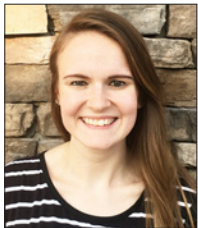


Suddenness of death as a determinant of differential grief experiences



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Abstract: Previous research has shown that bereavement following the loss of a loved one can often produce a variety of physical and psychological effects for the individuals left behind. Specifically, the suddenness and violence of a death may be particularly important determinants of subsequent negative psychological functioning. The purpose of this study was to gain a better understanding of the grief experiences of individuals bereaved by different causes of death, specifically focusing on the suddenness of the death. Adult participants completed an online survey including demographic questions and psychological measures. The results suggest that individuals who lost someone to a sudden death reported more negative outcomes and impairment than individuals who lost someone to a more expected death. These results suggest that the cause and circumstances surrounding the death may play an important role in an individual's grief and bereavement experiences.

Keywords: bereavement, grief, suddenness, expectedness

Most individuals will experience loss-related grief in their lifetime. Although some individuals experience positive psychological changes after their loss – a phenomenon known as post-traumatic growth (Michael & Cooper, 2013) – most mourners follow a similar pattern of grief (Bonanno & Kaltman, 2001). These ‘common’ symptoms can include cognitive disorganisation, dysphoria, health deficits, and social isolation (Bonanno & Kaltman, 2001). Certain causes of death (i.e., suicide, homicide, and accident) may cause additional, unique difficulties for the bereaved. These deaths can increase a bereaved individual's risk for developing complicated grief, depression, and traumatic

stress disorders (Hibberd, Elwood, & Galovski, 2010). Complicated grief symptoms include: intense longing for the deceased, difficulty accepting the loss, emotional pain, and feelings of being astounded by the loss (Papa, Lancaster & Kahler, 2014). Social acknowledgement of the loss may be an important determinant of lasting psychopathology (Bryiewicz, 2008). Unfortunately, public denial of the negative effects resulting from these traumatic losses can often impede this sense of social support and cause more negative outcomes (Raphael, 1984). In 2014, accidents and suicides were the fourth and tenth leading causes of death in the United States, respectively, for all age groups, and homicides were between the third and fifth leading causes

of death for toddlers through to middle-aged adults (Centers for Disease Control and Prevention (CDC), 2016). Given the prevalence of individuals bereaved by these losses, the factors which contribute to more maladaptive and long-lasting grief experiences warrant focused investigation.

Two elements common to suicide, homicide, and fatal accidents that may distinguish them from other causes of death are the violent manner or suddenness of the loss (Currier, Holland, & Niemeyer, 2006). Evidence indicates that the sheer *violence* of these losses has a damaging impact on the psychological functioning of the bereaved (McDevitt-Murphy, Neimeyer, Burke, Williams, & Lawson, 2012; Zinzow, Rheingold, Hawkins, Saunders, & Kilpatrick, 2009; Currier, Holland, & Niemeyer, 2006; Kaltman & Bonanno, 2003; Amick-McMullen, Kilpatrick, & Resnick, 1991). Violent deaths – including those resulting from homicides or accidents – may leave bereaved family and friends believing the loss was untimely, unfair, and meaningless (Currier, Holland, & Niemeyer, 2006). Although prior research has shown that making sense of a loss can facilitate the grief process, thereby decreasing risk for negative psychological outcomes (Neimeyer, 2006), homicide or accident loss may preclude this opportunity. This may erode the bereaved individual's core belief that people are generally good and that the world is safe (Field & Filanosky, 2009). Additionally, in a cross-sectional study of grief outcomes, Burke and Neimeyer (2014) found that violently-bereaved individuals reported more complicated grief and complicated spiritual grief than individuals bereaved by natural death. Similarly, Kaltman and Bonnano (2003) found that violent loss predicted the emergence of post-traumatic stress disorder (PTSD) symptoms and depression.

While there is evidence that violence may play a role in bereavement experiences, it is unclear whether *suddenness* may explain additional variability in negative grief reactions (Gamino, Sewell, & Easterling, 1998). Although Kaltman and Bonnano (2003) found that suddenness was not related to PTSD symptoms, other studies report inconsistent findings. Suicide deaths – which may be sudden, but may or may not occur violently – might impede bereaved individuals' ability to say goodbye to their loved ones, grasp the reality of their losses, and make meaning in the face of bereavement (Kristensen, Weisæth, & Heir, 2012). For example, Boelen (2015) found a significant relationship between perceived suddenness of a death and prolonged grief disorder and PTSD. These conflicting results suggest that further inquiry is needed to clarify the experiences surrounding the loss of a loved one to sudden forms of death, regardless of whether the death occurred in a violent way.

