Pathological Grief: The Role of Religion and Meaning-Making

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Abstract

Introduction. The death of a loved one is a profound and pervasive human experience, in some cases leading to an adverse grief trajectory resulting in maladjustment and psychiatric problems. Belief systems, such as religion or spirituality, are thought to facilitate incorporating negative life events such as loss through meaning making. This study aimed to uncover the potential effect of religious affiliation, expressed through either identification with or engagement in religion or spirituality, on the level of pathological grief (PG) and mediated through meaning making.

Method. Dutch and German bereaved individuals (N = 248) who had lost a loved one at least 6 months prior were interviewed by phone to assess religious affiliation, meaning making and pathological grief symptoms. Religious affiliation was measured through single items measuring identification with a religious/spiritual conviction group and engagement in religious/spiritual activities. PG symptoms were assessed through the Traumatic Grief Inventory – Clinician Administered. Independent samples t-tests, Spearman's rank-order correlations and mediation analyses were performed.

Results. There was no significant difference in means of PG between religious/spiritual and non-religious/non-spiritual participants. Significant correlations were found between more religious engagement and more meaning making, and more meaning making and lower PG levels.

Discussion. No total effect of religious affiliation was found, however religious engagement was found to have a positive effect on meaning making and more meaning making lead to lower levels of PG. Further sound methodological research is necessary to extrapolate the working mechanism underlying the found associations.

Keywords: pathological grief, religious affiliation, meaning making, mediation

Pathological Grief: The Role of Religion and Meaning-Making

The death of a loved one is a profound human experience, and generally leads to a painful but transient period of mourning the departed (Boelen & Smid, 2017b). This pervasive phenomenon has been conceptualized theoretically in a myriad of ways since the relatively recent engagement in research regarding loss, bereavement and grief. Grief is a universal phenomenon that is subject to many different social norms, according to which it can also develop into psychopathology (M. Stroebe & Schut, 1998). In most cases, people adjust to the loss of a loved one, but it is possible that a person experiences adverse grief that impedes their further day to day life. *Pathological grief* is an umbrella term used to refer to grief reactions that deviate distinctly from average grief trajectories and which are associated with maladjustment and psychiatric problems (Lenferink, Boelen, Smid, & Paap, 2019; M. Stroebe et al., 2000; W. Stroebe, Schut, & Stroebe, 2005). This trajectory of grief symptoms of the bereaved where grief symptoms do *not* decrease in severity over time but rather persist and ultimately lead to impairments in functioning, has also been theorized as *complicated grief* (Shear et al., 2011). Other denominations of pathological grief reactions are the classifications according to the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013) and ICD-11 (World Health Organization, 2019): persistent complex bereavement disorder (PCBD) and prolonged grief disorder (PGD), respectively. The question of whether these diagnoses are clinically useful is a topic of debate within the field, leading to their inclusion in comparative research (Boelen, Lenferink, Nickerson, & Smid, 2018; Boelen & Prigerson, 2012; Eisma & Lenferink, 2018; Lenferink & Eisma, 2018; Maciejewski, Maercker, Boelen, & Prigerson, 2016; Mauro et al., 2017). Studies looking at grief symptoms over time have found support for differential grief reaction trajectories post-loss with the majority having *low* or *decreasing* trajectories and minor groups having a *high* or *late* grief trajectory (Nielsen, Carlsen, Neergaard, Bidstrup, & Guldin, 2019). Studies using

PCBD and PGD symptoms to study symptom trajectories found similar results (Bonanno & Malgaroli, 2019; Lenferink, Nickerson, de Keijser, Smid, & Boelen, 2020).

There is evidence that certain risk factors for developing adverse grief reactions exist. Among others, these risk factors are; gender, educational level, and the nature of the relationship to the deceased (with women, individuals with lower levels of education and partners being more at risk) (Lenferink et al., 2020; Lobb et al., 2013; Nielsen et al., 2019). When it comes to protective factors, review of the ‘grief work hypothesis’ – that the bereaved must confront and express the intense emotions evoked by the loss, possibly with the assistance of others or professional interventions – concludes that there is no evidence that emotional disclosure (or grief work) facilitates adjustment to loss in normal bereavement (W. Stroebe et al., 2005).

