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Coping Processes Among Bereaved Spouses

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Abstract

We investigated if an intervention based on the dual process model (vs. traditional bereavement support) enhanced oscillation between loss- and restoration-oriented (LO/RO) coping of recently bereaved (2–6 months) spouses/partners. Participants were followed over 12 months. We found an increased emphasis over time on RO coping, particularly for women and those who were younger; however, no treatment effect was detected. Although patterns in the data are consistent with the model, we conclude that it is difficult for interventions to modify LO, RO and oscillation unless there is sufficient intervention dosage and tailored to those exclusively engaged in one process.

The purpose of this paper is to report on the findings from a study designed to test the effectiveness of a theoretically-based intervention to enhance the bereavement coping of recently widowed spouses and partners. Rather than examining the mental and physical health outcomes that are often influenced by bereavement, the focus of this paper is on the specific types of coping used by bereaved persons. It is generally agreed that how well bereaved individuals adapt is a function of the coping processes in which they engage (Hansson & Stroebe, 2007). Consequently, a focus on coping has been and continues to be a focal point of interest among scholars in the field (Stroebe, Folkman, Hansson, & Schut, 2006).

Over the past decade growing attention has been focused on the dual process model of coping with bereavement (DPM). This model, introduced in 1999 by Stroebe and Schut, has stimulated a growing body of literature, including a special issue of *Omega: Journal of Death and Dying* (Vol. 61, no. 4, 2010). The DPM emphasizes two types of bereavement-related stressors, each having its own unique coping process. One process, *loss-orientation* (LO), involves focusing on the stress attributed to the loss itself, encompassing many of the grief-related feelings and behaviors that tend to dominate early but can re-emerge during bereavement. *Restoration-orientation* (RO) focuses on coping strategies directed toward ongoing secondary stressors consequential to one's new status as a bereaved spouse or partner. These often include the need to master new skills, make important life decisions,

adjust to a new role identity, and take greater self-care initiative. The DPM differs from more global stress and coping frameworks through the recognition that the bereaved will oscillate between these two processes as demands arise in daily life (Stroebe & Schut, 1999).

Oscillation is best conceived as how the process of coping with loss- or restoration-oriented stressors is self-regulated (Stroebe et al., 2006), which allows each person the flexibility to avoid devoting their entire coping in one direction or the other. For example, if bereaved persons only dwell or ruminate on thoughts of the deceased, they may be unable to cope effectively with other aspects of daily life. Conversely, if bereaved persons focus exclusively on restoration-orientation, it may lead to an avoidance of dealing with the emotional aspects of the loss. According to the DPM, coping with bereavement is best facilitated by being able to move back and forth between loss and restoration issues. In order to effectively oscillate, bereaved persons must be aware of the two coping strategies and able to control their coping in either direction as needed (Caserta & Lund, 2007; Lund, Caserta, Utz, & De Vries, 2010a).

Variation and Context

Personal characteristics – such as age and gender – as well as the situation surrounding the loss itself – such as whether the death was expected –influence an individual's coping response (Arbuckle & de Vries, 1995; Caserta, Lund, Utz, & de Vries, 2009). Men and women sometimes differ in how they cope with life stressors, as well as their appraisal of the situation and how well they believe they can address it (Bennett, Hughes, & Smith, 2005). For example, bereaved men are more likely than are women to pursue maladaptive avoidant coping strategies such as excessive alcohol consumption and smoking (Wolff & Wortman, 2006). Women are often more comfortable confronting the emotional dimensions of loss, whereas men are more likely to engage in strategies to address daily practical challenges (Arbuckle & de Vries, 1995). Stroebe and colleagues (Stroebe & Schut, 2010; Stroebe, Stroebe, & Schut, 2001) have suggested that women may be more practiced and comfortable engaging in loss-oriented coping strategies, but they often have no choice but to turn their attention to life's required daily tasks regardless of their emotional state. Alternatively bereaved men more easily avoid the grief work, rumination, and cognitive processing inherent in loss-orientation to remain focused on restoration-oriented strategies. Still, others have suggested that gender differences in coping responses have been over-emphasized, ignoring the similarities in coping behaviors among bereaved men and women (Lund, 2001).

There is evidence suggesting that coping processes may also differ by age. For example, Woo et al. (2008) reported that the coping responses of middle-aged Chinese widowers were more “present-oriented,” focused on those issues requiring immediate attention (e.g., work and childcare responsibilities - tasks considered RO-focused), while older widowers were less present-focused in their coping styles. The DPM holds that engaging in LO and RO coping processes demands an active effort and personal awareness (Stroebe & Schut, 1999; 2010), but according to Hansson and Stroebe (2007), increased age could be a detriment especially when accompanied by chronic impairments and accumulation of additional life stressors that deplete one's energy. One study found that bereaved widowers in their 70s experienced particular difficulty that was attributed to having to simultaneously manage losses associated with retirement and widowhood (Lund & Caserta, 2001). Alternatively, the experience that comes from multiple losses and life course stressors could predispose older persons to greater resiliency (Aldwin & Levenson, 2004).