Although findings on the impact of the suddenness of loss have been inconsistent, decades of research argue that humans have a psychological preference for predictability and respond more negatively to sudden, unpredictable

events (Lejuez, Eifert, Zvolensky, & Richards, 2000; Badia, McBane, Suter, & Lewis, 1966). When given the choice, most individuals chose a predictable aversive event over a similar, but unpredictable aversive event (Lejuez, Eifert, Zvolensky, & Richards, 2000; Badia, McBane, Suter, & Lewis, 1966). For example, in one study, the majority of participants preferred an immediate, predictable shock, rather than a variably delayed and unpredictable shock (Badia, McBane, Suter, & Lewis, 1966). Similarly, a more recent study indicated that most participants preferred predictable administrations of 20% carbon-dioxide-enriched air rather than unpredictable administrations (Lejuez, Eifert, Zvolensky, & Richards, 2000). To our knowledge, there is no research to evaluate whether these results generalise to the aversive experience of the death of a loved one; however, this preference for predictability might explain the more distressing mourning processes experienced by those who have lost a loved one to sudden (i.e., unpredictable) causes of death - including homicides, suicides, or fatal accidents.

Supporting this prediction, suicide-bereaved individuals may experience unique difficulties relative to other bereaved groups (Jordan, 2001). Compared to other survivors, suicide-bereaved individuals report significant isolation (e.g., Kentish-Barnes & Prigerson, 2016), depression (Feigelman, Jordan, & Gorman, 2009), guilt and self-blame (Sveen & Walby, 2008), and feelings of abandonment (e.g., Jordan & McIntosh, 2011). The suicide-bereaved also perceive pervasive stigma toward themselves and their loved one's death (e.g., Cvinar, 2005) and this stigma is associated with increased grief-related difficulties (Feigelman, Jordan, & Gorman, 2009). Importantly, other studies have failed to find differences between suicide-bereaved adults and adults bereaved by other causes of death (e.g., Feigelman, Jordan, & Gorman, 2009; Murphy, Johnson, Wu, Fan, & Lohan, 2003; McIntosh, 1993) or have found differences in specific domains (e.g., grief experiences) but not in others (e.g., post-traumatic stress disorder; Sveen & Walby, 2008). Inconsistent results suggest that more research is needed to understand the specific grief experiences of the suicide-bereaved.

Suicide survivors may be in increased need of professional support; however, they also report many barriers to seeking help, including depression, lack of energy, lack of information, unavailability of resources (McMenamy, Jordan, & Mitchell, 2008) and stigmatisation (Cvinar, 2005). Research concerning the impact of these barriers on treatment engagement is limited. While some studies indicate that most suicide-bereaved individuals seek support – both formal (e.g., mental health professionals, funeral directors, clergy members) and informal, (e.g., close friends; family members; McMenamy, Jordan, & Mitchell, 2008) – others do not (Dyregrov, 2002; Provini, Everett, & Pfeffer, 2000). Given the above mentioned negative

psychological impact of suicide loss, barriers to help-seeking and potentially low levels of help-seeking among the suicide bereaved are two notable research directions.

To address the conflicting results of previous research, the aims of the present study are to 1) examine and compare the psychological effects of bereavement among individuals who lost loved ones to deaths that are commonly viewed as predictable (i.e., natural causes, illness and disease) and deaths that are commonly viewed as 'sudden' (i.e., accidents, homicides, and suicides); 2) compare the psychological effects of bereavement among individuals who reported suspecting or anticipating the death of their loved one to those who did not, regardless of the particular cause of death; 3) further investigate the differences in impact between losing someone to suicide and the other sudden death subgroups; and 4) examine whether individuals who have lost a loved one to suicide have more negative attitudes towards mental health treatment than those affected by other sudden causes of death. We hypothesised that individuals who lost someone to a 'sudden' cause of death (i.e., suicide, accident, or homicide) would experience more negative psychological outcomes than those who lost someone to natural causes, illness, or disease. We also hypothesised that individuals who did not suspect or expect their loved one was ill or at risk for death would experience more negative psychological outcomes than those who expected (or suspected) the loss, regardless of the cause of death. Lastly, we predicted individuals who lost someone to suicide would 1) experience more negative psychological outcomes than those who lost a loved one to another sudden cause of death (i.e., accident or homicide) and 2) hold more negative attitudes toward mental health treatment than those who lost a loved one to other sudden causes of death.

