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Humor, Laughter & Happiness in the Daily Lives of Recently Bereaved Spouses

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Abstract

The positive psychology movement has created more interest in examining the potential value of experiencing positive emotions (e.g. humor, laughter and happiness) during the course of bereavement. This study of 292 recently widowed (5-24 weeks) men (39%) and women (61%) age 50 and over examined both the perceived *importance of* and actual *experience of* having positive emotions in their daily lives and how they might impact bereavement adjustments. We found that most of the bereaved spouses rated humor and happiness as being very important in their daily lives and that they were also experiencing these emotions at higher levels than expected. Experiencing humor, laughter and happiness was strongly associated with favorable bereavement adjustments (lower grief and depression) regardless of the extent to which the bereaved person valued having these positive emotions.

The positive psychology movement has drawn more attention to not only examining positive outcomes associated with stressful life transitions and situations but has also brought greater awareness of the importance of positive coping processes (Fredrickson, 2003; Seligman & Csikszentmihalyi, 2000). For well over a decade, research has shown support for the potential role of positive emotions and humor in particular, in reducing stress (Folkman, 1997; Lefcourt, 2002; Martin, 2001). Having a sense of humor is recognized as a coping mechanism and has been found to be associated with overall quality of life, psychological well-being and physical health (Thorson & Powell, 1993; Thorson, Powell, Sarmany-Schuller & Hampes, 1997; Folkman & Moskowitz, 2000). In the well known study of young Catholic nuns' autobiographies dating back to the 1930's, those who experienced the most positive emotions over the course of their lives lived approximately 10 years longer than those whose accounts contained fewer positive emotions (Danner, Snowdon, & Friesen, 2001).

Research on bereavement has clearly identified that most people experience both positive and negative emotions during the course of adjustment (Bisconti, Bergeman & Boker, 2004; Bonanno & Kaltman, 1999) and that it is not uncommon to experience a wide range of emotions nearly simultaneously (Lund, Caserta & Dimond, 1993; Byrne & Raphael, 1999). There is considerable intra-individual variation in grief (Ong, Bergeman & Bisconti, 2004). However, most attention has been directed toward an examination of the emotions that are problematic, or determined to interfere with daily life and threatening to well-being (e.g. anger, fear and sadness) (Fredrickson, 2003; Stroebe & Schut, 2001).

While very little empirical research has examined positive aspects of the bereavement coping process and adjustment outcomes, there is some evidence that positive daily emotions among

the bereaved can either regulate, moderate or protect against some of the negative psychosocial reactions associated with grief (Fredrickson, 2001; Fredrickson, Mancuso, Branigan & Tugade, 2000; Ong et al, 2004). For example, some evidence within the literature on emotional self regulation and the course of human development suggests that as adults age they often improve in affect optimization where they use positive emotions to reduce negative emotions and the end result may increase their resiliency to losses (Carstensen, Fung & Charles, 2003; Labouvie-Vief & Medler, 2002; Mroczek & Kolarz, 1998; Blanchard-Fields, 1997). Ong and colleagues (2004) found that in a sample of 34 recently widowed older women, those who experienced daily positive emotions and the use of humor had less bereavement stress, anxiety and depression. They concluded that daily stress and depressive symptoms are weakened when positive emotions are also present. Keltner and Bonanno (1997) also reported that bereaved persons who engaged in full-laughter were more successful in emotionally distancing themselves from grief. Hill (2005) suggests that being able to cultivate positive emotional states may be an intrapersonal resource that facilitates resilient coping in widowhood.