Research has also shown that *perception* of the irreversibility of the loss of a significant other plays a large role in coping with the separation (Lobb et al., 2013; Roberts, Thomas, & Morgan, 2016). According to Boss (2016) “ambiguous loss is the most stressful type of loss because it defies resolution” (p. 270). Ambiguous loss is a term coined with reference to “unclear loss that remains unverified” (Boss, 2016, p. 270), such as disappearances. In the current study it is argued that all loss may be perceived as ambiguous to the degree that the meaning of death and what comes after is unknown. Additionally, it is posited that interpretation of bereavement in part determines its ambiguity, and that cognitions about the loss may be facilitated or guided by situational factors such as religious affiliation (Becker et al., 2007; Christian, Aoun, & Breen, 2019; McIntosh, Cohen Silver, & Wortman, 1993; McLellan, 2015). Cultural guidelines such as those provided by religious institutions or texts enable processing, attributing meaning and exploration of existential matters, ultimately promoting resolution (M. Stroebe & Schut, 1998). Through this endorsed manner of meaning-making, bereaved individuals may resolve the ambiguity of their loss and foster adaptive

coping strategies such as acceptance (Boelen & Lenferink, 2018; Lenferink, de Keijser, Piersma, & Boelen, 2018). In this regard, religiously affiliated persons may not need to learn to live with not knowing, as some research suggests (Heeke, Stammel, & Knaevelsrud, 2015), because in a sense they *do* know which may allow for a different sort of acceptance altogether.

Previous research into the effect of religious or spiritual beliefs on bereavement whilst implying a positive influence, is often not conclusive due to methodological flaws (Becker et al., 2007). However, findings suggest that religious or spiritual affiliation can explain some of the variance in grief reactions (Christian et al., 2019) and that religion can play a positive role in adjusting to a negative life event (McIntosh et al., 1993). Another proposed protective factor in coping with a negative life event, such as significant loss, is meaning making (Currier, Holland, & Neimeyer, 2006; Davis, Nolen-Hoeksema, & Larson, 1998; Park, 2010). In stress and trauma research the meaning making model of adapting to adverse events has been widely accepted, although here too methodology is flawed and results are inconsistent (Park, 2008). This meaning making model differentiates global meaning – a system of global beliefs and core schemas –, and situational meaning – the initial appraisal of the stressor –, proposing that discrepancies between the two lead to distress, and that this discrepancy can be resolved by assimilating the situational meaning to the global meaning system, leading to better adjustment to the stressor (Park, 2008). From this it can be expected that meaning making through the reappraisal of significant loss is a protective factor against pathological grief, and that this is facilitated by religion or spirituality as a global meaning system.

Considering the high prevalence of significant loss, the far reaching consequences of incidental pathological grief, and the hitherto inconsistent empirical findings, the present study aimed to provide insight into the relationship between religion, meaning making and pathological grief.

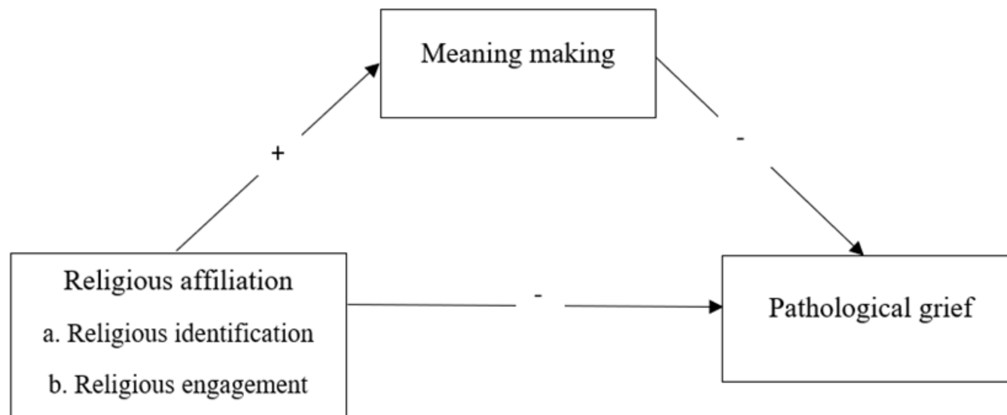

Figure 1. *Two single-mediation models.*

Note. This figure demonstrates two single-mediation models, with religious affiliation assessed through two different measures. One model contains religious identification (a) as the independent variable. The second model contains religious engagement (b) as the independent variable. In both models the mediator variable is meaning making and the dependent variable is pathological grief. Also shown are the hypothesized relationships between the variables.