Method

Design and participants

Participants were 340 bereaved adults living in the United States who lost a loved one within the past five years ($M_{\text{age}}=32.5$, $SD=12.7$, range=18-72). This timeframe was selected to increase the homogeneity of the sample and to ensure sufficient memory of grief experiences. Participants were recruited via online bereavement support groups and forums, social networking sites (e.g., Facebook, Reddit), and professional organisation listservs. Recruitment was completed in a sensitive manner, ensuring that advertisements were approved by forum administrators and deemed appropriate prior to posting in each venue. Most participants lost someone to illness or disease (58%) and participants were predominantly white (89%), female (78%), and 60% reported having at least a college degree. Participants' demographic information is included in [Table 1](#).

After providing electronic informed consent, participants completed an online survey hosted on the *Survey Monkey*

Table 1. Participant characteristics

	M (SD)	n	%
Age (years)	32.5 (12.7)		
Time since loss (months)	24.07 (18.20)		
Gender			
Female		265	78.4
Male		70	20.7
Other		3	0.9
Ethnicity			
White		304	89.4
More than one race		16	4.7
Other		9	2.4
Not reported		11	3.3
Highest education			
Less than high school		6	1.8
High school or equivalent		33	9.7
Some college		98	28.8
Bachelors' or Associate's degree		132	38.8
Beyond Bachelors' degree		71	20.9
Marital status			
Never married		190	56.4
Married		97	28.8
Widowed		27	8.0
Divorced		19	5.6
Separated		4	1.2
Deceased's cause of death			
Illness or disease		197	57.9
Natural causes		63	18.5
Accident		40	11.8
Suicide		35	10.3
Homicide		5	1.5
Relationship to deceased			
Parent		92	27.1
Grandparent		75	22.1
Friend		48	14.1
Spouse, romantic partner		37	10.9
Aunt, uncle		26	7.6
Sibling		20	5.9
Child		8	2.4
Other		34	10.0
Lifetime suicide attempt (yes)		43	12.6
Lifetime NSSI (yes)		131	38.6

Note. NSSI=non-suicidal self-injury

website (www.surveymonkey.com), which included demographic questions and measures of distinct grief experiences. Participants were then presented with national mental health services information and crisis hotline phone numbers. Four hundred and fifty-eight individuals completed all or part of the online survey; however, 118 participants were excluded from the analyses (83 for providing invalid birthdates or zip codes, 23 for failing to report type of death, and 12 because they lost loved ones more than 5 years ago). Each set of analyses includes data from individuals whose full survey responses were available. This study was approved by the institutional review board of a northeastern university in the United States.

Demographics

Participants completed a demographic questionnaire that included questions about participants and their deceased loved ones. Questions about the deceased included time since death, cause of death, relationship to the deceased, and expectedness of death. We selected suicide, homicide, and accident as 'sudden' and natural causes, illness, and disease as 'non-sudden' causes of death. To determine expectedness of the death, we asked questions specific to the cause of death (e.g., 'Did your friend, relative, or loved one let others know he/she was ill in the time leading up to his/her death?' and 'In the period prior to his/her death, did you suspect this person might have been suicidal?'). Additionally, participants indicated whether they had ever attempted suicide ('Have you ever attempted suicide, i.e., intentionally caused harm or injury to yourself with the intent to die as a result of your actions?') and/or engaged in non-suicidal self-injury ('Have you ever engaged in non-suicidal self-injury, i.e., intentionally causing harm or injury to yourself with no intent to die as a result of your actions?'). Participants' help-seeking behaviours were also assessed before and after the loss of their loved one ('Did you ever seek mental health treatment, e.g., therapy, support group, online support group?') with a Likert-type scale ranging from 1 ('Yes, I sought face-to-face treatment and/or support') to 5 (No, and I never felt like I needed treatment and/or support').

