Grief and Functional Impairment following COVID-19 Loss in a Treatment-seeking

Sample: The Mediating Role of Meaning

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Abstract

The COVID-19 pandemic has brought unprecedented levels of grief and psychological distress in community samples. We examined unique pandemic grief risk factors, dysfunctional grief, PTSD symptoms, general psychiatric distress, disrupted meaning, and functional impairment in a treatment-seeking sample of people bereaved from COVID-19 in the United Kingdom. A sample of 183 participants (91.80% female; $M = 47.40$ years) completed an online survey as part of an intake assessment for a grief support and referral service. Most reported clinically elevated PTSD symptoms (83.1%), psychiatric distress (64.0%), and functional impairment (56.8%). A smaller, but still concerning percentage (39.3%) reported clinically significant symptoms of dysfunctional grief. Disrupted meaning substantially mediated the relationship between risk factors and all four outcomes. Counsellors should address the breadth of psychological distress in those bereaved by COVID-19 and hone their skills in promoting meaning making in the wake of the trauma and loss generated by the pandemic.

Key words: bereavement, grief, meaning making, pandemic

Introduction

At the time of this writing, there have been over 6 million deaths globally from COVID-19, and nearly 175,000 of these have occurred in the United Kingdom (World Health Organization, 2022), each of which has been estimated to affect an average of 9 family members (Verdery, Smith-Greenaway, Margolis, & Daw, 2020). A study from the Netherlands provided early evidence that the prevalence of grief complications would be higher among people bereaved by coronavirus disease than other natural causes. Dutch adults bereaved by COVID-19 ($n = 49$) reported significantly more acute grief than those bereaved by natural deaths ($n = 1,182$), and comparable grief to those bereaved by nonnatural deaths such as suicide, homicide, and fatal accident ($n = 210$; Eisma, Tamminga, Smid, & Boelen, 2021). Data from China reveal a similar picture. In a sample of 422 adults in mainland China who lost someone to COVID-19, 70% scored in the clinical range for anxiety, 65% for depression, and 22% for post-traumatic stress disorder (PTSD) (Tang, Yu, Chen, Fan, & Eisma, 2021). Moreover, 38% met criteria for prolonged grief disorder (PGD) (Tang & Xiang, 2021), a figure nearly 4 times higher than pre-pandemic estimates (Prigerson, Boelen, Xu, Smith, & Maciejewski, 2021).

A series of studies on samples in the United States further demonstrated the deleterious outcomes of COVID-19 bereavement. In a sample of 831 American adults losing a loved one to the coronavirus, 66.4% met or exceeded the clinical cut point for dysfunctional grief, measured using the Pandemic Grief Scale, with scores correlating strongly with anxiety, depression, and functional impairment in work and social roles, and a comparable number reported clinically significant functional impairment (Lee & Neimeyer, 2022). A further analysis of these data showed that unique circumstantial risk factors associated with pandemic loss (e.g., inability to "be there" for the loved one at the end of life because of hospital safety protocols; dissatisfaction with memorial services) accounted for 59% of the

variance in functional impairment and 71% of the variance in dysfunctional grief (Neimeyer & Lee, 2022). A subsequent study of 1,065 American adults bereaved from COVID-19 documented that 56.6% met or exceeded the clinical cut point for dysfunctional grief (Lee, Neimeyer, & Breen, 2021). A third study of 307 American adults bereaved by COVID-19 showed that most participants scored in the clinical ranges for generalised anxiety (70.0%), depression (74.3%), dysfunctional grief (66.1%), and functional impairment (63.2%; Breen, Lee, & Neimeyer, 2021). Mean scores for functional impairment in these studies were equivalent to or exceeded those reported by treatment seeking adults diagnosed with clinically debilitating PGD in the pre-pandemic era (Bui et al., 2015; Shear, Wang, Skritskaya, Duan, Mauro, & Ghesquiere, 2014).

The above studies focused specifically on experiences and symptoms of people bereaved by COVID-19. However, the social context of dying during the pandemic is generally characterised by similar circumstantial risk factors such as multiple concurrent stressors, inability to be at dying persons' bedsides, restrictions in mourning rituals, and social isolation (Breen, 2020; Eisma, Boelen, & Lenferink, 2020; Menzies, Neimeyer, & Menzies, 2020; Neimeyer & Lee, 2022; Stroebe & Schut, 2020). Thus, it is likely that all people bereaved during the pandemic, irrespective of the cause of death, could encounter similar risks and manifest comparable struggles in post-loss adaptation. Studies of bereavement during the pandemic, whether or not caused by COVID-19, support such a supposition. A study in the Netherlands found that people experiencing a recent loss during the pandemic reported more severe acute grief symptoms than did those experiencing comparable acute losses before the pandemic, which suggests that adapting to loss during a pandemic can be particularly challenging (Eisma & Tamminga, 2020). A subsequent study of 409 adults in the United States showed no differences in circumstantial risk factors, dysfunctional grief symptoms, disrupted meaning, and functional impairment between people

bereaved from COVID-19 and from other natural or violent causes in the second year of the pandemic (Breen, Mancini, Lee, Pappalardo, & Neimeyer, 2022). Worrisomely, 77% reported functional impairment and 72% reported dysfunctional grief, both of which are higher proportions than reported in studies earlier in the pandemic using precisely the same metrics.

