Predictors of Grief Following the Death of One’s Child: The Contribution of Finding Meaning

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This study examined the relative contribution of objective risk factors and meaning-making to grief severity among 157 parents who had lost a child to death. Participants completed the Core Bereavement Items (CBI; Burnett, Middleton, Raphael, & Martinek, 1997), Inventory of Complicated Grief (ICG; Prigerson et al., 1995), questions assessing the process and degree of sense-making and benefit-finding, and the circumstances surrounding their losses. Results showed that the violence of the death, age of the child at death, and length of bereavement accounted for significant differences in normative grief symptoms (assessed by the CBI). Other results indicated that the cause of death was the only objective risk factor that significantly predicted the intensity of complicated grief (assessed by the ICG). Of the factors examined in this study, sense-making emerged as the most salient predictor of grief severity, with parents who reported having made little to no sense of their child’s death being more likely to report greater intensity of grief. Implications for clinical work are discussed. © 2008 Wiley Periodicals, Inc. J Clin Psychol 64:1145–1163, 2008.

Keywords: grief; bereavement; parental bereavement; loss of a child; meaning-making; sense-making; benefit-finding

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Losing one’s child to death can be a devastating experience that places a parent at heightened risk of psychological suffering and decrements in functioning (Rando, 1983; Sanders, 1980). Compared to losing other loved ones, the death of a child is inherently out of synchrony with the family life cycle and violates the perceived order of natural living. Contrary to other losses, a child’s death also often comes without warning before his or her expected time to die. Insofar as a child’s development largely depends on the quality of the attachment relationship with his or her parent(s), being a parent is an underestimated developmental achievement for many persons that can engender a sense of identity and purpose (Rubin & Malkinson, 2001). Therefore, when a child dies, many parents not only experience sadness over losing a valued member of the family; they feel that a part of themselves has somehow died as well (Malkinson & Bar-Tur, 2005). Although the majority of bereaved parents find a way to resume productive lives, studies have shown that grief symptoms for parents who outlive their children frequently endure throughout the life span (Dyregrov & Dyregrov, 1999; Lehman, Wortman, & Williams, 1987; Malkinson & Bar-Tur, 2005; Martinson, Davies, & McClowry, 1991; Rubin, 1990). However, few studies have sampled bereaved parents with substantial variability in times since loss or examined several of the more clinically relevant factors that could be crucial to identifying the subset of bereaved parents who may benefit from a psychotherapeutic intervention (see Schut, Stroebe, van den Bout, & Terheggen, 2001, for review).

The existing literature suggests several possible risk factors for bereaved parents that increase the likelihood of adverse grief outcomes (see Rubin & Malkinson, 2001, for review). For example, there is some indication that mothers face greater difficulties adapting to the death of a child than fathers (Rando, 1983; Scwab, 1996; Sidmore, 1999). In addition, studies have shown that parents who lose a child by a violent death (i.e., homicide, suicide, or fatal accident) are at increased risk of poor bereavement adaptation (Lehman et al., 1987; Murphy et al., 1999; Murphy, Johnson, Chung, & Beaton, 2003a). Another relevant factor relates to the presence of other children in the family, as parents who lose their only child appear to have a more difficult time (Dyregrov, Nordanger, & Dyregrov, 2003). Although more research is needed, at least one study supports the notion that parents who lose older children may fare worse in the adjustment process (Rubin, 1990). Possibly reflective of “bereavement overload,” a phenomenon in which an individual confronts multiple losses, such that one loss cannot be accommodated before another occurs (Neimeyer & Holland, 2006), there is also some suggestion that parents who have faced multiple deaths tend to report poorer outcomes than those who experienced a single loss (Rando, 1983). Any of these risk factors may contribute to adverse grief outcomes and signify the need for a thorough assessment to determine whether clinical intervention is indicated. Nonetheless, most studies on parental bereavement have only focused on one or two of these risk factors at once, which limits the ability to detect confounding variables or generate other explanations for the results.

A notable exception to this trend pertains to a recent longitudinal study conducted by Wijngaards-de Meij and colleagues (2005). They tracked symptoms of grief and depression among 219 couples who had lost children at 6, 13, and 20 months after the death. Focusing on many of the aforementioned risk factors related to the context of the death and individual parent (e.g., age, gender), they found that the

1For ease of presentation, we use the term “parent” to refer broadly to any biologically or nonbiologically related individual who assumes a family caregiver role for a child.
cause of death, number of remaining children, and child age each accounted for unique variance in grief outcomes in a multivariate analysis. In particular, as one would predict, parents whose children had experienced a violent death and who had lost their only child reported higher grief symptoms. Age of the child emerged as a significant nonlinear predictor, as parents of the youngest and oldest aged children in the sample reported comparatively less grief. Also, Wijngaards-de Meij and colleagues found that contextual factors related to the circumstances surrounding the death (e.g., cause of death, age of child) accounted for differences in grief symptoms between the parents, but that these same factors failed to predict depression. These results largely corroborate those of prior research and underscore the importance of attending to objective risk factors with bereaved parents in considering whether clinical intervention may be indicated. However, as even the most well-conducted studies have limitations, Wijngaards-de Meij and colleagues were not able to account for one of the more psychologically oriented factors of particular relevance in cases of parental bereavement.