Grief experiences

Participants completed four questionnaires focused on their grief experiences.

The Grief Experiences Questionnaire (GEQ; Barrett & Scott, 1989) is a 55-item self-report questionnaire that examines elements of bereavement and includes eight subscales: abandonment, feelings of responsibility, feelings of stigmatisation, guilt, somatic symptoms, self-destructive tendencies, and shame. Items are rated on a Likert-type scale ranging from 1 ('Never') to 5 ('Almost Always'). Higher total scores indicate more negative feelings. The

internal consistency coefficients in the current study were satisfactory (Cronbach's $\alpha=0.97$ for the total score and ranging from 0.75-0.90 for subscales) and consistent with previous research (Bailey, Dunham, & Kral, 2000).

The Inventory of Complicated Grief (ICG; Prigerson et al., 1995) is a 19-item self-report questionnaire that assesses symptoms of pathological grief. Items are rated on a Likert-type scale ranging from 0 ('Never') to 4 ('Always'). Total scores higher than 25 indicate high risk and may require clinical attention. In the present study, Cronbach's $\alpha=0.94$, which is consistent with prior research (Prigerson et al., 1995).

The Social Acknowledgment Questionnaire (SAQ; Maercker & Müller, 2004) is a 16-item self-report questionnaire that measures the level of recognition individuals feel after a traumatic event. Items are rated on a Likert-type scale ranging from 0 ('Not at all') to 3 ('Completely'). Higher total scores indicate higher positive acknowledgement. In the present study, Cronbach's $\alpha=0.78$, which is consistent with prior research demonstrating high internal consistent, test-retest reliability, and convergent validity (Maercker & Müller, 2004).

The Post Traumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) is a 21-item self-report questionnaire that measures positive outcomes of traumatic events. Items are rated on a Likert-type scale ranging from 0 ('I did not experience this change as a result of my crisis') to 5 ('A very great degree as a result of my crisis'). Higher total scores indicate more positive outcomes. Cronbach's α in the present study was 0.95, which is consistent with prior research (Tedeschi & Calhoun, 1996).

Barriers to treatment

Participants completed two questionnaires to assess factors that may interfere with their willingness or ability to engage in mental health treatment.

The Perceived Barriers to Psychotherapy questionnaire (PBP; Mohr et al., 2006) is an 8-item self-report questionnaire that measures potential barriers to accessing psychotherapy. Items are rated on a Likert-type scale ranging from 1 ('No problem at all') to 4 ('Impossible to attend psychotherapy regularly'). Higher total scores indicate more barriers to receiving psychotherapy. Cronbach's $\alpha=0.71$ in the present study, which is consistent with prior research (Mohr et al., 2006).

The Stigma Scale for Receiving Psychological Help (SSRPH; Komiya, Good, & Sherrod, 2000) is a 5-item self-report questionnaire that assesses perceptions of public stigma. Items are rated on a Likert-type scale ranging from 0 ('Strongly disagree') to 3 ('Strongly agree'). Higher total scores indicate more perceptions of public stigma. In the present study, Cronbach's $\alpha=0.84$, which is consistent with prior research demonstrating adequate construct validity and internal consistency (Komiya, Good, & Sherrod, 2000).

Results

The first hypothesis – individuals who lost someone to a ‘sudden’ cause of death (i.e., suicide, accident, or homicide) will experience more negative outcomes than those who lost someone to a ‘non-sudden’ cause of death (i.e., natural causes, illness or disease) – was evaluated using a series of analysis of variance (ANOVA) analyses. Participant age was significantly correlated with four GEQ subscale scores (guilt, somatic symptoms, self-destructive tendencies, and shame) and was included as a covariate in the applicable analysis of covariance (ANCOVA) analyses. Means and standard deviations for each outcome variable grouped by cause of death and results for ANOVA and ANCOVA analyses are reported in Table 2. Chi-square analyses were also conducted for categorical outcome variables (i.e., lifetime suicide attempts and self-injury). Suddenness of the cause of death significantly affected overall grief experiences, each of the eight grief subscales, total complicated grief symptoms, and reported social acknowledgement such that participants who experienced sudden causes of death reported significantly more negative outcomes (i.e., more grief experiences, less social acknowledgement). There was no effect of the cause of death on post-traumatic growth. There were also no significant associations between the suddenness of the cause of death and lifetime history of suicide attempts [$\chi^2(1, N=339)=3.48, p=0.06$] or non-suicidal self-injury [$\chi^2(1, N=338)=2.69, p=0.10$].