The potential for a substantial increase in bereavement care needs during the pandemic is of increasing concern. Baseline results from a longitudinal study of 711 adults in the United Kingdom bereaved between March and December 2020 indicated only one-third felt supported by friends and family. The majority had not sought help from bereavement services (59%) or their family doctor (60%; Harrop et al., 2021). More than half of those who had attempted to seek help from professionals experienced difficulties accessing support (56% and 52% respectively). Reported barriers centred on limited availability, discomfort seeking help and lack of appropriate care. Importantly, half (51%) reported high or severe grief, yet nearly three-quarters of this subset were receiving no support from bereavement or mental health services.

Notwithstanding the gap between the need for bereavement care and access to it, meaning reconstruction interventions might be particularly fruitful for intense and impairing grief during the pandemic. Meaning reconstruction has been demonstrated to be a strong prospective predictor of adaptation to loss (Milman, Neimeyer, Fitzpatrick, MacKinnon, Muis, & Cohen, 2019; Neimeyer, 2019; Park, 2010) and can play a central role in grief therapy (Lichtenthal et al., 2019; Neimeyer, 2022a). Further, after controlling for participant age and gender and time since death, disruptions in meaning making processes significantly mediate the relationship between pandemic risk factors and functional impairment, and between pandemic risk factors and dysfunctional grief (Breen, Mancini et al., 2022). If further substantiated as a predictor of bereavement outcome in the context of loss of a loved

one to COVID-19, meaning reconstruction can be supported through a great range of trauma-informed and attachment informed interventions, ranging from restorative retelling procedures to encourage the emotionally regulated narration and integration of the story of the loss, through experientially vivid means of addressing unfinished business with the deceased, to revising the mourner's own sense of identity in the aftermath of the loss (Neimeyer, 2022a, 2022b).

In the present study we aimed to replicate and extend previous work that used the same measures with community samples in the United States, but with the focus on a treatment-seeking sample drawn from the United Kingdom. We report the extent of pandemic grief risk factors, dysfunctional grief symptoms, PTSD symptoms, general psychiatric distress, disrupted meaning, and functional impairment in British adults seeking counselling for their grief and mental health needs following a COVID-19 death. Extending recent analyses (Breen, Mancini et al., 2022), we hypothesised that disrupted meaning would mediate the relationship between unique pandemic grief risk factors and all four outcomes: dysfunctional grief, general psychiatric distress, PTSD symptoms, and functional impairment in family, work, and social roles.

Method

Participants

The sample comprised 183 participants residing in the United Kingdom (168 identifying their gender as women, 13 men, 2 other) aged 18 to 65 years ($M = 47.40$, $SD = 11.26$), who were bereaved due to a death from COVID-19. All participants were invited to complete the following measures as part of their intake by counsellors working with the National Bereavement Partnership (https://www.nationalbereavementpartnership.org/), a support hotline, counselling referral service, and befriending program for people suffering from grief, anxiety, or mental health issues as a direct or indirect result of the pandemic.

Participants were predominantly White (86.3%), followed by Asian or Asian-British (4.9%), mixed-ethnicity (3.3%), Black, African, Caribbean, or Black British (1.6%), or another ethnic group (3.8%). Most participants were an immediate family member of the deceased (91.3%), followed by extended family member (4.4%), in a romantic relationship (3.8%), or other relationship (0.5%). Most participants experienced this death due to COVID-19 over 6 months prior to the study (56.3%), with others between 3 and 6 months (28.4%), or within the 3 months prior to the study (15.3%). Because personal experience of COVID-19 symptomatology (e.g., deadening fatigue, struggle breathing) could plausibly enhance participants' empathy and identification with the suffering of the deceased, thereby exacerbating their grief, we requested that they report whether they themselves had tested positive for the disease. In total, 19.7% of participants had previously tested positive for COVID-19.

Measures

Pandemic Grief Risk Factors. Potential complications in bereavement experienced during the COVID-19 pandemic were measured using the 10-item Pandemic Grief Risk Factors (PGRF) inventory developed by Neimeyer and Lee (2022). This instrument measures unique circumstantial risks during the pandemic for severe grief and impairment in social function. Responses are recorded using a 4-point scale (0 = *not at all* to 3 = *nearly every day*). Sample items include *I felt upset that the deceased was not given a proper funeral or memorial service* and *I kept having images of the deceased struggling for life on some machine*. Higher scores demonstrate a higher level of perceived risk factors. This scale displayed strong internal reliability in the present study (α = .85).

