

Do Afterlife Beliefs Affect Psychological Adjustment to Late-Life Spousal Loss?

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Objectives. We explore whether beliefs about the *existence* and *nature* of an afterlife affect 5 psychological symptoms (anxiety, anger, depression, intrusive thoughts, and yearning) among recently bereaved older spouses.

Method. We conduct multivariate regression analyses using data from the Changing Lives of Older Couples (CLOC), a prospective study of spousal loss. The CLOC obtained data from bereaved persons prior to loss and both 6 and 18 months postloss. All analyses are adjusted for health, sociodemographic characteristics, and preloss marital quality.

Results. Bleak or uncertain views about the afterlife are associated with multiple aspects of distress postloss. Uncertainty about the existence of an afterlife is associated with elevated intrusive thoughts, a symptom similar to post-traumatic distress. Widowed persons who do not expect to be reunited with loved ones in the afterlife report significantly more depressive symptoms, anger, and intrusive thoughts at both 6 and 18 months postloss.

Discussion. Beliefs in an afterlife may be maladaptive for coping with late-life spousal loss, particularly if one is uncertain about its existence or holds a pessimistic view of what the afterlife entails. Our findings are broadly consistent with recent work suggesting that “continuing bonds” with the decedent may not be adaptive for older bereaved spouses.

Key Words: Afterlife beliefs—Bereavement—Coping—Psychological distress—Widowhood.

SPOUSAL death is one of the most distressing of all life events. An estimated 40%–70% of bereaved older adults experience a period of 2 weeks or more marked by feelings of sadness and anxiety immediately after loss (Wolff & Wortman, 2006). However, a substantial proportion (30%–60%) withstands spousal loss with relatively few symptoms of distress. Given that clinical depression is the exception rather than the norm in the face of late-life spousal loss, researchers seek to identify the psychosocial resources that protect against distress among the recently bereaved. Studies have documented the protective effects of social support (Bisconti, Bergeman, & Boker, 2006), economic resources (van Grootheest, Beekman, Broese van Groenou, & Deeg, 1999), and personal attributes such as personality traits (Pai & Carr, 2010). Researchers also have investigated the extent to which religious beliefs and practices protect against loss-related distress (Becker et al., 2007; Pargament, 1997; Pargament, Smith, Koenig, & Perez, 1998; Sherkat & Reed, 1992). However, findings are inconclusive. Some find positive associations between personal religiosity indicators (including religious affiliation, frequency of religious attendance, frequency of prayer, and religious importance) and bereavement outcomes, whereas others find negative or no associations (see Becker et al., 2007; Stroebe 2004, for reviews). These inconsistent findings are puzzling, given the vast literature documenting that religious beliefs are an important resource for coping with both chronic and acute stressors (Pargament, 1997, 2002).

The equivocal findings may reflect three limitations of prior studies. First, few studies have investigated whether religious beliefs related specifically to death and the afterlife affect psychological adjustment among the bereaved. Scholars have speculated that beliefs in the afterlife may help the bereaved cope by offering the possibility of spiritual reunion and continued attachment with the deceased (Benore & Park, 2004; Wuthnow, Christiano, & Kuzlowski, 1980); however, these claims have not been evaluated empirically. We know of only two studies that consider the role of afterlife beliefs in the bereavement process, with both comparing those who do versus do not believe in the afterlife. Smith, Range, and Ulmer (1992) studied a nonrepresentative cross-sectional sample of bereaved adults and found that persons who believed in an afterlife had better existential well-being than nonbelievers. Similarly, a small qualitative study of nine bereaved African American congregation members showed that persons who believed in an afterlife were comforted by those thoughts (Abrums, 2000). However, neither study captured the specific nature of one’s beliefs toward the afterlife; the protective effects of afterlife beliefs may be limited to those who hold potentially positive views, such as the belief that their loved one is in a better place or that reunification may someday be possible.

Second, studies typically focus on general psychological outcomes such as depressive symptoms rather than reactions specific to the loss. Many bereavement studies rely on surveys designed to assess mental health in the

general population and thus do not measure loss-specific symptoms. However, this focus on general symptoms only, such as depressed affect, may fail to reveal the distinctive consequences of religious beliefs for specific loss-related outcomes such as anger, yearning for the decedent, and intrusive thoughts about the death.

Finally, most bereavement studies are cross-sectional, measuring religious beliefs and psychological adjustment to loss at a single point in time. Studies based on single waves of data cannot track whether the purportedly protective effects of religious beliefs on bereavement outcomes increase, decrease, or remain stable over time. If the effects of religious beliefs change over the course of bereavement, then studies that fail to consider multiple time points post-loss may over- or understate the association between beliefs and adjustment. For instance, if the effects of religious beliefs on bereavement outcomes are positive in the short term yet nonsignificant in the longer term, studies focused on a single point of time will fail to detect this nuance. Moreover, studies based on a single cross-sectional observation cannot ascertain whether religious beliefs affect psychological adjustment or vice versa. For example, such studies cannot discern whether persons who are particularly grief-stricken and despondent postloss develop bleak views toward the afterlife and God, or whether bleak religious views impede psychological adjustment to loss (Becker et al., 2007; Pargament, 2002).