The second hypothesis – individuals who reported they did not expect or suspect that their loved one was ill or at risk for death will experience more negative outcomes than those who expected (or suspected) the loss, regardless of type of death – was evaluated using a series of ANOVA and ANCOVA analyses. Two groups were created based on whether they indicated having known or suspected that their loved one was going to die before the death occurred. Participant age was covaried in analyses for the four applicable GEQ subscales (guilt, somatic symptoms, self-destructive tendencies, and shame). Means and standard deviations for each outcome variable grouped by expectedness of death and results for ANOVA and ANCOVA analyses are reported in Table 2. As predicted, unexpected and suspected/expected groups significantly differed on overall grief experiences as well as the grief subscales of abandonment, seeking an explanation, guilt, feelings of responsibility, engagement in self-destructive behaviors, and shame. There were no between-group differences on complicated grief symptoms, post-traumatic growth, or social acknowledgement.

The third hypothesis – individuals who lost someone to suicide will experience more negative outcomes than those who lost someone to another sudden cause of death (i.e., accident or homicide) – was evaluated using a series of ANOVA and ANCOVA analyses. Participant age was

covaried in analyses for the four applicable GEQ subscales (guilt, somatic symptoms, self-destructive tendencies, and shame). Means and standard deviations for each outcome variable grouped by specific sudden cause of death and results of ANOVA and ANCOVA analyses are reported in Table 3. Cause of death significantly affected feelings of abandonment, $F(2, 64)=9.51, p<0.001$. Planned contrasts revealed that suicide cause of death significantly increased feelings of abandonment compared to accidental cause of death, $t(64)=-3.107, p=0.003$. Cause of death did not significantly impact any of the other outcome variables. Chi-square analyses revealed cause of death (suicide vs. not) and lifetime history of self-injury (suicide attempt and/or non-suicidal self-injury) were significantly associated, $\chi^2(1)=9.37, p=0.002$. Based on the odds ratio, participants who lost someone to a non-suicide cause of death were 3.55 times more likely to report lifetime self-injurious behavior than participants who lost someone to suicide.

The fourth hypothesis – individuals who lost someone to suicide would have more negative attitudes toward mental health treatment than those who lost someone to other sudden causes of death – was evaluated using a series of ANOVA analyses. Results are reported in Table 3. Cause of death significantly affected reported stigma related to receiving psychological help, $F(2,46)=4.01, p=0.03$. Planned contrasts revealed that homicide cause of death was associated with significantly increased stigma ratings compared to accident cause of death, $t(46)=2.83, p=0.01$. Chi-square analyses were conducted for the categorical outcome variable (i.e., engagement in mental health treatment following the death). Predictability of the cause of death and whether participants engaged in treatment were significantly associated, $\chi^2(1)=9.25, p=0.002$. Based on the odds ratio, participants were 2.27 times more likely to seek some form of treatment following a sudden loss than a predictable one. Furthermore, participants were 3.75 times more likely to seek treatment following a suicide death than any other sudden cause of death, $\chi^2(1)=12.69, p<0.001$.

Discussion

The present study aimed to gain a better understanding of the grief experiences of individuals bereaved by different causes of death. Specifically, we were interested in whether suddenness and expectedness of death may underlie the increased severity of grief experiences following particular losses. We first examined whether bereavement following ‘sudden’ causes of death was associated with more negative psychological outcomes than bereavement following ‘non-sudden’ (i.e., more typically predictable) causes of death. In support of our hypothesis, sudden cause of death was significantly associated with reported grief experiences such that individuals who lost someone

Table 2. Comparisons of grief experiences as a function of death circumstances:

