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CONTINUING BONDS AND RECONSTRUCTING MEANING: MITIGATING COMPLICATIONS IN BEREAVEMENT

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Drawing on attachment theory and constructivist conceptualizations of bereavement, the authors assessed the relation between continuing bonds coping and meaning reconstruction following the death of a loved one and complicated grief symptomatology. Five hundred six young adults in the first two years of bereavement from a variety of losses completed the Inventory of Complicated Grief along with measures of the strength of their ongoing attachment to the deceased and their capacity to make sense of the loss, find benefit in the experience, and reconstruct a progressive sense of identity following the death. Several variables concerning the survivor, his or her relationship to the deceased, and the nature of the death functioned as risk factors for heightened distress, but their role was generally moderated by meaning-making, often to the point of nonsignificance. In contrast, higher levels of benefit-finding and positive identity change were associated with lower levels of bereavement complication. Finally, an interaction emerged between sense-making and ongoing attachment to the deceased, suggesting that strong continuing bonds predicted greater levels of traumatic and especially separation distress, but only when the survivor was unable to make sense of the loss in personal, practical, existential, or spiritual terms.

In the two decades that have elapsed since the Institute of Medicine compiled its review of scientific research on bereavement (Osterweis, Solomon, & Green, 1984), over 4,000 scientific publications have addressed psychosocial issues arising at the end of life and in the aftermath of loss (Neimeyer, 2004). The robustness of this field of research is a function of several converging factors, including more extensive empirical assessment of traditional models having relevance to bereavement, such as attachment theory (Field, Gao, & Paderna, 2005); the emergence

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of newer theories such as those emphasizing the role of active coping processes and meaning reconstruction in adaptation to loss (Center for the Advancement of Health, 2004); and greatly improved methods for assessing grief responses, especially in their more complicated and problematic forms (Neimeyer & Hogan, 2001). The present project draws on developments in each of these domains to evaluate the relationship between bereaved adults' experience of a continuing bond with the deceased and their ability to attribute meaning or significance to the loss, on the one hand, and their report of complicated grief symptomatology, on the other.

An Attachment Theory Perspective

Deriving originally from a broadly psychodynamic concern with the impact of temporary separation from parents on the developing child, attachment theory ultimately evolved to include a focus on the profound biopsychosocial transitions occasioned by the permanent separation from a loved one through death (Bowlby, 1980; Parkes, 1996; Stroebe, 2002). Drawing on ethological, laboratorybased, and social scientific research on the attachment behavioral system, researchers in this tradition have delineated the dual functions served by maintaining proximity to an attachment figure, whether this figure is a parent in the case of a child, a partner in the case of an adult, or any other figure who provides a safe haven at times of threat, and a secure base from which to explore the world (Field et al., 2005). Death of an attachment figure, of course, represents the ultimate threat to this relationship, typically triggering a prolonged process of protest, despair, and reorganization as the survivor attempts to adapt to the loss (Bowlby, 1980). Classically, this process was considered to require "working through" in the form of detachment of emotional investment in goals and memories linked to the bond to the deceased, in order to permit psychic and behavioral adaptation through investment in new relationships (Freud, 1957).

In recent years, however, grief theorists and therapists have embraced an alternative view that emphasizes the adaptive function of retaining bonds with the deceased, rather than relinquishing them (Klass, Silverman, & Nickman, 1996). Drawing primarily on qualitative research and cultural studies, advocates of this

continuing bonds perspective have focused attention on the frequency with which bereaved persons report an ongoing engagement with the memories and images of the deceased many months or years after the loss, and the apparently salutary function of maintaining this attachment (Attig, 2000; Klass, 1999). It is worth noting that Bowlby (1980) himself was ambiguous in his argument for whether detachment from or continued attachment to the deceased was the more adaptive course for the bereaved, ultimately acknowledging that change in the nature of the bond, rather than its severance, per se, was the critical goal of grief (Stroebe & Schut, 2005). In keeping with this latter view, contemporary theorists have emphasized how a constructive reorganization rather than relinquishment of the bond can be achieved by "internalizing" the lost loved one as an extension of the self to enhance affect regulation through maintaining psychological rather than physical proximity to the attachment figure, taking him or her as a role model, appreciating that individual's unique legacy, or cultivating a sense of the figure's comforting presence at times of stress (Field et al., 2005). Alternatively, reworking of the bond could be construed in terms of retention of those ties to loved ones that do not require their physical presence (e.g., continuing their life work), coupled with developing new goals that have "substitute value" for those that must be relinquished (Boerner & Heckhausen, 2003). In either case, a refined attachment theory perspective and related models that emphasize the postmortem relationship to the deceased (Rubin, 1999) seem to accommodate the possibility that maintenance of such bonds can play either a constructive or obstructive role in loss adaptation, depending on their form, function, and timing (Stroebe & Schut, 2005).

Quantitative research to date underscores the complexity of the relationship between continuing attachment to the deceased and bereavement adaptation. For example, concrete expressions of proximity seeking (e.g., hoping for comfort through contact with a loved one's possessions) has been associated with greater grief-related distress, whereas more abstract forms of bonding (e.g., through comforting memories) may be accompanied by less anguish (Field, Nichols, Holen, & Horowitz, 1999). Moreover, whereas coping through accessing the continuing bond with their deceased husbands was predictive of overall negative mood for a group of widows reporting their thoughts and feelings several times

daily over a 2-week period, for those farther along in their bereavement calling their husbands to mind was also associated with more positive emotions. Such findings converge with research that indicates that although most of the bereaved report a frequent sense of the loved one's continuing "presence" and most find this comforting, this is by no means uniformly the case (Datson & Marwit, 1997). Reviewing these and other relevant studies, Stroebe and Schut (2005) read the evidence as inconclusive: "neither can we categorically conclude that continuing, nor that relinquishing bonds will be helpful to bereaved persons in coming to terms with their grief" (p. 489). Instead, they suggested that "research efforts need to be channeled toward establishing who among the bereaved actually benefit from retaining versus relinquishing their ties" (p. 490). Developments in another line of grief theory could prove useful in pursuing this objective.