Bereavement coping may also vary by death expectedness, which could initiate the coping processes described in the DPM prior to the loss itself (Carr, 2010). This might include the grief work associated with loss-orientation, but also household, financial, and daily-life responsibilities as the soon-to-be widowed begins to prepare for what is to come (Cheek, 2010; Utz, 2006).

In an attempt to further understand the diversity of coping experiences, Stroebe and Schut (2010) recently suggested that bereaved spouses/partners will oscillate differently between LO and RO coping and could differ in which of the two processes they will emphasize at any given time throughout the course of bereavement. Similarly, Caserta and Lund (2007) described oscillation "balance," or the extent to which bereaved individuals equally emphasize loss- versus restoration-orientation. They found that the recently bereaved reported greater balance while those bereaved for more than a year were more likely to emphasize restoration-oriented coping. In general, the DPM assumes that exclusive focus on one process at the expense of the other is associated with less favorable outcomes (Stroebe & Schut, 2010). Therefore, bereavement support interventions would do well to address extremely unbalanced coping styles, especially in the early months of bereavement.

Can the Coping Processes Described in the DPM be Facilitated?

Most bereavement interventions are offered in a group format and focus primarily on loss-oriented coping such as sharing and validating feelings of loss, providing opportunities to express sadness and receive comfort and support from others in similar situations (Levy, Derby, & Martinkowski, 1993). However, interventions, even those with a predominant focus on LO coping, could include RO coping strategies as well. This could be done by adding lessons or skill-building activities aimed at developing or enhancing self-efficacy, learning new and unfamiliar tasks of daily living, improving self-care activities, and pursuing opportunities to engage in activities that provide brief periods of respite from grief. There have been successful community-based efforts to do this (Caserta, Lund, & Obray, 2004), which provided the foundation for the *Living After Loss* (LAL) project -- a study comparing the effectiveness of a traditional support group (which is primarily LO focused) to one designed to facilitate oscillation between LO and RO coping as stipulated by the DPM.

Although we have previously reported findings from LAL that have addressed descriptive and correlational questions (Caserta et al., 2009; Lund et al., 2010a; Lund, Caserta, Utz, & de Vries, 2010b; Lund, Utz, Caserta, & de Vries, 2008; Utz, Caserta, & Lund, 2012; Utz, Lund, Caserta, & de Vries, 2011), this is the first to report a primary aim of the LAL study: can a DPM-based intervention influence coping processes differently than a traditional support group? In other words, can coping processes be modified by the type of intervention or support one receives during a time of stress? All analyses controlled for the influences of age and gender of the bereaved in addition to whether or not the death was perceived as being expected, as these variables are known to modify the coping processes pursued by older bereaved persons.

Methods

Design

The LAL project was implemented for recently bereaved (2 – 6 months post-loss) persons from Salt Lake City, Utah and San Francisco, California who were age 50 and older. Most spousal loss occurs in later life (Federal Interagency Forum on Aging-Related Statistics, 2010) and the minimum cut-off of age 50 provided the variability needed for the analyses. Potentially eligible participants were first identified from local vital statistics records,

supplemented by referrals and a scan of obituaries. Participants were randomly assigned to one of the two study conditions upon consent and enrollment and were only aware of their own group condition.

Participants in both conditions attended 14 weekly meetings led by trained facilitators. For those in the comparison group, all 14 meetings addressed issues related to loss orientation. For those in the DPM treatment group, 7 of the meetings were loss-oriented in focus and 7 addressed restoration-oriented issues; the LO and RO focused meetings alternated from week to week to simulate oscillation between the two coping processes. In general, the LO sessions focused on issues related to grief work. Typical content included grief-related feelings and emotions, dealing with loneliness and critical time periods (e.g., birthdays, anniversaries), and having realistic expectations. The RO sessions emphasized ways to meet the challenges associated with assuming new responsibilities and tasks of daily living. Topics included meeting one's own health needs, managing financial and legal issues, maintaining household responsibilities, meeting nutritional needs (especially when living alone), and learning how to remain socially connected. For these sessions, the facilitators introduced a guest speaker who had expertise in that week's content and then guided and oversaw the ensuing group discussion. A more detailed description of the intervention sessions for both study conditions can be found in Lund, Caserta, de Vries, and Wright (2004) and Lund, Caserta, Utz, and de Vries (2010a).