Outcome Variable	Cause of Death				F	p
	n	Predictable M (SD)	n	Sudden/ Unpredictable M (SD)		
GEQ total	186	103.24 (32.91)	64	137.55 (39.31)	46.68	<0.001**
Abandonment ^a	203	16.20 (6.99)	67	23.75 (11.05)	36.69 ^b	<0.001**
Stigmatisation	199	17.67 (7.62)	66	23.26 (8.73)	24.74	<0.001**
Explanation	205	17.48 (7.44)	66	23.48 (6.13)	42.88 ^b	<0.001**
Guilt	207	14.73 (6.37)	66	17.91 (7.22)	9.19 ^c	0.003*
Somatic symptoms	205	8.88 (3.62)	67	10.66 (3.11)	10.21 ^c	0.002*
Responsibility ^a	206	7.20 (3.73)	67	9.37 (4.89)	13.27 ^b	<0.001**
Self-destructive behaviours ^a	205	8.37 (4.71)	66	10.06 (4.85)	7.95 ^c	0.005*
Shame	200	10.74 (3.89)	65	14.38 (4.63)	34.98 ^c	<0.001**
ICG total	163	37.53 (14.82)	53	46.02 (14.87)	13.11	<0.001**
PTGI total	142	56.58 (24.39)	49	62.49 (24.50)	2.14	0.15
SAQ total	97	27.36 (6.05)	31	22.45 (7.44)	7.46	0.01*
Outcome Variable	Expectedness of Death				F	p
	n	Expected or Suspected M (SD)	n	Unexpected M (SD)		
GEQ total	142	103.89 (35.46)	78	120.55 (39.01)	10.34	0.001*
Abandonment ^a	156	16.74 (8.27)	83	20.39 (9.82)	10.48	0.001*
Stigmatisation	152	18.18 (8.28)	82	19.90 (8.43)	2.28	0.13
Explanation	157	17.16 (7.08)	84	20.82 (8.03)	13.03	<.001**
Guilt	157	14.59 (6.63)	85	16.48 (6.46)	5.37 ^c	0.02*
Somatic symptoms	157	9.03 (3.57)	84	9.36 (3.61)	0.67 ^c	0.42
Responsibility ^a	157	7.18 (3.64)	85	8.53 (4.77)	4.22 ^b	0.04*
Self-destructive behaviours ^a	157	8.24 (4.59)	83	9.59 (5.33)	4.63 ^c	0.03*
Shame	153	11.01 (4.10)	82	12.11 (4.51)	4.63 ^c	0.04*
ICG total	124	37.83 (14.51)	71	39.89 (15.20)	0.88	0.35
PTGI total	108	56.72 (25.46)	63	57.68 (21.27)	0.07 ^b	0.79
SAQ total	76	25.61 (6.70)	39	24.00 (5.99)	1.59	0.21

Note. GEQ=Grief Experiences Questionnaire; ICG=Inventory of Complicated Grief; PTGI=Post-Traumatic Growth Inventory; SAQ=Social Acknowledgement Questionnaire.

^a Variables were transformed using the natural log. Untransformed means and standard deviations are reported.

^b Welch's test of equality of means is reported as the assumption of homogeneity of variances was violated.

^c Age was significantly correlated with the outcome variable, so it is included as covariate.

*denotes p-values that are less than 0.05

** denotes p-values that are less than 0.001

to a sudden cause of death reported more severe grief experiences, complicated grief symptoms, and less social acknowledgement of their experiences than those who lost someone to a 'non-sudden' cause of death. This finding is consistent with previous research demonstrating the differential impact that cause of death can have on the bereaved (e.g., Kristensen, Weisæth, & Heir, 2012; Hibberd, Elwood, & Galovski, 2010).

We then explored whether individuals who reported losing a loved one without expecting or suspecting that this might occur experienced more negative outcomes than those who reportedly suspected the loss, regardless of the

type of death. Our hypothesis was partially supported in that individuals who did not expect/suspect that their loved one was ill or likely to pass away reported more overall grief experiences. Specifically, unexpected death was associated with significantly higher levels of abandonment, seeking an explanation for the loss, feelings of guilt and responsibility for the death, engagement in self-destructive behaviours, and shame. Although there were no differences between groups regarding symptoms of complicated grief, social acknowledgement of the loss, or post-traumatic growth, the observed differences in grief experiences provide additional evidence for Neimeyer's (2006)

Table 3. Comparisons of suicide, accident, and homicide causes of death:

