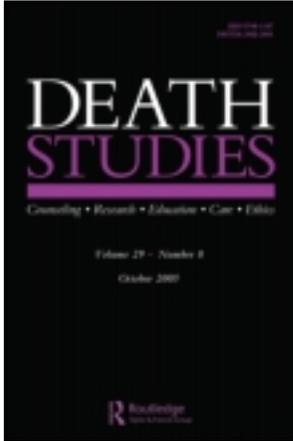


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Death Studies

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/udst20>

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Accepted author version posted online: 01 Feb 2013.

Version of record first published: 20 Feb 2013.

To cite this article: Wendy G. Lichtenthal PhD, Robert A. Neimeyer, Joseph M. Currier, Kailey Roberts & Nancy Jordan (2013): Cause of Death and the Quest for Meaning After the Loss of a Child, *Death Studies*, 37:4, 311-342

To link to this article: <http://dx.doi.org/10.1080/07481187.2012.673533>

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CAUSE OF DEATH AND THE QUEST FOR MEANING AFTER THE LOSS OF A CHILD

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This study examined patterns of making meaning among 155 parents whose children died from a variety of violent and non-violent causes. Findings indicated 53% of violent loss survivors could not make sense of their loss, as compared to 32% of non-violent loss survivors. Overall, there was overlap in sense-making strategies across different causes of death, with many parents invoking spiritual and religious meanings and the cultivation of empathy for the suffering of others. Nonetheless, violent loss survivors described the imperfection of the world and brevity of life more frequently in their narrative responses than parents who lost a child to natural causes, who in turn were more likely to find benefit in the loss in terms of personal growth. Violent loss survivors—and especially those losing a child to homicide—also reported enhanced appreciation of life more frequently than survivors of non-violent losses, and surviving a child's suicide was specifically associated with a change in priorities in the sample. Findings are discussed

Received 11 February 2011; accepted 7 January 2012.

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in terms of common and distinctive themes in meaning making that clinicians may encounter when working with parental bereavement, and the implications these carry for finding spiritual and secular significance in a traumatic loss.

The loss of a child can be a devastating experience, regardless of the cause of death. Studies of bereaved populations suggest, however, that there are differential psychological consequences when a death is sudden versus expected (Barry, Kasl, & Prigerson, 2002), and violent versus nonviolent (Currier, Holland, & Neimeyer, 2006). The mechanisms underlying potentially stark differences in outcome may have to do in part with how the death is processed and interpreted, which could be key to adjustment for many persons. The authors' purpose in conducting the present study was to establish whether different modes of a child's death, either violent (fatal accident, suicide, homicide) or nonviolent (through natural causes), were associated with different patterns of meaning-making in a sample of bereaved parents, many of whom struggled with profound and protracted complications in their grieving following the death of their child (Keesee, Currier, & Neimeyer, 2008).

Prolonged Grief Disorder

Individuals who perceive themselves as having been less prepared for their child's death are at increased risk for more chronic or complicated grief reactions (Barry et al., 2002), such as prolonged grief disorder (PGD), also termed *complicated grief*. PGD is characterized by intense, severe, and functionally impairing grief symptoms, which have been shown to be distinct from bereavement-related depression and anxiety. These symptoms can persist an extended period of time, currently defined as at least 6 months (Prigerson et al., 2009) but potentially lasting several years (Ott, 2003). The symptoms of PGD represent the extreme end of a continuum of bereavement responses that also include adaptive grief responses (Holland, Neimeyer, Boelen, & Prigerson, 2009), which in their severe form have been associated with several negative mental and physical health outcomes (Prigerson et al., 2009; Shear et al., 2011). Researchers have identified various risk factors for PGD,

including the loss of a child and experiencing a violent type of loss (Currier et al., 2006; Prigerson et al., 2009), thereby raising concerns that the convergence of these two forms of loss can lead to a particularly poor prognosis for many persons.

One contemporary line of research on bereavement adaptation focuses on the challenges posed by the loss of a significant loved one for the mourner's assumptive world (Currier, Holland, & Neimeyer, 2009; Janoff-Bulman & Berger, 2000) or self-narrative (Neimeyer, 2006), and the corresponding processes of meaning reconstruction in its aftermath (Neimeyer, 2001; Neimeyer & Sands, 2011). For example, Davis, Nolen-Hoeksema, and Larson (1998) found that making sense of a loss based on one's spiritual or secular beliefs and identifying positive consequences or benefits associated with the loss experience were associated with better adjustment in a sample of bereaved children, parents, spouses, and siblings of the deceased. Conversely, challenges with sense-making and benefit-finding have been linked with higher levels of PGD symptoms in several investigations (Currier et al., 2006; Lichtenthal, Currier, Neimeyer, & Keesee, 2010; Neimeyer, Baldwin, & Gillies, 2006). Although a great deal of support has accumulated on this meaning reconstruction model (Neimeyer & Sands, 2011), more refined research is required about its particulars, including the need for a qualitative focus on the sort of meanings that are actually made of stressful events and how they may relate to outcome (Park, 2010).

The violent or unexpected death (e.g., accident, homicide, suicide) of a loved one has been linked with poorer psychological adjustment in surviving family members (Bradach & Jordan, 1995; Neimeyer et al., 2006; Thompson, Norris, & Ruback, 1998; Wheeler, 1993). One explanation for these findings is that violent losses pose particular challenges to meaning-making. Currier and his colleagues (2006) demonstrated that sense-making, in particular, appears to play a critical role in accounting for PGD symptoms after violent losses, as bereaved individuals who were able to construct a coherent sense of understanding of the violent loss report lower levels of PGD symptoms. In the case of parental bereavement, the ability to identify factors leading up to a child's violent death may facilitate such meaning-making (Murphy, Johnson, & Lohan, 2003; Wu et al., 2008). For example, Murphy, Johnson, and Lohan (2003) found that parents who lost children to suicide were more

likely to find meaning soon after the death if they had some indication of the child's psychological distress beforehand.