Dysfunctional Grief Symptoms. The Pandemic Grief Scale (PGS) was used to measure symptoms of dysfunctional grief (Lee & Neimeyer, 2022). This instrument measures self-reported frequency of five symptoms of grief following a death (e.g., *I wished to die in*

order to be with the deceased; I found it difficult to have positive memories about the deceased). Responses to each item are recorded on a 4-point scale (0 = *not at all* to 3 = *nearly every day*). A total score equal to or greater than 7 suggests that the participant is experiencing clinically significant grief symptoms (Lee & Neimeyer, 2022). The scale has strong psychometric features and convergent validity with other psychiatric instruments (Lee & Neimeyer, 2022) and incremental validity even after depression and anxiety are accounted for in explaining functional impairment, meaning-making difficulties, and substance use coping with the loss (Lee et al., 2021). In the current study, the PGS displayed strong internal reliability (α = .86).

Psychiatric Distress. Symptoms of anxiety and depression—collectively indicative of psychiatric distress—over the previous two weeks were measured using the Patient Health Questionnaire-4 (PHQ-4; Kroenke et al., 2009). Participants respond to four items on a 4-point scale (0 = *not at all* to 3 = *nearly every day*). An example item is *little interest or pleasure in doing things*. Total scores range from 0 to 12 and can be used to identify whether participants have no risk (0-2), mild risk (3-5), moderate risk (6-8), or severe risk (9-12) for psychiatric distress. Separate scores for anxiety and depression are also generated, a score of 3 or greater suggesting elevated risk in that specific domain. The PHQ-4 has demonstrated good psychometric properties as an ultra-brief screening measure (Kroenke et al., 2009). Internal reliability for the PHQ-4 in the current study was strong (α = .90).

PTSD Symptoms. The PTSD screen for DSM-5 (PTS) developed by Prins et al. (2016) was used to measure participant PTSD symptoms over the past month. Participants respond to five statements using a binary 'yes' or 'no' response format (e.g., *In the past month have you been constantly on guard, watchful, or easily startled?*). Higher scores suggest higher PTSD symptoms. The endorsement of three or more items is indicative of clinically significant PTSD symptoms and the measure has demonstrated good reliability and validity

in previous research (Prins et al., 2016). Internal reliability for the PTS in the current study was low (α = .65) but not unexpected considering the binary nature of this instrument.

Disrupted Meaning. The Integration of Stressful Life Experiences Scale-Short Form ([ISLES-SF] Holland, Currier, & Neimeyer, 2014) was used to assess participant-rated difficulties in making meaning of the loss they had experienced. Responses to the six statements (e.g., *This loss is incomprehensible to me*; *I don't understand myself anymore since this loss*) were recorded using a 5-point scale (1 = *strongly disagree* to *5 = strongly agree*). Higher scores indicate greater disruption in the making meaning process following a death. The ISLES-SF demonstrated strong internal reliability in the present study (α = .87).

Functional Impairment. A 5-item scale adapted from the Work and Social Adjustment Scale (WSAS; Mundt, Marks, Shear, & Griest, 2002) that has been recently administered in COVID-19 grief literature (Breen, Lee et al., 2021; Neimeyer & Lee, 2022) was used to measure functional impairment. This self-report scale assesses levels of perceived disruption in social role performance following a loss during the COVID-19 pandemic. Responses are recorded using a 9-point scale (0 = *not at all* to 8 = *very severely*). An example item is *Because of this loss, my home management (cleaning, tidying, shopping, cooking, looking after home or children, paying bills) is impaired.* Higher scores demonstrate poorer functioning spanning family, workplace, and social settings. A score $\geq$ 21 indicates clinically significant levels of functional impairment (Neimeyer & Lee, 2022). This scale displayed strong internal reliability in the present study (α = .89).

Procedure

Approval to conduct this study was provided by Christopher Newport University in accordance with the principles stated in the Declaration of Helsinki. An online survey using the SurveyMonkey platform was available for completion between 31 January 2021 and 8

June 2021. The survey was approximately 10 minutes in length and all participants provided informed consent.

Analytic Plan

Mediation models were tested using a similar process documented in a recent study examining similar variables in a U.S. sample (Breen, Lee et al., 2021). Model 4 of the PROCESS macro (Hayes, 2020) was performed to test the potential mediating effect of disrupted meaning on the relationship between pandemic grief risk factors and four outcomes: dysfunctional grief symptoms, psychiatric distress, PTSD symptoms, and functional impairment. The 95% bias-corrected and accelerated confidence intervals (BcA CIs) for the direct and indirect effect were estimated using 10,000 bootstrapped iterations. Those 95% BcA CIs that do not contain zero were deemed statistically significant. Covariates included in this model were age, gender, and time since death.