All participants completed a series of self-administered questionnaires: Baseline (O1) data were collected prior to the intervention at 2–6 months after the loss. Post-test (O2) occurred at the conclusion of the 14-week intervention period (at 5–9 months of bereavement), with the O3 assessment following 3 months later. The final data point (O4) was a 9-month post-intervention follow-up, equivalent to 14–18 months after the loss. These data points allowed us to examine immediate as well as longer term effects of the intervention, while avoiding the particularly difficult 12-month anniversary of the death. The first questionnaire was personally home-delivered and explained by a research assistant to ensure the participants understood the questions and how to fill out the questionnaire; all others were mailed.

Sample

Participants must have met the following criteria: (1) their spouses or co-residing partners must have died within the past 2–6 months, (2) they were 50 years of age or older at baseline, (3) they intended to reside in the local area for the duration of their participation in the study, (4) they were English-speaking, and (5) they were cognitively and physically able to complete questionnaires and participate in the group meetings. After sending 3,104 letters of invitation to potential participants and being able to contact 1,474 of them, 42% of those we determined to be eligible agreed to participate in the study, yielding a final sample size of 328. Of these, 197 (60%) came from Salt Lake City and 131 (40%) from San Francisco.

Fifty-six percent of the total sample ($n=185$) was assigned to the DPM study condition and 44% ($n=143$) to the comparison condition. Independent sample *t*-tests and chi-square analyses revealed no statistically significant demographic differences between participants in the two study conditions at baseline. Similar analyses showed that there were very few substantive differences between the Salt Lake City and San Francisco samples (Lund et al., 2010b).

Sixty-one percent of those enrolled in the study were women and 39% were men. The average age of the sample at baseline was 69.6 years ($SD = 10.6$), with a range of 50 to 93 years. Participants had been married or partnered for an average of 39.8 years ($SD = 16.9$). The sample was quite educated: only 15% of the sample had a high school education or less, while 44% were college graduates. The majority were Caucasian (85%), with 7% Asian, 5%

African American, 2%, Latino and 1% other. A little more than half (57%) said they expected their spouses' or partners' deaths, most of which (97%) occurred after a period of illness lasting 2 or more months.

Measures

DPM coping processes were measured by the Inventory of Daily Widowed Life (IDWL) (Caserta & Lund, 2007), which consists of 22 Likert-format items that assess how much time during the past week respondents spent on loss-oriented and restoration-oriented activities (11 items for each subscale). LO items included, for example, "Looking at old photographs and other reminders of my spouse," and "Feeling a bond with my spouse," while examples of the RO subscale items include "Learning to do new things" and "Focusing less on my grief." The LO and RO subscale scores were calculated by summing the frequency of identified activities (responses from 1 "rarely or not at all" to 4 "almost always,"). Each subscale ranges from 11 to 44, with higher scores indicating greater levels of LO or RO coping. Both subscales were internally consistent based on data from this sample (LO subscale, $\alpha = .91$; RO subscale, $\alpha = .73$).

Oscillation balance is the degree to which participants engaged in equal amounts of both coping processes; it was calculated by subtracting the LO subscale score from the RO subscale score ($RO - LO$). The balance score can range from -33 (exclusively loss-oriented focus) to $+33$ (exclusively focused on restoration-orientation), with 0 indicating perfect balance.

Participants were also asked, "During the past week, to what extent have you focused your attention on issues related to grief, emotions and feelings regarding your loss?" to measure if they were aware of their engagement in loss-orientation, and to what extent they focused on "new responsibilities, activities, and time away from grieving" as a way to measure awareness of their own restoration-oriented coping. Both items were measured on a scale from 1–5 with 1 indicating very little and 5 a great deal.

Analytical Plan

Although baseline descriptive statistics were generated for the two IDWL subscales (LO, RO), multivariate analyses relied on the oscillation balance score, since this single variable shows the degree to which persons were focused on LO or RO coping processes. Analyses utilizing the LO and RO subscales individually (available by request) are similar, even redundant, to those presented here using the oscillation balance score.

We utilized a Hierarchical Linear Model (HLM) (Raudenbush & Bryk, 2002) to explore the extent to which the LO and RO coping processes changed over the first year and a half of bereavement. Statistically, HLM predicts a series of simultaneous regression equations, where the first equation (level-1) models the average trajectory or change over time using repeated measures of an outcome variable. The second set of equations (level-2) predicts individual-level variation in both the slope (change) and the intercept (starting point or baseline level) of those longitudinal trajectories. We first estimated an unconditional model to show the typical trajectory of coping processes over time, followed by a conditional model which estimated how much of the variation in coping responses were due to age, gender, or death expectedness.