But just what sorts of meanings do those individuals coping with the violent death of a loved one seek and find? In a qualitative study of meaning-making with a group of adults who had lost a family member to homicide, Armour (2003) found that the most common themes included the pursuit of justice, the expression of perceived truths about events posthomicide, and living in a way that gives purpose to the loved one's death. Similarly, suicide survivors have reported an increased sense of purposefulness in their lives, as well as efforts to make sense of the death and control its impact (Begley & Quayle, 2007). Murphy, Johnson, and Lohan (2003) found that an important contribution to this effort was recourse to communal and spiritual resources; parents who participated in support groups or who sought religious support were more likely to identify meaning in their child's death by suicide, homicide or accident. Similarly, Possick, Sadeh, and Shamai (2008) found that parents coping with the violent death of children due to a terrorist attack reported finding collective or shared sources of meaning. Thus, although empirical research on patterns of meaning-making in response to violent loss remains somewhat germinal, especially in the tragic circumstance of the loss of a child, recent studies suggest that further investigation of this topic is critical.

Surveying research on adaptation to loss with a particular focus on suicide, McIntosh and Jordan (2010, pp. 68–69) concluded “much evidence is emerging in the larger bereavement literature regarding the importance of sense making and meaning making after a loss . . . [T]hese aspects of grief hold much promise for revealing valuable information regarding our understanding and intervention with survivors following a death by suicide or other traumatic or violent causes.” The present study sought to mine this promise by focusing on differential form of meaning-making as a function of mode of death and its relation to complications in grieving.

Relative to the emerging literature on violent death, even fewer studies of parental bereavement following nonviolent death have examined meaning-making. Barrera et al. (2009) examined parents who lost a child to cancer and found that the most common way in which parents found meaning after their child's death was through finding a renewed purpose in life. Factors associated

with parents' ability to cope with the death and create meaning included the ability to accept the physical loss, to maintain connections to social support and to the child, and to redefine their sense of self (Barrera et al., 2009). Meaning-making during the child's illness may also influence bereavement outcomes. For example, Wu et al. (2008) found that mothers of hematopoietic stem cell transplant recipients who found meaning in their child's illness before the child's death experienced less distress following the death. Just what forms of meaning-making sustain (or trouble) parents in the wake of the death of their children to disease remains to be investigated, however.

Although studies have examined meaning-making in a variety of populations, meaning-making processes among parents who experienced loss of a child to both violent and nonviolent causes of death have been limited. Using a measure of world assumptions (Janoff-Bulman, 1989) and following up on a smaller study comparing parents bereaved by homicide and accident (Wickie & Marwit, 2000–2001), Matthews and Marwit (2003–2004) found that parents whose child was murdered viewed the world as a more malevolent place and had lower levels of self-worth than parents bereaved by accidents or illness. Parents bereaved by illness had the most difficulty with meaningfulness; that is, the sense that the world is just, predictable, within one's control, and that people get what they deserve (Matthews & Marwit, 2003–2004). Still, there is an absence of research on the specific ways in which parents bereaved by different types of death find or are challenged to find meaning after their loss. It is possible that those whose loved ones died by different means might ultimately seek and find different significance in the event, or emphasize different forms of hard-won benefit from the loss experience as they move forward with their lives.

The current study therefore examined associations between cause of death, meaning-making themes, and PGD symptoms in a sample of parents bereaved by a range of causes. In a study of this same sample, Keesee et al. (2008) found that violent death of a child in fact correlated with higher levels of normative grief and PGD symptoms among the bereaved parents. In general, parents who were able to make sense of their child's death reported better post-loss adjustment (Keesee et al., 2008). In a subsequent study with this same group of parents, Lichtenthal et al. (2010) examined narratives

on sense-making and benefit-finding and found that those who explicitly stated that they could not make sense or find benefit in their loss reported more severe PGD symptoms. The purpose of the current study was to expand on these earlier findings by examining (a) the most common meaning-making themes that emerged for violent vs. natural causes of death, (b) differential associations between these themes and different causes of death, both general (i.e., violent vs. natural) and specific (e.g., suicide, homicide, natural sudden loss), and (c) whether cause of death predicts severity of PGD symptoms in the months and years following the child's death.

Method

Participants and Procedures

Participants were bereaved parents, at least 18 years old, who were recruited from two Southeastern United States chapters of The Compassionate Friends (a support group network for bereaved parents) and from a study website linked to bereaved parents Internet sites. The study website described the investigation as an examination of bereaved parents' grief processes. The study activities could either be conducted online or by printing, completing, and mailing in the paper-and-pencil questionnaires. Online participation was anonymous (e-mail addresses and other identifying information were not recorded). Only one parent per family could participate to avoid issues with dependent data from parents of the same child. A total of 156 bereaved parents participated in this study, with 95 parents completing the surveys electronically, and 61 completing pencil-and-paper measures. There were no significant differences in identifying characteristics or grief outcomes between those who completed the surveys online and those who completed them by hand. This study was approved by the University of Memphis Institutional Review Board.

The current study focuses on the 155 participants for whom cause of death data were available. See Table 1 for participant characteristics. A range of causes of death were represented, including miscarriage or stillbirth (6.5%; $n = 10$), natural anticipated (e.g., cancer; 11.6%; $n = 18$), natural sudden (e.g., heart attack; 20.0%; $n = 31$), accident (e.g., motor vehicle fatality; 44.5%; $n = 69$), suicide (11.0%; $n = 17$), and homicide (6.5%; $n = 10$). In keeping with traditional

TABLE 1 Participant Characteristics

Demographic characteristics	Total sample (<i>N</i> = 155)
Age, <i>M</i> (<i>SD</i>) ^a	49.5 (10.5)
Relationship to child, <i>N</i> (%) ^b	
Mother	123 (80.9)
Father	29 (19.1)
Ethnicity [<i>N</i> (%)] ^a	
Caucasian	143 (92.9)
African American	6 (3.9)
Other	5 (2.6)
Death-related circumstances	
Years since loss, <i>M</i> (<i>SD</i>) ^c	5.9 (6.2)
Child age at death (in years) ^d	16.8 (10.5)
Number of surviving children ^a	1.6 (1.1)
Cause of death, <i>N</i> (%) ^c	
Perinatal loss (e.g., stillbirth)	10 (6.5)
Natural anticipated (e.g., cancer)	18 (11.6)
Natural sudden (e.g., heart attack)	31 (20.0)
Accident (e.g., motor vehicle accident)	69 (44.5)
Suicide	17 (11.0)
Homicide	10 (6.5)
Child gender ^e	
Son	96 (64.0)
Daughter	54 (36.0)

Note. Sample size varied due to missing data.