An increasingly popular conceptual framework to explain bereavement adaptation, the (DPM) dual process model (Stroebe & Schut, 1999), also allows for the potential value of experiencing humor and other positive emotions and actions in the coping process. The DPM suggests that people will make more effective adjustments to bereavement if they engage in two coping processes, moving back and forth between them overtime (oscillating) as needed (Caserta & Lund, 2007). The first process (loss-orientation) deals with the stress associated with psychoemotional difficulties related to the *loss* such as the severed attachments, sadness, pining, regrets, rumination, and the intrusion of grief in one's day-to-day existence. The second process (restoration-orientation) requires attention to coping with *restorative* aspects associated with developing new skills and relationships and building a new daily life. According to the DPM, restoration-orientation also includes engaging in activities or having experiences that are distractions from grief. Therefore, having humor and laughter in one's daily life could be perceived as a distraction from grief and contribute to restoration-oriented coping in this model. Also, some evidence is emerging that restoration-oriented coping may begin in the first few weeks and months of bereavement (Bisconti et al, 2004: Richardson, 2007).

One factor that has not been addressed in the emerging research on positive emotions and coping with difficult life transitions (e.g. bereavement), is the degree of importance that individuals' place on having daily positive emotions in their lives. Most theories of adult development suggest that there is considerable variation in how people develop relatively unique personal characteristics, personalities, preferences and lifestyles (Hill, 2005) so it should be no surprise that people also will vary according to how much importance they place on experiencing positive emotions. This may be particularly true regarding the perceived importance for having humor and laughter in daily life. We suggest that research on positive emotions and coping with bereavement should consider to what extent individuals desire or value the experiences. For example, if someone perceives humor and laughter as being important but they are unable to experience them, they may have much greater dissatisfaction than someone else who indicates that humor and laughter are not very important to them. Similarly, if someone does not place a high degree of importance on having humor in their daily life there should not be much disappointment if it is not present during bereavement.

The primary purpose of this study, therefore, is to investigate the role of daily positive emotions in coping with spousal bereavement and to address three specific questions. First, how much importance do recently bereaved spouses place on having humor and happiness in their daily lives? Second, to what extent do these recently bereaved (2-6 months) widows and widowers regularly experience humor, laughter and happiness? Third, if bereaved spouses place a great deal of importance on having humor and happiness in their daily lives and they are able to experience these positive emotions are they also experiencing more positive bereavement

adjustments? And, by contrast, do those who place a great deal of importance on having humor and happiness but do not experience them have the greatest difficulty adjusting to bereavement?

Methods

The data for this investigation come from the "Living After Loss Project" (LAL), an ongoing study of recently widowed persons designed primarily to test the effectiveness of an intervention based on the dual process model (DPM) of coping with bereavement (Lund, Caserta, de Vries & Wright, 2004). While the final intervention outcome measures will not be completed until spring, 2009, there is considerable relevant data available from the 292 bereaved spouses who already have completed the baseline assessments prior to the intervention. Therefore, we can address the questions about the role of humor, laughter and happiness in daily life among these bereaved persons prior to any intervention effects. The LAL study was designed (quasi-experimental, pretest and three posttests) to compare the effectiveness of bereavement support groups where participants receive both components of the DPM (loss-orientation and restoration-orientation coping) with participants who meet in traditional support groups that receive only the loss-orientation coping component. All participants complete the same measures and according to the same schedule described in the following sections.

Procedures

A dual site study was used to generate a sufficiently large and more diverse sample of participants. Recently bereaved spouses/life partners were identified in Salt Lake City and San Francisco through the use of official county death records and other recruitment strategies. The Salt Lake sample was generated almost entirely through the use of computerized death records made available at low cost. However, in San Francisco, the recent official death records required a much more costly personal inspection to identify those eligible to participate so this data source was supplemented primarily by the review of local newspaper obituaries. In both sites, very few participants came to the project by way of referral and/or outreach. The surviving spouses/partners had to be living with the deceased person at the time of death, be at least age 50, able to read and speak English, hear well enough to participate in group meetings, widowed 2-6 months at the time of the baseline assessment immediately prior to the intervention, able to attend 14 weekly small group (6-12 persons per group) intervention sessions, and willing to complete four self-administered questionnaires over a period of time up to 14-16 months bereaved.