The main research question was whether a mediational relationship exists between religious affiliation, meaning making and pathological grief (see Figure 1). It was expected that religious affiliation related to lower levels of pathological grief (Hypothesis 1). Furthermore, it was anticipated that this relationship can be partly explained by meaning making (Hypothesis 2). Two mediational models were tested; one in which religious affiliation was measured throug religious identification and one in which it was measured through religious engagement. This was done because religious engagement – performing or participating in religious/spiritual activities – could possibly give a more accurate representation of an individual's religious affiliation than mere identification with a religious or spiritual group (Abbasi, Kazmi, Wilson, & Khan, 2019; Bailly & Roussiau, 2010; Chiang, Lee, Chu, Han, & Hsiao, 2017; Cohen et al., 2017).

Method

Participants and procedure

This study has a cross-sectional design. Participants were recruited via convenience and snowball sampling methods, using platforms such as social media networks, grief related forums, and support groups for bereaved individuals. Additionally, university students could participate for course credits. The inclusion criteria for participants were an age of 18 years or older, loss of a loved one (partner, family member or friend) a minimum of six months prior, and no psychotic illness or suicidal ideation. Informed consent was obtained from all participants.

Participants who met the inclusion criteria were required to provide informed consent. After this was received participants were contacted and invited to an interview conducted over the phone. Researchers trained in the use of the instruments administered the measures. First, the interviewer informed the participant about the structure of the interview. During the first part of the interview, questions pertaining to the background variables were asked, followed by questions about the loss-related variables and possible help received. Part two of the interview consisted of various validated questionnaires concerning depressive symptoms, grief reactions, PTSD symptoms and functioning. Interviews lasted approximately 45 minutes. In the case of (a history of) psychosis or suicidal ideation, the participant was referred to mental health services, and the interview was terminated.

Materials

A structured interview using self-report measures was used for an on-going study of pathological grief, posttraumatic stress disorder and depressive symptoms following bereavement. The interview consisted of questions regarding background variables, loss-related variables, and emotional and grief reactions.

Pathological grief.

The Traumatic Grief Inventory – Clinician Administered (TGI-CA) was conducted to assess the general degree of pathological grief as well as encompassing the symptom criteria for both Prolonged Grief Disorder (PGD) as to be classified by the ICD-11 (World Health Organization, 2019) and Persistent Complex Bereavement Disorder (PCBD) as recently taken up in the DSM-5 (American Psychiatric Association, 2013; Boelen & Prigerson, 2012). The TGI-CA is based upon the Traumatic Grief Inventory – Self Report (TGI-SR) and overlaps from items 1 to 18, with 4 additional items (items 19 until 22) measuring symptoms of prolonged grief disorder according to ICD-11 (Boelen, Djelantik, de Keijser, Lenferink, & Smid, 2019; Boelen & Smid, 2017a). While the TGI-SR items are formulated as statements, the TGI-CA items were rephrased into questions; each item referring to "the past month" and references to "the deceased" being replaced by the name of the deceased or the participants' relation to the deceased in the TGI-CA ("Have you, in the past month, experienced that life is empty and meaningless without John?"; consult appendix B for the complete TGI-CA). As in the TGI-SR, the participants are asked to indicate for each TGI-CA item to what extent the relevant grief response applies to them in the past month. They are asked to an answer scale of 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = always. The TGI-CA was first used for this study, however it is to a great degree based on the TGI-SR which has strong psychometric qualities with Cronbach's alpha of all 18 items of the TGI-SR together being .95 (Boelen & Smid, 2017a). Cronbach's alpha in the current study was .93, meaning the internal consistency is high (Field, 2013).

***Religious affiliation*.**

Among the questions regarding background variables, religious affiliation was queried. Based on prior research (Alwin, Felson, Walker, & Tufiş, 2006; Idler et al., 2003; O'Connell & Skevington, 2007; Sherman et al., 2001) we included the item "Do you identify with a religious or spiritual conviction?" to asses religious or spiritual identification. No

choices were offered by the interviewer, giving the participant full agency over belonging to a certain belief group or not. The interviewers then categorized the participants response according to the following categories: ‘not religious/spiritual’, ‘Christian’, ‘Jewish’, ‘Muslim’, ‘Buddhist’, ‘Spiritual’ or ‘Other’.

Another item was used to measure religious engagement, based on various measures in clinical settings (Austin, Macdonald, & Macleod, 2018; Bailly & Roussiau, 2010; Chiang et al., 2017; Cohen et al., 2017). The item was “To what extent do you incorporate your religious/spiritual beliefs into your daily life?” and it was rated on a 5-point Likert scale with anchor points 1 being *never* and 5 being *very often*.