^a*n* = 154. ^b*n* = 152. ^c*n* = 155. ^d*n* = 153. ^e*n* = 150.

ways of categorizing different types of death (Currier et al., 2006), the former three causes were considered nonviolent (38.1%; *n* = 59), and the latter three were considered violent (61.9%; *n* = 96).

Measures

Sense-making was assessed by having participants respond to an open-ended question in writing: "Have there been any ways in which you have been able to make sense of the loss of your child? If so, please, in a brief paragraph, describe that experience." This method corresponds closely to the manner in which other researchers have measured meaning-making in prior studies (Davis et al., 1998; Lehman, Wortman, & Williams, 1987; McIntosh, Silver, & Wortman, 1993; Uren & Wastell, 2002).

Benefit-finding was also assessed by asking participants a qualitative question: "Despite the loss, have you been able to find any benefit from your experience of the loss? If so, please, in a brief paragraph, describe the benefits you have found."

Inventory of Complicated Grief (ICG; Prigerson et al., 1995). The ICG was developed specifically to assess maladaptive reactions to bereavement (Neimeyer, Hogan, & Laurie, 2008; Prigerson et al., 1995; Prigerson et al., 1999). The initial version of the ICG used in the present study includes 19 statements, such as "I can't help feeling angry about his/her death," "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 5-point Likert-like scale describing the frequency of symptoms (from 0 = *never* to 4 = *always*). Scores can range from 0 to 76, with a clinical cutoff around 25 (Neimeyer et al., 2008; Prigerson et al., 1995). As with the strong psychometric properties of the ICG displayed in a number of other studies (Chen et al., 1999; Neimeyer et al., 2008; Prigerson et al., 1997; Prigerson et al., 1999), the ICG yielded a Cronbach's alpha of .94 and average interitem correlation of .43 in the current sample. In support of its validity, this version has been shown to predict a range of serious long-term health and mental health consequences of bereavement (e.g., Neimeyer et al., 2008; Prigerson et al., 1997; Prigerson et al., 1999), justifying its use as a measure of maladaptive responses to loss.

Data Analysis

We developed a content coding system for qualitative analyses of the open-ended sense-making and benefit-finding responses in an earlier study (Lichtenthal et al., 2010), which was applied in the current study as well. Responses were parsed into meaning units, which were defined as segments of the responses that seemed to capture a distinct aspect or type of meaning-making. There were 796 independent meaning units identified, which contained between 1 to 92 words. Forty-two content categories were created by Wendy G. Lichtenthal and Joseph M. Currier, who then independently grouped the content categories into two higher order thematic categories: (a) sense-making themes and

(b) benefit-finding themes. Content categories that related to comprehending causes and reasons (both practical and cosmological) for why the death occurred were grouped as sense-making themes (14 categories). Content categories that described positive consequences associated with the loss experience were grouped as benefit-finding themes (18 categories). The remaining content categories did not involve sense-making or benefit-finding and were grouped as other salient themes. Following development and thematic coding of the 42 content categories, both raters (Wendy G. Lichtenthal and Joseph M. Currier) independently coded the meaning units using these content categories, blinded to whether or not the meaning unit was in response to the sense-making or benefit-finding items. The coders achieved a kappa of .80 (Fleiss, 1981). There were 157 (20%) disparities across the meaning units, which were each resolved by consensus. Meaning units were counted at the level of the respondent so that participants who provided longer written narratives were not given more weight in the analyses; for each of the 42 categories, a value of 0 (*no*) or 1 (*yes*) was marked to indicate whether a participant gave a response that fell into a given category. This approach had the advantage of allowing the calculation of the proportion of parents who discussed a particular category of meaning-making, in such a way that results would be unbiased by the length of their response.

Frequencies of parents' meaning-making themes were counted regardless of whether or not the theme was offered in response to the sense-making or benefit-finding item. If a parent offered a sense-making or benefit-finding response, but also explicitly stated that he/she could not make sense of or find benefit related to his/her loss, both the sense-making/benefit-finding response and the "no sense" or "no benefit" responses were coded. Associations between cause of death and meaning-making categories were examined using chi-square tests. When the expected value in a given cell was less than five, Fisher's exact test was used to examine these associations. To examine the relations between causes of death and severity of grief, we used analysis of variance. It should be noted that 6% of the sample had missing ICG data (typically a few items), which was addressed by averaging the completed items as the participant's overall score and using this as the dependent variable in the analyses (Keese et al., 2008; Lichtenthal et al., 2010).

Results

Most Common Themes Among Parents Who Lost Their Child to a Violent Death

SENSE-MAKING THEMES

As presented in Table 2, of the many parents in the sample who lost their child to a violent cause, the most common theme that emerged in the narratives was that they could not make sense of the death (53.1%; $n = 51$). However, several parents bereaved by violent causes had nonetheless found some way of making sense of their loss by concluding that the death was God's will (16.7%; $n = 16$); endorsing belief in an afterlife where the child was safe or reunion was possible (15.6%; $n = 15$); and/or invoking beliefs about human existence, the imperfection of the world, and the brevity of life (11.5%; $n = 11$). We observed that 47.9% ($n = 46$) of parents who experienced violent loss provided at least one way they made sense of their loss.

BENEFIT-FINDING THEMES

Of parents who experienced a violent loss, 22.9% ($n = 22$) explicitly expressed that there were no benefits associated with their experience (see Table 3). The most common gains cited by parents who lost a child to a violent death included the ability to help others who have experienced loss (21.9%; $n = 21$); increased compassion, empathy, and sensitivity (18.8%; $n = 18$); greater appreciation of life or not taking life for granted (17.7%; $n = 17$); learning about the pain of loss and better relating to others (13.5%; $n = 13$); enhanced spirituality (13.5%; $n = 13$); and benefits to others and society (13.5%; $n = 13$). Nearly three-quarters of parents (72.9%; $n = 70$) who lost a child to a violent cause expressed at least one benefit-finding theme.