Letters of explanation and invitation to participate in the project were mailed to those identified in official death records and through other recruitment efforts. Within a few days, a research project staff person called the potential participant to answer questions, provide further details, verify that eligibility criteria were met, and to solicit their willingness to participate. If they agreed, a trained research assistant made an appointment to make a home visit to personally meet each participant, screen again to confirm eligibility, obtain their signed consent and review with them the baseline self-administered questionnaire. Those who self-initiated contact with the project went through similar screening procedures. Each participant was asked to complete the questionnaire and return it within 3-5 days in a self-addressed, stamped envelope. If questionnaires were not returned on time or were incomplete, a research assistant called to offer additional assistance or clarification.

The average participant completed the baseline questionnaire approximately 4 months (15.6 weeks) after the spouse's death, with some completing it as early as 5 weeks post-loss and some as late as 24 weeks post-loss. Those who refused participation were offered a list of local referral agencies that could provide assistance beyond that of the research project.

We sent invitation letters to 2,669 persons, but were only able to make follow-up calls to about 60% of those persons because we could not locate a working telephone number through the white pages or other on-line directory services for everyone or because the original invitation letter was returned to us for reasons of insufficient or incorrect address (<5% of original invitation letters). Of the 1,629 persons for whom we did have a working phone number, we successfully reached 1,062 (65%) for a follow-up phone call: 129 did not meet the eligibility criteria (e.g. under age of 50, could not speak English) while 637 refused to participate. The most common reasons for refusal were "not interested, too busy, health problems, and unable to attend scheduled meetings". Altogether, 296 persons agreed to participate, but four of them did not complete the first questionnaire so these four persons were added to the non-participant category. Therefore, the overall participation rate was 31% (calculated as the number of participants divided by the number of likely eligible persons we were able to reach, 292/937). Our participation rate is a conservative estimate because many of those who declined to participate did so before we were able to determine whether they met the eligibility criteria (n=246). The 31% participation rate is consistent with what has been reported for other studies that did not use the assistance of hospitals or other health care facilities in recruitment (often below 30%), and made early bereavement contacts and used intervention and longitudinal designs (Bisconti, et al, 2004; Stroebe, Stroebe & Schut, 2003; Neal, Carder & Morgan, 1996; Lund & Caserta, 1998).

Sample

A total of 292 bereaved spouses/partners completed the baseline questionnaire, making up the analytic sample for this investigation. Our sample comprises 61% women (n=179) and 39% men (n=113). The average age of our sample was 69.6 years (SD=10.5), with a range of 50 to 93 years. Participants had been married or partnered for an average of 39.8 years (SD=17.0), with most reporting very high levels of relationship satisfaction (M=6.0, SD=1.1, on a scale of 1 = very unhappy to 7 = perfectly happy). Our sample was also quite educated: only 15% of the sample had a high school education or less; 40% had some college; and 45% had graduated from a college. The majority were Caucasian (87%), with 5% African American and 8% Asian, Latino or Pacific Islanders. A little more than half (56%) said they expected the spouse's death.

Of the 292 bereaved participants, 179 (61%) came from the Salt Lake City site and 113 (39%) from San Francisco. Statistical comparisons between the participants in the two cities showed that they did not differ with respect to age, gender, or socioeconomic status. However, as expected, the participants in San Francisco were more diverse in terms of religious affiliation (e.g. Catholics, Protestants, Jewish and no religious affiliation) and race/ethnicity (e.g. African Americans, Asian American, Latinos and Pacific Islanders). No statistical differences between the participants in these two cities have yet been found regarding bereavement adjustment outcome measures (Lund, Caserta, Utz & de Vries, 2007) and this includes all of the adjustment outcome variables in the analyses reported herein.