The Meaning Reconstruction Perspective

Part of the explanation for the ambiguous evidence concerning the role of the continuing bond in bereavement adaptation might owe less to the conceptual inadequacy of attachment theory than to its incompleteness. That is, to the extent that other critical psychosocial processes shape responses to losses—including loss of the attachment bond—then bereavement might best be viewed through a wider lens that brings into focus factors that interact with ongoing attachment to predict post-loss adjustment. Recent research on meaning reconstruction in the wake of loss suggests that the effort to "make meaning" of the loss in practical, personal, existential, or spiritual terms may be one such factor (Neimeyer, 2001b).

A concern with meaning making in the aftermath of loss arises from a cluster of related perspectives, including those associated with assumptive world (Janoff-Bulman, 1989), cognitive (Thompson & Janigan, 1988), coping (Folkman, 2001) and narrative (Neimeyer, 2005, 2006) approaches. A common theme in these models is that significant loss disrupts the coherence of that matrix of personal meanings by which individuals order their life experiences, calling for active attempts to (a) make sense of the loss, (b) find some sort of "silver lining" or benefit in the experience, and (c) reorganize one's identity as survivor (Gillies & Neimeyer, 2006). In a constructivist view, inability

to assimilate such a psychosocial transition into the individual's "self-narrative" instigates a frequently painful and protracted process of accommodating or reconstructing central meaning structures (Neimeyer, 2005). Successful revision of the meaning system is by no means an assured outcome, posing the risk of clinical complications in the course of bereavement (Neimeyer, Prigerson, & Davies, 2002). Conversely, positive integration of the loss can bring about the sort of progressive reconstruction of one's self-narrative associated with life-transforming "posttraumatic growth" (Calhoun & Tedeschi, 2006).

Evidence for the relevance of meaning making as a predictor of bereavement outcome is accumulating as a result of several converging research programs. For example, an unsuccessful struggle to make sense of the death of a loved one predicts heightened distress, particularly in the early months of bereavement, with benefit-finding perhaps playing a larger role as time goes on (Davis, Nolen-Hoeksema, & Larson, 1998). Similarly, an unresolved and ruminative search for meaning tends to be associated with protracted, "chronic grief" trajectories (Bonanno, Wortman, & Nesse, 2004). Furthermore, the inability to make sense of the loss appears to represent a near-perfect mediator of the impact of violent bereavement (i.e., through suicide, homicide, and accident) on complicated grief symptomatology (Currier, Holland, & Neimeyer, 2006). Finally, identity change in bereavement has been most explicitly studied in retrospective qualitative research, documenting how the death of parents (Schultz, in press), siblings (Davies, 1999) or children (Klass, 1999) can precipitate a significant reorganization of one's sense of self, for better or worse. Thus, as research on perinatal bereavement suggests, a multidimensional quest for meaning in loss appears to make an independent contribution to the prediction of grief acuity beyond that associated with security of attachment (Uren & Wastell, 2002).

The complementarity and compatibility of attachment and meaning reconstruction perspectives is also congruent with both clinical observations and theoretical considerations. The former is reflected in a comparison of two young mothers whose infants died of congenital heart problems (Neimeyer & Anderson, 2002), both of whom reported a strong continuing attachment to their children, who they viewed as in the hands of God. For one of them, however, the effort to make sense of the inexplicable loss

remained an ongoing challenge; as she said, "The only thought that comes to me is that God must have really needed [my baby] to be one of his angels in heaven, because she died so suddenly and didn't show any of the symptoms she suffered from that caused her death." Accordingly, she bitterly isolated herself from her family and church community in a desperate struggle to find some sense or hidden benefit in the tragic loss and the diminished sense of self it introduced into her life. In contrast, the other mother reported finding great meaning and personal growth in her loss, noting that, "[my baby's] purpose in life was to bring us great joy and love in the three short days he was here on earth.... I have greater appreciation for life and for healthy babies. I have a greater knowledge of the heart disease that [he] had. And I feel I can help others who have lost a child or who will lose a child in the future. Spiritually, I know that when I die, I will go to heaven, and we will be together again." In short, for these two mothers, whether or not the loss could be accorded a more ample meaning in the context of their self-narratives seemed to critically distinguish their bereavement trajectories, despite their commonality in preserving a continuing bond with their child. A similar struggle to simultaneously make meaning of the loss and preserve a valued connection to an attachment figure characterized the grief of a college student for his beloved uncle following his death by cancer (Neimeyer & Anderson, 2002). At a theoretical level, the relevance of meaning reconstruction to the reorganization of bonds following loss is implied by the way in which attachment patterns shape "internal working models" of the self and other(s) (Bowlby, 1980; Parkes, 1996), models that have to be reworked when psychosocial transitions cannot be accommodated by the person's existing meaning system (Guidano & Liotti, 1983).