In view of evidence from quantitative (Florian, 1989; Lehman, Wortman, & Williams, 1987; Matthews & Marwit, 2003; McIntosh, Silver, & Wortman, 1993; Murphy, Johnson, & Lohan, 2003; Uren & Wastell, 2002; Wheeler, 1993) and qualitative (Braun & Berg, 1994; Wheeler, 2001) studies, it appears that many bereaved parents are faced with a crisis of meaning. Beyond attending to objective risk factors, the results of these studies support an understanding of grief as an interpretive phenomenon in which a sizeable subset of bereaved parents are faced with the challenging task of reconstructing a personal world of meaning after their child’s death (Gillies & Neimeyer, 2006; Neimeyer, 2001). Consistent with the work of Janoff-Bulman (1992), this crisis of meaning could be conceptualized in the following terms: (a) parents bring a set of preexisting beliefs about themselves, the world, and the future to the loss experience; (b) the death of a child can violate or even shatter these basic assumptions; (c) when the loss cannot be fitted into the bereaved parents’ belief systems, parents are launched into a profound and typically prolonged struggle to adapt their personal world of meaning to “make sense” of the experience; and (d) complications in the grieving process result when they are unable to find meaning within the context of their worldview or to initiate changes in identity to assimilate the loss. From this perspective, the intense and enduring symptoms of grief that bereaved parents often report reflect the difficult challenge of integrating a seemingly incomprehensible loss into the pre-loss meaning structures that gave their life stories an overarching sense of purpose, predictability, and order (Neimeyer, 2006a).

Although some bereaved parents do not feel compelled to search for meaning, evidence suggests that the grieving process can be especially painful for those who attempt but fail in such a quest (Davis, Wortman, Lehman, & Cohen Silver, 2000). For example, studying a sample of 124 parents coping with the death of their infants by sudden infant death syndrome (SIDS), McIntosh and colleagues (1993) found that less than half of the parents who sought meaning in the loss were able to find any understanding, even more than a year after the death. In another study conducted by Lehman and his colleagues (1987) of 41 parents who had lost a child to a motor vehicle accident 4 to 7 years earlier, results similarly showed that the majority not only failed to find any meaning in their child’s death, but also that they were deeply distressed by this fact. This same general pattern was seen in Murphy and colleagues’ (2003b) work with parents whose child was killed violently by homicide, suicide, or a fatal accident. Specifically, studying 138 parents over the first
5 years postloss, Murphy and colleagues found that nearly half of the sample had still not found any meaning by end of the study. Importantly, this inability to find meaning was not a peripheral issue; the failure to construct a sense of understanding in the child’s death and/or life after the loss was a significant predictor of elevated distress in each of the studies.

Considering the centrality of finding meaning in the wake of parental bereavement, the present study aims to expand on prior research by focusing on individual and contextual factors related to losing a child in conjunction with the degree to which bereaved parents find meaning in the loss experience. Finding meaning in difficult life experiences has been conceptualized in a multitude of ways (see Park & Folkman, 1997, for review). Nonetheless, based on the work of Janoff-Bulman and Frantz (1997), important distinctions have been drawn between “sense-making” and “benefit-finding” in adapting to bereavement (Davis, Nolen-Hoeksema, & Larson, 1998; Holland, Currier, & Neimeyer, 2006; Murphy et al., 2003b). Sense-making denotes the comprehensibility of the loss or the survivor’s capacity to find some sort of benign explanation for the seemingly inexplicable experience, often framed in philosophical or spiritual terms. Conversely, benefit-finding refers to the significance of the loss and entails the survivor’s paradoxical ability to uncover a “silver lining” in the personal or social consequences of the loss, such as enhanced empathy, reordered life priorities, or a closer connection to other people or God. Apart from these distinctions, sense-making and benefit-finding may each denote both the process of searching for meaning after losing a child and the outcome of the search at any given moment in time. As a way to gain information on each dimension, we implemented a mixed methodology in which participants described their process of sense-making and benefit-finding and rated the outcome for each construal of meaning.

Previous research suggests that the ameliorative impact of sense-making and benefit-finding may vary over the grieving process (Davis et al., 1998; Murphy et al., 2003b). In a longitudinal study of 205 family members of hospice patients, Davis and colleagues (1998) found that making sense of loss successfully predicted healthy adaptation exclusively in the initial 6 months postloss; whereas, reports of benefit were primarily related to reduction of emotional distress at 13 and 18 months after a loss. Similarly, Murphy and colleagues (2003b) found that the focus of the search for meaning shifted from comprehending the loss to endowing the experience with significance over the 5 years of the study. Using a cross-sectional approach and focusing directly on grief symptoms with the revised version of the Inventory of Complicated Grief (ICG-R; Prigerson & Jacobs, 2001), Holland and colleagues (2006) failed to support these interaction effects. Instead, studying a diverse group of over 1000 young adults, they found that a high degree of sense-making reliably predicted low levels of grief complication over the first 2 years of bereavement, but that benefit-finding and time since the death each failed to predict bereavement adaptation. Beyond differences in methodology, one of the potential reasons for these differences is that the participants in Holland and colleagues’ study were all in the first 2 years of bereavement and that many of them had lost secondary relationships (e.g., grandparents or friends). Focusing on a sample of bereaved parents who ranged in both age and length of time since the death, the present study not only afforded the opportunity to assess the contribution of finding meaning in predicting grief symptoms, but also enabled the evaluation of the predictive power of sense-making and benefit-finding across a considerable period of time with a different group of individuals.
Study Aims

In view of the challenges facing parents who lose a child to death, the current study examined how risk factors related to the (a) individual parent (gender, age), (b) circumstances of the death (cause of death, time since loss, number of surviving children, child age at death, and number of other significant bereavement experiences), and (c) the extent to which parents found meaning in the loss (sense-making, benefit-finding) accounted for differences in the severity of grief symptoms. Based on results from earlier research, it was hypothesized that the following risk factors would each associate with greater severity of grief symptoms: (a) being a mother; (b) losing a child via homicide, suicide, or a fatal accident; (c) shorter length of bereavement; (d) no other children and/or fewer number of surviving children; and (e) history of other significant losses. We also hypothesized that higher degrees of sense-making and benefit-finding would demonstrate negative correlations with levels of grief symptomatology in univariate analyses. Nevertheless, when analyzed simultaneously, it was also hypothesized that the extent to which the bereaved parents constructed a sense of understanding around the death of their child would emerge as a particularly salient predictor of grief intensity. In addition to analyses with grief as a dimensional variable, we also classified “normal” and “complicated” grievers on the basis of the current diagnostic criteria for complicated grief (see Prigerson et al., 2008, for a description) to evaluate possible differences between these groups on the basis of individual and circumstantial factors, sense-making, and benefit-finding.