Outcome Variable	Cause of Death			F	p
	Suicide M (SD) (n=14-30)	Accident M (SD) (n=14-32)	Homicide M (SD) (n=3-5)		
GEQ total	147.64 (42.49)	127.68 (35.00)	142.20 (38.36)	2.00	0.15
Abandonment ^a	29.67 (12.40)	18.69 (7.12)	20.60 (5.13)	9.51	<0.001**
Stigmatisation	25.24 (9.10)	20.81 (7.42)	27.40 (11.65)	2.70	0.08
Explanation	24.40 (6.63)	22.90 (6.00)	21.60 (2.97)	0.70	0.50
Guilt	18.24 (7.14)	17.66 (7.14)	17.60 (9.63)	0.06 ^b	0.94
Somatic symptoms	10.40 (2.91)	10.59 (3.31)	12.60 (2.88)	1.31 ^b	0.28
Response ^a	10.50 (5.34)	8.31 (4.35)	9.40 (4.83)	1.47	0.24
Self-destructive behaviours ^a	10.31 (5.36)	9.28 (3.90)	13.60 (6.50)	1.40 ^b	0.25
Shame	15.21 (4.44)	13.35 (4.72)	16.00 (4.69)	1.58 ^b	0.21
ICG total	43.96 (13.30)	48.41 (16.72)	46.75 (16.28)	0.54	0.59
PTGI total	59.69 (21.60)	66.80 (27.92)	58.00 (29.21)	0.52	0.60
SAQ total	21.00 (7.88)	25.21 (5.99)	16.33 (8.33)	2.46	0.10
SSRPH total	9.73 (3.34)	8.95 (3.03)	14.00 (3.65)	4.01	0.03*
PBP total ^c	14.16 (3.46)	15.40 (4.08)	17.33 (5.51)	1.23	0.30

Note. GEQ=Grief Experiences Questionnaire; ICG=Inventory of Complicated Grief; PTGI=Post-Traumatic Growth Inventory; SAQ=Social Acknowledgement Questionnaire; SSRPH=Stigma Scale for Receiving Psychological Help; PBP=Perceived Barriers to Psychotherapy.

^a Variables were transformed using the natural log.

^b Age was significantly correlated with the outcome variable, so it is included as covariate.

^c Variable was transformed using the square root.

argument that sudden deaths interfere with the bereaved individual's ability to make sense of the loss.

We examined whether individuals bereaved by specific types of sudden death (i.e. homicide, suicide, and accident) would be differentially negatively impacted. We hypothesised that individuals who lost someone to suicide would experience more negative outcomes than those who lost a loved one to another sudden cause of death (i.e., accident or homicide); this hypothesis was partially supported. The suicide-bereaved reported greater feelings of abandonment than those bereaved by either accident or homicide deaths. This finding replicates previous work, which has found abandonment to be a particularly salient element of suicide bereavement (Jordan & McIntosh, 2011); however, we failed to find any other differences in grief experiences relative to the two other unpredictable causes of death groups. This may provide support for the assertions that qualities about the manner of death – including suddenness or unexpectedness and violent means – are more robust predictors of negative outcomes than the particular cause of death (Currier, Holland, & Neimeyer, 2006; Kaltman & Bonanno, 2003).

Furthermore, individuals whose loved one died by suicide were less likely to report a lifetime history of self-injurious behaviors than those bereaved by other sudden causes of death. Non-suicide-bereaved individuals (i.e., accident- and homicide-bereaved) were 3.55 times more

likely to have engaged in self-injurious behaviors in their lifetime. Previous research reports mixed results regarding the prevalence of self-injurious behavior within suicide-bereaved populations (Guldin et al., 2015; Hollingshaus & Smith, 2015; Kuramoto, Runeson, Stuart, Lichtenstein, & Wilcox, 2013). Although the cross-sectional design of our study precludes our ability to determine whether participants' self-injurious behaviors occurred before or after the loss of their loved one by suicide, our findings suggest that there could potentially be a protective effect of suicide loss on subsequent self-injurious behavior, relative to other losses. Though the grief experiences of those bereaved by suicide may be more acute, perhaps the death of a loved one by suicide constitutes such an aversive experience for the bereaved that they determine not to engage in self-injurious behaviors themselves to avoid exposing loved ones to the potential consequences. Previous research has suggested that the effects of suicide loss on subsequent self-injurious behaviors may be most apparent more than five years after the loss (e.g., Kuramoto, Runeson, Stuart, Lichtenstein, & Wilcox, 2013); however, this is outside the timeframe of the present study.