We use data from a prospective longitudinal data source, the Changing Lives of Older Couples (CLOC), to explore how beliefs about both the *existence* and *nature* of the afterlife affect the bereavement process. We evaluate (1) the extent to which afterlife beliefs affect five distinctive aspects of psychological adjustment to loss (anger, anxiety, depressive symptoms, intrusive thoughts, and yearning) among bereaved older adults and (2) the extent to which the patterns documented in (1) persist in the short-term (6 months) and longer term (18 months) postloss. We control for personal characteristics that may account for a spurious association between afterlife beliefs and psychological adjustment, including religious coping, marital quality, preloss health, and socioeconomic status (SES).

AFTERLIFE BELIEFS AND PSYCHOLOGICAL ADJUSTMENT TO LOSS

Religion provides a system of beliefs that helps older adults to cope with acute and chronic stressors, and a community of fellow believers who may provide instrumental and emotional support. Religious practices such as prayer and meditation also help to manage negative emotions (Pargament, 1997, 2002; Sharp, 2010). Despite persuasive research on religion and adjustment to stress, few studies have documented how religious beliefs related specifically to death, such as afterlife beliefs, affect psychological adjustment to loss.

Beliefs in an afterlife are central to many of the world's religions. Most Christians believe in an afterlife that

consists of a heavenly paradise and a punishing hell, with an individual's destination determined by his or her moral behavior while living. Afterlife beliefs are conceptually and statistically distinct from (although correlated with) other religiosity measures such as attendance and affiliation (Greeley & Hout, 1999; Harley & Firebaugh, 1993), so they may affect bereavement outcomes independent of other religiosity measures.

Several scholars have argued that beliefs in an afterlife may help individuals cope with the sadness caused by the death of a loved one and with anxiety over one's own eventual death (Benore & Park, 2004; Pargament, 1997; Wuthnow et al., 1980). Afterlife beliefs may be protective to bereaved older adults by providing a sense of meaning during times of despair and fostering continued emotional attachments with the deceased.

Traditional beliefs in an afterlife, where deserving individuals are rewarded and reunited with their loved ones, may provide bereaved spouses with a way to positively reinterpret the death and accept the inevitability of one's own demise (Wuthnow et al., 1980). This interpretive function may have protective effects on a range of postloss psychological outcomes. For example, the belief that one's late spouse still exists in an otherworldly place and that one will be reunited with him or her may lessen feelings of loss, separation, and sadness. The notion that "good" people are rewarded in an afterlife may restore one's beliefs in a just world or may lessen feelings of anger over the death, particularly anger at God if a death is deemed unjust.

Afterlife beliefs also may protect against intrusive thoughts. Intrusive thoughts are conceptually similar to posttraumatic stress disorder (PTSD), where unprovoked painful thoughts about the deceased and the death haunt the survivor (Archer, 1999). Widowed persons who believe that their spouse is in a rewarding afterlife and that reunification is possible may be less susceptible to distressing thoughts about the death. Afterlife beliefs also may protect against anxiety. Anxiety about one's own demise may be particularly acute among bereaved older spouses, for whom thoughts about death are highly salient (Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989).

Afterlife beliefs also may help the bereaved adjust by enabling continued emotional attachment to their spouse. Continued attachment (or "continuing bonds") refers to a bereaved person's belief in an active, ongoing relationship with the decedent (Benore & Park, 2004, p. 9). Attachment theories hold that when secure attachments are severed, individuals may experience painful feelings of loss and separation (Bowlby, 1980). Thus, we expect that yearning, or the painful longing to be with one's late spouse, will be less acute for those who believe in an afterlife because such beliefs may foster feelings of continued attachment to the decedent.

ARE AFTERLIFE BELIEFS POTENTIALLY HARMFUL TO THE BEREAVED?

An emerging literature suggests that afterlife beliefs may not be universally protective for bereaved older adults (Shear, 2010; Stroebe, 2004). The extent to which afterlife beliefs are protective or harmful may be contingent upon the *nature* and *content* of one's beliefs. For example, the belief that individuals who "sinned" in life are punished in the afterlife may be distressing, especially to those whose late spouses had engaged in behaviors judged harshly by religious teachings (e.g., heavy drinking) or who were unkind spouses (Carr, 2009).