Measures

In order to assess the extent to which the bereaved persons were *experiencing* humor, laughter and happiness in their daily lives we developed a five item scale. Each of the five items began with the timeframe of "during the past week" followed by (1) "I have enjoyed the humor of others", (2) "I had a good laugh", (3) "I did something that made me feel happy", (4) "someone else did something that made me feel happy", and (5) "I felt happy about something". After each statement the respondent indicated if they (1) strongly disagreed, (2) disagreed, (3) were neutral, (4) agreed, or (5) strongly agreed. These five items create a summative scale ranging from 5-25 with the lowest score of 5 representing little or no experience of the positive

emotions and 25 reflecting very high experience of the positive emotions. The alpha coefficient for this scale was .90.

The degree of *importance* that the bereaved persons placed on these positive emotions in their daily lives was assessed by their responses to two statements; (1) "Having humor in my daily life is important to me", (2) "Feeling happy during my daily life is important to me". The answer choices were the same five options (from strongly disagree to strongly agree) as described above ranging from 1-5 for each item. The lowest possible scale score for the *importance* of these emotions was 2 with the highest possible score being 10, indicating a very high degree of importance. The alpha coefficient for this scale was .70.

The outcomes in this investigation were grief and depression as they are the two most well known and widely used assessments of bereavement adjustment (Carr, 2006). The Texas Revised Inventory of Grief—Present Feelings (TRIG) (Faschingbauer, 1981) was used to measure grief. This scale 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. A sample from our previous intervention study generated an alpha equal to .88 (Caserta & Lund, 1993) and with the current sample the alpha was .90. Although other scales have been recently developed, the TRIG continues to be the most widely used grief measure in bereavement studies (Neimeyer & Hogan, 2001).

Depression was assessed using the Geriatric Depression Scale (GDS) (Short Form) (Sheikh & Yesavage, 1986), which is a 15-item version of the longer GDS (30 items). The GDS is devoid of items regarding somatic complaints that are often confused with symptoms of common geriatric conditions. The scale scores have a possible range of 0 (low depression) to 15 (high depression). A score of 5+ is considered indicative of clinical depression (Sheikh & Yesavage, 1986). The short version was developed with items that produced the greatest item-total correlations and is equally effective versus the long form in discriminating depressed from non-depressed older adults (r = .84) (Sheikh & Yesavage, 1986). In another previous study of 163 recently widowed men and women we obtained an alpha coefficient of .90 for this scale (Caserta & Lund, 2007) and with the current sample the alpha was .84.

Results

The data in Table 1 indicate that the bereaved spouses in this study rated humor and happiness as being very *important* in their daily lives and they also were found to be *experiencing* humor, laughter and happiness (HLH) in relatively high amounts. The high degree that they were experiencing these positive emotions is somewhat surprising considering that it was quite early in the bereavement process. Based on the 2- item scale measuring the Importance of HLH in every day life (possible scores of 2-10), the bereaved spouses had a mean of 8.7 (SD = 1.2). Both items, "feeling happy" and "having humor" in daily life received virtually similar endorsements where nine in ten respondents said they strongly agreed or agreed with each of the two statements. Likewise, the five-item scale measuring the Experience of HLH in daily life (possible scores of 5-25) was also quite high, with a mean of 20.5 (SD = 3.7). More than 75% of respondents said that they strongly agreed or agreed with each statement, indicating that they had experienced some type of humor, laughter, or happiness in the past week. Like the Importance scale, the individual items related to the experience of happiness were endorsed more than the items related to the experience of humor or laughter. The two HLH scales are conceptually unique, as determined by a principle components factor analysis, but highly correlated (R=0.58, *p*<0.001).

The data in Table 2 show how each of the two scales (importance and experience of HLH) vary across the personal and situational factors that are known to influence the bereavement experience. Neither scale differed by the age, sex, or education level of the respondent, nor did the scales differ between the two data collection sites: San Francisco and Salt Lake City. The respondent's report of marital happiness, length of marriage, and time elapsed since the death was also not associated with variations in the Importance or Experience subscales. On the other hand, the White and Black respondents reported significantly higher levels on both subscales than the "other" race categories, which were comprised of Asians, Latinos and Pacific Islanders. Also, those respondents who expected the death were more likely to experience HLH than the persons who did not expect the spouse's death (M = 21.1 vs. 19.7, p < 0.05) and also rated the importance of HLH as higher than those who did not have any death forewarning (M = 8.9 vs. 8.6, p < 0.05).

