

Exploring Maternal Grief: A Mixed-Methods Investigation of Mothers' Responses to the Death of a Child From Cancer

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This study investigated the meaning-making phenomena underlying the responses of 13 bereaved mothers to the death of a child from cancer. Using a mixed-methods research design incorporating constructivist data collection methods, we found specific characteristics, coping processes, and factors to distinguish adaptive as opposed to complicated grief responses to this type of loss. However, the findings did not distinguish the bereaved mothers themselves as “adaptive” or “complicated grievers,” as they all evidenced both types of responses to their loss within or across different datasets. Despite this finding, the mothers' results varied in terms of the proportions of adaptive as compared to complicated grief responses to their loss, which in turn were related to features of their self-construing, change or reinforcement of their world assumptions, ongoing relationship to their child and others in their social world, and management of loss- and restoration-oriented coping. Results suggest the utility of constructivist and cognitive coping models and methods in illuminating the experience of parental bereavement.

The death of any person can have debilitating effects on psychological adjustment and physical health of survivors (Li, Precht, Mortensen, & Olsen, 2003; Sheahan, Smith, & Campbell, 2001; Stroebe, Hansson, Stroebe, & Schut, 2001). However, the death of a child is regarded as one of the most traumatic, incomprehensible, and devastating of losses, with the potential to precipitate a crisis of meaning for bereaved parents (Davies, 2004; Keesee, Currier, & Neimeyer, 2008; Klass, Silverman, & Nickman, 1996). Although complications in the resultant grieving are common, parents also respond in highly adaptive ways to the death of a child (Swanson, Pearsall-Jones, & Hay, 2002). Tedeschi and Calhoun (1995, 2004) and others (Joseph & Linley, 2005) have used the term “posttraumatic growth” (PTG) to describe these and other positive changes that can accompany the struggle with extreme adversity.

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In seeking to explain the variability in parental responses to the death of a child, many researchers have embraced the concept of “meaning-making” as central in understanding parents’ responses (Braun & Berg, 1994; Gamino & Sewell, 2004; Gerrish, Steed, & Neimeyer, 2010; Keesee et al., 2008; Klass, 1988, 1999, 2001; Rubin, 1991–1992; Swanson et al., 2002; Talbot, 1996–1997, 2002; Wheeler, 2001). But despite this increasing body of research, details about the specific meaning-making activities, processes, and factors associated with adaptive and problematic responses to the death of a child remain limited (Barrera et al., 2007; Lichtenthal, Currier, Neimeyer, & Keesee, 2010). Our goal in the present mixed-methods study is draw on complementary constructivist methods to investigate maternal meaning-making in the wake of loss, shedding light on both adaptive and complicated features of these women’s grieving.

One problem when conducting research on meaning-making is that the term “meaning” has been used in the bereavement literature to describe very different phenomena (Davis, Wortman, Lehman, & Silver, 2000; Janoff-Bulman & Frantz, 1997; Wheeler, 2001). However, finding meaning or making sense of a loved one’s death is “defined generally as finding some degree of coherence, orderliness, predictability, purpose, or value in what has happened” (Gamino, Hogan, & Sewell, 2002, pp. 793–794). In line with this definition, three major theoretical perspectives that have contributed to meaning-making frameworks for understanding responses to major trauma and loss events are cognitive/trauma theories (Calhoun & Tedeschi, 2006; Janoff-Bulman, 2006), constructivist theories (Neimeyer, 2001; Neimeyer & Sands, 2011), and the Dual Process Model of Bereavement (DPMB; Stroebe & Schut, 2001, 2010). Common to each of these theories is an emphasis on how individuals reaffirm, find, or rebuild meaning in the wake of loss and other traumatic life events (Gillies & Neimeyer, 2006).

However, despite an increasing emphasis on the importance of meaning-making for understanding responses to loss and trauma, problems in study methods have constrained what they have been able to provide (Gillies & Neimeyer, 2006). In particular, researchers are faced with considerable challenges when deciding how best to capture the frequently complex and multi-dimensional aspects of bereavement responses (Stroebe, Stroebe, & Schut, 2003). Furthermore, measurement and instrumentation issues associated with using qualitative and quantitative research methods to assess adaptive and problematic responses to loss/trauma events are well documented (Lichtenthal et al., 2010; Park & Lechner, 2006).

Another issue facing the field is that although parental grief following the death of a child *from any cause* has received considerable research attention (e.g., Arnold & Gemma, 2008; Barrera et al., 2007; Hogan & Schmidt, 2002; Lichtenthal et al., 2010; Klass, 2001; Miles & Demi, 1991–1992; Noelen-Hoeksema & Larson, 1999; Polatinski & Esprey, 2000; Wheeler, 2001; Woodgate, 2006; Znoj, 2006), studies investigating parental responses to the death of a child *from cancer* are comparatively rare. As Murphy (2008) stated, “studies of parental bereavement following a child’s death due to cancer appear to have decreased” (p. 392). This paucity of research is unfortunate, as cancer is “the most common cause of non-accidental death in children, with approximately 25% of children with cancer dying from the disease or its treatment” (McCarthy et al., 2010, p. 1321). Furthermore, evidence suggests that how a child dies is linked to specific grief outcomes (Davis et al., 2000; Feigelman, Jordan, & Gorman, 2011; Murphy, Johnson, Wu, Fan, & Lohan, 2003). Some of the factors that uniquely affect parental grief responses to cancer include their interpretation of its potentially life-threatening significance, witnessing the child endure harsh medical treatments, and their oscillation between periods of hope when treatments work and despair when they fail (Barrera et al., 2004; Murphy, 2008).

STUDY AIM AND OBJECTIVES

The aim of the current study was to describe the meaning-making phenomena underlying bereaved mothers' adaptive and complicated grief responses to the death of a child from cancer. A mixed-methods research design was considered appropriate to achieve this research aim. The specific research objectives were to examine the impact of losing a child to cancer on bereaved mothers' (1) self-identity—that is, their construal of self, others, and worldviews—and (2) means of coping and how these relate to their adaptive or complicated responses to their loss.