Most Common Themes Among Parents Who Lost Their Child to a Nonviolent Death Category

SENSE-MAKING THEMES

As with those parents who lost a child to violent death, those whose child died of nonviolent causes most commonly reported that they could not make sense of the loss (32.2%; $n = 19$). As presented in Table 2, for parents who offered ways in which they had

TABLE 2 Sense-making Themes Emerging from the Narratives of Parents Who Lost a Child to Violent and Nonviolent Death

Sense-making theme	Coding definition	Total sample (<i>N</i> = 155) % (<i>n</i>)	Violent death (<i>n</i> = 96) % (<i>n</i>)	Nonviolent death (<i>n</i> = 59) % (<i>n</i>)	<i>p</i> ^a
No sense	Provided explicit response of “no” to sense-making question or elaboration indicating no sense could be made of the loss.	44.9 (70)	53.1 (51)	32.2 (19)	.011^b
Death was God’s will	Discussed God’s will, plan, or that God knows what is best.	17.9 (28)	16.7 (16)	20.3 (12)	.564 ^b
Theme of an afterlife	Discussed existence of afterlife, continuum between life and death, or the belief that deceased child is safe in afterlife or parent will be reunited with child.	16.0 (25)	15.6 (15)	16.9 (10)	.828 ^b
Beliefs about human existence, the imperfection of the world, and the brevity of life	Discussed beliefs about the inevitability of death, suffering, and negative life events. Discussed the fragility or brevity of life.	10.9 (17)	11.5 (11)	10.2 (6)	.803 ^b
Death attributed to fate/spiritual journey	Discussed fate, destiny, or spiritual journey without mention of God.	9.0 (14)	8.3 (8)	10.2 (6)	.699 ^b

(Continued)

TABLE 2 Continued

Sense-making theme	Coding definition	Total sample (<i>N</i> = 155) % (<i>n</i>)	Violent death (<i>n</i> = 96) % (<i>n</i>)	Nonviolent death (<i>n</i> = 59) % (<i>n</i>)	<i>p</i> ^a
Child is no longer suffering	Discussed how child was no longer physically or mentally suffering as a result of their death.	7.7 (12)	6.3 (6)	10.2 (6)	.375 ^c
Child's behavior	Discussed child's actions (positive, negative, or neutral) that were believed to be related to death.	3.2 (5)	5.2 (5)	0.0 (0)	.157 ^c
Biological/medical explanations	Offered concrete biological or medical explanations for death.	7.1 (11)	4.2 (4)	11.9 (7)	.105 ^c
Purpose of child's life/death	Discussed the purpose of the child's presence in the world or lessons learned through the child's death in the context of why the death occurred.	3.8 (6)	3.1 (3)	5.1 (3)	.675 ^c
Information-seeking about cause of death	Discussed obtaining information about the death in context of understanding why the death occurred.	3.2 (5)	3.1 (3)	3.4 (2)	1.000 ^c

Parent's role in death	Discussed own actions (positive, negative, or neutral) that were believed to be related to death.	3.2 (5)	2.1 (2)	5.1 (3)	.369 ^c
Random	Discussed death as a random event.	1.3 (2)	2.1 (2)	0.0 (0)	.525 ^c
Laws of physics	Discussed the laws of physics in the context of understanding why the death occurred (e.g., give an example).	0.6 (1)	1.0 (1)	0.0 (0)	1.000 ^c
Other sense-making themes	Discussed another sense-making theme/explanation not listed above to come to terms with their child's death.	13.5 (21)	11.5 (11)	16.9 (10)	.332 ^b

Note. Numbers in this table reflect the percentage and amount of parents that discussed a given theme. Parents may have discussed multiple themes, and therefore this table details how common discussion of a theme was in the narrative responses.

^aBolded value indicates a statistically significant association between violent death and sense-making theme at the $p < .05$ level.

^bChi-square test.

^cFisher's exact test (used instead of the chi-square test when the expected frequency in at least one cell was less than five).

TABLE 3 Benefit-Finding Themes Emerging From the Narratives of Parents Who Lost a Child to Violent and Nonviolent Death

Benefit-finding theme	Coding definition	Total sample (<i>N</i> = 155) % (<i>n</i>)	Violent death (<i>n</i> = 96) % (<i>n</i>)	Nonviolent death (<i>n</i> = 59) % (<i>n</i>)	<i>p</i> ^a
No benefit	Provided explicit response that no benefits were related to the loss experience.	20.5 (32)	22.9 (22)	16.9 (10)	.373 ^b
Help others who have experienced loss	Discussed actions taken to help others or desire to help others who have experienced loss.	20.5 (32)	21.9 (21)	18.6 (11)	.629 ^b
Increased compassion/empathy/sensitivity in general	Discussed increases of compassion, empathy, or sensitivity in general, with no direct mention of its relationship to relating to bereaved individuals.	16.7 (26)	18.8 (18)	13.6 (8)	.401 ^b
Greater appreciation of life/do not take life for granted	Discussed heightened appreciation of life, staying in the moment, taking one day at a time, and/or not taking life for granted.	14.7 (23)	17.7 (17)	10.2 (6)	.200 ^b
Learned about the pain of loss and can relate to others	Discussed increases of compassion, empathy, or sensitivity towards other bereaved individuals.	13.5 (21)	13.5 (13)	13.6 (8)	.998 ^b
Enhanced spirituality	Discussed increases in spirituality, faith, or religiosity.	13.5 (21)	13.5 (13)	13.6 (8)	.998 ^b
Benefits to others/society	Discussed how consequences of child's death benefited others (e.g., organ donation) or society (e.g., laws passed).	10.3 (16)	13.5 (13)	5.1 (3)	.093 ^b

Relationships strengthened or developed	Discussed the strengthening of current relationships or the formation of new personal relationships.	12.2 (19)	11.5 (11)	13.6 (8)	.699 ^b
Other themes of personal improvement/growth	Discussed themes of personal growth other than those detailed (e.g., other than increased sensitivity). Examples included being wiser, more patient, and more tolerant.	12.8 (20)	10.4 (10)	16.9 (10)	.239 ^b
Expression of appreciation of relationships	Discussed increased appreciation of others or heightened ability to express appreciation of others (distinct from mentioning strengthening of relationships).	7.7 (12)	8.3 (8)	6.8 (4)	1.000 ^c
Changes in priorities	Discussed changes in priorities, or changes in the importance of roles, relationships, time spent, or what is distressing.	7.1 (11)	8.3 (8)	5.1 (3)	.534 ^c
Development of relationships to other children	Discussed giving birth to or adopting other children or improvement of relationships with other children.	7.7 (12)	6.3 (6)	10.2 (6)	.375 ^c
Stronger, improved coping, or less afraid	Discussed ways in which felt stronger, that could cope with difficult situations, or was less afraid in general or of specific issues, like dying.	8.3 (13)	4.2 (4)	15.3 (9)	.033^c

(Continued)