The purpose of this study therefore was to assess the possible interaction between continuing bonds coping on the one hand, and sense-making, benefit finding, and identity change on the other, in predicting complicated grief symptomatology (Prigerson & Maciejewski, 2006) in a large cohort of bereaved young adults. A further advantage of the study was its use of an extensively validated measure of complicated grief (Prigerson & Jacobs, 2001), as distinct from the psychometrically weaker or unvalidated

TABLE 1 Demographic and Background Information (n = 506)

Background	Demographic information
Age of the bereaved	M = 20.52, SD = 3.83,
	Range = 17-53
Gender of the bereaved	119 men (23.5%)
	387 women (76.5%)
Ethnicity of the bereaved	293 Caucasian (57.9%)
	186 African-American (36.9%)
	25 Other (5%)
Relationship of decedent	25 Parents (5%)
	10 Sibling (2%)
	2 Children (.4%)
	4 Partners/spouses (.8%)
	105 Grandparents (20.8%)
	110 Aunts/uncles/cousins (21.7%)
	140 Friends (27.7%)
	33 Other relatives (6.5%)
Age of the deceased	M = 52.11 years, $SD = 26.43$ years,
_	Range = $4 \text{ months} - 102 \text{ years}$
Amount of contact with the deceased	M = 3.38, $SD = 1.72$, Range = 1–6
in the 3 months preceding death	, ,
Closeness of the relationship with the	M = 3.65, $SD = 0.84$, Range = 1–5
deceased prior to death	, ,
Cause of death	222 Natural, anticipated (43.9%)
	106 Natural, sudden (20.9%)
	91 Accidental (18%)
	27 Suicide (5.3%)
	38 Homicide (7.5%)
	22 Other (4.3%)
Number of months ago	M = 11.82, SD = 7.59,
death occurred	Range = $0.25-24$
Other major losses prior to	Yes: 300 (59.3%)
this death	No: 202 (39.9%)
Prior to the death, ever received	Yes: 64 (12.6%)
mental health counseling	No: 426 (84.2%)
Since the death, received	Yes: 51 (10.1%)
mental health counseling	No: 435 (86%)
Support available	Yes: 429 (84.8%)
- or r	No: 56 (11.1%)
Time spent talking about the loss	M = 2.25, $SD = 1.13$, Range = 1-4
Sense making	M = 2.25, $SD = 1.15$, Range = 1-4
Benefit finding	M = 3.23, $SD = 0.54$, Range = 1-5 M = 2.62, $SD = 1.31$, Range = 1-5
Amount of identity change	M = 2.40, $SD = 1.31$, Range = 1-5 M = 2.40, $SD = 1.30$, Range = 1-5
- Into ant of identity change	2.10, 5D = 1.30, Range = 1-3

TABLE I Continue	ΓABLE	- 1	Continue	b
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Background	Demographic information
Positive identity change Continuing bonds	M = 2.18, $SD = 0.66$, Range = 1–3 $M = 26.87$, $SD = 10.26$,
ICG-Traumatic Distress ICG-Separation Distress	Range = 11-55 M = 9.65, SD = 4.29, Range = 5-25 M = 18.38, SD = 7.86, Range = 11-51

Note. ICG = Inventory of Complicated Grief.

measures of general grief that have characterized previous research on smaller samples.

Methods

Participants

Following institutional review of the project, 506 participants were recruited from undergraduate introductory psychology courses at the University of Memphis over a 3-year period. As a criterion of eligibility, each participant reported having experienced the loss of a friend or loved one through death within the past 2 years, in keeping with studies that suggest that significant bereavement phenomena can be observed over 24 months or longer in many cases (Prigerson & Jacobs, 2001). The sample ranged in age from 18 to 53 years old with a mean age of 21 years (SD = 3.83); 76.5% were female and 23.5% were male; 57.9% were Caucasian, 36.9% African American, and 5% were of another ethnicity, reflecting the undergraduate distribution of ethnicities at the urban research institution. Other demographic characteristics of the participants and descriptions of their losses are presented in Table 1.

Procedure

Each eligible participant completed a one-time battery of instruments that included demographic items, the Inventory of Complicated Grief (ICG), the Continuing Bonds Scale (CBS), questions about meaning reconstruction, and questions about factors surrounding the loss and his or her relationship to the decedent.

Measures

INVENTORY OF COMPLICATED GRIEF (ICG)

(Prigerson & Jacobs, 2001; Prigerson, Maciejewski, Reynolds, Beirhals, & al., 1995). The ICG is composed of 30 declarative statements, such as "I feel like I have become numb since the death of [the deceased]" and "Ever since [the deceased] died I feel like I have lost the ability to care about other people or I feel distant from people I care about," to which responses are made on a 5point Likert-type scale describing the frequency of symptoms (i.e., from 1 = never to 5 = always). Items assess two theoretically distinguishable features of complicated grief, focusing on both symptoms of separation distress (e.g., yearning, loneliness, preoccupation with thoughts of the deceased) and traumatic distress (e.g., disbelief about the death; feelings of being shocked and overwhelmed, numb and out of control; disturbances in sleep). Both clusters of items were retained as distinct dependent variables in the analyses that follow given the potentially greater relevance of continuing bonds coping to separation distress symptomatology and meaning reconstruction to traumatic symptomatology.

The first 19-item version of the ICG displayed strong psychometric properties in a number of studies. For example, this earlier version of the ICG (Prigerson et al., 1995) exhibited 6-month test-retest reliability of r = .80, and good concurrent validity with the Texas Revised Inventory of Grief (TRIG; Faschingbauer, 1981). The expanded version of the ICG (Prigerson & Jacobs, 2001), which was used in the present study, has also shown solid psychometric values. For example, the newer version was tested in the Netherlands, where a Dutch translation displayed good temporal stability (.92) over a period ranging from 9 to 28 days (Boelen, Van den Bout, De Keijser, & Hoitjink, 2003). Research has also provided considerable support for the scale's validity. For example, diagnoses based on the newer ICG were found to have a sensitivity of .93 and a specificity of .93 in the detection of interview-determined complicated grief (Barry, Kasl, & Prigerson, 2002). In addition, this scale has predicted a broad range of serious long-term health and mental health consequences of bereavement (Hardison, Neimeyer, & Lichstein, 2005; Ott, 2003; Prigerson et al., 1999; Silverman, Johnson, & Prigerson, 2001).