HLM is an ideal statistical approach to analyze these data because it allows for unbalanced or missing panel data, thus the full LAL sample ($n=328$) could be utilized for the longitudinal multivariate analyses. Furthermore, HLM accommodates uneven spacing between repeated measures, thus accommodating the variation in timing due to when the participant entered the study (Range: 2–6 months post-death, $M = 4.6$; $SD = 0.8$). All

models utilized a precise measure of time (weeks since death) to estimate longitudinal trajectories. Most importantly, this modeling strategy allowed us to identify both the trajectory of coping processes over the first year and a half of widowhood (unconditional model), as well as to assess which individuals and under what circumstances these trajectories may be modified (conditional model)

Results

Descriptive Data

While the theoretical or maximum range for both the LO and RO subscales is 11–44, the observed range for LO was 15–44 and 17–44 for RO at baseline. Most of the sample scored at or above the theoretical midpoint (27) for both scales; this was the case for 71% of the LO scores and 82 % of the RO scores, showing that there were relatively high levels of both LO and RO coping taking place at baseline. Mean scores also show that there were similar and relatively high engagement in both LO ($M = 31.0$; $SD = 7.1$) and RO ($M = 31.0$; $SD = 5.0$) coping processes at the baseline assessment. Accordingly, oscillation scores were quite balanced between both forms of coping ($M = 0.03$; with 0 indicating perfect balance), but there was notable variability across the sample ($SD = 8.5$). The average LO awareness score was 3.3 ($SD = 1.1$), on a five point scale where 1 is “very little” and 5 is a “great deal.” The average RO awareness score was also 3.3 ($SD = 1.0$). Across all the variables highlighted in Table 1, there were no statistically significant differences between the DPM treatment and comparison groups at baseline, thereby suggesting equivalence between study conditions prior to the intervention.

The average correlation (based on bivariate correlations at each of the four assessment periods) between LO coping and LO awareness was .66 (range = .63 to .71; $p < .001$), whereas the average correlation pertaining to RO coping and RO awareness was noticeably lower at .36 (range = .32 to .39; $p < .001$). These findings suggest that the participants’ awareness of their LO coping was quite (although not perfectly) consistent with their measured levels of loss-oriented coping. However, although there was an empirical association between RO coping and RO awareness, there was less consistency between engagement in restoration-oriented issues and the participants’ perceived awareness of how much of that they were actually doing.

Longitudinal Analyses

The first set of HLM analyses presented in Table 2 show the results of the unconditional model, which allowed for random variation in both the slope and intercept at level-2 but no level-2 predictors. The estimated intercept (β_{00}) and slope (β_{10}) are shown in the top panel labeled “Fixed Effects,” whereas the random error unaccounted for by the model specification is shown on the bottom panel labeled “Random Effects.” The estimated mean intercept showed participants to be slightly more loss-oriented at baseline ($\beta_{00} = -0.53$), however, the result was not significantly different than zero ($p = .31$). The estimated slope ($\beta_{10} = .09$) was positive and significantly different from zero ($p < .001$) meaning that, in general, there was a significant movement towards restoration-orientation over time. The statistic can be interpreted as the average person changing in the direction of restoration-orientation about .1 units per week, or about one full unit every 10 weeks. The significant correlation between the intercept and the slope ($-.19$) indicated that rate of change was related to initial oscillation balance scores. The nature of this relationship is that people who start out with lower or negative initial oscillation balance scores (i.e., more emphasis on LO than RO coping) have a higher rate of change than do people with higher initial oscillation balance scores. The significant random variation associated with the intercept (r_{0i}) and slope

(r_{1i}) show that there was significant within-subject variance in both intercept and slope that could be predicted by individual-level variables.

Table 3 shows the results of the conditional model, which included all relevant individual-level variables (treatment condition, gender, age, and expectedness of death) as predictors of the change in RO/LO orientation over time (slope). In this model, condition, gender, and expectedness of death were all dummy coded as 0 or 1. Age was a continuous variable and was grand mean centered in the model. Level-1 fixed effects for the intercept, slope, and correlation between intercept and slope all remained similar to the unconditional model presented in Table 2.

The significance tests of the predictor variables showed that neither the treatment condition nor expectedness of death had a significant influence on the rate of change over time (i.e., slope). The covariates of gender and age, however, were significantly related to change over time. The estimated coefficient for gender ($\beta_{12} = .02$) was only marginally significant ($p = .06$). This result indicates that women moved toward RO coping, on average, at a rate of .02 units per week faster than men, as illustrated in Figure 1. The relationship between age and change over time ($\beta_{13} = -.001$) was significant ($p = .03$), indicating that for each additional year of age, individuals' oscillation balance scores changed significantly less per week. This relationship is illustrated for three selected age groups in Figure 2.

A post-hoc analysis was conducted to explore whether any of the covariates – age, gender, death expectedness, and treatment – were associated with intercept differences. These analyses revealed that age was the only variable correlated with intercept differences. That is, younger people exhibited more LO coping initially than older persons. This finding coupled with the slope differences described above, suggests that younger persons, despite their initially higher levels of LO coping, eventually emphasized RO coping at a level that surpassed the oldest participants in the sample. None of the other covariates significantly accounted for the variation in initial levels of LO and RO coping at baseline.