METHODOLOGY

A Pragmatic, Mixed-Methods Approach

The theoretical paradigm that guided the research approach was pragmatism (Datta, 1997; Teddlie & Tashakkori, 2009a), which supports the use of both qualitative and quantitative research methods in the same study. Pragmatic researchers take the view that multiple research methods are often necessary to understand complex phenomena (Leech, Dellinger, Brannagan, & Tanaka, 2010). Consistent with this approach, we used a mixed-methods design (Teddlie & Tashakkori, 2009b), “in which the investigator collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry” (Tashakkori & Creswell, 2007, p. 4). Although several bereavement researchers have indicated their support for such designs (Calhoun & Tedeschi, 2006; Genevro, Marshall, & Miller, 2004; Neimeyer & Hogan, 2001), their application to the study of bereaved parents is limited (see Arnold, Gemma, & Cushman, 2005; Barrera et al., 2007; Lichtenthal et al., 2010, for notable exceptions). In this study, a parallel mixed design (Tashakkori & Teddlie, 2009), or concurrent triangulation design (Hanson, Creswell, Plano Clark, Petska, & Creswell, 2005), was selected to collect qualitative and quantitative data simultaneously from bereaved mothers. Finally, although datasets were analyzed independently, inferences and interpretations were derived from the integration of each type of data.

METHOD

Participants

A purposive sample (Patton, 1990) of 13 mothers agreed to participate in the study (M age = 49.5, range 41 to 71 years). All had participated in cancer support groups at some stage. All were Caucasian and had Year 10 or higher education; 11 were married, 1 separated (following her bereavement), and another widowed. Six were working on a full- or part-time basis. All had experienced the death of a child from cancer, on average, 4.5 years prior (range 0.80 to 9.3 years). Time since death was not controlled for in this study given evidence that parents' grief and associated outcomes can be experienced at any time after loss events and over a lifelong basis (Clarkson, 1992; Keesee et al., 2008; Linley & Joseph, 2004). Finally, 12 of the mothers had between 1 and 4 surviving children, with 1 mother losing her only child. Deceased children ranged in age from 2 to 35 years ($M = 14.8$ years). Eleven of the children had suffered an illness

TABLE 1
Time Period Following the Death, Length of Illness, and Age at Death for Each Mother's Child

Mother	Time since death (years)	Length of illness (months)	Age of child (years)
M1	7.0	52	3
M2	3.3	3	15
M3	4.2	28	7.5
M4	2.8	102 ^a	30
M5	3.6	36	10
M6	4.4	26	6
M7	9.3	12	2
M8	2.3	4	35
M9	3.8	70 ^a	20
M10	6.3	20	3.5
M11	4.8	12	24
M12	1.6	10	16
M13	0.8	10	20
Averages	4.5	19.4	14.8

^aTotal duration of time between diagnosis and death, including periods of remission. These two durations of illness are omitted when calculating the mean length of illness.

ranging from 3 to 52 months ($M = 19.4$). However, two other children experienced an illness that was considerably longer, as both had periods of remission (see Table 1 for details).

Procedure

Following institutional ethics approval for the study, mothers were contacted via mail to ascertain their interest in participation, with a follow-up phone call made to schedule a first interview time. All mothers asked to be interviewed at their own homes. At the conclusion of the interview, the mothers were given a rationale and detailed written instructions for completing the two psychometric measures. At the commencement of the follow-up interview, these two measures were discussed and collected. Then the third assessment was administered—the biographical grid method, as described below.

DATA COLLECTION AND ANALYSIS

Semi-Structured Interviews

A semi-structured interview schedule was developed in accordance with principles of interpretative phenomenological analysis (IPA; Smith, 1995). Bereaved mothers were asked open-ended questions about their experience of loss. In keeping with the meaning-making theories outlined earlier, bereaved mothers were asked structured questions in relation to how their construal of self, others, and the world had been affected by their loss. When a change was reported, they were asked whether they regarded this as “adaptive or healthy in some way” or “negative or problematic in some way.” Finally, in order to examine how they had coped with their child’s death, a series

of interview questions were developed with reference to Stroebe and Schut's (1999, 2001) Dual Process Model of Bereavement.

Two interviews were completed with each mother, each ranging from 120 to 185 min ($M = 154$ min.). Interviews were recorded and transcribed verbatim, and analyzed in accordance with IPA methodology (Smith & Osborn, 2008; Willig, 2008). At the first level, emergent themes were identified and given descriptive labels that stayed close to the data, reflecting the mother's own words, concepts, and beliefs. At the second level, a more explicit interrogation of the data moved to a more interpretive level (Eatough & Smith, 2008; Smith & Osborn, 2008). In particular, the associated categories/themes from the first level of analysis were reexamined, but this time with reference to existing theoretical constructs (Willig, 2008).

The Biographical Grid Method

A variant of the repertory grid technique (Fransella, Bannister, & Bell, 2004; Kelly, 1955)—called the biographical grid method (BGM; Neimeyer, 1985; Neimeyer & Stewart, 1996)—was employed to address the aim and objectives of this study. The BGM is considered to have both qualitative and quantitative components (Neimeyer, 2004a). It has its origins in personal construct theory, constructivism, and narrative forms of inquiry (Kelly, 1955; Mahoney, 2004; Neimeyer, 2006; Raskin, 2002), and in the context of bereavement can assess how an individual's personal constructions and overall self-narrative has been affected by his or her loss. A detailed description of how the BGM is administered, scored, and analyzed was provided by Gerrish and Bailey (2012). In summary, the grid is administered in three stages.

First, individuals are asked to develop a personal timeline of significant life events that "say something about who they were" at that point in time, with one of these being the loss event under investigation. These events then become the "self-elements" for the individual's grid. What they in fact represent are autobiographical memories, or "situated self-identities" that plot the development of the person's identity across the life span (Neimeyer, 1985). At this stage it can be useful to include two other self-elements in the person's timeline: the "ideal self," to assess the degree of positivity or negativity of the other self-elements on the person's grid, and the "present self," to assess the perceived continuity of his or her construal of self in the past into the present (Neimeyer & Stewart, 1996). In this study, rather than using only one provided self-element to reflect the present self, three provided self-elements were chosen to reflect different dimensions of the mother's present-self. These included: me as I am personally (i.e., personal self), me as I relate to others (i.e., relational self), and me as I am spiritually/philosophically (i.e., spiritual self). These self-elements were chosen to reflect the core domains of identity in which PTG typically occurs, but also the domains in which negative or otherwise problematic changes to self-identity can occur (Neimeyer, 2004b; Tedeschi & Calhoun, 2004).

In the second stage of the BGM, personal constructs are elicited. Kelly (1955) defined these as bipolar mental representations that individuals develop in order to make sense of their existence and gain security, predictability, and control in the world. In accordance with the triadic elicitation method used with most repertory grids, individuals are presented with three of their self-elements with the instruction to "identify some way in which two of them are similar, yet different to the third," thereby eliciting a potentially important theme or personal construct that informed their construal of themselves at that point in time (e.g., times I succeeded vs. times I struggled; life stopped vs. life continued on). Further groupings of three self-elements are then presented,

resulting in the generation of additional constructs that together begin to provide an understanding of the individual's identity development over time.