CONTINUING BONDS SCALE (CBS)

The CBS (Field, Gal-Oz, & Bonanno, 2003) consists of 11 questions that explore to what extent the bereaved person feels the deceased loved one remains a part of his or her life. Responses to questions such as "I seek out things to remind me of___" and "I have inner conversations with my spouse where I turn to him or her for comfort or advice" are rated using a Likert-type scale that ranges from 1 (not true at all) to 5 (very true). The CBS has shown good internal consistency ($\alpha = .87$) and is positively related to ratings of satisfaction with the relationship and negatively related to the degree of blame in a role-played conversation with the deceased (Field et al., 2003). In the present study we subjected the CBS to a principal components analysis. A scree plot suggested extracting one factor, which included all 11 items and had high internal consistency ($\alpha = .90$). Thus, we summed the 11 items for a total score.

MEANING RECONSTRUCTION

Meaning reconstruction was assessed by four items. Sensemaking was assessed by the question, "How much sense would you say you have made of the loss?," with anchor points of 1 (no sense) to 4 (a good deal of sense); whereas benefit finding was measured by the question, "Despite the loss, have you been able to find any benefit from your experience of the loss?," with anchors of 1 (no benefit) to 5 (great benefit). Finally, identity change was assessed by asking, "Do you feel that you are different, or that your sense of identity has changed, as a result of this loss?," with anchors of 1 (no different) to 5 (very different), with an additional item simply assessing the direction of this change (1: for the better, 2: mixed, or 3: for the worse). These questions correspond closely to the singleitem questions that other researchers have used to measure these construals of meaning for quantitative analyses (e.g., Bonanno et al., 2003; Davis et al., 1998; Lehman et al., 1987; McIntosh et al., 1993). As with these other investigations, these single items showed considerable utility in an earlier study in both differentiating violent and natural loss survivors and predicting complicated grief (Currier et al., 2006).

OTHER VARIABLES MEASURED

Basic demographic information, such as age, gender, and ethnicity, was gathered for each participant. In addition, the

participants provided information concerning their loss. The participants indicated their relationship to the deceased (e.g., father, grandmother, cousin), how old the deceased was when he or she died, the amount of contact they had had in the three months prior to the death, intimacy level of the relationship, cause of death, how many months ago the death occurred, the amount of time they had spent talking about the loss, and whether or not they had (a) experienced other major losses, (b) received mental health counseling prior to the loss, (c) received mental health counseling since the loss, and (d) felt that there was a supportive person with whom they could talk.

Data Analysis

We used hierarchical regression models to examine the relationship between continuing bonds, meaning reconstruction, and grief outcomes. The regression models for both separation and traumatic distress consisted of three steps. We were interested in how well continuing bonds and meaning reconstruction predicted grief outcomes above and beyond the demographic characteristics of the respondent and the characteristics of the death. Thus, the first step included only the demographic characteristics of the respondent. The second step included the characteristics of the death. Finally, the last step included the CBS, the meaning reconstruction items, and the interaction between the two, as well as between each of them and other statistically significant predictors of grief outcomes from the first two steps.

Results

Separation Distress

The complete results of the separation distress analysis can be seen in Table 2. The demographic characteristics of the respondent were entered in the first step, which did not account for a statistically significant amount of variance in this aspect of complicated grief ($R^2=.023,\ p=.061$). Of the demographic variables, only the African American variable had a statistically significant relation to separation distress; on average, African Americans reported more such symptomatology than Caucasians.

TABLE 2 Predictors of Separation Distress

		Model 1			Model 2			Model 3	
Variable	В	SE B	β	В	SE B	β	В	SE B	β
Intercept	1.98	.26		1.30	.34		2.32	.32	
Age of bereaved	008	.01	04	02	.01	10*	004	800.	02
Gender of bereaved	9.	.11	.02	02	60.	01	07	80.	04
White	600.	60.	90.	9.	80.	.03	80.	90.	90.
African American	.27	60:	.17**	.21	60.	.13*	.21	.07	.13**
Age of deceased				001	.002	03	002	.002	90.–
Immediate family				.59	.14	.20**	09	.14	03
Contact				.13	.03	.25**	04	.02	80.
Murder/suicide				.16	.13	90.	08	.11	03
Anticipated loss				07	60.	04	12	.07	07
Months since death				90.—	.01	05	08	.004	07
Intimate relationship				.14	90.	.13*	02	.05	02
Other losses				.14	80.	80.	80:	90.	.04
Counseling prior to loss				.10	.12	.00	.05	.10	.02
Counseling since loss				.34	.15	*11:	.16	.12	.05
Someone to talk to				27	.13	10^{*}	08	.10	03
Time spent talking about loss				.13	.04	.17**	.01	.03	.02
Continuing bond							.38	.04	.42*
Sense making							19	.04	21^{**}
Benefit finding							07	.03	10^{*}
Amount of identity change							11.	.03	.17**
Positive identity change							12	.05	09*
CB × Sense making							11	.04	11**
$CB \times Immediate family$.23	60.	.13*

 $^{^*}p < .01.$ $^*p < .05.$

Characteristics of the death and support variables were included in the second step and accounted for a significant amount of variance in separation distress ($R^2 = .266$, p < .001). Six of the twelve variables entered in Step 2 were statistically significant. Family relationships, amount of contact with the deceased in the months preceding death, level of intimacy with the deceased, counseling for an emotional problem since the loss, presence of a supportive person, and amount of time spent talking about the loss all had a positive relationship with separation distress. Being African American continued to have a positive relationship with separation distress, as did being of younger age. Length of time since the loss was noticeably unrelated to separation distress in the model.