Afterlife beliefs also may be protective in the *short term only* and may be maladaptive in the longer term. In the early stages of bereavement, "continuing bonds" to a deceased spouse may provide a sense of comfort. However, as time passes, a persistent attachment to and desire to reconnect with the deceased may prevent widow(er)s from exploring new relationships, roles, and activities—adaptations that are critical for adjustment (Stroebe, 2004; Stroebe, Schut, & Boerner, 2006). Continued attachment to the deceased also may exacerbate feelings of yearning; widow(er)s who believe that their deceased spouse still exists may have a stronger desire to rejoin them and thus may yearn more for reunification.

OTHER INFLUENCES ON AFTERLIFE BELIEFS AND SURVIVOR PSYCHOLOGICAL ADJUSTMENT

To account for the possibility that statistical associations between afterlife beliefs and bereavement outcomes are spurious, we control four potential confounding influences: preloss psychological and physical health; the quality of one's marital relationship preloss; religious coping; and sociodemographic characteristics. First, we control psychological and physical health prior to loss, to distinguish well-being before the death and changes that occur post-loss. Health may affect one's religious views; persons with poorer mental health hold more negative views of the afterlife (Flannelly, Ellison, Galek, & Koenig, 2008). Preloss well-being also is a strong predictor of postloss adjustment (Bonanno, Wortman, & Nesse, 2004).

Second, preloss marital quality may be associated with both afterlife views and adjustment to loss. Individuals with high marital quality may be particularly motivated to believe in an afterlife; the prospect of reunification may reflect wishful thinking among those with good marriages. Marital quality also predicts psychological adjustment to loss; persons with supportive marriages go on to report elevated levels of yearning postloss (Carr et al., 2000). Third, we consider one's general reliance on religious coping. Persons who rely on religious beliefs or practices to cope with stress show better adjustment to loss (Hays & Hendrix, 2008) and also may be more likely to believe in an afterlife (Falkenheim & Handal, 2003). Finally, we control socioeconomic and demographic characteristics. Low SES increases

the odds of becoming widowed and experiencing psychological distress (Johnson, Cohen, Link, Dohrenwend, & Brook, 1999), as well as belief in an afterlife (Koppen & Anderson, 2007).

METHOD

Data

We use data from the CLOC, a prospective study of a two-stage area probability sample of 1,532 married individuals from the Detroit Standardized Metropolitan Statistical Area. All participants in the baseline survey were noninstitutionalized English-speaking members of a married couple in which the husband was aged 65 or older. Women were oversampled to maximize the number of persons experiencing spousal loss during the study period due to women's greater propensity of experiencing widowhood. Two thirds of those contacted for the baseline interview participated, comparable with response rates from other Detroit area studies in that period. Baseline face-to-face interviews were completed between June 1987 and April 1988.

Following the baseline interviews, the study investigators monitored spousal death using monthly death records provided by the State of Michigan and by reading obituaries in Detroit area daily newspapers. The National Death Index was used to verify deaths and obtain cause of death information. Of the 319 participants who lost a spouse during the study period, 86% ($n = 276$) participated in at least one of the three follow-up interviews, conducted 6 (Wave 1), 18 (Wave 2), and 48 (Wave 3) months after the death. The most common reasons for nonparticipation were refusals (38%) and poor health or death at follow-up (42%).

We focus on the 210 bereaved persons (159 women and 51 men) who participated in the 6-month follow-up interview, and the 155 bereaved persons (110 women and 45 men) who also participated in the 18-month follow-up. The data are weighted to adjust for unequal probabilities of selection and differential response rates.

Dependent Variables

We consider two general (depressive symptoms and anxiety) and three loss-related (anger, intrusive thoughts, and yearning) outcomes. Depressive symptoms and anxiety reflect two core components of emotional responses to loss: sadness, and "active distress" or anxiety (Bowlby 1980). *Depressive symptoms* ($\alpha = .83$) are assessed with nine negative items from the 20-item Center for Epidemiologic Studies Depression scale (Radloff, 1977). Respondents indicate how often they experienced each symptom in the week prior to interview: felt depressed; felt everything was an effort; sleep was restless; felt lonely; people were unfriendly; did not feel like eating; felt sad; felt that people disliked me; and could not get going. Response categories are hardly ever, some of the time, or most of the time.

Anxiety ($\alpha = .86$) is assessed with the Symptom Checklist 90 Revised (Derogatis & Cleary, 1977). Respondents indicate how often (i.e., not at all, a little bit, moderately, quite a bit, and extremely) they experienced 10 symptoms in the last week: nervousness; trembling; feeling suddenly scared for no reason; feeling fearful; heart pounding or racing; feeling tense and keyed up; spells of terror and panic; feeling so restless you couldn't sit still; feeling that something bad is going to happen to you; and thoughts and images of a frightening nature.