Method

Participants

Following institutional review of the project, 157 participants were recruited in one of two ways: (a) direct advertising to two southeast chapters of a support group network for bereaved parents (i.e., The Compassionate Friends) via fliers and contact with leaders, or (b) Internet search engines and links from Internet sites that provided resources for bereaved parents to a Web site designed for the present study. This Web site described the primary aim of the study as improving the understanding of the grief process for bereaved parents and afforded the opportunity for bereaved parents to participate online. The data were collected either electronically via this Web site or by allowing participants to print and complete the online forms and return them to the first author by postal mail. Altogether, 96 participants completed surveys electronically and 61 completed pencil and paper copies; there were no significant differences in identifying characteristics or grief outcomes between the two groups. Of those respondents who submitted surveys online, data received at the study Web site were automatically downloaded into a secure file such that the respondents’ e-mail addresses did not appear on the returned surveys. Inclusion criteria stipulated that all of the participants had to be at least 18 years of age. To avoid problems with nonindependence by treating individuals from the same parental dyad as separate observations in the analyses, all of the participants came from different families and had lost different children.

The current sample ranged in age from 23 to 77 years with a mean of 49.41 years (SD = 10.58). Mothers made up 81% of the sample and fathers comprised 19%. The sample had considerable geographic variability, as participants resided in 32 different U.S. states, 2 Canadian provinces, and Australia. The majority of
participants was Caucasian (93%). Other ethnicities included African American (4%) and Hispanic/Latino and biracial (3%). Parents had lost a child by six different causes of death: miscarriage or stillbirth (6%); natural anticipated (e.g., cancer; 12%); natural sudden (e.g., heart attack; 20%); accident (e.g., motor vehicle accident; 45%); suicide (11%); and homicide (6%). The majority of the sample had at least one living child (91%) at the time of the study. In terms of length of bereavement, the mean length of time elapsed since loss was 6 years ($SD = 6.14$), with a range of 0 to 40 years. The average age of the child at death was 17 years ($SD = 10.54$; range = 0 to 47). On average, respondents reported experiencing the deaths of 2.64 other family members or loved ones ($SD = 2.32$; range = 0 to 10).

**Measures**

**Core Bereavement Items.** The Core Bereavement Items (CBI; Burnett et al., 1997) is generally viewed as a measure of normative grief (see Neimeyer & Hogan, 2001, for review). It is a self-report measure comprised of 17 items that focus on the personal, cognitive, and emotional elements of grief currently experienced by the bereaved. Each item is presented as a question such as “Do you find yourself preoccupied with images or memories of ____?” or “Do you find yourself thinking of a reunion with ____?” Responses are given on a 4-point Likert-type scale based on how often the respondent experiences that item. The respondent may choose never, a little bit of the time, quite a bit of the time, or always. Responses are scored 0, 1, 2, and 3, respectively, with the overall score being determined by the sum of the individual items, ranging from 0 to 51. The scale’s authors report high internal consistency ($\alpha = .92$) with a sample of 158 bereaved adults (Burnett et al., 1997). The authors also found evidence for construct validity in that the CBI discriminated between different subsets of the bereaved based on varying levels of grief intensity, which included differentiating between expected and sudden causes of death (Middleton, Raphael, Burnett, & Martinek, 1998). In the current sample, Cronbach’s alpha was .94 for the CBI.

**Inventory of Complicated Grief.** In contrast to the CBI, the Inventory of Complicated Grief (ICG) was developed specifically to assess maladaptive reactions to bereavement (Neimeyer & Hogan, 2001; Prigerson et al., 1995, 1999). The initial version of the ICG used in the present study includes 19 declarative 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-type scale describing the frequency of symptoms (from 0 = never to 4 = always). Scores can range from 0 to 76, with a clinical cutoff in the range of 25 (Prigerson et al., 1995) to 30 (Boelen, van den Bout, de Keijser, & Hoijtink, 2003). Items assess preoccupation with thoughts of the deceased, hallucinations, disbelief about the death; feelings of being shocked and overwhelmed, numb, out of control, anxious and unsafe; in

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2 There is now an expanded and revised 30-item version of the ICG that includes items from the initial version in addition to several other questions assessing maladaptive reactions to bereavement (see Prigerson & Jacobs, 2001).

3 This slightly more conservative estimate was adapted from Boelen and colleagues (2003) psychometric study of the Dutch version of the ICG-R. The measure used by Boelen and colleagues included 29 items scored on a scale of 1 to 5. We used a simple algebraic equation to estimate what the cutoff would be for the 19-item version for which responses could range from 0 to 4.
addition to avoidance behaviors, sense of purposelessness about the future, and disturbances in sleep. As with the strong psychometric properties of the ICG displayed in a number of other studies (Chen et al., 1999; Neimeyer & Hogan, 2001; Prigerson et al., 1997, 1999), the ICG yielded a Cronbach’s alpha of .94 in the current sample. In support of its validity, the ICG has been shown to predict a range of serious long-term health and mental health consequences of bereavement (e.g., Prigerson et al., 1997, 1999), justifying its use as a measure of maladaptive responses to loss in the present study.