Step 3 was the final model and included continuing bonds coping, the meaning reconstruction items, and interactions. These variables accounted for a significant amount of variance in separation distress ($R^2 = .276$, p < .001, overall $R^2 = .567$). Amount of identity reconstruction had a statistically significant positive relationship with separation distress; the greater the identity disruption experienced by the bereaved, the more painful the separation. In contrast, benefit finding and positive identity change were associated with significantly less separation distress.

In addition to these simple main effects there were two statistically significant interactions. Figure 1 provides a graphic depiction of the continuing bonds by sense-making interaction. When amount of sense made was low, stronger continuing bonds were associated with more separation distress. However, as the amount of sense-making increased, the strength of the continuing bond made less of a difference in separation symptoms. The second significant interaction concerned continuing bonds by relationship to the deceased. When the deceased was a member of the bereaved individual's immediate family, strong continuing bonds were associated with higher levels of separation stress than weak bonds. However, when the deceased was not a member of the immediate family, the strength of the continued bond made less difference. Thus sense-making and the relationship to the deceased moderated the relationship between continuing bonds and separation distress.

Once we controlled for continuing bonds, meaning reconstruction and the interactions, only one of the variables that were

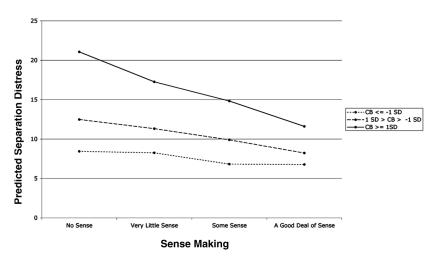


FIGURE 1 Continuing bond by sense making Interaction-Separation Distress.

predictors of separation distress in Steps 1 and 2 remained significant. Specifically, African Americans continued to manifest greater separation distress.

Traumatic Distress

The complete results of the traumatic distress analysis are presented in Table 3. Demographic characteristics of the respondent were entered in the first step but did not account for a statistically significant amount of variance in traumatic distress ($R^2 = .024$, p = .062). Of the demographic variables, only age of the respondent had a statistically significant negative relationship with traumatic distress, suggesting that younger survivors were somewhat more likely to respond to loss with greater subjective trauma.

Characteristics of the death and support variables were included in the second step and accounted for a statistically significant amount of variance in traumatic distress ($R^2 = .293$, p < .001). Of the 12 new variables entered in Step 2, 9 were significant. Three of those variables had a negative relationship with traumatic distress: age of the deceased, number of months since the death, and availability of someone with whom the respondent was able to talk about the loss. The other 6 significant variables had a positive relationship with traumatic distress: loss of a member of the

TABLE 3 Predictors of Traumatic Distress

		Step 1			Step 2			Step 3	
Variable	В	SE B	β	В	SE B	β	В	SE B	β
Intercept	1.85	.20		1.62	.56		2.22	.25	
Age of bereaved	02	60.	.11*	02	.01	15**	01	.01	90.–
Gender of bereaved	80.	80.	50.	.00	.07	.02	02	90.	01
White	03	.07	03	05	90.	05	02	.05	02
African American	1.	.07	60:	.10	.07	80.	.12	.05	*01.
Age of deceased				004	.001	15**	004	.001	14*
Immediate family				309	11.	**	14	.11	90.–
Contact				80.	.02	.21**	.03	.02	*60`
Murder/suicide				.29	.10	.14*	.05	60.	.03
Anticipated loss				.00	.07	.02	02	90.	02
Months since death				01	.004	14**	01	.003	14**
Intimate relationship				80.	.04	60.	03	.04	<u>-</u> .04
Other losses				Π.	90.	80.	.03	.05	.03
Counseling prior to loss				.28	60:	.14*	.21	80.	.11**
Counseling since loss				.27	.11	.12*	.16	60:	.07
Someone to talk to				19	.10	*60.	03	80.	01
Time spent talking about loss				.07	.03	.13*	.01	.03	.03
Continuing bond							.19	.03	.28**
Sense making							17	.04	—.2 4 **
Benefit finding							90.—	.02	.11**
Amount of identity change							.07	.02	.14*

(Continued)

TABLE 3 Continued

Variable B SI				Step 2			Step 3	
	SE B	β	В	SE B	β	В	SE B	β
Positive identity change						10	90.	10*
$CB \times Sense making$.18	.03	10*
$CB \times Immediate family$						07	.07	.13*
Sense × Treatment prior to loss						.18	.07	13**
Sense \times Age of deceased						20	.03	*80

 $^{**}p < .01.$

* p < .05

immediate family, the amount of contact with the deceased, death through murder or suicide, history of counseling, and the amount of time spent talking about the loss. In summary, level of traumatic distress increased for deaths that were premature, recent, violent, involved immediate family or frequent interaction, or left the bereaved unsupported, especially if he or she had a history of mental health consultation. Age of the respondent continued to have a statistically significant negative relationship with traumatic distress.

Step 3 was the final model and included continuing bonds, the meaning reconstruction items, and the interactions. These variables accounted for a significant amount of variance in traumatic distress ($R^2=.243$, p<.001, overall $R^2=.559$). Amount of identity reconstruction had a statistically significant positive relationship with traumatic distress; the greater the identity change triggered by the loss, the greater the traumatic disruption. In contrast, benefit finding and positive identity change had a statistically significant negative relationship with traumatic distress, suggesting that they functioned as protective factors against traumatic symptoms as they did against separation distress.