Anger ($\alpha = .68$) is measured with three items: In the past month, have you felt: resentful or bitter about the death; the death was unfair; and felt angry at God. *Yearning* ($\alpha = .75$) is assessed with four items: have you: found yourself longing to have your spouse with you; had painful waves of missing your spouse; experienced feelings of intense pain or grief over the loss of your spouse; and experienced feelings of grief, loneliness, or missing your spouse? *Intrusive thoughts* ($\alpha = .66$) are assessed with three items: have you: had difficulty falling asleep because thoughts of him/her kept coming into your mind; tried to block out memories or thoughts of him/her; and been unable to get thoughts about him/her out of your head. Response categories range from 1 to 4 (no, never; yes, rarely; yes, sometimes; and yes, often). Items were drawn from widely used scales including the Bereavement Index (Jacobs, Kasl, & Ostfeld, 1986). All outcomes are standardized ($M = 0$; $SD = 1$) and higher scores reflect more frequent symptoms.

Independent Variables

Afterlife beliefs.—We consider three indicators: whether one believes in the existence of an afterlife and two specific beliefs about the afterlife experience. Participants are asked, “Do you believe that people stop existing after death or that there is an afterlife?” The three mutually exclusive response categories are: yes, believes in an afterlife; no, people stop existing after death (reference category); and don't know. Individuals who say “yes” then indicate their level of agreement with two statements: “In the afterlife, you will be reunited with your loved ones”; and “People who suffer unjustly in this life will be rewarded in the afterlife.” Response categories range from strongly agree to strongly disagree. The vast majority indicates that they agree, so we constructed categories of: agree strongly, agree somewhat, and disagree (either somewhat or strongly). The reference category includes those who do not believe in or do not know whether there is an afterlife; because these persons do not believe in an afterlife, they are not asked to report their views on the specific nature of the afterlife.

Afterlife beliefs are measured at multiple waves; however, we use as our predictor afterlife beliefs measured at baseline and use this measure to predict emotional adaptation at the 6- and 18-month follow-up. This strategy allows

us to ascertain causal ordering. Beliefs about the existence of an afterlife are quite stable across waves; roughly 80% reported the same belief at the baseline and Wave 1 interviews, for example.

Marital quality.—Marital quality ($\alpha = .88$) is assessed with seven items: How much does your spouse make you feel loved and cared for; how much is your spouse willing to listen when you need to talk about your worries and problems; there are some serious difficulties in our marriage (reverse coded); how often do you feel happy about your marriage; taking all things together, how satisfied are you with your marriage; how often do you feel bothered or upset by your marriage (reverse coded); and my spouse doesn't treat me as well as I deserve to be treated (reverse coded). Items are from the Dyadic Adjustment Scale (Spanier, 1976) and are evaluated preloss in order to avoid the bias of retrospective “sanctification” of one's late spouse (Lopata, 1981). Scale scores are averaged and standardized; higher scores reflect higher quality.

Religious coping.—Religious coping ($\alpha = .76$) comprises three items: In general, how important are religious or spiritual beliefs in your day-to-day life; when you have problems or difficulties in your family, work, or personal life, how often do you seek spiritual comfort or support; and when you have decisions to make in your everyday life, how often do you ask yourself what God would want you to do? Responses are averaged and standardized. Higher scores reflect a greater reliance on religious coping. Items are adapted from the Religious Coping Scale (Pargament et al., 1988). We consider religious coping rather than denomination because of multicollinearity between denomination and afterlife beliefs; 100% of conservative Protestants and 0% of persons with “no religion” in the CLOC believe in an afterlife.

Preloss health.—Preloss depressive symptoms ($\alpha = .83$) and anxiety ($\alpha = .86$) are assessed at baseline with the measures described earlier. Thus, multivariate models for which depressive symptoms and anxiety symptoms are outcomes reveal changes in symptoms pre- and postloss. *Physical health* is assessed with a measure of self-rated health; responses are coded into fair/poor versus good/better health.

Socioeconomic status.—Three indicators of socioeconomic resources (at baseline) are considered: *education* (ranging from 3 to 17 years of completed schooling), *home ownership* (1 = owns home), and *total household income* (natural log of income).

Other potential confounding influences.—All analyses control for *gender* (1 = female, 0 = male), *race* (1 = black, 0 = white), and *age* (in years). All models are adjusted for the duration (in months) between the baseline and 6-month

follow-up interviews. Although the first follow-up interview took place exactly 6 months postloss, the time elapsed since baseline ranges from 9 to 76 months due to variation in the timing of spouse's death. Consequently, baseline assessments are more temporally distant for those who lost their spouses at later dates.

RESULTS

Descriptive and Bivariate Analyses

Descriptive statistics are presented in Table 1. The average age is 70; nearly three quarters of study participants are women, and 15% are black. The mean level of educational attainment is slightly less than a high school degree, and nearly all (92%) own their home at the baseline interview. Two thirds believe in an afterlife, whereas substantially smaller proportions either do not believe (19%) or do not know if an afterlife exists (13%). Of the 68% who believe in an afterlife, the majority agree that loved ones are

reunited (94%) and that those who suffer unjustly in life are rewarded (77%) after death.