Our final research question considers whether HLH is associated with the commonly experienced negative emotions of bereavement such as grief and depression. We found, as expected, that the experience of HLH was negatively correlated with both the grief and depression outcomes (r = -.37 & -.49 respectively, p < 0.001), while the importance of HLH had a similar but slightly lower association with grief and depression (r = -.21 & -.33 respectively, p < 0.001). In a regression analysis that controlled for the personal and situational factors described in Table 2 (available from the author by request), the model which contained only the personal and situational factors explained 11% of the total variation in depression scores and 21% of variation in the grief scores, while the models which included the two HLH scales significantly improved the fit of the regression equations, explaining 28% of the total variation in each model. Furthermore, the regression analyses suggested that one's daily *experience* of HLH was more strongly associated with more favorable grief and depression outcomes than whether the bereaved spouse believed that HLH was *important* in their daily life.

To illustrate further this relationship between the HLH scales and bereavement outcomes, we dichotomized the experience scale into "high" and "lower" categories, with high being assigned to persons who reported strongly agreeing with at least three out of 5 items on the original scale and agreeing with the remaining items (total scores = 23-25). The same procedure was conducted on the importance scale; that is, it too was dichotomized into high and lower categories, with high being assigned to persons who strongly agreed with both items and to persons who strongly agreed with one item and agreed with the second item (total scores of 9 or 10). Approximately one-third (32%) of the sample (n=93) had high levels of experience, while 57% (n=165) reported high levels of importance. We then combined the two dichotomous variables to create a single variable with four categories: 1) High Experience, High Importance (30%, n=87), 2) High Experience, Lower Importance (2%, n=6), 3) Lower Experience, High Importance (27%, n=78), and 4) Lower Experience, Lower Importance (41%, n=119). Table 3 shows the average level of grief and depression for each category of these variables. Adjusted mean values were derived from OLS regression equations that controlled for personal and situational factors (i.e., age, gender, education, race, site, death forewarning, weeks bereaved, length of marriage, marital happiness).

The top portion of the data in Table 3 show that experiencing high levels of HLH was associated with significantly lower levels of both grief and depression. For example, after controlling for personal and situational factors, the persons reporting high experience had an average (adjusted mean) depression score of 2.8 compared to 4.8 among the persons reporting lower levels of experience (p<0.05). The average grief scores (adjusted means) were 40.2 versus 44.5 (p<0.05) indicating lower grief for those experiencing the highest levels of HLH. On the other hand, the mean differences between the high and lower importance groups, although statistically significant, were not as profound as they were for the high and lower experience groups. The average depression score (adjusted mean) was only slightly lower for the persons reporting the

highest levels of importance, compared to the persons reporting lower levels of importance (M=3.7 versus 4.1, p<0.05). And, although the average grief score (adjusted mean) was slightly higher for those in the lower importance group (M=42.9 versus 43.6) the difference was not statistical significant.

Finally, the bottom portion of Table 3 presents the average grief and depression scores (including adjusted means) across the four-category variable that combines the experience and importance subscales. This analysis makes it even more evident that the experience of HLH matters much more than the importance of HLH during the earliest stage of spousal bereavement. The relationship between the experience of HLH and the two outcome measures (grief and depression) was not moderated by the degree of importance that the bereaved spouses placed on having the positive emotions in their daily lives. In other words, grief and depression levels tended to be lower for those who experienced the most positive emotions regardless of the degree to which they valued having them.