The purpose of the third and final stage of the BGM is to weave the personal constructs generated in Stage 2 through the major points of the individual's self-narrative. This is achieved by asking individuals to consider one by one each of their self-elements on their grids in relation to each of their constructs and to provide a rating (using a Likert-type rating scale, e.g., from 1 to 7) to indicate how each core theme/construct has informed their identity development over time. When completed for each self-element across each theme/construction, the end result is a matrix of ratings that can be analyzed using both qualitative and quantitative methods.

In this study, in accordance with guidelines for the analysis of repertory grid data (see Jankowicz, 2004; Neimeyer, 1993), each mother's grid matrix was analyzed and interpreted at both content and structural levels. In terms of the former, the grid data was analyzed in an "impressionistic or qualitative fashion" (Neimeyer, 1993, p. 74). First, a process analysis was conducted by reflecting on how the grid administration had proceeded, with a focus on how mothers completed the grid and their personal experience of the process. Second, eyeball analysis of the grid for each mother was conducted using guidelines provided by Feixas, Geldschlager and Neimeyer (2002), Jancowicz (2004), and Neimeyer (1993).

Structural analysis of the grid data used hand-scoring procedures (Jancowicz, 2004) to identify the percentage of positive, negative, positive/negative, neutral, mid-point, zero, and polarized negative (i.e., extreme ratings of 1 or 7) ratings for each mother's grid. In addition, the percentage of polarized ratings provided by mothers of their death self-element was calculated. Next, similarity scores were calculated between all the self-elements of each mother's grid. This involved calculating sums of differences scores between all possible pairs of self-elements and converting these into percentage similarity scores (see Jankowicz, 2004). From this process a table of percentage similarity scores was generated for each bereaved mother, enabling specific relationships of theoretical interest to be examined. In particular, scores between the death self-element, personal, relational, and spiritual self-elements (i.e., representing the present self), and the ideal self element were considered. By assessing how these four self-elements articulated with each other it was possible to examine the degree to which each mother had adaptively integrated the death experience into her identity in the present (i.e., on personal, relational, and/or spiritual levels), versus the degree to which the death remained fragmented from her identity in the present, potentially reflecting complications in her grieving process (Neimeyer, 2004a; Neimeyer, Prigerson, & Davies, 2002; Payne, Joseph, & Tudway, 2007; Sewell, 1996).

Psychometric Measures

The Hogan Grief Reaction Checklist (HGRC; Hogan, Greenfield, & Schmidt, 2001) is a 61-item scale designed to measure positive and negative grief reactions to the death of a loved one. Items are rated from 1 (does not describe me at all) to 5 (describes me very well). Factor analysis of the HGRC revealed 6 factors: despair, panic behavior, blame & anger, detachment, disorganization, and personal growth. Cronbach's alpha ranged between .79 and .90 for the six factors, and convergent and divergent validity results have been consistent with the conceptual structure of the HGRC (Hogan et al., 2001).

The Post-Traumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) is a 21-item self-report of individuals' perceptions of positive changes following a traumatic life experience. Items

are rated from 0 (I did not experience this change at all) to 5 (I experienced this change to a very great degree). The PTGI contains five factor-analytically derived subscales: relating to others, new possibilities, personal strength, spiritual change, and appreciation of life. In the validation sample, scale intercorrelations ranged from $r = .62$ to $r = .83$, and internal consistency from $\alpha = .67$ to $.85$, with that of the whole scale being $\alpha = .90$ (Tedeschi & Calhoun, 1996).

Quantitative analysis of the HGRC and the PTGI was undertaken using descriptive statistical methods. On the HGRC, an average grief distress item rating was calculated for each mother, using the 49 items from the five grief distress factors. Similarly, an average personal growth item rating was calculated from the 12 items on the personal growth factor. On the PTGI, an average personal growth item rating was calculated for each mother, using the ratings from the 21 items. Ratings of 1–2.4 were interpreted as a low level of grief distress or personal growth, 2.5 low/moderate, 2.6–3.4 moderate, 3.5 moderate/high, and 3.6 and above a high level of grief distress or personal growth. A more adaptive grief response was defined by an average grief distress item rating on the HGRC in the low/moderate range, paired with an average personal growth item rating on the HGRC and the PTGI in the moderate/high range. In contrast, a more complicated grief response was defined by an average grief distress item rating in the moderate/high range on the HGRC, paired with an average personal growth item rating in the low range on the HGRC and the PTGI.

Integrated Data Analysis: Merging the Three Datasets

In accordance with the guidelines provided by Creswell and Plano Clark (2007), the integrated analysis involved comparing and contrasting findings from each dataset to identify similarities and differences between them. Where inconsistencies emerged between datasets, efforts were made to meaningfully account for these findings. These interpretations formed the basis for generating meta-inferences in relation to bereaved mothers' adaptive and complicated responses to their loss (i.e., findings that moved beyond what the single datasets could provide).

RESULTS AND DISCUSSION

Independent and integrated analyses of the findings from each of the datasets were organized into three sections: (a) characteristics of bereaved mothers' adaptive and complicated grief responses, (b) coping processes associated with these types of responses, and (c) factors related to these responses. The findings from this study supported and extended many of the premises that underpin how cognitive/trauma models (Calhoun & Tedeschi, 2006; Janoff-Bulman, 2006), constructivist theories (Gamino & Sewell, 2004; Neimeyer, 2001; Neimeyer & Sands, 2011), and the Dual Process Model of Bereavement (Stroebe & Schut, 1999; 2010) understand adaptive and problematic responses to major loss events.

However, it should be noted at the outset that all the mothers evidenced adaptive *and* complicated grief responses to their children's deaths within one, two, or all three of their datasets (i.e., thematic, biographical grid, and psychometric results). It was not appropriate, therefore, to categorize the bereaved mothers as "adaptive" or "complicated grievers." Along similar lines, based on the thematic analysis of interview data from 85 bereaved individuals, Gamino and Sewell (2004) were not able to make categorical distinctions between participants with "positive

meaning reconstructions and those with negative ones.” Instead the overwhelming majority of their sample reported both (p. 413).

Despite this, it was possible to differentiate the mothers in terms of their proportions of adaptive versus complicated grief responses. In particular, four mothers (M3, M9, M11, and M12) showed the highest proportions of adaptive grief responses within all three datasets. In contrast, three mothers (M4, M5, and M8) showed the highest proportion of complicated grief responses within all three (M5) or two (M4 and M8) datasets. Finally, six mothers (M1, M2, M6, M7, M10, and M13) showed more equal proportions of adaptive and complicated grief responses within their thematic results, mostly adaptive grief responses on the psychometric measures (except for M10) and mostly complicated grief responses within their BGM results.