TABLE 3 Continued

Benefit-finding theme	Coding definition	Total sample (<i>N</i> = 155) % (<i>n</i>)	Violent death (<i>n</i> = 96) % (<i>n</i>)	Nonviolent death (<i>n</i> = 59) % (<i>n</i>)	<i>p</i> ^a
Others demonstrated support and care	Described efforts made by friends and family following their loss.	3.2 (5)	4.2 (4)	1.7 (1)	.650 ^c
Furthered education or changed careers	Discussed pursuing classes, higher education, or a desired change in careers.	3.8 (6)	3.1 (3)	5.1 (3)	.675 ^c
Lifestyle improvements	Discussed positive changes in life that include moving, ending a difficult marriage, etc.	2.6 (4)	3.1 (3)	1.7 (1)	1.000 ^c
Learned valuable lesson or about something valued	Described lesson learned about life, death, relationships, etc.	1.3 (2)	1.0 (1)	1.7 (1)	1.000 ^c
Other benefit-finding themes	Described another positive consequence/benefit not listed; (e.g., freedom, travel, legacy).	16.1 (25)	14.6 (14)	18.6 (11)	.505 ^b

Note. Numbers in this table reflect the percentage and amount of parents that discussed a given theme. Parents may have discussed multiple themes, and therefore this table details how common discussion of a theme was in the narrative responses.

^aBolded value indicates a statistically significant association between violent death and benefit-finding theme at the $p < .05$ level.

^bChi-square test.

Fisher's exact test (used instead of the chi-square test when the expected frequency in at least one cell was less than five).

made sense of their child's death, reasons included the belief that the death was God's will (20.3%; $n = 12$); discussion of an afterlife in which the child was safe, no longer suffering, and/or would be reunited with the parent (16.9%; $n = 10$); and biological and medical explanations (11.9%; $n = 7$). Sixty-one percent of parents ($n = 36$) who experienced a nonviolent loss provided at least one way in which they made sense of their child's death.

BENEFIT-FINDING THEMES

Of the parents who lost a child to nonviolent causes, 16.9% ($n = 10$) expressed that there were no benefits associated with their loss experience. As outlined in Table 3, common benefits cited by parents bereaved by nonviolent causes included helping others who have experienced loss (18.6%; $n = 11$); personal improvement and growth (16.9%; $n = 10$); stronger, improved coping, or feeling less afraid (15.3%; $n = 9$); increased general compassion, empathy, sensitivity (13.6%; $n = 10$); learning about the pain of loss and the ability to relate to others (13.6%; $n = 10$); enhanced spirituality (13.6%; $n = 10$); and the strengthening or development of relationships (13.6%; $n = 10$). Of the nonviolently bereaved parents in this study, three-quarters (74.6%; $n = 44$) described at least one benefit associated with their loss experience in their narrative response.

Associations Between Cause of Death and Meaning-Making Themes

SENSE-MAKING THEMES

Using chi-square tests of significance and Fisher's exact tests, we next examined whether specific qualitative themes were associated with different causes of death. Parents whose child died from violent causes were more likely to explicitly state that they could not make sense of the death of their child, $\chi^2(1, N = 155) = 6.46$, $p = .01$. See Table 2 for details. Examining different causes individually, we found that parents who lost a child to natural anticipated causes were less likely to explicitly express that they were unable to make sense of the loss than survivors of other types of losses, $\chi^2(1, N = 155) = 4.33$, $p = .038$. These parents were also more likely to state that they made sense of their loss by thinking about how their child was no longer suffering, $p = .035$, Fisher's exact test. Parents who lost a child to homicide were significantly more likely to cite explanations related to their beliefs about

human existence, the imperfection of the world, and the brevity of life, $\chi^2(1, N=155) = 9.23, p = .002$. They also frequently affirmed that the death was God's plan, although the association was marginally significant, likely because this was a common sense-making explanation for survivors of other types of losses as well, $\chi^2(1, N=155) = 3.48, p = .062$. No distinctive sense-making themes were significantly associated with perinatal, natural sudden, accident, or suicide losses when these causes were considered individually ($ps > .10$).

Controlling for time since the loss in logistic regression analyses predicting the presence of sense-making themes resulted in the same pattern of findings. These findings should be interpreted in light of the multiple statistical tests conducted. Application of the conservative Bonferroni correction for the associations between cause of death and the 14 sense-making themes would result in accepting those statistical tests at a significance level of less than .0036 as statistically significant, which would retain only the association between homicide and beliefs about human existence and the brevity of life.

BENEFIT-FINDING THEMES

Parents whose child died from nonviolent causes were more likely to report that they were stronger, had improved coping, or were less afraid than parents who were bereaved by violent causes, $p = .033$, Fisher's Exact Test. Details can be found in Table 3. Surviving a homicide was associated with expressing a greater appreciation of life ($p = .043$, Fisher's exact test) and greater appreciation of relationships ($p = .031$, Fisher's exact test). Parents who lost a child to suicide were more likely to state that they had changed their priorities when compared to parents bereaved by other causes ($p = .003$, Fisher's exact test). No other significant results emerged from analyses of benefit-finding themes. Controlling for time since the loss in logistic regression analyses predicting the presence of benefit-finding themes resulted in the same pattern of findings. Application of the conservative Bonferroni correction for the associations between cause of death and the 18 benefit-finding themes would result in accepting those statistical tests at a significance level of less than .0028 as statistically significant, which would lead us to consider the above findings nonsignificant.

Associations Between Cause of Death and Prolonged Grief Disorder

PGD symptoms were common in this sample, with 51.6% ($n = 80$) of the sample scoring above the ICG clinical cutoff ($M = 29.1$, $SD = 16.1$). Consistent with prior findings (Keesee et al., 2008), parents who lost a child to a violent death had significantly higher ICG scores ($M = 33.7$, $SD = 15.4$) than nonviolently bereaved parents ($M = 23.6$, $SD = 15.5$), $F(1, 153) = 15.71$, $p < .001$. When both individual causes of death and whether or not parents expressed that they could not make sense of their loss were included as predictors of ICG scores in a univariate general linear model, main effects for both cause of death and difficulty with sense-making emerged. There were significant differences in ICG scores between the cause of death groups, $F(5, 143) = 5.83$, $p < .001$. Results of Tukey post hoc tests revealed significantly higher ICG scores among those in the accident group compared to both those suffering perinatal loss, $p < .001$, and natural anticipated loss, $p = .027$. Furthermore, those in the homicide group reported greater grief complications compared to survivors of perinatal loss, $p = .005$ (see Figure 1). ICG scores were also