**Sense-making.** Sense-making was assessed by two questions, one qualitative and the other quantitative in nature. First, participants responded 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.” Following the narrative response, participants rated the amount of sense they had made of the loss experience on a 5-point Likert-type scale, with anchor points of 1 (I have been able to make no sense of my loss) to 5 (I have made a great deal of sense of my loss). This method corresponds closely to the manner in which other researchers have measured meaning-making in prior studies (e.g., Currier, Holland, & Neimeyer, 2006; Davis et al., 1998; Lehman et al., 1987; McIntosh et al., 1993; Uren & Wastell, 2002).

**Benefit-finding.** Benefit-finding was assessed in the same two ways. First, participants were asked 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.” Next, based on their open-ended narrative response, participants rated the amount of benefit they had found in the loss experience on a 5-point Likert-type scale, with anchor points of 1 (no benefit) and 5 being (great benefit).

**Other variables.** Basic demographic information was gathered for each participant, including age, sex, and ethnicity. Factors related to the context of the death were also assessed, including the relationship to the child, length of time since the death, cause of death, the age of the child when he or she died, number of living children, and the total number of other significant death-related losses they had experienced in addition to the death of their child.

**Procedure**

Whether electronically or using paper and pencil, each eligible participant completed a questionnaire that elicited demographic information and circumstances surrounding the loss (e.g., relationship to the deceased, cause of death, age of the child at death, time since loss). Each also completed the above two measures of grief, the CBI (Burnett et al., 1997) and the 19-item version of the ICG (Prigerson et al., 1995), along with questions pertaining to sense-making and benefit-finding regarding the loss experience.

**Results**

In 6% of cases, participants failed to complete all of the items on the CBI or ICG. However, in all but one of these instances in which a participant omitted nine items on the CBI, participants only failed to answer one or two items. In view of the small number of omissions and strong internal consistency showed for the CBI (α = .94)
and ICG (α = .94), the number of missing cases was reduced by using the mean of the completed items as the participants’ overall scores in the statistical analyses.

### Univariate Analyses

A series of univariate analyses were initially performed to explore associations between the independent variables and intensity of grief symptoms on the CBI and ICG. Table 1 presents results for parent gender and the cause of death. Based on the results of independent samples t tests, mothers reported significantly higher grief symptoms than fathers on the CBI, t(148) = 2.44, p = .02. Although mothers also reported experiencing more grief on the ICG, these differences failed to achieve statistical significance, t(149) = 1.5, p = .1. Using estimated clinical cutoffs around 25 (Prigerson et al., 1995) or 30 (Boelen et al., 2003), it is notable that, on average, the responses of mothers and fathers reflected considerable distress for either gender. Consistent with other research (Currier et al., 2006), the violence of death accounted for significant differences in sense-making, t(149) = 2.37, p = .02, in addition to normative and maladaptive grief reactions, t(152) = 3.72, p < .001 and t(153) = 3.97, p < .001, respectively. Parents who had lost a child to homicide, suicide, or fatal accident reported making significantly less sense of the loss experience compared to parents who lost a child to a natural form of death. Additionally, scores on the CBI and the ICG were significantly higher for parents who lost a child to a violent death. There were no significant differences in benefit-finding between parents who lost children to violent and natural deaths, t(144) = 0.64, p = .5.

Table 2 presents the descriptive statistics and bivariate correlations for continuous variables. As hypothesized, time since the loss, sense-making, and benefit-finding were negatively correlated with scores on the CBI and ICG. In general, participants whose losses had occurred earlier and who reported making greater sense and finding greater benefit tended to report less grief on the CBI and ICG. Conversely, the age of the child at death demonstrated small positive correlations with CBI and ICG scores.
indicating that parents who lost older children had more severe grief symptomatology. However, the age of the child was negatively correlated with time since loss, which suggests a possible confound in that losses of younger children had generally occurred earlier in time. As with Holland et al. (2006), sense-making and benefit-finding were significantly (though moderately) correlated with one another. Contrary to this earlier study, they each were positively correlated with length of bereavement, indicating that parents who had more time to adjust had a greater likelihood of making sense and finding benefit in the loss experience.

**Multivariate Analyses**

Using the pattern of significant results of the univariate analyses for guidance, we conducted two hierarchical regression analyses to examine the ability of risk factors, sense-making, and benefit-finding to predict grief symptomatology on the CBI and ICG. We report the squared semipartial correlation \( r^2 \) as a way of presenting the degree of unique variance accounted for by each of the variables in grief severity. In each analysis, parent gender, cause of death (violent vs. nonviolent), parent age, time since loss, and child age at death were entered on the first step. On the second step, sense-making and benefit-finding were entered along with the individual and contextual factors.