Discussion

The primary purpose of these analyses was to determine to what extent oscillation between LO and RO coping processes occurred during the first year and a half of bereavement, and if it can be facilitated by an intervention based on the dual process model (Stroebe & Schut, 1999; 2010). Specifically, we sought to discover if those in the DPM treatment condition more readily oscillated between the two forms of coping than those in a traditional LO-focused comparison group. We also addressed to what extent oscillation was influenced by gender, age, and if the death was perceived as being expected. Finally, we explored individuals' awareness of their own coping processes and experiences.

Participants in both study groups were quite balanced in their coping styles at baseline, reporting that they were attending to the loss itself as well as the daily life challenges that occurred as a result of the loss. Their awareness of these two coping processes, however, differed; across all time points, there was a higher correlation between the awareness of and engagement in LO coping compared to the correlation between the awareness of and engagement in RO coping. In other words, participants were much more likely to be aware of their LO coping than they were of their RO coping. RO coping may allow a person to learn a new task that he or she had not typically done when the spouse/was alive – such as bill paying or house cleaning – but since these tasks need to be performed in a routine manner, bereaved persons may not attribute the challenges associated with doing these new tasks as a direct form of coping with the loss. Alternatively, the time spent processing and coping with the loss – such as attending to one's feelings of sadness, loneliness, and grief –

provide an immediate and recognizable disruption to one's routine activities, thus may be much more salient to the bereaved person. These patterns persisted over time possibly because the bereaved persons never associated RO coping with bereavement but instead considered them as simply learning how to adapt to the demands of their daily lives (Bennett, Gibbons, & Mackenzie-Smith, 2010). Future research might examine more closely the relevance and importance of participants not identifying some of their RO coping as being bereavement-related.

Consistent with the DPM (Stroebe & Schut, 1999; 2010), our analyses revealed greater movement toward RO coping over time. The rate of change, however, was more pronounced for those who were more LO focused at baseline. This pattern of change was independent of treatment condition. In other words, although those in the DPM treatment condition were deliberately exposed to an array of restoration-oriented content during the intervention, they did not pay any more attention to these kinds of issues over time than their counterparts in the traditional bereavement support comparison group. This suggests that bereaved persons may follow a similar trajectory of realizing the importance of RO coping for the maintenance of their daily lives, regardless of whether they are consciously reminded of this during an intervention. In practice settings it might be important to help bereaved individuals recognize that engaging in what they perceive to be daily tasks - especially if they are new - improves their ability to cope with this significant life change. For example, if a bereaved man learns how to prepare meals, it may be more beneficial for him to also realize that this new skill is facilitating his bereavement adjustment and not simply having its positive impact go unnoticed. Recognizing these positive RO strategies might serve as motivation to continue to pursue further RO coping efforts.

There are several plausible explanations as to why a treatment effect was not detected in these analyses. One possibility is that 14 sessions and only 7 devoted specifically to RO coping may not be sufficient to promote RO coping in measurable degrees. In other words, the dosage levels of this intervention may not have been adequate to produce the expected changes.

Another possible answer could be that independent of what transpires within an intervention setting, daily challenges emerge – many of which could be considered restoration-oriented in nature – that require attention. Consistent with what Stroebe and Schut (2010) suggested, individuals in either study condition were pressed to meet the daily-life demands that commonly emerged as a consequence of their changed lives. These kinds of RO-related challenges were often revealed during group meetings when participants discussed their daily lives with other group members. This included those in the LO-focused comparison group, despite the conscious effort of facilitators to not introduce these issues (Lund et al., 2010a). For example, a participant might coincidentally describe engaging in enjoyable activities such as going to a movie with friends, learning how to do e-mail so they can communicate with grandchildren, going on a walk with a neighbor, or starting a vegetable garden; others might become interested in doing some of the same activities.

Also, the specific information delivered to those in the DPM treatment group was potentially helpful in increasing awareness of RO coping processes, but its usefulness varied depending on individuals' needs, previous experiences, and existing levels of skill and knowledge (Lund et al., 2010a). That is, the RO content of the intervention was delivered in a group format and thus focused on general and common content, rather than individually tailored to individuals' specific needs or circumstances. This group-based delivery perhaps compromised the utility or potential effectiveness of the intervention. Therefore, future interventions may need to focus on delivering the RO features individually rather than in a group format because the group format assumes that everyone has the same or similar RO

needs and will benefit from the same type and amount of RO intervention efforts. A more successful RO focused intervention should begin with individual assessments of what is needed and what strategies may be the best way to meet the needs of each individual.

In one study of spousal loss (Lund, Caserta, Dimond, & Shaffer, 1989), 75% of the widows and 67% of the widowers reported that within the first few months of bereavement they learned skills that they previously lacked prior to receiving any formal support. These findings suggest that bereaved individuals are capable of addressing some restoration-oriented challenges on their own, which is congruent with Jordan's and Neimeyer's (2003) argument that not everyone requires an intervention to cope effectively.