Conclusions & Discussion

There are three primary conclusions from this investigation. First, recently bereaved spouses age 50 and over place a great deal of importance on having humor and happiness in their daily lives and they were experiencing these positive emotions (including laughter) relatively early in the course of their bereavement adjustment process. Even though their spouse had died approximately only four months previously these respondents both valued and experienced these positive feelings. Apparently, even during times of great difficulty positive emotions are highly regarded.

Second, the only personal and situational factors associated with experiencing and valuing humor, laughter and happiness in daily life were race and the expectedness of the death. We found that Black and Caucasian bereaved spouses had slightly higher levels of importance and experience of these positive emotions compared with Asians, Latinos and Pacific Islanders. Those who reported that the death of their spouse was expected also reported higher levels of importance and experience of these positive emotions. African-Americans in particular, have reported being quite open about expressions of humor and laughter even quite early in the bereavement process (Rosenblatt & Wallace, 2005). Also, perhaps among some cultures, wherein ritual has historically played a more dramatic and significant role, the endorsement and perhaps even the expression of humor, laughter, and happiness during a period of grief may be discouraged. It is possible that the lack of anticipation and preparation may make it more difficult to think about and experience a broader range of emotions. When widowhood is unexpected the bereaved may be more preoccupied or overwhelmed with the immediate difficulties, common but problematic emotions and lifestyle changes (Faletti, Gibbs, Clark, Pruchno & Berman, 1989). We suggest that future studies examine this relationship in greater detail. The actual amount of time bereaved (ranging from 5 to 24 weeks) was not associated with the value and importance of the positive emotions so the amount of time since the loss, at least in this relatively early period of grief, is not the only issue relevant to the likelihood of valuing and experiencing positive emotions. The other personal and situational factors that were not associated with valuing and experiencing positive emotions included, age, gender, city of residence, education, years married and perceived marital happiness.

Third, the bereaved spouses who had both a high degree of importance and experience of these positive emotions were found to be making the most positive bereavement adjustments. This is similar to the findings reported by Ong, et al (2004), wherein positive emotions were associated with less perceived stress, anxiety and depression among a sample of older widows. Our findings support this same relationship for men as well. However, we found that the experience of these positive emotions was related to positive bereavement adjustments

regardless of whether the widow or widower placed a high degree of importance on them. The lowest grief and depression scores were found among those who were classified as experiencing a relatively high degree of humor, laughter and happiness. Similarly, those experiencing the lowest levels of having humor, laughter and happiness in their daily lives had the highest grief and depression scores. In fact, those who had the lowest importance and experience scores for positive emotions had a mean depression score indicative of clinical depression (M=5.4). Those who placed a high degree of importance on having these emotions but were not experiencing them also had relatively high depression and grief scores (M=4.5 and 44.9 respectively). We cannot assume a causal relationship but there is considerable evidence that experiencing humor, laughter and happiness is associated with making early positive adjustments to bereavement and when these positive emotions are lacking, there might be negative outcomes. Once the larger LAL study is completed we will have longitudinal data to address this issue more fully.

The affect optimization and emotional self-regulation literature mentioned earlier (Labouvie-Vief & Medler, 2002; Carstensen et al., 2003) suggested that older adults would experience higher levels of positive emotions than younger adults because they have gained the ability to suppress negative emotions, and instead, emphasize positive emotions. We did not find support for this relationship (i.e. age was not associated with the importance or experience of positive emotions) within the study participants but it may be the result of not having participants younger than the age of 50. Because our sample used age 50 as the minimum cutoff, and did not include adults in their 20,s, 30,s and 40,s we may have diminished the chance of finding support for this relationship. It could be, however, that the reason we found so many in our sample to be experiencing such a high degree of positive emotions this early in their bereavement process was because we included only middle aged and older adults who may already have gained a great deal of ability to regulate and maximize their emotional expressions.