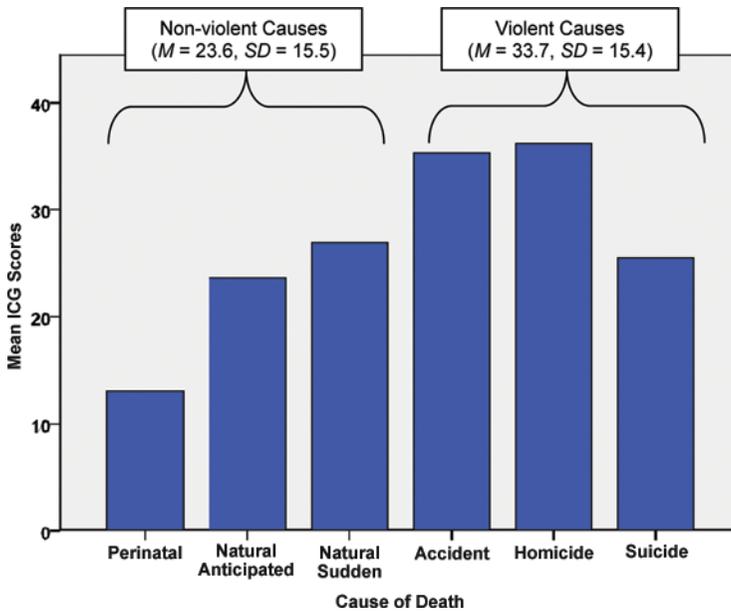


FIGURE 1 Mean inventory of complicated grief scores by cause of death (color figure available online).

significantly higher among parents who reported that they could not make sense of the loss ($M=35.9$, $SD=14.4$) when compared to those who did not express this ($M=24.8$, $SD=15.7$), $F(1, 143)=6.03$, $p=.015$. The interaction between cause of death and difficulty with sense-making failed to reach statistical significance ($p>.10$).

Likewise, when cause of death and whether or not parents expressed that they could identify positive consequences related to their loss were included in a univariate general linear model predicting ICG scores, we found a significant main effect for cause of death, $F(5, 143)=2.62$, $p=.027$. We observed the same pattern of results in Tukey post hoc tests as described above; there were significantly higher ICG scores among those in the accident group compared to both those suffering perinatal loss, $p<.001$, and natural anticipated loss, $p=.024$. Those in the homicide group reported significantly higher ICG scores than the perinatal loss group, $p=.004$. There was also a main effect for difficulty with benefit-finding, with higher ICG scores among parents who reported that they could not identify benefits related to their loss experience ($M=38.7$, $SD=12.0$) when compared to those who did not express this type of positive consequence ($M=27.5$, $SD=16.2$), $F(1, 143)=10.34$, $p=.002$. Interestingly, a marginally significant interaction between cause of death and difficulty with benefit-finding was found, $F(5, 143)=2.27$, $p=.051$. Although ICG scores among perinatal loss, natural anticipated, accident, and suicide survivors were substantially higher among those who expressed that they could not find benefits related to their loss, ICG scores among natural sudden and homicide survivors were on average approximately the same. That is, the relationship between challenges with benefit-finding and ICG scores was less notable among parents in these two groups.

Discussion

The role of meaning has been proposed as a crucial factor in adjustment to bereavement involving the loss of a child and violent causes of death (Currier et al., 2006, Keesee et al., 2008, McIntosh et al., 1993, Murphy, Johnson, & Lohan, 2003). This study attempted to extend the literature by examining different patterns of meaning-making among parents bereaved by a range of causes, including perinatal, natural anticipated, natural sudden, accident, homicide, and suicide. In general, findings suggested that

sense-making was significantly more challenging for parents who suffered a violent loss (i.e., accident, homicide, or suicide) compared to those who suffered a nonviolent loss (i.e., perinatal, natural anticipated, or natural sudden causes). Over half of parents who suffered a violent loss expressed that they could not make sense of their loss at the time of the study, as compared to the less than one-third of parents bereaved by nonviolent causes. Prior studies similarly found high rates of difficulty with sense-making among parents whose child suffered a violent death. For example, Lehman, Wortman, and Williams (1987) found that 59% of parents who lost a child in a motor vehicle accident reported that they had not made sense of or found meaning in their loss. Even five years after their child's death, Murphy, Johnson, and Lohan (2003) found that 43% of parents surviving the violent death of a child could not make meaning of their loss.

One explanation for the challenges with sense-making among those who experienced a violent death is that such deaths are sudden, which prevents the possibility of processing the death compared to those who lose someone to natural anticipated causes. In addition, although no statistically significant associations emerged, we observed that a greater percentage of those bereaved by nonviolent death specifically noted that they made sense of their loss via apparent beliefs that their child's death was God's will, that their child is no longer suffering, and by accepting biological/medical explanations. These attributions may be particularly adaptive and comforting (in contrast to, e.g., the potentially disturbing belief that their child's behavior played some role in his/her own death, which only violent loss sufferers offered).

Regardless of the cause of death, a considerable proportion of parents (53%) expressed ways they were able to make sense of their loss. Among survivors of both violent and nonviolent losses, parents most commonly incorporated the belief that the death was God's will in their attempts at sense-making, and many parents reported a belief in an afterlife, where their child was safe and where they could be reunited. Violent loss survivors also frequently described beliefs about the imperfection of the world and the brevity of life as ways of making meaning of their child's death. Specifically, among the 70% of parents bereaved by homicide who were able to offer an explanation for their loss,

sense-making themes most frequently centered around the shortness of life and the belief that their children's deaths had some meaning in a divine scheme. Such findings comport with evidence that, especially when losses are tragic, survivors frequently turn to their philosophic and spiritual resources for comfort and comprehension (Burke, Neimeyer, McDevitt-Murphy, Ippolito, & Roberts, 2011; Wortmann & Park, 2008).