***Meaning making*.**

Based on previous research (Currier et al., 2006; Davis et al., 1998; Keesee, Currier, & Neimeyer, 2008; Lehman, Wortman, & Williams, 1987; McIntosh et al., 1993) the following item was added to the loss-related variables questionnaire: “To what extent would you say that you were able to give meaning to your loss?” Participants were asked to rate the degree to which they had been able to give meaning to their loss on a 4-point Likert-type scale where anchor point 1 is *no meaning* and 4 is *a good deal of meaning*.

Statistical Analyses

In our hypothesized model the independent variable is the presence of religious affiliation, measured through either religious identification or religious engagement, and the dependent variable is the degree of pathological grief, as measured by the TGI-CA. Religious identification (predictor a) is a categorical variable (coded as 0 = non-religious/non-spiritual, 1 = religious/spiritual) and religious engagement (predictor b), meaning making (mediator) and pathological grief (outcome) are continuous variables.

According to the causal steps approach, preliminary analyses were performed before the mediation analysis (Baron & Kenny, 1986). For the first model, the total effect of religious identification on pathological grief was assessed through an independent samples t-test. Then another t-test was run to determine the relationship between religious identification and meaning making. For the second model, correlations were run between religious engagement and pathological grief to determine the total effect, and religious engagement and meaning making. For both models a correlation was run to determine the relationship between meaning making and pathological grief. Spearman's rank-order correlations were run due to violated assumptions for the Pearson’s correlation. Research has shown that the use of non-parametric correlation measures is suitable for the analysis of Likert data (Murray, 2013), and the Spearman’s rank-order correlation was used for all correlation analyses with a variable using a Likert scale.

Subsequently, a simple mediation analysis was performed using the PROCESS tool (version 3.4) in SPSS developed by (Hayes, 2012) to examine if the relationship between religious identification or engagement and pathological grief can be explained by meaning making. In the analyses, X was the degree of religious engagement, Y was the level of pathological grief and M was level of meaning making. Using the PROCESS tool unstandardized regression coefficients were calculated for each path in the mediation model. The effect of X on M is represented as path a, path b signifies the effect of M on Y while statistically controlling for X, and path c represents the total effect of X on Y. The direct effect of X on Y whilst controlling for the effect of M is denoted as path c′. The level of confidence for all 9 confidence intervals was 95% and the number of bootstrap samples for percentile bootstrap confidence intervals was 5000.

Results

Sample Characteristics

In total, 251 participants were interviewed for this research. Three participants were not included in this study because they did not meet the inclusion criteria (N = 248). This sample had a mean age of 46.51 years (SD = 16.3, range 19-87), and contained 194 women (78.2%). The majority of participants was Dutch (N = 144, 58.1%), and a subsample came from Germany (N = 84, 33.9%), with the remainder having various other nationalities (N = 20, 8.1%). About half of the participants were higher educated with 51.2% having completed a university education or higher vocational education (N = 127). Further sample characteristics are displayed in table 1 in appendix A.

Preliminary analyses

Religious identification and pathological grief levels

There were 128 religious/spiritual participants and 120 non-religious/non-spiritual participants. An independent-samples t-test was run to determine if there were differences in level of pathological grief between religious/spiritual and non-religious/non-spiritual participants. There were outliers in the data, as assessed by inspection of a boxplot, but these were deemed genuine unusual values and included in the analysis. Pathological grief symptoms for each level of religious affiliation were normally distributed, as assessed by visual inspection of the Normal Q-Q plots, and there was homogeneity of variances, as assessed by Levene's test for equality of variances (p = .579). Religious/spiritual participants (M = 40.3, SD = 14.3) had slightly higher levels of pathological grief than non-religious/non-spiritual participants (M = 39.6, SD = 15.0), but no statistically significant difference was found, M = -.754, 95% CI [-4.42, 2.91], t(246) = -.405, p = .686.

Religious identification and meaning making

An independent samples t-test was run to assess the effect of religious identification on meaning making. There were no outliers in the data, as assessed by inspection of a boxplot.

Level of meaning making for religious/spiritual (N = 128) or non-religious/non-spiritual (N = 120) participants was not normally distributed, as assessed by Shapiro-Wilk's test ($p < .001$). The test was run regardless because the independent-samples t-test is fairly robust to deviations from normality and the sample sizes for each group were nearly equal. There was homogeneity of variances for meaning making levels for religious/spiritual and non-religious/non-spiritual participants, as assessed by Levene's test for equality of variances ($p = .062$). Levels of meaning making were -0.17, 95% CI [-.48 to 0.14] higher for religious/spiritual participants (M = 2.71, SD = 1.30) than non-religious/non-spiritual participants (M = 2.54, SD = 1.19), but this was not statistically significant, $t(246) = -1.066$, $p = .287$.