Bereaved Mothers’ Adaptive and Complicated Responses to Their Children’s Deaths

According to cognitive theorists, how individuals respond to the potentially terrifying assumptions implied by loss is considered crucial in determining their responses. As Payne and colleagues (2007) explained, following massive disruption to a person’s assumptive world, three potential psychological outcomes are possible: assimilation (return to baseline functioning), positive accommodation (better functioning), and negative accommodation (poorer functioning). In the initial sections below, findings are examined in relation to each of these types of psychological outcome. In addition, findings that support two other psychological outcomes—termed positive and negative assimilation—are described. These outcomes differed from the form of assimilation described by Payne and colleagues (2007), in that the mothers who experienced them did not return to baseline functioning. Instead, they described how their loss had changed them, either through reinforcing and strengthening adaptive aspects of their preloss self-identities (positive assimilation) or by reaffirming (and further entrenching) certain maladaptive beliefs they held prior to their loss (negative assimilation).

In the section that follows, with reference to constructive perspectives on trauma/loss, variations in narrative complexity shown in the biographical grids (i.e., self-narratives) of the bereaved mothers are documented for the purpose of highlighting more adaptive versus potentially more complicated grief responses. Finally, some of the characteristics of the highly adaptive relationship bonds that all of the mothers had established with their deceased children are examined.

Assimilation

For 11 of the 13 mothers, the death of their child did not appear to result in the psychological outcome that cognitive theorists term *assimilation*. According to these theorists, some individuals respond to the invalidating meanings implied by adverse life events (i.e., that the world is random, uncontrollable, and meaningless) by attempting to restore their previously held (albeit illusory) assumptions. Although this outcome is adaptive in one sense (as it could alleviate distressing symptoms), it is generally seen as problematic, because the cost of retaining these pretrauma schemas is that the individual’s assumptive world is left more “fragile to future fragmentation and vulnerable to subsequent traumatization” (Joseph & Linley, 2005, p. 271). Seemingly, few of the bereaved mothers returned to any illusory assumptions they might have held prior to the child’s death. It appeared that the extreme negativity associated with the loss of a child could

not be “partitioned off” in an attempt to “reaffirm pre-trauma beliefs” (Payne et al., 2007, p. 82). As Hogan and Schmidt (2002) explained, it is simply not possible for many bereaved parents to return to their former self following the death of a child.

Positive Assimilation

All 13 mothers reported adaptive changes to their self-identity following their child’s death that did not emerge from massive disruption of their self and worldviews. Rather, they perceived these changes as *accelerating a process of adaptive personal development that was already in place prior to their death*. These mothers described how their experience of loss had “crystallized,” “heightened,” and “strengthened” adaptive beliefs they held prior to their child’s death. Strictly speaking, given the absence of any shattering of self as a precursor to these changes, they did not reflect the outcome of positive accommodation (i.e., PTG); instead, the loss validated key adaptive features of their preloss worldviews. For example, M9 described how she had always felt compassion for other people’s suffering, but following her daughter’s death, this had changed in some meaningful ways. In particular, she explained how she had moved from an intellectual understanding of compassion (“everything before was concepts—it was all head knowledge”) to a personal knowing (“a heart knowledge—this is where you’ve lived it”). Hence, she now believed she felt a *deeper compassion* for others.

Negative Assimilation

Several of the mothers described how they already held some negative views of themselves and the world prior to the child’s death, which had been reinforced as a consequence of the loss. Given that these changes were not perceived to emerge from the shattering of their worldviews, they did not reflect the outcome of negative accommodation. Rather, the child’s death seemed to have activated and strengthened maladaptive beliefs that mothers already held about themselves or the world (e.g., “I am unworthy”) prior to their loss. For example, one mother stated that she had “always been a worrier” prior to her daughter’s death. After her child’s death, she had become even more vigilant and restrictive in what she allowed her two surviving children to do for fear that “death could strike again at any time.”

According to Currier, Holland, and Neimeyer (2009), this form of problematic response to bereavement has received considerably less attention in the literature. For bereaved individuals who respond in this way, the death of a loved one “simply provides further evidence for the cruelty or indifference of God or the universe, the ultimate meaninglessness of life, or the powerlessness of the self” (Currier et al., 2009, p. 183). Similarly, Boelen, van den Hout, and van den Bout (2006) described how loss can reactivate longstanding negative global beliefs about the self, world, and future. Often these beliefs develop from people’s experiences of rejecting or unstable relationships with primary attachment figures during childhood (Bowlby, 1980; Neimeyer et al., 2002). A more detailed examination of how these prebereavement histories and associated assumptive worldviews can contribute to the development of problematic and pathological postbereavement responses was provided by Gerrish, Dyck, and Marsh (2009).

Positive Accommodation

For all 13 mothers, the death of a child led them to experience profound changes in how they viewed themselves, other people, and the world. Evidence of positive accommodation was revealed in the mothers' reports of personal changes such as increased personal strength, greater self-reliance, being more open to experiences, heightened self-awareness, feeling more authentic, greater confidence, enhanced self-worth, increased self-acceptance, and less fear of their own mortality. It was also revealed in adaptive relationship changes, such as feeling greater compassion for other's suffering, acting more assertively, and strengthened relationships with people in their family and community. Many of these adaptive personal and relationship changes are consistent with the positive psychological changes described in Tedeschi and Calhoun's (2004) functional-descriptive model of PTG.

In terms of worldview changes, the majority of the mothers described how their beliefs about life had been permanently changed as a result of their loss. Most of these changes were considered adaptive by participants, and occurred in the domains of their (a) spiritual or religious views and (b) assumptions about the world. Beginning with spiritual beliefs, 10 of the 13 mothers reported having a religious base in place prior to their child's death. Six of these mothers' belief systems had been reinforced as a consequence of their experience of loss. For the four other mothers with preloss religious frameworks, their child's death had massively challenged their spiritual frames of meaning. Finally, for the three mothers with no preloss spiritual/religious beliefs, two (M1 and M11) had developed new beliefs following their child's death that helped them respond adaptively to their loss. The other mother (M8) with no such beliefs prior to her child's death developed new beliefs that contributed to complications in her grieving process.

Overall, we found that most of the mothers, through their struggle with grief, had experienced some adaptive changes in their core assumptions about the world. For example, one (M3) described how the death of her son had led her to recognition of the "good and the bad" in all experiences. Another (M5) described how she had developed new and adaptive assumptions about the controllability of life as a result of her experience of losing her child (e.g., that much of life was random and beyond her control).