Multivariate Analyses

Do afterlife beliefs affect loss-related psychological symptoms?—We used ordinary least squares regression analyses to evaluate how three indicators of afterlife beliefs affect five psychological symptoms at the 6- and 18-month follow-up. Not one of the three beliefs was a statistically significant ($p < .05$) predictor of yearning or anxiety at either 6 or 18 months postloss. By contrast, depressive symptoms, anger, and intrusive thoughts were affected by one's beliefs about reunification in the afterlife, whereas intrusive thoughts also were affected by belief in the existence of an afterlife. In Tables 2 and 3, we present models where afterlife beliefs are significant predictors of psychological adjustment 6 and 18 months postloss, respectively.

Six months postloss, individuals who believe in an afterlife yet who do not believe that loved ones are reunited report elevated symptoms of depression ($b = 1.09$, $p < .01$), anger ($b = 0.486$, $p < .10$), and intrusive thoughts ($b = 0.588$, $p < .05$) relative to persons who do not believe in the afterlife. At the 18-month follow-up, the effect size declined considerably for depressive symptoms ($b = 0.69$, $p < .05$), yet was unchanged for intrusive thoughts ($b = 0.59$, $p < .05$). By contrast, belief in reunification was no longer a statistically significant predictor of anger at 18 months.

Although those with a bleak view of the afterlife reported consistently higher levels of all three types of symptoms at the 6-month follow-up, we also found that those who *do* believe in a postdeath reunion also have elevated intrusive thoughts at both the 6-month ($b = 0.43$, $p < .05$) and 18-month ($b = 0.66$, $p < .01$) interviews. These findings are puzzling, yet suggest that individuals who hold strong beliefs—whether positive or negative—about the prospect of reunion are more susceptible to postloss intrusive thoughts.

Unexpected findings also emerged for the general afterlife belief indicator. At the 6-month follow-up, general afterlife beliefs predicted just one of the five outcomes: intrusive thoughts. Individuals who believe in the existence of an afterlife reported intrusive thoughts that are two-thirds standard deviations higher than nonbelievers ($b = 0.68$, $p < .01$), whereas those who don't know whether the afterlife exists report levels that are one-half standard deviation higher than nonbelievers, although the latter effect only approaches statistical significance ($b = 0.48$, $p < .10$). These effects remained virtually unchanged at the 18-month follow-up; persons who believe ($b = 0.73$, $p < .001$) or do not know whether the afterlife exists ($b = 0.60$, $p < .05$) reported significantly more frequent intrusive thoughts than nonbelievers.

Analyses of the 18-month follow-up data also revealed a lagged effect for one outcome: anger. Although anger was

Table 1. Means (and Standard Deviations) or Proportions for All Variables Used in Analysis, Bereaved Spouses, Changing Lives of Older Couples, 1987–1994 ($N = 210$)

Dependent variables, 6 months	
Depressive symptoms (CES-D)	0.42 (1.21)
Anxiety	0.05 (1.01)
Yearning	0 (1.0)
Anger	0 (1.0)
Intrusive thoughts	0 (1.0)
Independent variables	
Afterlife beliefs	
Believes in afterlife	0.68
Does not believe in afterlife	0.19
Does not know if afterlife exists	0.13
Loved ones reunited in afterlife	
Agree strongly	0.39
Agree somewhat	0.21
Disagree strongly/somewhat	0.07
Those who suffer unjustly are rewarded in afterlife	
Agree strongly	0.25
Agree somewhat	0.29
Disagree strongly/somewhat	0.13
Preloss health characteristics	
Depressive symptoms (CES-D), baseline	0.07 (0.98)
Anxiety	0.00 (0.76)
Self-rated health: fair/poor	0.33
Demographics	
Age	70.56 (6.94)
Gender (1 = female)	0.72
Race (1 = black)	0.15
Education (in years)	11.27 (2.92)
Household income	21,049 (16.417)
Owns home (1 = yes)	0.92
Psychosocial characteristics	
Marital warmth, baseline	-0.07 (0.80)
Religious coping, baseline	0.16 (0.94)
Months between baseline and Wave 1 interview	37.27 (18.17)

Note. CES-D = Center for Epidemiologic Studies Depression.