In addition to these simple main effects, there were four statistically significant interactions. Two of these followed the same pattern as occurred with separation distress, such that higher levels of sense making and a non-familial relationship to the deceased moderated the impact of a high continuing bond. Sense-making also interacted with prior counseling such that when sense-making was low, counseling prior to the loss was associated with higher levels of traumatic distress, whereas under conditions of high sense-making, whether or the not the person had previously sought counseling made little difference. Similarly, when sense-making was low, survivors reported greater traumatic distress in the case of death of younger rather than older loved ones. However, as sense-making increased, the difference attributable to decedent age diminished greatly.

Once we controlled for continuing bonds, meaning reconstruction, and the interactions, many of the variables that predicted complicated grief symptoms in Steps 1 and 2 were no longer significant. Specifically, age of the respondent, age of the deceased, the nature and intimacy of the relationship, death by murder or suicide, subsequent counseling, availability of support, and the amount of time spent talking about the loss all no longer had a

statistically significant relationship with traumatic distress. However, some variables remained significant: amount of prior contact with the deceased, number of months since the death, and prior counseling all continued to predict traumatic impact. Interestingly, with meaning reconstruction and bonding controlled, ethnicity emerged as significant, with African Americans showing greater traumatic distress than Caucasians.

Discussion

The results of the study indicate that even after controlling for the demographic characteristics of the bereaved and several factors concerning the character of the relationship to the deceased and the loss itself, continuing bonds and meaning reconstruction were reliable predictors of both traumatic and separation distress. Specifically, high levels of meaning making consistently predicted better grief outcomes during the first two years of bereavement for this young adult sample, whereas high levels of post-loss attachment to the deceased were associated with more complicated grief symptoms, at least under conditions of low sense-making. It is worth noting, however, that continuing bonds coping was more highly related to separation ($\beta = .42$) than to traumatic ($\beta = .28$) distress, whereas sense-making had approximately equal relevance to both sets of symptoms. The unique contributions of each of these factors to the prediction of complicated grief symptomatology reinforces the relevance of both attachment theory and constructivist, meaning-oriented theories to conceptualizing chronic and anguishing debilitation in response to bereavement (Neimeyer, 2006a). Moreover, these relationships were found using a measure of grief symptoms with strong construct and predictive validity for poor health and mental health outcomes, strengthening previous literatures on both continuing bonds and meaning making that have relied on psychometrically weaker measures of normal grief.

The fact that strong postmortem attachment to the deceased under conditions of low sense-making was associated with higher, rather than lower grief-related distress challenges the assumption that continuing bonds necessarily mitigate the stress of bereavement (Attig, 2000; Klass et al., 1996). Such evidence is consistent with at least some previous research that evidences a similar pattern among widows in the early months of their loss, when

self-reported contact with the memory of their husbands was related to higher levels of negative emotion (Field & Friedrichs, 2004). However, our findings leave open the possibility that with greater time to process and integrate the loss beyond the two years of bereavement assessed in the present study, survivors might become able to draw upon a transformed bond to their loved one in a comforting way, as did the widows in the Field and Friedrichs study who were more than 2 years into their bereavement. Still, it is worth emphasizing that the passage of time alone was unrelated to the amelioration of symptoms of separation distress in our study, cautioning against the assumption that "time heals all wounds." Instead, it seemed that it was the ability to find some form of benefit or "silver lining" in the loss, to experience a progressive rather than regressive transformation in one's identity, and especially to make sense of the loss in personal, practical, existential, or spiritual terms that predicted more positive grief outcomes. Indeed, sense-making in particular moderated the effect of continuing attachment on grief, suggesting that it is those bereaved persons who remain closely bonded to their loved ones but who are unable to integrate the loss into a more ample system of personal meaning who are at greatest risk for bereavement complications.

Results of the study also point to other factors that predict more difficult adaptation to loss. For example, several variables associated with the intimacy and nature of relationship to the deceased and use of mental health services by the bereaved were associated with greater separation distress, and these same factors as well as others concerning recency of the loss and prematurity and violence of the death predicted more traumatic symptomatology. These findings accord with the broader literature on factors associated with bereavement complications (Currier et al., 2006; Gamino, Sewell, & Easterling, 1998; Hardison et al., 2005), underscoring their clinical relevance as observable markers of bereavement risk. Importantly, however, the predictive power of the majority of these factors was reduced by sense-making, often to the point of non-significance. Therapeutically, this suggests that narrative strategies that promote meaning making regarding loss (Neimeyer, 1999, 2001a) can mitigate bereavement complications for high-risk mourners, as evidenced by a recent randomized controlled trial of therapy that relies on systematically telling and retelling the story of the loss in the context of reviewing and revising life goals (Shear, Frank, Houch, & Reynolds, 2005). In terms of research, these same findings hint at the relevance of developing more finely-tuned operational definitions of meaning-making processes beyond the few straightforward items used in this and earlier studies (Gillies & Neimeyer, 2006). Fortunately, the larger constructivist literature offers an expansive toolbox of methods for eliciting, coding, and analyzing the features of life narratives that are implicated in transformation of "working models" of self and world triggered by substantial loss (Neimeyer, 2006b).

The one demographic factor associated with elevated risk of complicated grief even when meaning making and continuing bonds were taken into account was ethnicity: African Americans were more likely than their Caucasian counterparts to suffer both greater separation and traumatic distress. Unfortunately, very little empirical work has examined issues of ethnicity, although a recent qualitative study points to distinctive stressors and resources for African American mourners as a function of a history of social oppression and marginalization (Rosenblatt & Wallace, 2005). The results of the present study suggest that more empirical attention needs to be given to this subject.