Religious engagement, meaning making and pathological grief levels

A Spearman's rank-order correlation was run to assess the relationship between pathological grief levels and religious engagement. Preliminary analysis showed the relationship to be non-monotonic, as assessed by visual inspection of a scatterplot. There was no statistically significant correlation between religious engagement and pathological grief, $r_s(238) = .066$, $p = .308$. However, there was a statistically significant, small positive correlation between religious engagement and meaning making, $r_s(238) = .221$, $p = .001$. Between meaning making an pathological grief another statistically significant, moderate negative correlation was found, $r_s(246) = -.372$, $p < .001$. The results are shown below in Table 2.

Table 2. Spearman's rank-order correlations results ($N = 248$).

	Pathological grief levels	Meaning making
Religious engagement	.066	.221**
Pathological grief levels		-.372*

Note. There was missing data for religious engagement (n = 8); *$p < .001$, **$p = .001$.

Mediation analyses

Despite there being no total effect of either predictor variable on the outcome variable in the preliminary analysis, there was a significant association between predictor b (religious engagement) and the mediator, as well as between the mediator and the outcome variable. This means that a mediation analysis could still be run to determine the indirect effect of religious engagement on pathological grief through meaning making (Hayes, 2009).

Religious engagement, meaning making & pathological grief

As shown below in Table 3, the coefficients of path a, path b and path c' were significant, and the coefficient for path c was not.

Table 3. Mediation analysis results (N = 240).

Model	Mediator	a	b	Total effect (c)	Direct effect (c')	Unique indirect effect (a*b)	95% CI
1	Meaning making	.20*	-5.11*	.46	1.49**	-1.03	-1.74, -.39

Note. Significant at *p < .001, ** p < .05.

The overall model of path a was significant, $F(1, 238) = 11.83$, $p < .001$, $R^2 = .05$, as was the coefficient, $b = .20$, $t(238) = 3.44$, $p < .001$, meaning religious engagement is a significant predictor of meaning making. The overall model for path b was also significant, $F(2, 237) = 27.09$, $p < .001$, $R^2 = .19$, as was the coefficient for path b, $b = -5.11$, $t(237) = -7.32$, $p < .001$. The coefficient for the direct effect (path c′) of religious engagement on pathological grief was also significant, $b = 1.49$, $t(237) = 2.30$, $p = .022$. The overall model for an indirect effect of religious engagement on pathological grief was not significant, $F(1, 238) = .44$, $p = .508$, $R^2 = .001$, and neither was the coefficient for path c, $b = .46$, $t(238) = .66$, $p = .508$.

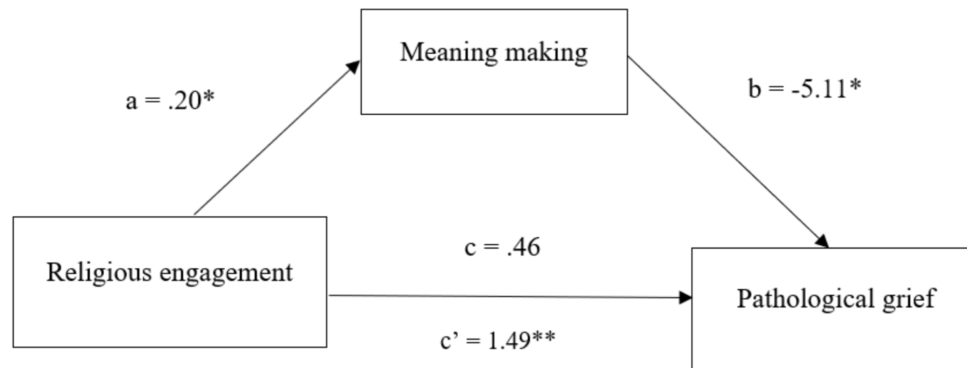

Figure 2. A simple mediation model showing the coefficients (Note: *p < .001, ** p < .05).

The total effect (path c) was non-significant and the direct effect (path c') was greater than zero and significant, suggesting that meaning making is only a partial mediator. However the BC 95% CIs of the indirect effects did not contain zero in any model, suggesting that the effect of religious engagement on pathological grief was uniquely mediated through meaning making.