<table>
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<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>N</th>
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<th>(3)</th>
<th>(4)</th>
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<th>(6)</th>
<th>(7)</th>
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<td>(1) Parent age</td>
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<td>10.58</td>
<td>23–77</td>
<td>156</td>
<td>.38*</td>
<td>.06</td>
<td>.61*</td>
<td>.26*</td>
<td>.02</td>
<td>.07</td>
<td>.17*</td>
<td>-.06</td>
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<td>(2) Time since loss (in years)</td>
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<td>6.14</td>
<td>0–40</td>
<td>156</td>
<td>.09</td>
<td>-.26*</td>
<td>.11</td>
<td>.20*</td>
<td>.21*</td>
<td>-.48*</td>
<td>-.36*</td>
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<td>(3) Number of other children</td>
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<td>1.11</td>
<td>0–8</td>
<td>155</td>
<td>-.02</td>
<td>.09</td>
<td>.07</td>
<td>.04</td>
<td>-.003</td>
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<td>(4) Child age at death (in years)</td>
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<td>0–47</td>
<td>154</td>
<td>.16</td>
<td>-.16*</td>
<td>-.09</td>
<td>.20*</td>
<td>.21*</td>
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<td>(5) Number of other bereavements</td>
<td>2.64</td>
<td>2.32</td>
<td>0–10</td>
<td>156</td>
<td>.10</td>
<td>.03</td>
<td>-.11</td>
<td>-.08</td>
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<tr>
<td>(6) Amount of sense-making</td>
<td>2.53</td>
<td>1.31</td>
<td>1–5</td>
<td>152</td>
<td>.49*</td>
<td>-.49*</td>
<td>-.60*</td>
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<td>(7) Amount of benefit-finding</td>
<td>3.21</td>
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<td>1–5</td>
<td>147</td>
<td>-.37*</td>
<td>-.48*</td>
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<td>(8) Core Bereavement Items</td>
<td>29.98</td>
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<td>1–51</td>
<td>155</td>
<td>.81*</td>
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<tr>
<td>(9) Inventory of Complicated Grief</td>
<td>28.09</td>
<td>14.93</td>
<td>0–60</td>
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\( *p < .05. \)

As a way of attempting to replicate Wijngaards-de Meij et al.’s (2005) finding, we also conducted analyses to see if parents of children who died in an intermediate period of age reported higher grief scores. These analyses failed to achieve statistical significance for scores on the CBI, partial \( r(150) = -.13, p = .1, \) and the ICG, partial \( r(151) = -.11, p = .2. \) As we lacked a clear empirical or theoretical reason to investigate other curvilinear relations between the predictors, no other analyses of this sort were performed.

In light of past research on the role of sense-making and benefit-finding (e.g., Holland et al., 2006), we considered three possible interactions on a third step: Sense-Making × Benefit-Finding; Sense-Making × Time Since Loss; and benefit-Finding × Time Since Loss. Because this step failed to increase the amount of variance explained for scores on either grief measure, the results of this last step are not reported.
Predicting CBI scores. In the first hierarchical regression analysis, the dependent variable was overall scores on the CBI. As presented in Table 3, the first step included the five objective risk factors and proved significant, $F(5, 131) = 11.47, p < .001$, predicting 31% of the total variance in CBI scores. Of the individual and contextual factors, parent gender, cause of death and time since loss significantly predicted grief symptoms on the CBI. The entry of sense-making and benefit-finding on a second step significantly increased the CBI variance explained, $\Delta R^2 = .17, F_{\text{change}}(2, 129) = 21.28, p < .001$. Sense-making accounted for 10% of the unique variance compared with around 3% each for parent gender, cause of death, and time since loss in the second model. Benefit-finding failed to account for a significant amount of unique variance in this analysis.

Predicting ICG scores. The second set of regression analyses used the same strategy to examine predictors of complicated grief (CG). Using ICG scores as the dependent variable, parent gender, cause of death, parent age, time since loss, and child age at death were entered in a first step. As displayed in Table 4, objective risk factors accounted for a significant amount of the variance in ICG scores, $R^2 = .22, F(5, 131) = 7.47, p < .001$. As with the results for the CBI, cause of death was demonstrated to predict ICG scores. As before, the entry of sense-making and benefit-finding also significantly increased the portion of variance explained in grief severity, $\Delta R^2 = .3, F_{\text{change}}(2, 129) = 41.21, p < .001$. Sense-making accounted for 15% of the unique variance compared to 4% for cause of death. Notably, even with the positive correlation shown for sense-making and time since loss, sense-making still accounted for a substantial portion of the unique variance. In addition, in contrast to its failure to predict normative grief symptoms, benefit-finding was shown to predict lower severity of CG, accounting for around 3% of the unique variance in ICG scores.

| Table 3 | Risk Factors and Meaning-Making Variables Predicting CBI Scores ($N = 136$) |
|---|---|---|---|---|---|
| Predictor | $B$ | SE $B$ | $\beta$ | $sr^2$ | $R^2$ |
| **Model 1** | 0.31* | 0.13 | .19 | .03 |
| Parent gender | 0.03* | 0.11 | .26 | .06 |
| Cause of death (violent vs. natural) | 0.35* | 0.11 | -.07 | .00 |
| Parent age | -0.04* | 0.01 | -.37 | .05 |
| Time since loss | 0.01 | 0.01 | .07 | .00 |
| **Model 2** | 0.48* | 0.11 | .19 | .03 |
| Parent gender | 0.30* | 0.09 | .20 | .03 |
| Cause of death (violent vs. natural) | 0.26* | 0.01 | .08 | .00 |
| Parent age | -0.03* | 0.01 | -.27 | .03 |
| Time since loss | 0.01 | 0.01 | .09 | .002 |
| Child age at death | -0.19* | 0.04 | -.38 | .10 |
| Sense-making | -0.04 | 0.03 | -.10 | .01 |
| Benefit-finding | *$p < .05$. |
Predicting Potential Cases of Complicated Grief

From a diagnostic standpoint, CG\(^6\) denotes a state of chronic grieving characterized by intense separation distress, intrusive and emotionally troubling thoughts regarding the deceased, a sense of emptiness and meaninglessness, trouble accepting the reality of the loss, and various difficulties moving on with life (Prigerson, 2004; Prigerson & Jacobs, 2001). Despite the fact that the current assessment methods do not allow for a formal diagnosis of CG, we attempted to identify potential cases in accordance with the diagnostic criteria proposed by Prigerson and her colleagues (in press) in a recent field trial. All parents met Criterion A by dint of their bereavement. To be considered a complicated griever, participants had to report on the ICG that they “often” or “always” experience at least one symptom of separation distress (Criterion B); at least four cognitive, emotional, and behavioral symptoms (Criterion C); and at least one type of functional impairment (Criterion E).\(^7\) Eliminating the 11 parents in the sample who were not bereaved for at least 6 months (Criterion D), 30% of the remaining participants (\(n = 43\)) who did not have any missing data were classified as complicated grievers, which exceeds the estimated base rate of CG from research on other bereaved samples (10%–15%; Bonanno & Kaltman, 2001; Prigerson et al., in press), but is compatible with reports of the frequently intense and debilitating symptomatology among bereaved parents. Descriptive statistics of potential CG cases and noncases are presented in Table 5.