Few, if any, of the LAL participants had extreme oscillation balance scores, primarily driven by the fact that persons were typically engaged in fairly high levels of both types of coping, even from the earliest months of bereavement. One potential direction for future investigations would be to identify those persistently engaged in one form of coping at the expense of the other and determine if an appropriately tailored individual intervention induces movement in the direction of the form of coping they are chronically avoiding.

Besides an assessment of a treatment effect between the two types of interventions, we also were interested in whether personal characteristics such as age and gender or situational factors such as the perceived expectedness of the death might modify the coping trajectories of bereaved persons. Death expectedness did not have a significant effect on oscillation balance over time, either independently or interactively with study condition, nor did death expectedness alter the initial levels of LO or RO coping. Unfortunately, a lack of pre-death data does not allow for conclusions as to whether the coping processes described in the DPM were initiated prior to the loss itself as some have suggested (Carr, 2010). In the months following the death, there appears to be a general movement toward more RO coping, independent of whether or not the death was expected and independent of the type of support group to which one was assigned. Perhaps those who were expecting the death were too consumed with feelings of anticipatory grief and/or their caregiving demands to adequately learn or apply new RO coping skills prior to the death. Even so, RO coping may increase over time because new RO demands continue to emerge for months, even years, after the loss. This possibly transcends whether or not the death was expected because these challenges might be unforeseen but still need to be addressed. These possible reasons may explain the continual progression toward increasing RO coping over time.

The findings regarding perceptions of death expectedness need to be tempered in light of it being assessed with a single dichotomous item. Death expectedness could arguably be a more complex concept. It could be a function of interactions and communication among the soon-to-be widowed, the dying person, and members of a health care or hospice team (Carr, Wortman, & Wolff, 2006; Cheek, 2010), to what extent a terminal prognosis is accepted (Schulz, Boerner, & Hebert, 2008), and how prepared the bereaved actually are for the inevitable outcome (Carr, 2010; Hansson & Stroebe, 2007). In nearly all the instances where the death was perceived as being expected, the spouse or partner who died endured a time of illness. This could suggest that the surviving partner potentially used that time to prepare for the loss, but the data did not enable us to assess preparedness directly.

Although only marginally significant ($p = .06$), women tended to increase their engagement in RO coping over time at a somewhat greater pace than the men. This is consistent with what Stroebe et al. (2001) posited regarding how many bereaved women find themselves - often out of necessity - attending to tasks and responsibilities that cannot be ignored such as keeping a household running smoothly, budgets balanced, and autos repaired, or developing, maintaining, or renewing relationships to remain connected and to function within the larger

community. Like women, men also gradually increased their engagement in RO coping over the time, but the extent of this engagement leveled off (at least in comparison to women). Men's movement, although still in the direction of greater RO coping, was likely tempered by exposure to the LO content included in both group conditions. Even with fewer LO sessions in the DPM treatment condition, there was enough discussion of loss-oriented issues and challenges in both groups to induce the men to more deliberately engage in LO coping in their daily lives. Again, pre-death data might help determine the origins of the trajectories revealed here, and whether men and women differentially engage in these types of coping processes prior to the loss.

These analyses also suggested important age differences in coping experiences. First, the younger participants engaged in more LO (vs. RO) coping at baseline compared to those who were older. Although there were no significant age differences in death expectedness ($M_{\text{Expected}} = 70.6$, $SD = 10.0$; $M_{\text{Unexpected}} = 68.5$, $SD = 11.2$; $t = 1.08$, ns), there is a greater likelihood that deaths among younger couples were considered "off time," thereby precipitating more persistent rumination about the loss, more frequent pining for one's spouse or partner, and greater levels of the grief work among younger widowed persons (Stroebe & Schut, 1999). Second, while there was a tendency for all participants to place increasing attention on RO over time, the younger ones did so at a more rapid pace. Perhaps as Woo et al. (2008) observed, the younger participants soon found themselves being more "present-oriented," needing to regularly address matters requiring immediate attention even though the effects of the loss itself dominated their daily lives more recently after the death. Given these two age-related trends, it is difficult to determine if increased age was a detriment (Hansson & Stroebe, 2007) or an advantage (Aldwin & Levinson, 2004) to the bereavement coping process. The older participants were more balanced with relatively less change over time, while those who were younger showed greater swings between LO and RO and hence, more change. All age groups, however, demonstrated a general movement toward greater emphasis on RO coping over time, very much in keeping with the DPM (Stroebe & Schut, 1999; 2010). It is also clear that this movement happened independent of the study condition to which the participants were assigned.