Table 2. OLS Regression Predicting Effects of Afterlife Beliefs on Psychological Adjustment of Bereaved Spouses 6 Months Postloss, Changing Lives of Older Couples, 1987–1994

	Depressive symptoms	Anger symptoms	Intrusive thoughts	
			Model 1	Model 2
Afterlife beliefs				
Yes, believes in afterlife			0.68** (0.21)	
Don't know if afterlife exists			0.48† (0.26)	
Loved ones are reunited in afterlife				
Agree strongly	0.284 (0.21)	0.20 (0.17)		0.43* (0.18)
Agree somewhat	0.068 (0.23)	0.006 (0.19)		0.27 (0.20)
Disagree	1.09** (0.35)	0.486† (0.29)		0.588* (0.31)
Psychological characteristics				
Religious coping	-0.17† (0.10)	-0.21* (0.09)	-0.20* (0.09)	-0.15† (0.09)
Marital quality	0.067 (0.11)	-0.036 (0.094)	0.06 (0.10)	0.08 (0.10)
Constant	-1.02 (1.67)	2.29 (1.40)	-0.084 (1.45)	0.202 (1.48)
Adjusted R ²	.136	.108	.035	.015

Notes. OLS = ordinary least squares. Betas and standard errors are presented. Coefficients not shown for demographic characteristics (age, race, and gender), socioeconomic status (education, income, and home ownership), baseline well-being (depressive symptoms, anxiety, and self-rated health), or the number of months elapsed between baseline interview and spousal death.

† $p \leq .10$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Table 3. OLS Regression Predicting Effects of Afterlife Beliefs on Psychological Adjustment of Bereaved Spouses 18 Months Postloss, Changing Lives of Older Couples, 1987–1994

	Depressive symptoms	Anger symptoms	Intrusive thoughts	
			Model 1	Model 2
Afterlife beliefs				
Yes, believes in afterlife		-0.43* (0.21)	0.73** (0.21)	
Don't know if afterlife exists		-0.71* (0.30)	0.60* (0.28)	
Loved ones are reunited in afterlife				
Agree strongly	0.41 (0.21)			0.65** (0.20)
Agree somewhat	0.37 (0.24)			0.27 (0.22)
Disagree	0.69* (0.33)			0.59* (0.31)
Psychological characteristics				
Religious coping	-0.052 (0.11)	-0.32** (0.10)	-0.15 (0.10)	-0.11 (0.10)
Marital quality	0.045 (0.11)	0.006 (0.102)	-0.044 (0.10)	-0.028 (0.098)
Constant	1.16 (1.74)	1.19 (1.62)	2.48 (1.55)	2.77 (1.55)
Adjusted R ²	.06	.171	.156	.156

Notes. OLS = ordinary least squares. Betas and standard errors are presented. Coefficients not shown for demographic characteristics (age, race, and gender), socioeconomic status (education, income, and home ownership), baseline well-being (depressive symptoms, anxiety, and self-rated health), or the number of months elapsed between baseline interview and spousal death.

† $p \leq .10$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

not affected by afterlife beliefs in the short term, in later stages of the bereavement process, persons who believe in or question the existence of an afterlife reported significantly fewer anger symptoms ($b = -0.43$ and -0.71 , $p < .05$, respectively) compared with nonbelievers. The protective effects of afterlife beliefs for anger would not have been detected if we focused on short-term consequences only.

Do “continuing bonds” impede recovery?—The persistently distressing effect of afterlife beliefs for intrusive thoughts raises the question of “why?” Recent theoretical writings suggest that beliefs in an afterlife may be adaptive in the short term, yet problematic in the longer term if these thoughts prevent the widow(er) from resuming his or her everyday activities and relationships (Shear, 2010). We conducted supplementary analyses to evaluate whether

the effects of afterlife beliefs on intrusive thoughts could be partially explained by one aspect of social reintegration: forming new romantic relationships. Widow(er)s who were dating at the 6-month follow-up did not differ significantly from nondaters with respect to intrusive thoughts. The dating variable did not attenuate the association between afterlife beliefs and intrusive thoughts. We also conducted moderation analyses to evaluate whether afterlife beliefs affected psychological adjustment differently based on whether one was dating at the 6-month follow-up; the interaction term was not statistically significant.

DISCUSSION

Our study explored whether afterlife beliefs protect against psychological distress following late-life spousal loss. We found that afterlife beliefs are neither uniformly

protective nor distressing; rather, the effects of afterlife beliefs depend on the *certainty* and *content* of one's views, the *specific outcomes* considered, and one's *stage* in the bereavement process. Four key findings emerged from our analysis.

First, intrusive thoughts are particularly sensitive to one's afterlife beliefs. Second, persons who believe in an afterlife, yet who hold the bleak view that loved ones are not reunited, reveal a range of problematic psychological symptoms in both the short and longer term following loss. Third, persons who believe in an afterlife have significantly fewer anger symptoms than nonbelievers, yet this protective effect is lagged and emerges only 18 months postloss. Finally, we did not detect a statistically significant effect of afterlife beliefs on either yearning or anxiety symptoms.

Why Do Afterlife Beliefs Elevate Intrusive Thoughts?