While expressions of humor, laughter and happiness were not specifically identified in the dual process model of bereavement (Stroebe & Schut, 1999), they can be viewed as potential restoration-oriented coping strategies in that they provide opportunities for distractions from grief (loss-orientation) and they may be useful in strengthening or forming relationships with others (restoration-oriented). Keltner and Bonanno (1997) reported that laughter did help bereaved persons distance themselves from grief. Also, people are more likely to be able to have pleasant interactions with others and have the interactions continue if they are able to experience humor, laughter and happiness. Two of the five items in our "experience" scale recognize this social aspect of these positive emotions (i.e. "I enjoyed the humor of others," and, "someone else did something that made me feel happy"). Although these two items also can be construed as indicators of support received rather than just the experience of positive emotions, each of the two items were individually correlated with the outcomes measures of depression and grief. Also, these correlations together with an alpha equal to .90 suggest that all scale items are converging on a similar construct. The DPM also suggests that effective adjustment requires oscillation between loss-oriented and restoration-oriented coping, so we are not suggesting that bereaved persons only experience positive emotions and suppress all problematic emotions. Again, we cannot determine causal relationships with cross-sectional data, however, it appears that the bereaved spouses in our sample who were able to experience positive emotions early in grief were also making more positive bereavement adjustments. Evidence is emerging that shows bereaved persons to be engaging in restoration-oriented coping early in the bereavement process (Bisconti, et al, 2004; Richardson, 2007).

Ong et al (2004) suggest that future interventions for bereaved persons might find greater success if they specifically attempt to enhance positive emotions. Our findings are consistent with this recommendation because of the strong association between experiencing humor,

laughter and happiness and having lower levels of grief and depression. Also, the dual process model of bereavement and the emotion regulation literature both suggest that bereaved persons who can control, master or oscillate back and forth between coping with issues related to the loss and issues related to restoration would be at an advantage to adjust more effectively to their loss. Whether the interventions are delivered individually or in groups, discussions and activities could be added to facilitate the experience and control over the expression of positive emotions. Interventions that provide multidimensional components are likely to be more effective than those with a single focus (Lund & Caserta, 1998).

While the sample size for this investigation was relatively large for a prospective study of bereavement, the degree of diversity was limited. Only 13% of the 292 bereaved spouses were not Caucasian so it is difficult to know with any certainty if similar findings would emerge among those from a variety of racial and ethnic groups. Also, because our sample of bereaved persons only included spouses and those age 50 and over, we do not know if the relationships between positive emotions and adjustment would be similar among bereaved children, parents, siblings or friends and those of younger ages. The literature on affect optimization and emotion regulation does suggest that adults of younger ages may have less control over the experience and expression of their positive emotions. The cross-sectional nature of the data reported in this investigation also limits our understanding about the potential causal relationships between positive emotions and bereavement adjustment outcomes. Longitudinal studies that incorporate assessments of early and longer-term adjustments are needed to provide more evidence of the potential helpfulness of positive emotions. And, future studies examining the role of positive emotions in the context of bereavement would benefit from including additional emotions and assessing each person's perceived abilities to control or regulate them. As mentioned earlier, spousal bereavement is among the most distressing events in a person's life, yet, it appears that positive emotions are present and valued and that they are associated with more favorable adjustment outcomes.

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Individual Items a	Mean	Std Dev	% Who Strongly Agree or Agree
Perceived Importance of Humor, Laughter, & Happiness $(a = 0.70)$	8.7	(1.2)	
1. Having humor in my daily life is important to me	4.3	(0.7)	90.3
2. Feeling happy during my daily life is important to me	4.4	(0.7)	92.8
Experience of Humor, Laughter, & Happiness $(\alpha = 0.90)$	20.5	(3.7)	
1. During the past week, I have enjoyed the humor of others	4.0	(6.9)	76.6
2. During the past week, I had a good laugh at something	3.9	(1.0)	75.3
3. During the past week, I did something that made me feel happy	4.1	(6.9)	85.5
4. During the past week, someone else did something that made me feel happy	4.2	(0.8)	88.6
5. During the past week, I felt happy about something	4.2	(0.8)	89.6
Correlation between Importance & Experience Subscales		$\mathbf{R} = 0.58$ $(p \le 0.001)$	

 a Individual items were assessed with a five-point response: 1=strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Table 2
Personal and Situational Factors Associated with the Perceived Importance and Experience of Humor, Laughter, & Happiness NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