So, in answering the question as to whether the coping processes described in the DPM can be facilitated by a group-based intervention, the data reported here would apparently suggest that the answer is "no," at least not in the way the intervention in this study was designed and delivered. This is not to say that all future efforts to intervene should be abandoned but rather, we need to design interventions to target those bereaved who are most likely to benefit and delivered in a way that most precisely addresses their specific needs. Also, we need to acknowledge that interventions, like LAL, which offer only a total of 14 sessions equally divided between LO and RO content may not be sufficient to produce observable changes. Higher dosage levels (i.e., more sessions) and more individualized efforts might produce more favorable results. Conducting an initial needs assessment could help determine the most pressing LO and RO needs for an individual and therefore provide direction for the most effective type and amount of support to meet those needs. For example, if an in-depth assessment indicates that a bereaved spouse might benefit the most by learning how to use the internet to communicate with relatives and friends, then that person could have an intervention that teaches them basic electronic communication skills. After that skill is learned the intervention could move on to another need identified in the assessment.

Limitations and Future Directions

Like most community-based intervention studies, this investigation has its limitations. First of all, the fact this was a group-based intervention could mask potential treatment on individuals, as already suggested. Group interventions, by their very nature, tend to

incorporate a “one size fits all” approach that does not accommodate individual differences in needs, experiences, or existing levels of knowledge and skills (Hooyman & Kramer, 2006; Richardson, 2007). While group-delivered bereavement support can provide a commonality of experiences and examples of peers using effective coping strategies, restoration-oriented challenges may be too diverse for individuals to be effectively addressed in anything but a personally tailored one-on-one approach (Lund et al., 2010a).

Furthermore, recall that there were few, if any, participants who were almost exclusively loss- or restoration-oriented that would have provided the statistical power to differentially assess effectiveness of the DPM-based intervention for individuals at those extremes. These would be persons who essentially did not oscillate between LO and RO coping but were firmly enmeshed in one process or the other. As we previously suggested, future interventions might target such individuals as they could be at greater risk for adverse outcomes as a consequence of a failure to oscillate between the two processes (Stroebe & Schut, 2010). These persons, however, may be very difficult to identify, especially during the earliest months of bereavement, given our finding that most persons were engaged in both coping processes at the pre-intervention assessment.

It is also important to recognize the challenges associated with measuring (and especially quantifying) features of the DPM. Although the IDWL items were deliberately worded to emphasize process (e.g., coping activity and tasks) as opposed to outcome (e.g., feelings), Caserta and Lund (2007) acknowledged the potential for some conceptual overlap, particularly between loss-orientation as a coping process and grief as an outcome. In this study, however, the research staff was careful to point out the intent of all the wording of the scales in the questionnaires in which the distinction between activity and feelings or emotions was clarified.

Also, whereas oscillation is the most distinguishing feature of the DPM, it presents a challenge to measure because of its dynamic and multidimensional nature (Caserta & Lund, 2007; Stroebe & Schut, 2010). Although we focused on balance, the IDWL does not provide an opportunity to effectively address oscillation “depth” – or the overall extent of activity in both processes in conjunction with balance. For example, “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” (Caserta & Lund, 2007, p. 529). Simply adding LO and RO subscales does not simultaneously take into account balance, all of which need to be represented in a numerical expression that captures the essence of depth. An expression that conceptually represents this oscillation dimension cannot be derived the way the IDWL is constructed (Caserta & Lund, 2007). This concern is somewhat alleviated, however, by the fact that the ranges of the LO and RO subscale scores indicated that most of the sample was quite engaged in both coping processes with only a scant few engaged minimally; but clearly the findings could have been enriched further if depth could be accounted for in the analyses in some way.

The current findings could be strengthened if we were able to model other factors as possible moderators of the oscillation trajectories. Although most of those who expected their spouses’ or partners’ deaths were in situations where there was a period of illness, the data did not allow us to determine to what extent the bereaved spouse was engaged in a caregiving role, nor did the analyses consider the precise cause of death or prior losses as predictors. Furthermore, we did not explore how characteristics or resources of the bereaved persons such as functional limitations, financial resources, or the availability of social networks might affect their coping trajectories. We chose not to focus this analysis on these latter variables because of how fluid such characteristics can be over the course of early bereavement. Instead, we limited this study to understanding the general trajectory of coping

among recently bereaved spouses, and whether such processes can be modified by different intervention models or unchanging characteristics of the bereaved person such as age, gender, and whether the death was expected. The consideration of additional contextual factors could be explored in future studies to more fully describe the dynamic contexts and circumstances under which bereaved persons cope with the loss.