Our results revealed that afterlife beliefs powerfully affect intrusive thoughts, or unwanted and uncontrollable thoughts about the death and the decedent. In both the short and long term, intrusive thoughts are more frequent among those who believe in an afterlife, as well as among those who question whether an afterlife exists. Among those who believe in an afterlife, intrusive thoughts are particularly frequent for *both* persons who strongly believe in *and* who do not believe in the possibility of reunion with their loved one in the future. Although most bereavement scholars focus on broad outcomes such as sadness, we believe that it is important to focus on specific loss-related outcomes such as intrusive thoughts. These symptoms are similar to core symptoms of PTSD and may heighten one's risk of physical health problems, especially if PTSD symptoms disrupt sleeping, eating, and other routine health practices (Zisook, Chentsova-Dutton, & Shuchter 1998).

These results challenge theoretical writings proposing that "continuing bonds" is an effective way to cope with spousal loss (Klass, Silverman, & Nickman, 1996). Rather, our findings are consistent with recent work suggesting that "continuing bonds" with the deceased is a form of avoidance; this avoidance may prevent the bereaved spouse from seeking out other meaningful social roles and relationships that facilitate adjustment in the longer term (Shear, 2010; Stroebe, 2004). However, we found that the association between afterlife beliefs and intrusive thoughts could not be accounted for by postloss dating, nor did daters and nondaters differ with respect to intrusive symptoms levels. Future studies should explore other potential pathways through which continuing bonds impede adaptation to loss.

We were surprised by the result that both strongly agreeing *and* disagreeing that loved ones are reunited in an afterlife are associated with increased intrusive thoughts. We speculate that different causal mechanisms may operate for each subgroup. For bereaved persons who do believe in reunion, the *content* of intrusive thoughts may be positive, such as images of their spouse in heaven (or, in rare

cases, hell). By contrast, for bereaved persons who do not believe in afterlife reunion, intrusive thoughts may be wistful or melancholic thoughts about their spouses and how they will never see them again. We encourage researchers to further explore the content as well as the presence of intrusive thoughts. Qualitative methods such as in-depth interviewing could clarify both the content and implications of intrusive thoughts, with an emphasis on whether different patterns are evidenced among subgroups ascribing to different afterlife beliefs.

A Bleak View of the Afterlife Predicts Problematic Adjustment to Loss

The content of one's afterlife beliefs was an enduring predictor of psychological distress among the bereaved. Persons who believe that an afterlife exists yet do not believe that loved ones are reunited report elevated symptoms of depression and intrusive thoughts at both the 6- and 18-month follow-ups, and elevated anger symptoms at the 6-month follow-up only. Believing that one's spouse continues to live on after death, yet at the same time believing that one will never see their spouse again, is highly distressing. Individuals may feel a profound sense of loss and sadness because their attachment is severed and the prospect of renewed attachment is not possible. These beliefs also may cause anger, at least in the early stages of bereavement; the bereaved may feel anger toward one's spouse for leaving them and anger toward God for not allowing a future reunion. As time passes, the death of one's spouse may become less cognitively salient and the belief that one will never see their spouse again may become more accepted, and thus feelings of sadness and anger may subside.

We detected no association between the belief that "those who suffered unjustly in life are rewarded in the afterlife" and psychological adjustment to loss. We suspect this nonsignificant association may reflect the advanced age of the CLOC participants. Given that both spouses survived until late life, they may not have "suffered unjustly"; premature death is considered the hallmark of an unjust or unfair death (Emanuel & Emanuel, 1998). In future analyses, we hope to evaluate whether the protective effects of such beliefs are more acute for specific subpopulations who may have suffered injustices during life, such as African Americans, persons of lower SES, and persons whose late spouses suffered particularly long or painful illnesses.

Afterlife Beliefs as Protection Against Loss-Related Anger

Thus, far, we have focused solely on the negative consequences of afterlife beliefs for bereavement. However, in one case, afterlife beliefs are protective: 18 months postloss, persons who believe in or question the existence of an afterlife report significantly fewer anger symptoms than nonbelievers. Anger is conceptualized as an emotional

response to events deemed unfair or unjust (Frijda, 1993). Those who believe in an afterlife may gradually come to terms with their loved one's death and may find comfort in the belief that the decedent is in a better place—thus undoing the wrong that was done during the dying process.

Afterlife Beliefs and Postloss Yearning and Anxiety

We found that afterlife beliefs predict neither anxiety nor yearning. These patterns may reflect both age- and cohort-related characteristics of CLOC study participants. For older adults, postloss anxiety may be linked to taking on new practical and household tasks previously performed by one's spouse rather than to existential issues (Carr et al., 2000). We were surprised that afterlife beliefs were not significantly associated with yearning. It is possible that yearning, the one grief symptom that focuses specifically on one's relationship with the decedent, is affected most powerfully by characteristics of the late spouse (such as personality) or the late marriage. Evidence from the CLOC shows that marital quality is a significant predictor of yearning (Carr & Boerner, 2009; Carr et al., 2000); however, it is possible that one's desire to reconnect with one's spouse is completely independent from one's belief that such a reunion is possible. Future studies should investigate whether yearning symptoms respond uniquely to aspects of the late spouse and late marriage or whether they also are shaped by broader religious and philosophical views.