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**Table 4**

*Risk Factors and Meaning-Making Variables Predicting ICG Scores (\(N = 136\))*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>(B)</th>
<th>(SE)</th>
<th>(\beta)</th>
<th>(r^2)</th>
<th>(R^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent gender</td>
<td>0.24</td>
<td>0.18</td>
<td>.11</td>
<td>.01</td>
<td>.22*</td>
</tr>
<tr>
<td>Cause of death (violent vs. natural)</td>
<td>0.52*</td>
<td>0.15</td>
<td>.30</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Parent age</td>
<td>0.00</td>
<td>0.01</td>
<td>-.02</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Time since loss</td>
<td>-.04*</td>
<td>0.02</td>
<td>-.29</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Child age at death</td>
<td>0.01</td>
<td>0.01</td>
<td>.06</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td><strong>Model 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.53*</td>
</tr>
<tr>
<td>Parent gender</td>
<td>0.23</td>
<td>0.14</td>
<td>.11</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Cause of death (violent vs. natural)</td>
<td>0.38*</td>
<td>0.12</td>
<td>.22</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Parent age</td>
<td>0.00</td>
<td>0.01</td>
<td>-.03</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Time since loss</td>
<td>-.02</td>
<td>0.01</td>
<td>-.16</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Child age at death</td>
<td>0.01</td>
<td>0.01</td>
<td>.07</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Sense-making</td>
<td>-.30*</td>
<td>0.05</td>
<td>-.46</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Benefit-finding</td>
<td>-.11*</td>
<td>0.04</td>
<td>-.19</td>
<td>.03</td>
<td></td>
</tr>
</tbody>
</table>

\(\*p < .05\).

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\(^6\)The terminology of complicated grief has also been referred to in the past as traumatic grief and has recently been changed to prolonged grief disorder, which is currently being considered for inclusion in *DSM-V*.

\(^7\)Separation distress was represented using items 2, 4, and 19 on the ICG. Cognitive, emotional, and behavioral symptoms were represented by Items 3, 6, 7, 8, 9, 12, 13, and 17. Regarding this criterion, symptoms of pervasive numbness and extreme difficulty moving on with life are not reflected on the 19-item version of the ICG. Therefore, rather than using five symptoms as Prigerson and her colleagues (in press) propose for the ICG-R, we set a criterion of four symptoms for Criterion C. Impairment was represented by Items 1 and 10.
The potential CG cases reported greater intensity of grief symptoms on the CBI, \( t(126) = -8.97, p < .001 \). Cases and noncases also differed in the amount of sense-making, \( t(139) = 5.35, p < .001 \), and benefit-finding, \( t(135) = 4.69, p < .001 \), with those who reported less of either construal of meaning more likely to meet criteria for caseness. Consistent with results from earlier analyses, in terms of the objective risk factors, potential cases of CG differed from noncases with respect to the time since loss, \( t(143) = 2.77, p = .006 \), and age of child at death, \( t(142) = -2.44, p = .02 \). Additionally, 76.7% of the losses among potential CG cases were violent in nature compared to 53.3% for noncases, which yielded a significant difference, \( \chi^2(134) = 6.45, p = .01 \). Overall, these results indicate that parents who had less time to adapt to bereavement and who lost older-aged children to a violent death were more likely to be classified as complicated grievers.

### Discussion

The death of one’s child can be an extremely challenging loss to accommodate. Bereaved parents are vulnerable to a range of physical and emotional difficulties (Rubin & Malkinson, 2001). However, despite the generally challenging nature of parental bereavement, there are several factors related to the individual parent and context of the death that increase the risk of poor bereavement adaptation. This study examined the relative contribution of these risk factors, in addition to sense-making and benefit-finding, in predicting grief severity with a group of bereaved parents. Compared with individuals from our earlier studies who had experienced a blend of primary and secondary losses (Currier et al., 2006; Holland et al., 2006), the current sample reported considerable grief symptoms. Regardless of the gender of the parent or cause of the child’s death, on average, parents reported levels of grief that were equal to or greater than the clinical cutoffs established by other researchers to screen for distressed grievers (Boelen et al., 2003; Prigerson et al., 1995). Nonetheless, grief severity was also shown to vary on the basis of several risk factors, which suggests that certain subsets of the parents had greater vulnerability to distress than others. Results for normative grief symptoms indicated that the relationship to