(HLH) Among Recently Bereaved Persons, Living After Loss Study (n = 292)

		EXPERIENCE OF HLH (Range = $5 \text{ to } 25$)	OF HLH 0 25)			IMPORTANCE OF HLH (Range = $2 \text{ to } 10$)	OF HLH o 10)	
	Correlation	Mean	Std Dev	Sig.	Correlation	Mean	Std Dev	Sig.
Total Sample		20.5	(3.7)			8.7	(1.2)	
$\mathbf{Age}^{\ a}$	0.04			su	0.04			su
Sex^b								
Female		20.3	(3.8)	su		8.7	(1.2)	su
Male		20.7	(3.4)			8.7	(1.2)	
Education c								
High School or Less		19.8	(4.3)	su		8.8	(1.1)	su
Some College		20.2	(3.6)			8.6	(1.3)	
College Grad or More		20.9	(3.4)			8.8	(1.1)	
Race $^{\mathcal{C}}$								
White		20.7	(3.3)	*		8.8	(1.1	*
Black		21.5	(3.6)			8.9	(1.0	
Other		17.3	(5.8)			8.1	(1.8)	
Site b								
San Francisco		20.0	(4.3)	su		8.7	(1.3)	su
Salt Lake City		20.7	(3.2)			8.7	(1.1)	
Death Forewarning $^{\it b}$								
Expected Death		21.1	(3.1)	*		8.9	(1.1)	*
Did Not Expect Death		19.7	(4.1)			8.6	(1.3)	
Weeks Bereaved a		0.07		su		0.07		su
Years Married a	0.09			ns	0.04			su
Marital Happiness a (1= very unhappy; 7= very hanny)	-0.11			us	-0.01			su
(F.J.)								

Association is statistically significant at p < 0.05 level (2-tailed)

ns Association is not statistically significant

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 $^{^{\}mathcal{A}}\textsc{Correlation}$ analysis assessed bivariate statistical association

 $[\]boldsymbol{b}$ Independent Samples t-test assessed statistical differences between categories

Cone-way ANOVA assessed statistical differences between categories with Scheffe posthoc pairwise comparisons (Blacks and Whites were statistically different from those in the other category)

Depression and Grief Scores Across Categories of HLH Experience & Importance NIH-PA Author Manuscript Table 3 **NIH-PA Author Manuscript**

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			DEPRESSION (range = 0 to 15)		GRIEF (range = 13 to 65)
	% of Total Sample	Mean	Adjusted Mean ⁺	Mean	Adjusted Mean ⁺
Total Sample	n=292	4.1	4.1	43.2	43.2
High Experience of HLH	32%	2.2 *	2.8 *	38.8 *	40.2 *
Lower Experience of HLH	%89	5.0	4.8	45.2	44.5
High Importance of HLH	27%	3.3 *	3.7 *	41.9 *	42.9
Lower Importance of HLH	43%	5.3	4.1	45.0	43.6
High Experience, High Importance	30%	2.2 *	2.4 *	39.2 *	40.2 *
High Experience, Lower Importance	2%	3.0	3.3	34.2	36.7
Lower Experience, High Importance	27%	4.5	4.3	44.9	43.9
Lower Experience, Lower Importance	41%	5.4	4.5	45.5	45.1

+ Adjusted means were calculated from OLS regression equations that control for personal and situational factors (age, sex, education, race, site, death forewarning, weeks bereaved, length of marriage, *

p < 0.05. Statistical significance between categories was assessed by Independent Sample T-Tests and One-Way Anovas for the unadjusted means, and by OLS regression analyses in the adjusted marital happiness). Full regression tables are available from the author by request.