Negative Accommodation

Some mothers believed their child's death had led to negative changes in how they perceived themselves and others. One (M8) stated, "I always thought I was a strong person, but now I realize I'm not." For this mother, the death of her child had led to an "alteration of her beliefs in a negative direction" (Payne et al., 2007, p. 85). Moreover, all 13 continued to experience a chronic feeling of sadness in relation to the death, despite an average 4.5 years having passed. Furthermore, all anticipated they would feel this sadness for the rest of their lives. Most of the mothers had learned to "live alongside" this sadness. However, several mothers suffered considerable disruption to their daily functioning as a consequence.

Several of the mothers in this study believed their child's death also had contributed to negative changes in their perceptions of others (e.g., in the form of negative responses from others to their grief). Two mothers experienced a breakdown of their marriage (M12) or intimate relationship (M8) following their child's death.

In terms of negative worldview changes, a minority of the mothers believed that these had permanently changed in negative directions as a result of their loss. In the domain of spiritual views, one previously agnostic mother (M8) stated that her son's death had left her with a negative view of religion. She stated that she could "not understand how a God could be so cruel" as to take a child's life. In terms of assumptions about the world, another (M10) struggled to come to terms with the loss of predictability and future when her son died. A third (M4) had been left with a malevolent view of the world, describing it as "living in hell." Finally, another's (M5) belief—that pushing her child to be a good student at school would have afforded her some form of protection from harm—was shattered when her daughter died.

Variations in Narrative Complexity Within the Self-Narratives of the Bereaved Mothers

According to constructivist perspectives (Neimeyer, 2004b), increases in narrative complexity occur when individuals, in response to major life events, are able to successfully reconstruct a coherent image of self in relation to the event, and find positive significance for it within the larger self-narrative of their lives. In contrast, some individuals struggle to elaborate their self-narratives in such a way that enables this integration to occur, leaving them vulnerable to complications in the grieving process (Sewell et al., 1996). Results from the BGM indicated that of the 10 mothers who completed grids, four (M3, M9, M11, and M12) appeared to have greater narrative complexity as compared to the other six (M1, M2, M5, M6, M7, and M10). This assessment involved examining three major aspects of the grid results: (a) how the mothers had construed their identity in relation to their major life events, particularly the death of their child; (b) the extent to which they appeared to have meaningfully integrated their child's death into their broader self-narrative; and (c) evidence of personal constructs that helped them to adaptively assimilate their child's death or that changed along more adaptive lines in order to accommodate the loss. In summary, those mothers who appeared to evidence greater narrative complexity had grids that contained the following characteristics:

- more flexible overall construal style containing balanced construing (i.e., "shades of gray") in relation to major life events;
- self-construal at the time of the child's death that was more complex or had adaptive aspects;
- greater integration of the child's death into the broader life story; and
- some personal constructs that facilitated assimilation of major life events (including the child's death), contributing to narrative continuity and/or some that changed along more adaptive lines in response to the death.

In contrast, those mothers who evidenced less complexity in their self-narratives had grids that contained the following characteristics:

- a more rigid overall construal style dominated by polarized construing (i.e., "black and white") in relation to major life events;
- a self-construal at the time of the child's death that was highly polarized and negative;
- fragmentation of the child's death in relation to the broader life story (i.e., it remained an isolated event within the self-narrative); and

- few personal constructs that facilitated assimilation of major life events (including the child's death) or that changed along maladaptive lines in response to the death.

Development of an Ongoing Relationship Bond With the Deceased Child

A major finding of this study was that all 13 mothers—regardless of the degree to which they evidenced complications in their grieving process in other ways—had established a mostly adaptive ongoing (symbolic/internalized) bond with their deceased children, which they considered would be life-long. Some of the forms of this ongoing relationship included engaging in rituals to remember their children (e.g., visiting the cemetery and acknowledging anniversaries of the death), having conversations with their children (e.g., speaking aloud to tell them they loved them), spiritual encounters with their children (e.g., sensing their children's presence), finding connection to their children through maintaining close relationships with grandchildren, and engagement in community activities where they were able to draw on the legacy of their children (e.g., promoting increased awareness of cancer). In a powerful statement reflecting the overall significance of this ongoing bond, one mother (M2) described how she was “learning to live with an invisible [her child's name]” and said that the bond she had with her child “would never die.”

However, despite all the mothers in this study finding meaning in the form of this ongoing relationship, for one mother (M5) the nature of her attachment with her child before her death had complicated her attempts to form this meaningful bond. This mother explained how their preloss relationship had been a major source of her self-worth and had been one “without boundaries.” As a consequence, when her child died, the suffering endured by the child in the past became her own suffering in the present. However, with the assistance of a spiritual medium, this mother transformed the nature of her relationship to her deceased child. In particular, she was able to psychologically separate from her daughter (i.e., she saw that her daughter's illness and afterlife needed to be “her journey”). This enabled her to refocus the suffering she felt in relation to her daughter's life to considering what this suffering meant for her own life. This represented the beginning of a new form of ongoing bond with her deceased child, one in which she was not sure of the destination, but that offered new hope and more solace.

Coping Processes Associated With Mothers' Responses to a Child's Death

The bereaved mothers were found to have coped in four major ways in response to their children's deaths, which in turn were associated with adaptive and complicated grief responses. These coping processes are described below with reference to the Dual Process Model of Bereavement (Stroebe & Schut, 1999, 2010) and other trauma/bereavement research.

Loss and Restoration-Orientated Coping

All 13 mothers in this study were able to relate to the concepts of loss and restoration-orientated coping as described in the DPMB (Stroebe & Schut, 1999). That is, all experienced times when they were consumed by feelings of loss and times when they were focused on completing the tasks associated with living each day and progressing with their lives. This suggests the DPMB can be applied usefully in understanding how bereaved mothers cope with the death of a child—research that to date has been lacking (Stroebe & Schut, 2010).

TABLE 2
Coping Processes Associated With Bereaved Mothers' Responses to a Child's Death