Findings generally indicated that participants had less difficulty with finding benefits related to their loss than they did with making sense of it. Nearly three-quarters of the sample expressed at least one positive consequence resulting from their loss experience, and this proportion was similar among parents bereaved by violent and nonviolent losses. Among both violent and nonviolent loss survivors, the most common benefit-finding themes included the ability to help others who experience loss and increased compassion and understanding of others' pain. Thus, irrespective of the cause of death, the bereaved parents in our sample reported frequent posttraumatic growth (Calhoun & Tedeschi, 2006) in the form of enhanced empathy for others confronting similar suffering. In addition, reports of deepened spirituality were frequently expressed by participants, regardless of the child's cause of death. To the extent that meaning-making processes frequently involve common long-standing global beliefs that predate parents' loss experience (e.g., death is God's will, life is finite, everyone's life has a purpose), the commonalities in how meaning was made regardless of cause of death are not surprising (Park, 2010).

Notwithstanding striking overlap in the meaning-making strategies expressed by the bereaved parents, several distinct differences were revealed in the sample. Among violent loss survivors, an enhanced appreciation of life emerged as being a particularly salient theme compared to parents whose children died by natural causes, as if the sudden and horrific loss sharpened awareness of life's preciousness for many. Parents bereaved by homicide were also more likely to report a greater appreciation of relationships than parents bereaved by other causes, underscoring the importance of available social networks in postloss adaptation for this especially vulnerable group of survivors (Burke, Neimeyer, & McDevitt-Murphy, 2010). Although these results are subject to a variety of interpretations, the sudden nature of these losses may heighten one's awareness of the finitude and value of both life

and loving relationships. For parents surviving suicide, which presumably was a consequence of their child's emotional pain, the death may also have led to the choice to pursue a more purpose-driven life. This may explain in part why this form of loss was associated with a change in life priorities for many of the parents, a pattern frequently observed among suicide survivors (Neimeyer & Sands, 2011).

Compared to parents who lost their child to a violent death, those whose children died naturally reported higher rates of personal growth and improved coping. This group consisted largely of parents of children with chronic illnesses, many of whom likely weathered persistent caregiving-related stressors. Coping with these stressors may have presented opportunities for meaningful self-sacrifice, heightened tolerance of negative emotions, and recognition of their abilities to cope with extremely stressful situations (Farran, Keane-Hagerty, Salloway, Kupferer, & Wilken, 1991; Folkman, Chesney, & Christopher-Richards, 1994). These experiences may have also permitted the opportunity to engage in sense-making while the disease process unfolded. Indeed, parents whose child died of natural anticipated causes appeared to have significantly less difficulty making sense of their loss at the time of the study. When compared to survivors of other types of losses, they were more likely to report the belief that their child was no longer suffering as a way of making sense of the death. Parents bereaved by a natural sudden death also offered several ways in which they made sense of their loss. Although no one theme was particularly salient for this subgroup relative to the others, 61% of parents who lost their child suddenly to a natural cause were able to provide at least one explanation for their child's death.

Perinatal loss survivors were the least likely of this group to provide responses that were coded as one of the sense-making themes. Of the 10 parents bereaved by perinatal causes, four did not provide any response to the question about sense-making at all. Six parents did provide responses, however: three parents provided a response that fell within the sense-making categories, and another three parents provided responses that were coded as benefit-finding themes (i.e., they made sense of their loss by reflecting on the positive consequences of the experience, which, for this small group centered around personal growth and increased compassion). Thus, although the quest for meaning for these

parents often took a different form than that pursued by those suffering bereavement by violent means, meaning-making themes were no less evident in this subsample.

Notably, we observed that some parents offered at least one way in which they made sense of or found benefit related to their loss in response to the open-ended questions, and yet also explicitly stated in their narrative that they could not make sense of or find benefit related to the death. For example, 50% (five out of 10) of homicide survivors explicitly stated that they could not make sense of their loss, despite the fact that 70% (seven out of 10) of homicide survivors offered at least one way in which they made sense of their loss. Notably, three of these seven (43%) also explicitly stated that they could not make sense of their loss. Similarly, 52% (36 out of 69) of accident survivors stated that they could not make sense of the loss, and yet 46% (32 out of 69) provided at least one explanation or causal attribution for the death. Of the 32 who provided at least one way that they made sense of their loss, 13 (41%) also explicitly stated that they could not make sense of the loss. Although at lower rates, these seemingly contradictory sense-making responses also occurred among survivors of perinatal (33%; one of three), natural anticipated (14%; two of 14), natural sudden (26%; five of 19), and suicide deaths (29%; two of seven). These findings likely reflect the complexity of these meaning-making processes. Even if parents hold beliefs about causal attributions or have observed positive consequences, some meanings that are made may be less “satisfactory” than others. In addition, the idea of having made meaning of the loss may be aversive and viewed by parents as admittance of acceptance or being “okay” with the death.

In keeping with earlier work (Keesee et al., 2008), parents bereaved by violent causes and parents reporting difficulties with sense-making and benefit-finding exhibited higher levels of PGD symptomatology than those bereaved by nonviolent causes and those who did not express meaning-making challenges. In terms of the specific causes of death, parents whose children died via homicide and accidents had significantly more severe grief than survivors of perinatal and natural anticipated causes. As noted above, there was a subset of parents in both of these groups who expressed that there was no sense in their loss and yet were able to provide causal attributions in their narratives. Rates of this

phenomenon were highest among parents bereaved by homicide and accidents. It may be that the struggle to assimilate and accommodate conflicting beliefs exacerbates grief symptoms. Alternatively, elevated PGD symptoms may challenge one's ability to comfortably acknowledge any meaning they have made.

Although we did not find an interaction between cause of death and difficulty with sense-making, we did observe that difficulties with benefit-finding had a less consistent relationship with PGD symptoms among survivors of natural sudden deaths and homicide. In our earlier study, we reported that sense-making themes associated with lower levels of PGD (controlling for background characteristics) included the belief that one's child was no longer suffering and the belief that the death was God's will, and associated benefit-finding themes included enhanced spirituality and changes in one's priorities (Lichtenthal et al., 2010). One might expect that parents bereaved by natural causes more commonly endorsed those meaning-making themes that have been linked to lower levels of PGD symptoms, but we did not observe this pattern in the current study. It may be that other challenges to one's meaning-making system explain this finding. In their examination of assumptive world views among parents bereaved by different causes, Matthews and Marwit (2003–2004) found that parents bereaved by illness had the most negative views about the meaningfulness of the world, which, along with negative views about one's self-worth, was associated with more intense grief symptoms (Matthews & Marwit, 2003–2004).