Finally, the strengths of the study associated with its theoretical grounding, instrumentation, large sample and diversity of losses notwithstanding, future researchers should heed its limitations as well. For example, the fact that participants represented a large cohort of college students places constraints on generalization of these findings to other groups, insofar as these participants could be characterized by developmental issues unique to young adulthood, such as differentiation and individuation from family, achievement motivation and development of a broader social network (Balk & Vesta, 1998). In the context of our research, these developmental factors could have stressed or intensified bonds with the deceased and living support figures or influenced processes of meaning making in ways that cannot be revealed by our data.

Perhaps even more important are constraints on causal reasoning stemming from the correlational nature of the study. For example, although it might be tempting to conclude that reliance upon continuing bond coping or success in meaning reconstruction influenced the course of grieving, it is also possible that more acute

separation or traumatic distress stimulated a search for solace in the attachment to the deceased or attempts to make sense of the loss. Alternatively, grief-related distress and attempts to seek security and significance could influence one another in an ongoing iterative process (Gillies & Neimeyer, 2006). Only longitudinal and experimental designs that trace these several components of bereavement adaptation can resolve these thorny questions.

Conclusion

Although the nature of the attachment bond between the bereaved and the deceased has been a focus of scientific theory for nearly a century, serious empirical attention to its role in bereavement adaptation is of recent advent. The present study makes a contribution to this evolving research by documenting the greater separation and traumatic distress experienced by bereaved young adults who report more intense ongoing bonds with those they have lost. Importantly, however, continuing bonds appear to interact with meaning making in response to loss, such that those survivors who are able to make sense of the loss in personally meaningful terms experience fewer symptoms of complicated grief. Moreover, the various component processes of meaning reconstruction (sense making, benefit finding, and progressive identity change) seem to mitigate the impact of other risk factors focusing on the characteristics of the bereaved individual, the relationship to the deceased, and the death itself. Thus, there appears to be ample conceptual, empirical, and clinical warrant for further research on the reorganization of the continuing bond, and the larger processes of meaning reconstruction of which this is a part.

References

Attig, T. (2000). The heart of grief. New York: Oxford.

Balk, D. E. & Vesta, L. C. (1998). Psychological development during four years of bereavement: A longitudinal case study. *Death Studies*, 22, 23–41.

Barry, L., Kasl, S., & Prigerson, H. (2002). Psychiatric disorders among bereaved persons: The role of perceived circumstances of death and preparedness for death. *American Journal of Geriatric Psychiatry*, 10, 447–457.

Boelen, P., Van den Bout, J., De Keijser, J., & Hoitjink, H. (2003). Reliability and validity of the Dutch version of the Inventory of Traumatic Grief (ITG). *Death Studies*, 27, 227–247.

- Boerner, K. & Heckhausen, J. (2003). To have and have not: Adaptive bereavement by transforming mental ties to the deceased. *Death Studies*, 27, 199–226.
- Bonanno, G. A., Wortman, C. B., & Nesse, R. M. (2004). Prospective patterns of resilience and maladjustment during widowhood. *Psychology and Aging*, 19, 260–271.
- Bowlby, J. (1980). Attachment and loss: Loss, sadness and depression (Vol. 3). New York: Basic.
- Calhoun, L. & Tedeschi, R. G. (Eds.). (2006). Handbook of posttraumatic growth. Mahwah, NJ: Lawrence Erlbaum.
- Center for the Advancement of Health. (2004). Report on bereavement and grief research. *Death Studies*, 28, 489–575.
- Currier, J., Holland, J., Coleman, R., & Neimeyer, R. A. (2006). Bereavement following violent death: An assault on life and meaning. In R. Stevenson & G. Cox (Eds.), *Perspectives on violence and violent death*. Amityville, NY: Baywood.
- Currier, J., Holland, J., & Neimeyer, R. A. (2006). Sense making, grief and the experience of violent loss: Toward a mediational model. *Death Studies*, 30, 403–428.
- Datson, S. L. & Marwit, S. J. (1997). Personality constructs and perceived presence of deceased loved ones. *Death Studies*, 21, 131–146.
- Davies, B. (1999). Shadows in the sun: The experiences of sibling bereavement in child-hood. Philadelphia: Brunner/Mazel.
- Davis, C. G., Nolen-Hoeksema, S., & Larson, J. (1998). Making sense of loss and benefiting from the experience: Two construals of meaning. *Journal of Person*ality and Social Psychology, 75, 561–574.
- Faschingbauer, T. R. (1981). Texas revised inventory of grief manual. Houston, TX: Honeycomb.
- Field, N. P. & Friedrichs, M. (2004). Continuing bonds in coping with the death of a husband. *Death Studies*, 28, 597–620.
- Field, N. P., Gal-Oz, E., & Bonanno, G. A. (2003). Continuing bonds and adjustment at 5 years after the death of a spouse. *Journal of Consulting and Clinical Psychology*, 71, 110–117.
- Field, N. P., Gao, B., & Paderna, L. (2005). Continuing bonds in bereavement: An attachment theory based perspective. *Death Studies*, 29, 277–299.
- Field, N. P., Nichols, C., Holen, A., & Horowitz, M. J. (1999). The relation of continuing attachment to adjustment in conjugal bereavement. *Journal of Consulting and Clinical Psychology*, 67, 212–218.
- Folkman, S. F. (2001). Revised coping theory and the process of bereavement. In M. Stroebe, R. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of bereavement research*. Washington, DC: American Psychological Association.
- Freud, S. (1957). Mourning and melancholia. In J. Strachey (Ed.), *The complete psychological works of sigmund freud* (pp. 152–170). London, England: Hogarth Press.
- Gamino, L. A., Sewell, K. W., & Easterling, L. W. (1998). Scott & white grief study: An emprical test of predictors of intensified mourning. *Death Studies*, 22, 333–355.