Discussion

Previous research has shown the importance of meaning making as a protective factor in grief trajectories (Bellet, Neimeyer, & Berman, 2018; Rozalski, Holland, & Neimeyer, 2017; Supiano, Haynes, & Pond, 2017) and the role of religion/spirituality has been tentatively explored (Becker et al., 2007; Christian et al., 2019; McIntosh et al., 1993; McLellan, 2015). This study aimed to examine the relationship between religious affiliation and pathological grief with the possible underlying mechanism of meaning making. During preliminary analysis no significant difference was found in average pathological grief symptoms between religious/spiritual participants and non-religious/non-spiritual participants, measured through either religious identification or engagement. Religious identification was also not significantly related to meaning making. However, religious engagement was found to be significantly associated with meaning making, and meaning making was found to be

significantly related to pathological grief. Because the causal steps approach is contingent on various inferential tests that can be confounded when assumptions are not met or due to sample size, a mediation analysis was performed despite the absence of a total effect. These results also supported the hypothesis that more religious engagement was associated with more meaning making (a positive relationship) and that more meaning making was related to lower levels of pathological grief (a negative relationship). Additionally, there was a significant direct effect of religious engagement on pathological grief levels while controlling for meaning making, suggesting it was only a partial mediator.

This study is not the first study to fail to find a conclusive relationship between religious affiliation and pathological grief. A systematic review assessing the effect of spiritual or religious beliefs on the process of grief concluded the available data did not allow for a definite answer, due to a majority of the studies suffering from “weaknesses in design and methodological flaws” (Becker et al., 2007). This study sought to provide empirical evidence for a theoretical framework containing religious affiliation and grief. The strengths and weaknesses of this research, as well as recommendations for future research will be discussed below.

The results suggest that there is no total effect of religious engagement on pathological grief. Meanwhile significant effects were found of religious engagement on meaning making, and meaning making on pathological grief. Hayes offers an explanation for this by positing that a mediator can be a causal variable between the independent and dependent variables, even if they are not associated (2009). The total effect is the sum of many different direct or indirect paths of influence that may not all be part of the formal model. It is possible that there are multiple indirect paths responsible for the effect of the independent variable on the dependent variable that counteract each other leading to a lack of total effect (Hayes, 2009; MacKinnon, Krull, & Lockwood, 2000). Religious affiliation may have an effect on

pathological grief through two mechanisms working in opposite directions. For example, religious affiliation may be associated with more meaning making and thus lower levels of pathological grief, while simultaneously being associated with lower levels of education and thus higher levels of pathological grief (Nielsen et al., 2019). Therefore, not testing the effect of the mediator could mean missing potentially interesting results. Fortunately, in this study a mediation analysis was run nonetheless and underlying meaningful relationships were discovered.

These results should be interpreted with caution due to a number of limitations. The cross-sectional design of this study precludes the inference of a causal relationship or any conclusions about temporal precedence. Moreover, due to the snowball and convenience sampling method women, higher educated individuals and Christians were overrepresented in the sample, which potentially limits the generalizability of the current findings across the broad population or other specific groups. Additionally, independency of observations was assumed while in fact some participants may have been related and data might have been obtained from various participants pertaining to the same loss. Furthermore, data was collected in two languages (mostly corresponding with the two countries of birth) and both samples were treated as equal and merged without comparative testing beforehand. Again due to the sampling method, a ‘volunteer problem’ may have arisen out of a pre-selection that took place based on which individuals volunteered to participate in this study and there conceivably being underlying and possibly confounding variables that distinguish them from the individuals who chose not to participate (for more background and loss related variables concerning the current sample see Table 1, Table 4 and Table 5 in Appendix A). Possibly the data is also subject to a social desirability bias because measures were self-report and clinician administered by phone (Fisher & Katz, 2000; Holbrook, Green, & Krosnick, 2003).

Earlier research has found that in particular religiosity is associated with impression management (Gillings & Joseph, 1996; Presser & Stinson, 1998).

Another possible methodological limitation of this study is that while pathological grief was measured through a validated questionnaire with good psychometric qualities and internal consistency, the other concepts – religious affiliation and meaning making - were measured by 2 and 1 item respectively, which could lessen their construct or content validity. Whilst classifying religious identification is comparatively unambiguous, measuring religious engagement through a single self-report item might have simplified a complex experience and allowed it to be subjected to a wide range of interpretations (as opposed to observational methods). It is also important to note that in measuring religious engagement, other components of religiosity of spirituality were not taken into account (Afhami, Mohammadi-Zarghan, & Atari, 2017).