Adaptive responses	Complicated responses
<p><i>Loss-orientation:</i></p> <ul style="list-style-type: none"> ● Loss-related feelings that can be emotionally painful, but not to the point of causing distress or problematic decline in daily life functioning. ● A reduction in the number (i.e., frequency) of these loss-related feelings with the passing of time. ● A reduction in how long these loss-related feelings lasted (i.e., duration) with the passing of time. ● An increased awareness of what triggers their loss-related feelings (e.g., a particular song) with the passing of time, with these (now anticipated) triggers able to be better managed when next encountered. ● A more active approach to managing loss-related feelings when they arise (e.g., setting aside time each day to reflect on the loss). ● Loss-related feelings can bring a connection to child that is comforting or growth-producing (e.g., through feeling the loss, new insights into self are obtained). <p><i>Restoration-orientation:</i></p> <ul style="list-style-type: none"> ● Constructive engagement in activities and goals that are directed toward building a new identity independent of the deceased child (e.g., starting a new career pathway). <p><i>Regulation of loss and restoration-orientated coping:</i></p> <ul style="list-style-type: none"> ● Moment-to-moment movement between loss and restoration-orientated coping (i.e., highly interrelated pattern). ● Increased self-control over the regulation with the passing of time (e.g., can consciously move into or stay in restoration-orientated coping if they need to). 	<p><i>Loss-orientation:</i></p> <ul style="list-style-type: none"> ● Loss-related feelings that remain highly distressing (i.e., experienced at levels close to what was experienced at the time the child died) or cause a decline in ability to function. ● These (distressing) loss-related feelings are frequently present (i.e., for varying durations every day). ● Once loss-related feelings are activated, they frequently continue for long periods of time (e.g., 1 to 2 days). ● A continuation of high numbers of unexpected/random triggers (i.e., those that come "out-of-the-blue") that activate loss-related feelings with the passing of time, with these (now anticipated) triggers then actively avoided. ● A more passive approach to managing loss-related feelings when they arise (e.g., view that when loss-orientated feelings come there is little they can do in response). ● Loss-related feelings tend to bring a connection to child that is distressing (e.g., reactivates negative memories of the child's suffering). <p><i>Restoration-orientation:</i></p> <ul style="list-style-type: none"> ● Engagement in other activities and goals is mostly driven by the need to avoid the intensity of being in loss-orientated coping (e.g., going to work only as a form of distraction). <p><i>Regulation of loss and restoration-orientated coping:</i></p> <ul style="list-style-type: none"> ● Extended periods in loss-orientated coping, with occasional movement into restoration-orientated coping (i.e., either/or pattern). ● Difficulty regulating between loss and restoration-orientated coping despite the passing of time (e.g., will leave a social event because they are unable to move out of loss-orientated coping when it is activated).

A second major finding of this study was that all of the mothers, despite the passing of considerable time since their loss (an average of 4.5 years), continued to cope in *both of these ways* and anticipated that they would continue to do so for the rest of their lives. These findings are consistent with other research that suggests the grieving process of bereaved parents is typically lifelong (Arnold & Gemma, 2008; Malkinson & Bar-Tur, 2005). However, we also found differences in how some of the bereaved mothers had coped in these two ways, which in turn seemed to be associated with more adaptive versus complicated grief responses to their loss. These differences mostly emerged in the domain of loss-orientated coping, but also related to the regulation between loss and restoration-orientated coping styles (see Table 2).

Moving From Making Sense of the Loss to Finding Significance for It in One's Own Life

Two of the mothers (M5 and M10) believed their ability to cope with their loss improved once they stopped searching for answers as to “why” their children had died. They both reached a point at which they realized they would never find the answers they sought. M5 was then able to refocus on her own life. In other words, instead of ruminating on the sense of the death, she focused on finding meaning for the loss in terms of what value it had for her ongoing life. In contrast, another mother (M6) remained perpetually locked in a struggle to make sense of her child’s death. This mother struggled with questions about why her child had become sick in the first place and whether certain decisions (e.g., about her medical treatment) could have prevented her death. Finally, for one mother (M12) a search to make sense of her child’s death was never initiated because, working as a nurse, she knew that any life could be lost at any time.

These findings are consistent with the coping transition considered by Janoff-Bulman (2006) to represent a form of PTG, termed “existential re-evaluation” (p. 88). This occurs when people confronted with a major adversity are able to move from seeking explanations for why the event happened (i.e., meaning as comprehension) to exploring the meaning of the event for their ongoing lives (i.e., meaning as significance). The latter can take the form of increased appreciation for life or valuing of relationships with others. In the case of M5, in moving beyond searching for answers to why her child had died, she was able to cope adaptively by emulating the legacy (i.e., courage) of her daughter’s life as she lived her own.

In contrast, M6 had struggled to make this coping transition. Despite this, she did not evidence the high levels of grief distress (i.e., on the HGRC) that are usually associated with inability to make sense of the loss (Keesee et al., 2008; Lichtenthal et al., 2010). In seeking to explain this inconsistent finding, this mother had a strong belief in God and an afterlife for her child. This was one of the major sense-making themes reported by parents in the Lichtenthal et al. (2010) sample and one that predicted less severe symptoms of grief-related distress. Finally, for M12, her lack of any need to make sense of her child’s death (and her low grief-related distress on the HGRC) is consistent with reports that a significant proportion of the bereaved do not try to make sense of the loss and yet appear relatively well adjusted (Davis et al., 2000).

A Desire to Learn From All of Life's Experiences

Two of the mothers (M3 and M12) had always coped with life adversities by seeking to learn, grow, and find meaning from such experiences, and explained that the death of the child had activated a similar drive. One (M3) saw it as an “inevitable reality” that the death of her child was another source for such growth. Tennen and Affleck (1998) similarly found that some individuals intentionally tried to “view her/his crisis as an opportunity for personal growth,” and that these efforts could lead to adaptive personal change (p. 83). Barrera and colleagues (2007) reported a similar finding in their investigation of 20 parents who had lost a child to cancer or other causes. These researchers found that some parents coped with their loss by working “very hard to positively reframe their experiences of losing a child” (p. 152). Finally, several earlier models of coping and personal growth similarly emphasize the importance of redefining a crisis event as a challenge in facilitating personal growth (Nerken, 1993; Schaefer & Moos, 1992).

Dealing With Additional Life Stressors Following the Loss

Some mothers had to cope with additional life stressors after the child's death, including conflicted relationships, illness and deaths of other family members, personal health crises, and dealing with practical life changes (e.g., moving or changing employment). For some (e.g., M8), these stressors were so overwhelming that they complicated the grieving process. However, two other mothers (M7 and M10) felt *better able to cope with these crises*, which they attributed to having survived the deaths of their children. This type of coping appears to relate to two types of personal growth that can follow such coping success. First, Tennen and Affleck (1998) used the term "growth reminding" to describe situations in which individuals who have "already discovered personal growth from their adversity may be able to use this knowledge to actively comfort themselves in difficult times" (p. 84). Second, Janoff-Bulman (2006) described a type of personal growth that can follow from successful coping, which she termed "psychological preparedness" (p. 91), which lead people to "better withstand the shock of [future] tragedy" (p. 32).

Factors Related to Mothers' Adaptive and Complicated Responses to a Child's Death

Six possible factors were found to be related to adaptive and complicated grief responses to the loss of a child. These are described below.