- Gillies, J. & Neimeyer, R. A. (2006). Loss, grief and the search for significance: Toward a model of meaning reconstruction in bereavement. *Journal of Constructivist Psychology*, 19, 31–65.
- Guidano, V. F. & Liotti, G. (1983). Cognitive processes and emotional disorders. New York: Guilford.
- Hardison, H. G., Neimeyer, R. A., & Lichstein, K. L. (2005). Insomnia and complicated grief symptoms in bereaved college students. *Behavioral Sleep Medicine*, 3, 99–111.
- Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events. *Social Cognition*, 7, 113–116.
- Klass, D. (1999). The spiritual lives of bereaved parents. Philadelphia: Brunner Mazel. Klass, D., Silverman, P. R., & Nickman, S. (1996). Continuing bonds: New understandings of grief. Washington: Taylor & Francis.
- Lehman, D. R., Wortman, C. B., & Williams, A. F. (1987). Long-term effects of losing a spouse or child in a motor vehicle crash. *Journal of Personality and Social Psychology*, 52, 218–231.
- McIntosh, D. N., Silver, R. C., & Wortman, C. B. (1993). Religion's role in adjustment to a negative life event: Coping with the loss of a child. *Journal of Personality and Social Psychology*, 65, 812–821.
- Neimeyer, R. A. (1999). Narrative strategies in grief therapy. Journal of Constructivist Psychology, 12, 65–85.
- Neimeyer, R. A. (2001a). Reauthoring life narratives: Grief therapy as meaning reconstruction. *Israel Journal of Psychiatry*, *38*, 171–183.
- Neimeyer, R. A. (Ed.). (2001b). *Meaning reconstruction and the experience of loss*. Washington, DC: American Psychological Association.
- Neimeyer, R. A. (2004). Research on grief and bereavement: Evolution and revolution. *Death Studies*, 28, 489–490.
- Neimeyer, R. A. (2005). Widowhood, grief and the quest for meaning: A narrative perspective on resilience. In D. Carr, R. M. Nesse, & C. B. Wortman (Eds.), *Late life widowhood in the united states.* New York: Springer.
- Neimeyer, R. A. (2006a). Complicated grief and the quest for meaning: A constructivist contribution. *Omega*, 52, 37–52.
- Neimeyer, R. A. (2006b). Re-storying loss: Fostering growth in the posttraumatic narrative. In L. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research and practice.* Mahwah, NJ: Lawrence Erlbaum.
- Neimeyer, R. A. & Anderson, A. (2002). Meaning reconstruction theory. In N. Thompson (Ed.), *Loss and grief* (pp. 45–64). New York: Palgrave.
- Neimeyer, R. A. & Hogan, N. (2001). Quantitative or qualitative? Measurement issues in the study of grief. In H. S. M. Stroebe, R. Hansson, & W. Stoebe (Ed.), *Handbook of bereavement research* (pp. 89–118). Washington, DC: American Psychological Association.
- Neimeyer, R. A., Prigerson, H., & Davies, B. (2002). Mourning and meaning. *American Behavioral Scientist*, 46, 235–251.
- Osterweis, M., Solomon, F., & Green, M. (Eds.). (1984). *Bereavement*. Washington, DC: National Academy Press.

- Ott, C. H. (2003). The impact of complicated grief on mental and physical health at various points in the bereavement process. *Death Studies*, 27, 249–272.
- Parkes, C. M. (1996). Bereavement (2nd ed.). London & New York: Routledge.
- Prigerson, H. G., Bridge, J., Maciejewski, P. K., Beery, L. C., Rosenheck, R. A., & Jacobs, S. C., et al. (1999). Influence of traumatic grief on suicidal ideation among young adults. *American Journal of Psychiatry*, 156, 1994–1995.
- Prigerson, H. G. & Jacobs, S. C. (2001). Diagnostic criteria for traumatic grief. In M. S. Stroebe, R. O. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of bereavement research* (pp. 614–646). Washington, DC: American Psychological Association.
- Prigerson, H. G. & Maciejewski, P. K. (2006). A call for sound empirical testing and evaluation of criteria for complicated grief proposed by the DSM-V. Omega, 52, 9–19.
- Prigerson, H. G., Maciejewski, P., Reynolds, C. F., Beirhals, A. J., & al., e. (1995). Inventory of complicated grief: A scale to measure maladptive symptoms of loss. *Psychiatry Research*, 59, 65–79.
- Rosenblatt, P. & Wallace, B. (2005). *African American grief.* New York: Routledge. Rubin, S. (1999). The two-track model of bereavement: Overview, retrospect and prospect. *Death Studies*, 23, 681–714.
- Schultz, L. (in press). The influence of maternal loss on young women's experience of identity development in emerging adulthood. *Death Studies*, 31.
- Shear, K., Frank, E., Houch, P. R., & Reynolds, C. F. (2005). Treatment of complicated grief: A randomized controlled trial. *Journal of the American Medical Association*, 293, 2601–2608.
- Silverman, G. K., Johnson, J. G., & Prigerson, H. G. (2001). Preliminary explorations of the effects of prior trauma and loss on risk for psychiatric disorders in recently widowed people. *Israel Journal of Psychiatry*, 38, 202–215.
- Stroebe, M. & Schut, H. (2005). To continue or relinquish bonds: A review of consequences for the bereaved. *Death Studies*, 29, 477–494.
- Stroebe, M. S. (2002). Paving the way: From early attachment theory to contemporary bereavement research. *Mortality*, 7, 127–138.
- Thompson, S. & Janigan, A. (1988). Life schemes: A framework for understanding the search for meaning. *Journal of Social and Clinical Psychology*, 7, 260–280.
- Uren, T. H. & Wastell, C. A. (2002). Attachment and meaning making in perinatal bereavement. *Death Studies*, 26, 279–308.