Strikingly, relatively lower levels of PGD were found among survivors of suicide as well, despite its being violent by definition. This counterintuitive result could be explained by the finding that suicide survivors were more likely to find meaning in their loss than survivors of accidents or homicide, perhaps as a result of their common effort to reconstruct the mind-set of their loved one as a way of making sense of his or her actions (Sands, Jordan, & Neimeyer, 2010).

Clinical Implications

What might the current findings suggest that could inform clinical intervention with bereaved parents seeking services in the aftermath of their loss? Perhaps the overriding implication is that professionals

should be attuned to the frequent struggle for significance in a seemingly senseless death, which was particularly salient when the deaths were sudden and violent, but in some measure characterized a high percentage of parents facing the death of their children to natural causes as well. Given the tendency of both sets of parents to seek meaning in religious terms, it would seem appropriate for secular as well as spiritually oriented counselors to inquire whether they were finding some way to make sense of their loss, and whether this was changing over time. Although “positive religious coping” involving finding a larger significance in tragedy is a resource for many persons in crisis (Koenig, 2005) and one associated with better adaptation among bereaved parents specifically (Lichtenthal et al., 2010), clinicians should guard against the assumption that spirituality is necessarily an unproblematic resource in the context of bereavement. It is incumbent on professionals to explore whether the trauma of a child’s death also challenged or undermined parents’ faith in a way that requires review and revision of long-cherished beliefs, or engagement with existential issues that complicate the loss *per se*. Clinicians may also find utility in addressing existential distress through meaning-centered therapeutic techniques that emphasize the suffering parent’s ability to choose his/her attitude in the face of profound suffering, and reorienting them toward other sources of meaning in their life (Breitbart, 2004; Breitbart et al., 2010; Lichtenthal & Breitbart, 2012).

A further implication of these findings is that parents who face the death of their child by any cause, but perhaps most acutely through violent means, frequently seek meaning in the experience through empathic connection with the similar suffering of others. This largely altruistic motivation has also been noted in qualitative studies of violent loss survivors (Armour, 2003) and suggests the relevance of group interventions in which parents can not only receive but also give sensitive support to others who are in pain. In a more ongoing sense, it also underscores the possible relevance of joining parents in constructing “legacy projects” (Lewis & Hoy, 2011) through which they act on the meaning of their children’s lives and deaths, perhaps through foundation of a scholarship fund, volunteer work in a cause of relevance to their child’s life, or taking action in the social world to mitigate similar loss for others.

Beyond these general suggestions, the current findings also highlight some of the distinctive themes that clinicians may

encounter with parents whose children died from various causes. Because loss associated with homicide and accidents seemed to engender greater awareness of the preciousness of life and love, professionals should be prepared to join parents in seeking affirmative lessons in the loss for what ultimately has value, while taking care not to gloss over the real struggles associated with parental bereavement, especially when parents face the demands of caring for surviving children (Buckle & Fleming, 2010). Similarly, awareness that parents of children who died by suicide often seek to reorient to life by affirming relational over material goals can prompt clinicians to embrace this as a constructive outgrowth of the crisis of meaning engendered by their child's fatal choice (Sands, Jordan, & Neimeyer, 2010). Finally, especially for clinicians working in pediatric oncology, palliative care, and hospice contexts, it is important to recognize that parents' attempts to make sense of their loss frequently imply a need to understand the disease processes and attendant medical conditions entailed in their child's illness and treatment. In such settings, psychological support therefore can involve serving as a liaison and interpreter between the client and a medical team that may sometimes be rushed, uncomfortable, or uncommunicative. In addition, in view of findings that parents who lost children to natural death reported improvements in coping and personal growth, clinicians working with them can take care to explore how they see themselves developing as persons in light of their experience, validating hopeful changes while acknowledging the high price they have paid for them (Tedeschi & Calhoun, 2004). In all of such therapeutic work, however, it is worth cautioning against a "rush to meaning" through pressing prematurely for parents to accommodate a traumatic transition. Although the eventual ability of parents to do so was strongly evidenced in this study, these meanings likely evolved across months and years of effort, rather than hastily in the aftermath of devastating loss.

Limitations and Future Directions

Findings from this study should be interpreted with several limitations in mind. First, this was a cross-sectional investigation consisting primarily of Caucasian mothers who were seeking support through The Compassionate Friends or online bereaved parent

resources, limiting our ability to determine causal relationships and the generalization of our results. It should be noted, however, that similar themes have been observed in more ethnically diverse groups struggling with similar losses (Burke et al., 2011; Murphy, Johnson, Wu, Fan, & Lohan, 2003). The study was also limited by the relatively small samples in some of the cause of death and thematic categories, which may have resulted in a Type II error in our examination of associations. Power in the current study may have been insufficient to detect relationships. Because statisticians have warned against conducting retrospective power analyses using observed data, we did not calculate post hoc power to further explore this (Hoenig & Heisey, 2001). Our inclusion of Bonferroni adjustments for the cause of death and meaning-making associations was meant to assist with interpretation of our findings; given we were not testing the universal null hypothesis and that application of this adjustment only increases the risk of a Type II error (Perneger, 1998), we suggest readers interpret the data using all information available.

To circumvent problems with dependencies within the sample, we did not include both parents in a given bereaved family, which precludes a comparison of mothers and fathers of the same child, which may have resulted in a selection bias within households. On a related point, fathers were underrepresented in the sample, such that potentially significant gender differences in grieving call for closer analysis in future research (Doka & Martin, 2010; Murphy, Johnson, & Lohan, 2003). In addition, the “violent” and “nonviolent” death categories on which we relied were defined by our team rather than the perceptions of the bereaved parents, when the psychological reality for survivors could be somewhat different, as when parents are haunted by images of aggressive efforts to resuscitate a child dying of “natural” causes, or when they view death by suicide as releasing both the child and family from a long period of torment. Future investigations could therefore benefit from greater qualitative attention to the meanings parents make of the death itself and to their perception of meaning-making processes. It is also important to examine why some resilient individuals who do not struggle with poor psychological health do not report engaging in meaning-making processes (Bonanno, Wortman, & Nesse, 2004; Davis, Wortman, Lehman, & Silver, 2000). Of course, the present findings also call for replication with diverse

groups and larger samples of bereaved parents, as well as with other groups of survivors suffering different losses, to see whether the themes identified here hold across various causes of death even when the deceased is not one's child. The clinically useful themes found in the present study and their linkage to prolonged grief outcomes suggest that this research could be worthwhile.

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