In sum, our research is consistent with an emerging literature showing that religious beliefs and practices are not universally protective in the face of all life events for all psychological outcomes. Our findings also underscore the need to investigate whether and how particular religious beliefs affect psychological outcomes following stressful life events. We found that afterlife beliefs significantly predict some aspects of adjustment to loss even when we controlled for religious coping, demonstrating that the effects of afterlife beliefs on the bereavement process are independent of the effects of a traditional religious coping measure.

These results clearly reveal that religiosity is a multifaceted construct—some aspects of which are helpful for coping with loss and others that are detrimental. For instance, we found that religious coping is significantly and negatively related to depressive symptoms, anger, and intrusive thoughts among the bereaved. By contrast, both belief in and uncertainty regarding the existence of an afterlife are associated with heightened intrusive thoughts. We hope that future studies consider not only the distinctive effects of general and loss-related religious beliefs and practices on adjustment to stress but also examine whether *specific combinations* of beliefs and practices are particularly adaptive (or maladaptive) when coping with widowhood and other major stressors.

Finally, we have demonstrated the importance of focusing on the short- and long-term effects of afterlife beliefs on adjustment to loss. If we had focused on short-term

consequences only, we would have failed to detect distinctive symptom trajectories. Although the effect of afterlife beliefs on intrusive thoughts persists in the long term, the effects on depressive symptoms decline considerably and the effects on anger are lagged, appearing only 18 months after loss. We encourage researchers to investigate further the extent to which personal beliefs and practices protect or impair well-being over the course of bereavement.

Limitations and Future Directions

Our study has several limitations. First, we focused on older adults whose late spouses enjoyed long lives. By design, the CLOC is a study of persons aged 65 and older at baseline and their spouses. The association between afterlife beliefs and psychological adjustment to loss may be stronger in a sample of young or midlife persons, as younger persons typically are more fearful and anxious about death than older adults, and thus afterlife beliefs may provide them greater solace (Cicirelli, 2001). For older adults, and especially those who recently lost a spouse or other friends and relatives, death may be accepted with greater equanimity and less anxiety than among younger persons.

Second, the small analytic sample prevented the consideration of more fine-grained subgroup differences in the ways that afterlife beliefs affect adjustment to loss. For example, the emotional consequences of afterlife beliefs may be conditional upon other personal characteristics of the survivor (e.g., salience of one's religious views), the deceased spouse (e.g., his or her views on the afterlife), and the context of the death (e.g., whether the death was painful). We suspect that afterlife beliefs may be more or less protective based on the nature, cause, and context of the spouse's death and marital quality. In supplementary analyses, we evaluated whether the effect of afterlife beliefs on bereaved spouse's emotional adjustment was moderated by death timing (e.g., sudden/unexpected vs unexpected), and the quality of the marriage. Not one interaction term was statistically significant, although we cannot ascertain whether the nonsignificance reflects statistical power or a lack of substantive difference.

Third, we did not consider simultaneously the effects of afterlife beliefs and religious affiliation due to multicollinearity. For example, 100% of conservative Protestants in the CLOC sample believe in an afterlife. Future studies, perhaps based on larger samples, should examine the independent and interactive effects of affiliation and afterlife beliefs. Persons who hold afterlife beliefs that are discrepant with the teachings of their faith may hold these views strongly, whereas persons whose views mirror their religion's teachings may not have thought as deeply or critically about such issues. Further, most religions maintain their own distinctive practices that may protect against loss-related distress. For instance, Judaism encourages ritualized mourning practices that are believed to ease adjustment to loss.

Fourth, CLOC data collection began in the late 1980s, and thus includes only cohorts of adults born in the early 20th century. Older generations of Americans tend to hold more traditional religious beliefs than subsequent cohorts (Chaves, 2011); thus, we do not know whether the patterns evidenced here can be generalized to current cohorts of older adults, including Baby Boomers. Future studies should explore whether both the nature of afterlife beliefs and their impact on bereaved spouses vary across cohorts of older adults in the United States.

Finally, we detected relatively few statistically significant relationships. Model fit was quite poor, and the afterlife belief indicators and associated confounds accounted for relatively little of the explained variance in psychological outcomes; the best fitting model explained less than 16% of the variance in adjustment to loss. We believe that this may reflect our focus on a narrowly defined set of religious beliefs variables. Future analyses should explore a fuller range of views about death and spirituality, as well as religious practices and activities that may help (or hinder) psychological recovery from spousal loss.

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