with my spouse.	1	2	3	4
11. Feeling lonely.	1	2	3	4
12. Visiting or doing things with others.	1	2	3	4
13. Finding ways to keep busy or occupied.	1	2	3	4
14. Dealing with financial matters.	1	2	3	4
15. Engaging in leisure activities (hobbies, recreation, physical activity etc.).	1	2	3	4
16. Attending to my own health-related needs.	1	2	3	4
17. Engaging in employment or volunteer work.	1	2	3	4
18. Watching TV, listening to music, listening to the radio, reading.	1	2	3	4
19. Attending to legal, insurance or property matters.	1	2	3	4
20. Attending to the maintenance of my household or automobile.	1	2	3	4
21. Focusing less on my grief.	1	2	3	4

	Rarely or not at all	Once in a while	Fairly often	Almost always
22. Learning to do new things.	1	2	3	4

Scoring Instructions:

LO Subscale Score = Sum of items 1 through 11 (Possible range = 11[Low] to 44[High])

RO Subscale Score = Sum of items 12 through 22 (Possible range = 11[Low] to 44[High])

Oscillation Balance = RO score minus LO score (Possible range = -33 [Exclusively Loss-oriented] to +33 [Exclusively Restoration-oriented]. A score equal to zero (0) indicates perfect oscillation balance.