Finally, it could be argued that the most obvious limitation to this study is the absence of a non-intervention control group. The LAL data did not allow determination of naturally occurring patterns of oscillation between LO and RO coping without the influence of a group intervention. Previous research comparing bereavement self-help groups against non-treatment controls have found inconsistent results. While Caserta and Lund (1993) reported that support groups were indeed effective for certain types of individuals, particularly those without the psychosocial resources to effectively adapt on their own, others have questioned the positive benefits of support groups along with other forms of professional counseling (Currier, Neimeyer, & Berman, 2008). Unlike an efficacy trial comparing an intervention to a non-treatment group (Shadish, Cook, & Campbell, 2002), LAL was designed as a comparative effectiveness study pitting what has been considered the standard of care in community-based bereavement group intervention -- bereavement support groups -- against a new intervention design based explicitly on the dual process model. While we do acknowledge that this present study would have been further strengthened by including a second comparison condition that received no group intervention, it was too cost prohibitive to implement. The participants were randomly assigned (in blind fashion) to a study condition but they knew they would be receiving a group intervention, which could have motivated some to join and others to decline. We have previously compared participants in bereavement support groups with those who did not participate and found only minor differences in terms of mental and physical health outcomes (Lund & Caserta, 2001). Therefore, in the present study, we wanted to emphasize the comparisons between those who receive a traditional bereavement support intervention with those who are exposed to both LO and RO issues and coping strategies.

Despite these limitations, these results provide further confirmation of the presence of oscillation between LO and RO coping, as well as evidence supporting increasing emphasis on RO coping over time (but not at exclusion of LO coping). Furthermore, the findings suggest that coping processes may differ by age and gender, but not necessarily death expectedness. It is clear, however, that future investigations need to continue as a great deal of empirical evidence remains to be accumulated to refine and reformulate our understanding of the DPM in terms of conceptual elaboration, measurement, and application.

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Figure 1.
Average Oscillation Balance Scores Over Time, by Gender.

Figure 2.

Average Oscillation Balance Scores Over Time, by Age Group.

Note: Ages groups were determined by a tertile split of the full age-range available. A tertile split was used to summarize general differences in the trajectories across ages, without having to present the trajectories for each single-year age group. In other words, tertiles were utilized for empirical convenience and visual simplicity, not as a way to represent meaningfully or substantively different age groups or phases in the life course.

Loss-Oriented (LO) and Restoration-Oriented (RO) Coping, Oscillation Balance, and Awareness Among Recently Bereaved Persons At Baseline

Table 1

	Total Sample n=328		Treatment Group n=185		Comparison Group n=143	
	M	(SD)	M	(SD)	M	(SD)
LO Coping	31.0	(7.1)	30.5	(7.3)	31.6	(6.9)
Maximum Range: 11 to 44						
Observed Range: 15 to 44						
RO Coping	31.0	(5.0)	31.0	(5.0)	30.9	(4.9)
Maximum Range: 11 to 44						
Observed Range: 17 to 44						
Oscillation Balance (RO - LO)	0.03	(8.5)	0.6	(8.9)	-0.7	(7.8)
0=balanced						
Maximum Range: -33 to 33						
Observed Range: -20 to +26						
LO Awareness	3.3	(1.1)	3.3	(1.1)	3.4	(1.2)
1 very little to 5 a great deal						
RO Awareness	3.3	(1.0)	3.4	1.0)	3.2	(1.0)
1 very little to 5 a great deal						

Note: No statistically significant differences across groups, as assessed by independent samples t-tests.

Table 2

Linear Model of Change in Oscillation Balance Scores Over Time (unconditional model)

Fixed Effects	Coefficient	se	t Ratio	df	p value
Intercept β_{00}	-0.52888	7	0.517454	-1.022	323 0.308
Slope β_{10}	0.088939	0.007659	11.613	323	0.000
Random Effects	Variance Component	df	X ²	p value	
Intercept, r_{0i}	57.47127	298	896.88527	0.000	
Slope, r_{1i}	0.00430	298	406.34094	0.000	
Level-1 error, e_{1i}	18.54102				

Notes: Correlation between intercept and slope $\rho(\pi_{0i}, \pi_{1i}) = -.19$

Table 3

Linear Model of Change in Oscillation Balance Scores Over Time (conditional model)

Fixed Effects	Coefficient	se	t Ratio	df	p value
Intercept β_{00}	-0.524046	0.517769	-1.012	323	0.313
Slope β_{10}	0.141585	0.050729	2.791	319	0.006
β_{11} * Condition	0.002827	0.012012	0.235	319	0.814
β_{12} * Gender	0.023422	0.012464	1.879	319	0.061
β_{13} * Age	-0.001221	0.000549	-2.224	319	0.027
β_{14} * Expected Death	-0.005000	0.011912	-0.420	319	0.675
Random Effect	Variance Component	df	X ²	p value	
Intercept, r_{0i}	57.72576	298	898.07142	0.000	
Slope, r_{1i}	0.00411	294	398.09767	0.000	
Level-1 error, e_{it}	18.51550				

Notes: Correlation between intercept and slope, $\rho(\tilde{\pi}_{0i}, \pi_{1i}) = -.195$