In the case of meaning making, it is uncertain to what extent the item has measured the theoretical construct it was meant to measure. Human beings have the tendency to both seek and create meaning in their lives and therefore meaning is thought to be essential to the field of psychology, including the subject of grief. There is pervasive interest in meaning and meaning making and their effect on adjustment to stressful life events, however research is limited by conceptual and methodological shortcomings (Park, 2010). Conceptually, 'meaning' is an ambiguous term that encompasses a wide range of individual and interpersonal processes. Park's integrated model of meaning making distinguishes not only between the constructs of global and situational meaning but also between "meaning-making efforts" and "meaning made", even particularizing subconstructs. For example, in meaning therapy (MT) six types of meaning are identified; cognitive, narrative, unconscious, cultural, motivational and existential meaning (Vos et al., 2019). Methodologically, the current study sought to measure the degree to which a person had been able to make sense of their grief

using only one item. The interpretation of this item and the definition of meaning were left to the participants, with researchers giving no further instruction. Therefore, it is impossible to distinguish between the different types of meaning that were rated by participants. Whereas religious identification may have an influence on certain areas of meaning, these effects may not be reflected in the current study's analyses of the data.

Another concept that may have confounded the results of this study is the assumed direction of reappraisal of an adverse event such as significant loss. Perhaps instead of assimilating the situational meaning of the negative life event to their existing global belief system and thus giving it meaning (Park, 2008), bereaved individuals may accommodate their global meaning system to adapt to an adverse event, possibly weakening it. Therefore, religious identification may not signify a global belief system that withstood a challenge against it, while religious engagement on the other hand may be a better indicator of the continuing strength of the global belief system into which the loss was incorporated through meaning making. This could explain the significant relationship found between religious engagement and meaning making and not between religious identification and meaning making.

Despite its limitations this study has gained insight into the effects of religious affiliation and meaning making on pathological grief. Further research is necessary to corroborate these findings.

Directions for future research

Bereavement is an inescapable and highly prevalent phenomenon and coping with it is both uniquely personal as well as heavily influenced by situational or loss-related factors. Gaining insight into these underlying mechanisms of pathological grief is important to direct further research, which thus far has struggled to bridge the gap between abstract theoretical

framework and empiricism (Neimeyer, 2016). Moreover, it is clinically relevant to uncover potential protective factors to foster adaptive coping to loss and to inform effective and evidence based interventions (Boelen, 2016).

The role of religion and spirituality in grief trajectories has been researched, although not irrefutably (Becker et al., 2007). Hypotheses concerning religion, spirituality and other global belief systems as a support to bereaved individuals are often theoretically sound but insufficiently grounded in empiricism (Park, 2008). This study reproduced evidence to suggest that meaning making is a meaningful protective factor against pathological grief (Currier et al., 2006; Neimeyer, 2016). Exploring this area further is important to inform the development of interventions to alleviate pathological grief symptoms, and perhaps even prevent dysfunctional grief trajectories. If protective factors become known, they can be employed by professionals or bereaved individuals themselves.

Additionally, considering the gravity, complexity and personal nature of grief research the author suggests that a multi-methodological approach that combines quantitative and qualitative methods might be more appropriate. This would allow researchers to delve deeper into the experience of loss, and methodological triangulation could also help bridge the gap between theoretical frameworks and empirical evidence. Correct operationalization of complex theoretical concepts is necessary to increase validity. The sample should be further differentiated, considering differences between different religions and forms of spirituality. Further research might also control for the effect of other background and loss related variables.

Conclusion

In conclusion, this research has replicated findings that support a meaningful relationship between meaning making and lower levels of pathological grief (Park, 2010).

Although no total effect of religious affiliation on pathological grief was found, religious engagement was found to have a positive effect on meaning making and meaning making in turn was associated with lower levels of pathological grief. Further sound methodological research is necessary to extrapolate the working mechanism underlying the found associations. An important area of focus is to properly operationalize complex theoretical concepts, thereby increasing their validity.

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Appendix A

Table 1. ***Sample characteristics (N = 248)***

Background variable	Frequency (n)	Percentage (%)
Gender		
Female	194	78.2
Male	54	21.8
Country of birth		
Netherlands	144	58.1
Germany	84	33.9
Other	20	8.1
Education		
Primary education	1	.4
Secondary education	49	19.8
Vocational education	71	28.6
Higher education/university	127	51.2
Religious affiliation		
Christian	73	29.4
Spiritual	50	20.2
Other	5	2
Non-religious/Non-spiritual	120	48.4
Religious engagement[1]		
Never	81	32.7
Seldom	50	20.2
Sometimes	48	19.4
Often	38	15.3
Very often	23	9.3
Meaning making[2]		
1	74	29.8
2	34	13.7
3	50	20.2
4	90	36.3

[1]Note: Response to item ‘To what extent do you incorporate your religious/spiritual beliefs into your daily life?’. Missing data (n = 8).