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**Table 5**

*Descriptive Statistics for Potential Complicated Grief (CG) Cases and Noncases*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cases</th>
<th>Noncases</th>
<th>Cases</th>
<th>Noncases</th>
<th>Cases</th>
<th>Noncases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective risk factors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Time since loss (years)</td>
<td>4.29</td>
<td>7.28*</td>
<td>4.32</td>
<td>6.63</td>
<td>45</td>
<td>100</td>
</tr>
<tr>
<td>Child age (years)</td>
<td>19.54</td>
<td>14.9</td>
<td>10.3</td>
<td>10.5</td>
<td>44</td>
<td>100</td>
</tr>
<tr>
<td><strong>Meaning-making</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense-making</td>
<td>1.8</td>
<td>2.95*</td>
<td>1.06</td>
<td>1.24</td>
<td>45</td>
<td>96</td>
</tr>
<tr>
<td>Benefit-finding</td>
<td>2.61</td>
<td>3.75*</td>
<td>1.38</td>
<td>1.27</td>
<td>41</td>
<td>96</td>
</tr>
<tr>
<td><strong>Grief</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBI</td>
<td>39.5*</td>
<td>24.67</td>
<td>6.5</td>
<td>9.48</td>
<td>40</td>
<td>88</td>
</tr>
<tr>
<td>ICG</td>
<td>42.26*</td>
<td>20.26</td>
<td>8.59</td>
<td>11.6</td>
<td>43</td>
<td>92</td>
</tr>
</tbody>
</table>

*Note. CBI = Core Bereavement Items; ICG = Inventory of Complicated Grief. Cohen’s \( d \) (1977) reflects and estimate of effect size based on left column with potential CG cases. Independent samples t tests were used to evaluate differences between groups.

*\( p < .05 \).*
the child, violence of the death, and length of bereavement uniquely contributed to the intensity of bereavement-related thoughts and feelings. In terms of identifying at-risk parents, mothers reported more grief than fathers and parents who lost a child to violent death and those with less time since the loss had greater normative grief symptoms.

Despite similar results from univariate analyses regarding symptoms of CG, the violence of the death was the only objective risk factor that uniquely accounted for differences. When analyzed simultaneously, previously significant predictors like the time since loss and child age did not make a unique contribution to the prediction of grief severity. From a clinical standpoint, this lack of statistical significance does not rule out the possibility that these factors can have an influence on a parent’s adaptation to bereavement. Instead, methodologically speaking, this pattern of results highlights the fact that many of these risk factors tend to overlap with one another. For example, there was a negative correlation between time since loss and child age such that parents who had lost infants or young children tended to be more removed from the time of the death. Age of the child also overlapped partly with the cause of death, as older children were more likely to have died by homicide, suicide, or a fatal accident. However, because the violence of the death was the only significant predictor in the multivariate analysis, it appears that this risk factor is particularly valuable in screening for complicated grievers. Additionally, it is important to note that normative and maladaptive responses to loss were not associated with the same set of risk factors, which may indirectly support the distinctiveness of CG as a useful diagnostic category (Prigerson & Jacobs, 2001; Prigerson et al., 2008).

Although grief severity varied on the basis of objective risk factors, the ability to find a sense of understanding in the loss emerged as the most salient predictor by far of postloss adjustment. Sense-making uniquely contributed to considerable portions of the intensity of normative and CG symptoms (4–5 times as much as the next most influential predictor, and 3–15 times as much unique variance as the passage of time alone). Nearly half of the parents reported finding no sense (30%) or very little sense (17%), 33% of whom were 5 or more years beyond the time of their loss. Results also showed that these participants were more likely to report a greater intensity of grief symptoms. For example, when asked to describe her process of sense-making, a mother whose 34-year-old son was killed almost 8 years earlier shared the following:

My son’s murder was a bizarre, random event that occurred on Christmas Eve morning as he left a diner after having breakfast. He was accosted by a carjacker who had burglarized a nearby service station and who took his car and shot him at point-blank range. My son died all alone, without ever having an opportunity to see his family. I have never been able to make any sense of this event. The fact that one can make no sense of it makes the death very difficult to bear.

Other parents were more concise, such as a father who lost his 28-year-old son in a fatal accident 2 months earlier: “I can’t make any sense of it.” Another mother who lost her infant son nearly 5 years ago reported: “I’ll never make sense of the premature death of my dear son. He was to have buried me and not vice versa.”

8Qualitative data are only being used for illustrative purposes in this article. We will perform more rigorous analyses of the participants’ narratives in a future study deriving from this data set.
Consistent with Davis et al. (2000), each of these parents who struggled to find meaning also reported extreme levels of grief severity compared to the other parents in the sample. The strong relationship between failures in sense-making and more intense and debilitating grief reactions in this sample accord with cognitive (Boelen, van den Hout & van den Bout, 2006) and constructivist (Neimeyer, 2006a; 2006b) conceptualizations of CG, and carry implications for grief assessment and therapy, as noted below.

A minority of the parents did report finding a good (14%) to a great deal of sense (9%) in their losses. For example, a father who had lost his 22-year-old son to suicide 5 years ago shared:

After a great deal of study through coursework in psychology and personal reading, I have a better understanding of suicide and of my son's struggles with substance abuse and depression. This is my interpretation. I still grieve and have feelings that I could have been more supportive of him so that he might not have taken his life—even though friends and professionals suggest that there was little that I could have done. Styron’s book *Darkness Visible* and Kay Redman’s book *An Unquiet Mind* probably have had the most profound influence on my attempts to make sense of his death. Little has made much of a difference with respect to the feeling of loss—the void. It still aches.

Despite “the void,” he scored below the mean for both grief measures. Whereas this father engaged in a more secular form of meaning-making, many of the other parents who successfully found some understanding drew upon their religious faith. For example, a bereaved mother who had lost her 15-year-old daughter only a year earlier reported:

The Lord is in control of everything and He loves our child even more than we do. We trust that He knows what's best for her. We're also thankful that she is not suffering and is now seizure-free. God has given us many proofs of His love and love for her through our situation.

Another mother who had lost her 33-year-old daughter 6 years ago similarly shared:

My faith in God has been the source of my ability to pick up the pieces and continue on with life. I tried to be angry with God but my faith revealed to me that the will of God ‘must be done’ and he promised he would be with me always.