Lastly, we predicted that the suicide-bereaved would exhibit more negative attitudes and stigma toward mental health treatment. Our hypothesis was not supported, as homicide-bereaved individuals emerged as the group with the most negative attitudes toward mental health treatment. This may provide support for hypotheses related

to homicide-bereaved individuals' decreased disclosure while attempting to cope with the loss (Currier, Holland, & Neimeyer, 2006), which may preclude identification of psychological problems by mental health providers. Additionally, those bereaved by homicide may face unique issues such as ongoing navigation of the criminal justice system, media exposure, fear of violent victimisation, and preoccupation with thoughts of retaliation, all of which could potentially influence or produce barriers to treatment seeking (Sharpe, Joe, & Taylor, 2013). It is important to also note that the sample of homicide-bereaved individuals in this study was very small ($n=3-5$, depending on the outcome variable), so this finding should be considered preliminary and further replication is needed with larger sample sizes.

There are several important limitations of the current study that warrant discussion. First, our sample was comprised of more than 50% individuals bereaved by illness or disease. In total, approximately 24% of the sample was bereaved by 'sudden' causes of death (i.e., accident, homicide, suicide). As a result, we were unable to conduct between group analyses focused on the extent to which expectedness of the death in these sudden loss groups are related to differential grief responses. Additionally, missing data within questionnaires was common, precluding some of our analyses from being sufficiently powered to detect significant differences between conditions. Thus, null findings may reflect a true lack of differences or may be a consequence of small samples within groups. Future studies with larger sample sizes are needed to replicate and extend the results of this study; specifically, our speculation that individuals bereaved by accident, homicide, or suicide loss would be more likely to report that their losses were unexpected requires investigation. Future qualitative research would also allow for greater exploration of our preliminary findings with smaller or more difficult to recruit samples (e.g., homicide bereaved individuals). Second, the study utilised a cross-sectional design and we administered self-report questionnaires. This methodology has inherent weaknesses, including retrospective bias in responding and an inability to establish causal relations. After all, bereavement is a process that changes over time. Future studies using longitudinal designs would facilitate a better understanding of causal mechanisms underlying the process and examination of how these mechanisms might differ among distinct types of losses. Third, the current study did not directly assess violence of the death, but instead focused exclusively on suddenness of the loss. This does not allow us to directly evaluate the independent effect of violence or the combined effects of violence and suddenness on bereavement experiences. Further research examining both constructs would help to address this limitation. Fourth, the generalisability of the present study's findings might be limited. Many participants were

recruited via support networks, which might have created a unique sample of individuals who are experiencing more severe grief experiences and seeking support. Additionally, participants' willingness to participate in research involving answering questions about their grief experiences might not be representative of the broader population of bereaved individuals. Participants were also predominantly female, suggesting that future research would benefit from targeted recruitment of male participants to ensure the generalisability of our findings and further explore possible gender differences regarding grief experiences. Finally, additional questions about subjects' functioning prior to the loss may have also been helpful to better identify significant changes following the loss. The current study provides further validation that there are unique bereavement difficulties associated with homicide, accident, and suicide loss; however, there is still a need to further study the experiences of these specific groups to more fully understand the contributors to these difficulties.

Our findings provide partial support for the notion that bereavement due to sudden and/or unexpected loss is associated with more negative psychological outcomes. When loss is predictable or suspected, bereaved individuals may have the chance to prepare for the loss, find ways to cope, and experience anticipatory grieving. Suddenness surrounding the loss of an important person may also violate one's core assumptions about the world as a safe and predictable place and confound one's ability to make sense of the loss (Currier, Holland, & Neimeyer, 2006). Psychological problems may worsen as the individual struggles in a society that does not recognise their pain and the difficulty of their experiences.

The mechanisms by which suddenness may exert its influence on the bereavement process are unknown. Perhaps the opportunity to prepare for the loss, identify ways to cope, and experience anticipatory grieving are central to facilitating an adaptive grief response. Lastly, our findings have practical implications for clinical professionals treating bereaved individuals. For example, clinicians can be mindful that individuals bereaved by homicide, accident, and suicide may be at risk for more severe and complicated grief symptoms, specifically related to the extent to which they expected or suspected that their loved one might die. Additionally, a perception of less social acknowledgment can have implications for clients' social functioning within the context of the therapeutic relationship. An improved understanding of differential grief experiences will enable the development of more targeted and effective interventions for varied bereaved populations. ■

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