Perceptions of the Child's Life With Cancer and His or Her Death From the Disease

All of the mothers struggled immensely with witnessing their children suffer in multiple ways from their illness, but particularly in relation to the harsh medical treatments they endured. However, a detailed examination of the results revealed that some mothers, although having painful recollections of their children's suffering, also accepted that the decisions they made (e.g., about medical treatment) were the best they could make at the time with the knowledge they had. Furthermore, some perceived positive aspects to how their children had responded to their illness or death. For example, they recalled that their children had matured beyond their years, lived full lives despite their reduced years, or shown great courage in the face of their illness and death. In contrast, complicated grief responses were characterized by perceptions of the child's illness, treatment, and death that were dominated by distressing memories. In particular, medical decisions were tainted by regrets. In addition, rather than perceiving the children as being transformed in adaptive ways through the illness, they were seen as having been diminished by it.

These findings are consistent with McCarthy and colleagues' (2010) study of parental grief following the death of a child from cancer. Based on interview and psychometric assessment of 58 mothers, they found that lower parent-perceived quality of life for their children prior to death was a major predictor of clinical levels of depressive and complicated grief symptoms. Similarly, Barrera and colleagues (2007) found that how parents perceived their children's lives with cancer was an important part of their grief experience. In particular, bereaved parents "reflected on aspects of life that, due to illness and treatment, the child was unable to enjoy when he or she

was alive” (p. 504). For example, they grieved the loss of their children’s future in the sense that their children would never reach major milestones such as marriage. In expanding on these findings, we found that a child’s own perception of the illness had implications for his or her mother’s grief responses. An example of this was provided by M8, whose son was suffering from a preexisting mental health problem at the time he was diagnosed with cancer, which his mother believed had led him to react to his illness with extreme hostility, distress, and denial. This significantly complicated her grieving process. Similarly, Barrera and colleagues (2004) found higher levels of depression, anxiety, and general mental health issues in bereaved mothers whose children suffered from significant behavioral problems throughout the course of their cancer.

Opportunity to Prepare for the Child’s Death

Some mothers reported being able to anticipate their children’s deaths and so took the opportunity to speak with their children about dying. However, others had minimal time to prepare for death—in the case of M2, her child died within four weeks of her diagnosis. In her own work on parental grief, Rando (1986) argued that parents who could engage in “anticipatory grieving” experienced better adjustment during the illness and subsequent to the death, a finding replicated by Kreicbergs (2005). Rando (1983) found that even making funeral arrangements was an important part of anticipatory grieving for some parents with an ill child. In the present study, one mother (M11) described how her son organized and held his own wake before he died, and how his courage in this regard had helped her to adjust to his loss. Finally, in another study, McCarthy and colleagues (2010) found that a lower level of preparedness for a child’s death was correlated with more separation distress (a component of complicated grief reactions) and depression in parents who had lost a child to cancer.

In addition, all of the mothers emphasized the importance of being present when their children died and saying goodbye, even though in some cases a child was not conscious. This is consistent with other studies that show an association between adaptive grief responses and the parent being present for the child’s death (Martinson, Lee, & Kim, 2000; Wijngaards-de Meij et al., 2008; Woodgate, 2006). Other studies with mixed bereavement samples have similarly reflected the benefits for adjustment when there is the chance to say goodbye to a loved one (Frantz, Trolley, & Johll, 1996; Gamino, Sewell, & Easterling, 2000). Finally, Rosenblatt (2000) described how parents who were not present at the death of a child strived for many years after to reconstruct the moment of the death, highlighting the importance of this for resolution of the loss.

Perceived Preventability of the Child’s Death

Three of the mothers’ (M2, M8, and M12) grief was complicated by questions relating to whether their children’s deaths could have been prevented had their cancers been diagnosed earlier. In contrast, the other mothers mostly perceived their children’s deaths as beyond anyone’s control. For the three who felt their children’s deaths were preventable, each perceived failures in the medical system as the main foundation for their concerns. Likewise, Gamino and colleagues (2000) found perceiving a loved one’s death as preventable was a significant predictor of higher levels of grief-related distress in a mixed bereavement sample. Martinson, Guang-Qi, and Yi-Hua (1993) also found that some parents blamed medical professionals for their children’s deaths, a factor found to lead to complications in the grieving process (Martinson et al., 2000).

However, we also found differences in how the three mothers who thought their children's deaths could have been prevented had responded to this issue. M2 sought and obtained an apology from the treating medical professional concerned, although this was given in confidence and without an admission of liability. This helped her to come to terms with this aspect of her grief. M12 sought legal advice and was told she had a case, but decided it would "not bring her son back" and was working toward accepting what had happened. However, M8 appeared to have made less progress in resolving her concerns about the preventability of her son's death. She seemed unable to move past her feelings of guilt, regret, and blame—of herself and of the medical staff that treated her son.

The Posttrauma Social Environment

Twelve of the 13 mothers experienced complications in their grieving that related to the failure of others to support them in their grief. These support failures came from a range of people, including friends, family members, medical professionals, and others. Only one mother (M11) perceived her postloss social environment in entirely positive terms. The important role social support plays in facilitating bereaved parents' adaptive grief responses to loss has been documented by many researchers (Barrera et al., 2009; Doka, 2002; Hogan & Schmidt, 2002; Lepore, Silver, Wortman, & Wayment, 1996; Riley, LaMontagne, Hepworth, & Murphy, 2007). In a large population-based study of 449 parents following the death of a child from cancer, Kreicbergs, Lannen, Onelov, and Wolfe (2007) found that those who reported more support had a "higher likelihood of having worked through their grief" when compared with those who did not (p. 3308). Consistent with these findings, we found that the one mother (M11) who perceived her postloss social environment in mostly favorable terms also experienced mostly adaptive grief responses to her loss.

Our finding that 12 of the bereaved mothers experienced complications in their grieving process attributed to social support failures is also consistent with other research. For instance, Barrera and colleagues (2009) found that "nearly all parents had experienced at least some negativity" from their social support network following the death of a child from cancer (p. 508). Examples included not being listened to when parents spoke about their grief to others, or being offered advice about their grief that was unhelpful or even hurtful. Although the present study revealed similar support failures, it also highlighted how the mothers' responses to these social support failures influenced the degree to which their grief was complicated by these failures. In particular, when faced with negative responses to their disclosure of loss, three mothers (M4, M5, and M8) found it helpful to remember that if people had not lost a child themselves, they were unlikely to know how to respond to their grief. Other mothers developed a greater capacity to be self-reliant. Some recognized that much of their grieving would inevitably be "done alone," and others became better at discerning who to disclose to about their loss and who not to tell. In addition, some mothers rehearsed their responses to questions they knew they would be asked so they could feel confident when responding (i.e., knowing what to say when they were asked, "How many children do you have?"). Furthermore, eight of the mothers (M2, M3, M4, M5, M6, M8, M9, and M12) attended support groups that helped them counter some of the negative responses from others to their loss. Finally, five mothers (M4, M5, M8, M12, and M13) consulted a psychologist or psychiatrist at some stage and found it beneficial to talk through their grief with someone who was nonjudgmental and who really listened to their suffering.