As with the bereaved father who lost his son to suicide, each of these women reported normative and CG symptoms that placed them well below the mean levels of severity compared to the other parents. Similar to the null results from Holland et al. (2006), we failed to show that benefit-finding was consistently associated with improved adaptation to bereavement. A lack of benefit-finding uniquely contributed to the intensity of CG, but not normative grief. We also failed to find that reports of benefit had more of an ameliorative impact further along in the adjustment process. Nevertheless, reports of benefit-finding were positively correlated with sense-making in this sample, which makes interpretation of these results more difficult. Also, in reviewing qualitative
responses, descriptions of benefit-finding were often similar to sense-making for parents. For example, one woman shared: “I don’t understand why. I know there’s nothing I can do about my loss. I can try to help others in my situation. I do know how they feel.” The modal response for describing the process of benefit-finding was “none,” and several parents commented on the offensiveness of asking about finding benefit. This sentiment was reflected in the response of one mother who lost her 25-year-old daughter about a year earlier:

There is no benefit from losing your child. You learn to live for the others that you love, but there is no benefit. I think it is a misused word for this. How can you benefit from something that destroys you? She was my only daughter and my dearest friend.

In view of qualitative data, the null quantitative findings may have as much to do with ongoing challenges to measure the impact of positive life changes (Lehman et al., 1993) as the possibility that finding benefit does not alleviate the intensity of grief with the same consistency as sense-making.

**Limitations and Future Directions**

Overall, this study provided information about factors that contribute to grief severity for bereaved parents. Even though the simultaneous examination of clinically relevant risk factors and meaning-making extended the empirical literature in important ways, there are some limitations. First, the cross-sectional nature of the design limits causal and temporal inferences concerning the precise relations between the predictors. We cannot say with absolute confidence that a lack of sense-making was a source of distress for parents in this sample. It is possible that the parents’ experience of distress (as measured by the CBI and ICG) caused disturbances in cognitive functioning, which then resulted in the inability to find a sense of understanding, and not vice versa. Also, it is possible that both meaning-making and grief intensity could be the result of a third, unmeasured factor, such as attachment security or emotion regulation. Despite our ability to directly assess the role of timing of the loss, because of the variability in the length of bereavement, many of the predictors partly overlapped with time since loss. Longitudinal studies that assess the relations between these predictors at multiple time points with parents who are more uniform in their length of bereavement could shed light on interactions between the variables and further evaluate the influence of risk factors on grief severity over time.

A second limitation of this study pertains to the homogeneity of the sample. As with most studies in this area, the present investigation had an overrepresentation of women compared to men (4:1), resulting in a possible under representation of distinctively “masculine” styles of accommodating the death of a child. Additionally, despite considerable geographic variability, over 90% of the participants were Caucasian. Although this study attempted to reach beyond typical samples predominantly drawn from support groups, about a third of the current set of participants did attend a support group on a regular basis. In addition to advertising to support groups, many participants were also recruited via the Internet. Considering these recruitment strategies, the present results may generalize best to Caucasian women in the middle to higher range of socioeconomic status (SES), many of whom participate in support groups. Future work would do well to
implement alternative recruitment procedures to study parents with greater diversity in terms of gender, ethnicity, and SES.

A third limitation of our study pertains to the measurement of sense-making and benefit-finding. Despite the utility of the single-item measures demonstrated in prior research (e.g., Davis et al., 1998; Holland et al., 2006), the straightforward definitions used in this study limit our understanding of what is meant by these questions when asserted by bereaved parents. For this reason, we had parents describe their process of making sense and finding benefit in the loss of their child. However, at least for assessing benefit-finding, many of the parents were confused and some were offended by the wording of the question. Even though we relied on commonly used approaches to measuring these constructs, the manner in which meaning was assessed could still be improved. In particular, the development of more refined measures, as advocated by Gillies and Neimeyer (2006), could better reveal which facets of meaning-making are associated with more favorable grief outcomes in instances of parental bereavement. Also, we did not assess several of the possible correlates to the search for meaning or grieving process in general. One of these factors includes one’s attachment style, as finding meaning in loss may be less relevant for persons who display patterns of dismissive avoidant attachment in their relationships with significant others (see Davis et al., 2000; Fraley & Shaver, 1999).

Despite these limitations, this study provided information that extends the literature and could inform clinical work. Based on reviews of the effectiveness of grief therapies (e.g., Currier, Holland, & Neimeyer, 2007; Schut et al., 2001), generic interventions that do not take the initial step of identifying distressed grievers often fail to yield much therapeutic benefit to bereaved clientele. Therefore, clinicians working with bereaved parents would do well to attend to risk factors associated with poor bereavement adaptation. Nonetheless, the present results highlight the relevance of not only assessing objective factors such as the cause of death, but also listening for signs of bereaved parents’ struggle to find meaning in the loss. For parents who feel compelled to make sense of the loss, a failure to do so may be far more indicative of the risk of grief complication than circumstantial, temporal and contextual factors.

Beyond assessment per se, these results may also carry implications for the type of therapies that could be of benefit to bereaved parents who struggle with prolonged and intense grieving. Several authors have offered guidelines for grief therapy drawing on cognitive and constructivist formulations of grief, making use of a variety of procedures for reviewing, retelling, and reconstructing narratives of loss in a way that permits fuller integration and processing of the experience (Malkinson, 2007; Neimeyer, 2001, 2002; Neimeyer, van Dyke & Pennebaker, in press; Rynearson, 2006). As randomized controlled trials of therapies for complicated grief that feature such methods have begun to support their clinical efficacy (Shear, Frank, Houck & Reynolds, 2005; Wagner, Knaevelsrud & Maercker, 2006), clinicians can begin to draw upon evidence-based procedures to assist bereaved parents in a frequently anguished search for meaning occasioned by their tragic loss.

References