[2]Note: Response to item ‘How much sense would you say you have made of the loss?’. Only anchor points 1 = *no meaning* and 4 = *a good deal of meaning* were given.

Table 4. ***Sample characteristics descriptive statistics*.**

Background variable	N	Mean	SD	Minimum	Maximum
Age participants	248	46.5	16.3	19	87
Age of relevant deceased loved one*	247	59.8	22.4	0	104
Time passed since loss	248	7.1	8.9	.6	71.5

Note. In years. *Missing data (n = 1).

Table 5. ***Loss related variables (N = 248).***

Loss related variable	Frequency (n)	Percentage (%)
Kinship*		
Partner	83	33.5
Child	22	8.9
Parent	80	32.3
Sibling	7	2.8
Grandparent	42	16.9
Friend	7	2.8
Other	7	2.8
Cause of death*		
Somatic illness	190	76.6
Accident	17	6.9
Suicide	36	14.5
Murder or manslaughter	1	.4
Other	4	1.6
Level of expectedness*		
Not at all unexpected	67	27.0
A little unexpected	39	15.7
Quite unexpected	25	10.1
Very unexpected	41	16.5
Totally unexpected	76	30.6
Multiple losses		
1	115	46.4
2	57	23.0
3	46	18.5
4	29	11.7
5	1	.4

Note. *Pertaining to the relevant deceased loved one chosen by the participant.

Appendix B

Traumatic Grief Inventory – Clinician Administered

1. Hebt u, in de afgelopen maand, plots opkomende gedachten en beelden gehad die te maken hadden met het overlijden van [__]?
2. Hebt u, in de afgelopen maand, intense gevoelens van emotionele pijn, verdriet, of golven van rouw gehad?
3. Hebt u, in de afgelopen maand, een zeer sterk verlangen naar [__] gevoeld?
4. Hebt u, in de afgelopen maand, verwarring over uw rol in het leven of een verminderd gevoel van eigenwaarde gevoeld?
5. Hebt u, in de afgelopen maand, moeite gehad om het overlijden van [__] te aanvaarden?
6. Hebt u, in de afgelopen maand, plaatsen, voorwerpen, of gedachten vermeden die u eraan herinneren dat [__] dood is?
7. Hebt u, in de afgelopen maand, moeite gehad om mensen te vertrouwen?
8. Hebt u zich, in de afgelopen maand, bitter gestemd of boos gevoeld over het overlijden van [__]?
9. Hebt u, in de afgelopen maand, moeite gehad om door te gaan met uw leven (bijvoorbeeld door nieuwe vrienden te maken, nieuwe interesses te ontwikkelen)?
10. Hebt u zich, in de afgelopen maand, verdoofd gevoeld?
11. Hebt u, in de afgelopen maand, ervaren dat het leven leeg en zonder betekenis is zonder [__]?
12. Hebt u zich, in de afgelopen maand, geschokt of verbijsterd gevoeld over het overlijden van [__]?
13. Hebt u, in de afgelopen maand, gemerkt dat uw functioneren (in uw werk, privéleven en/of sociale leven) ernstig is verslechterd ten gevolge van het overlijden van [__]?
14. Hebt u, in de afgelopen maand, plots opkomende gedachten en beelden gehad die te maken hebben met de omstandigheden waaronder [__] is overleden?
15. Hebt u, in de afgelopen maand, moeite gehad om stil te staan bij positieve herinneringen aan [__]?
16. Hebt u, in de afgelopen maand, negatieve gedachten gehad over uzelf die verband houden met het overlijden van [__] (bijvoorbeeld gedachten over zelfverwijt)?
17. Hebt u, in de afgelopen maand, de wens gehad om zelf te sterven, om bij [__] te

kunnen zijn?

18. Hebt u zich, in de afgelopen maand, alleen gevoeld of voelde u afstand tot andere mensen?
19. Hebt u, in de afgelopen maand, ervaren dat het onwerkelijk is dat [__] dood is?
20. Hebt u, in de afgelopen maand, intens verwijt gevoeld naar anderen vanwege het overlijden van [__]?
21. Hebt u, in de afgelopen maand, het gevoel gehad alsof een deel van uzelf samen met [__] is gestorven?
22. Hebt u, in de afgelopen maand, moeite gehad om positieve gevoelens te ervaren?