In contrast, three mothers (M4, M5, and M8) struggled to find ways to counter the negative impacts these failures in support had on their functioning. This had contributed to complications in their grieving process. In particular, they reported feeling angry and bitter about such exchanges, found themselves increasingly withdrawing from social situations, or felt that their self-worth had been negatively affected.

Level of Psychological Distress Related to the Child's Death

Nine of the mothers' (M1, M2, M3, M6, M7, M9, M11, M12, and M13) results on the HGRC and PTGI appeared to reflect a mostly adaptive grief response to their loss that had continued over time. This was evidenced by low/moderate levels of grief-related distress and moderate/high levels on at least one of the personal growth measures. In contrast, three others (M4, M5, and M8) evidenced moderate/high levels of grief-related distress and low personal growth on both the HGRC and PTGI, reflecting potential complications in their grieving process that had continued over time. Other researchers also have reported an inverse relationship between personal growth and grief-related distress in mixed bereavement samples (Davis, Nolen-Hoeksema, & Larson, 1998; Gamino et al., 2000) and with samples of bereaved parents (Hogan et al., 2001). But how can such divergent outcomes be understood in light of evidence that all of our bereaved parents experienced substantial pain and grief following the loss of their children? In seeking to further explore such apparent differences, cognitive/trauma theorists (Janoff-Bulman, 2006; Tedeschi & Calhoun, 2004) have argued that once individuals have gained some control over initially intrusive and highly distressing ruminations about the trauma event, they can move into a more constructive (i.e., deliberate) processing of event-related information, one focused on rebuilding a functional worldview. However, a degree of ongoing distress in this period "may actually be important for the maximum amount of posttraumatic growth to occur" (Tedeschi & Calhoun, 2004, p. 8). As Calhoun, Tedeschi, Cann, and Hanks (2010) stated, some intrusive thoughts and associated distress "serve as a stimulus to work even harder to engage the deliberate thoughts" (p. 133). In support of this rationale, recent research has demonstrated that postloss growth is most substantial when distress is significant but is neither negligible nor overwhelming (Currier, Malott, Martinez, Sandy, & Neimeyer, 2012). In this study, it is possible that M4's and M8's high level of grief-related distress served to inhibit their opportunity for personal growth. In contrast, it was possible that the other nine mothers' low/moderate levels of grief-related distress had facilitated their experience of growth.

Losing an Only Child vs. Having Other Surviving Children

One of the mothers in this study (M4), who lost her only child to cancer, evidenced some of the highest proportions of complicated grief responses to her loss across all three datasets. At one point her grief became so severe that she was admitted to a psychiatric facility with high suicidal intent. In other research conducted with mothers who had lost an only child, Talbot (2002) found many experienced periods of suicide ideation following their child's death. However, she found the majority of mothers who felt suicidal "made a conscious decision to survive" through reinvesting in life activities aimed at building a future without their child (p. 159). Despite this, she also found that some mothers remained "perpetually bereaved," with over 60% making no comments reflecting a conscious decision to survive. Instead, these mothers lived mainly to get

through the day and were ambivalent about whether they had any future. In the present study, M4 also explained that the only reason she was still alive and prepared to live on a day-to-day basis was for the sake of her husband. The only meaningful existence she could envisage was one in which she was reunited with her deceased daughter.

In another study, Wijngaards-de Meij and colleagues (2005) examined psychological adjustment among 219 bereaved parents who had lost a child to a range of causes, finding that “parents grieved less and had less depression when there were other children in the family” (p. 619). Finally, Wheeler (1993–1994) used qualitative interviews and quantitative measures to investigate grief experiences and meaning and purpose in life in 203 parents whose children had died from a range of causes. She also found that a major source of meaning-making for the parents was having surviving children to invest in, noting that “almost half of the parents mentioned their living children as providing life meaning” (p. 60). In this study, M4 was the only mother who did not have this opportunity.

CONCLUSION

This study described the meaning-making underlying bereaved mothers’ adaptive and complicated grief responses to the death of a child from cancer. Using a mixed-methods research design incorporating constructivist data collection methods, we concentrated on shifts in participants’ self-narratives, world assumptions, coping processes, and psychological outcomes an average of 4.5 years following their loss. We found that all of the mothers evidenced adaptive *and* complicated grief responses to their loss—that is, they could not simply be categorized as “adaptive” or “complicated grievers.” However, some showed higher proportions of one or the other of these types of responses, which were linked to processes posited by cognitive/trauma theories (Calhoun & Tedeschi, 2006), meaning reconstruction perspectives (Neimeyer & Sands, 2011), and the DPMB (Stroebe & Schut, 2001). We found that the massive challenge to bereaved mothers’ assumptions about themselves, other people, and their world seemed to instigate highly meaningful changes in their self-identity that emerged from their struggle with grief, leading to substantial personal growth for many. These adaptive responses were associated with more flexible construing of major life events, greater integration of the loss into their self-narrative, and more adaptive construing of the self at the point of the child’s death. Of note, many of these transformational changes occurred in the *absence* of major disruption to the mothers’ self- and world views. Instead, the loss reinforced and strengthened adaptive aspects of their preloss self-identities. Conversely, some mothers evidenced problematic changes to their self-identities following their loss, a pattern more associated with rigid construing of life events in general and the loss of the child in particular, which tended to be fragmented from their larger self-narrative. These complicated grief responses were a product of both maladaptive identity reconstruction processes and the reaffirming of certain maladaptive beliefs held by some mothers prior to their loss.

Establishment of a symbolic ongoing bond with the deceased child was a major way that all of the mothers found some solace in their loss, although this process was complicated for the mother whose preloss bond with her child was most conflicted. In contrast, the negative impacts they all encountered from their postloss social environment significantly complicated their grieving process. However, some of the mothers were able to lessen these impacts through cognitive or

strategic management of such relationships, just as they were better able to manage vicissitudes in loss- and restoration-oriented coping as described by the DPMB. Adaptation to the loss seemed to be facilitated when mothers had time to prepare for the loss, regarded it as inevitable, encountered fewer postloss stressors, and had other surviving children. However, all of the bereaved mothers continued to experience a permanent feeling of sadness in relation to the child's death, and all expected this would be life-long.

In summary, the present mixed-methods study of 13 bereaved mothers demonstrated the utility of constructivist, cognitive/trauma, and coping models in illuminating the experience of grieving in both its more and less adaptive aspects. We hope others find these results useful in guiding further research and intervention with parents suffering the trauma of losing a child.

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