Results

Sample Characteristics

Bivariate correlations, means, and standard deviations for measurement variables are presented in Table 1. Strong positive correlations between risk factors, disrupted meaning, grief symptoms, functional impairment, PTSD symptoms and distress were all statistically significant, indicating that higher levels of one of variable are associated with elevated levels of the others. Age displayed weak, negative, but statistically significant correlations with risk factors and PTSD symptoms, such that older participants reported fewer risk factors and PTSD symptoms than younger participants. Age was not significantly correlated with disrupted meaning, grief symptoms, or distress. Gender was not significantly associated with any of the other study variables but was retained as a measure covariate (with the caveat that only two participants endorsed a gender category other than female or male, precluding their analysis as a distinct group or subgroups). Significant negative correlations ranging from

weak to moderate were observed between time since death with disrupted meaning, grief symptoms, functional impairment, PTSD symptoms, and psychiatric distress.

Clinical Outcomes

In keeping with previous research, a substantial percentage of the current sample displayed clinically significant elevations on each of the outcomes assessed. On the PHQ, only a small proportion (14.8%; $n = 27$) of participants reported no symptoms of psychiatric distress (scores of 0-2 on the PHQ-4). The rest of the sample were classed as mild-risk (21.3%; $n = 39$) or moderate-risk (21.9%; $n = 40$), with the largest proportion of participants classified as severe-risk (42.1%; $n = 77$). Separating the PHQ-4 into the anxiety and depression items separately, 58.5% of the sample ($n = 107$) were at elevated risk for anxiety and 62.3% ($n = 114$) for depression.

In comparison, approximately 40% ($n = 72$) of the sample reported clinically significant symptoms of dysfunctional grief with PGS scores equal to or larger than 7. In contrast, over 83% ($n = 152$) of the sample scored in the elevated range for PTSD symptoms with PTS scores equal to or greater than 3. Finally, approximately 56% ($n = 104$) of the sample reported clinically significant symptoms of functional impairment, with WSAS scores equal to or larger than 21, testifying to the severity of impact of bereavement on survivors' ability to perform in essential family, work, and social domains.

Mediation Analyses

Statistical assumptions underpinning mediation analysis were evaluated prior to hypothesis testing and deemed suitable to proceed with the planned analysis. Separate models were tested for each dependent variable. In each case, disrupted meaning making as assessed by the ISLES-SF was tested as a possible mediator of the relation between pandemic grief risk factors and the relevant outcome variable.

Dysfunctional Grief. The first mediation model with dysfunctional grief as the outcome variable was performed. As per previous recommendation (Shrout & Bolger, 2002), the potential mediating effect of dysfunctional grief on the relationship between risk factors and psychiatric distress (after controlling for covariates) was estimated using a percentile bootstrap estimation approach with 10,000 samples. A significant indirect effect is denoted if the 95% BcA CIs do not contain the null value of 0 between the upper and lower bound estimates. In combination, risk factors, disrupted meaning, and covariates (age, gender, and time since death) predicted a statistically significant and clinically substantial 59.83% of the variance in dysfunctional grief symptoms, Model $R^2 = .60$, $F(5, 177) = 238.03$, $p < .001$, and was a large effect $f^2 = 1.49$.

Results indicated that the indirect effect of risk factors on dysfunctional grief symptoms via disrupted meaning-making was significant ($B = .20$, 95% BcA CI [0.15, 0.26]), partially standardised $\beta = .05$. This indirect effect represented approximately 57.62% of the total effect of risk factors on dysfunctional grief symptoms, representing a large effect. The direct effect of risk factors on dysfunctional grief symptoms was reduced (from $B = 0.35$ to $B = 0.15$) but remained statistically significant after the inclusion of disrupted meaning and the covariates into the model, indicating a partially mediated effect. Thus, the relationship between risk factors and dysfunctional grief symptoms was partially mediated by disrupted meaning-making. This is visually presented in Figure 1.

Psychiatric Distress. A second mediation model consistent with the previous PROCESS analysis, but with general psychiatric distress as the outcome variable, was performed. In combination, risk factors, disrupted meaning, and covariates (age, gender, and time since death) predicted a statistically significant and substantial 52.47% of the variance in distress, Model $R^2 = .53$, $F(5, 177) = 39.09$, $p < .001$, and was a large effect $f^2 = 1.13$.

Results indicated that the indirect effect of risk factors on distress via disrupted meaning-making was significant (B = .14, 95% BcA CI [0.10, 0.19]), partially standardised β = .04. This indirect effect represented 49.40% of the total effect of risk factors on distress, representing a large effect. The direct effect of risk factors on distress was reduced (from B = 0.28 to B = 0.14) but remained statistically significant after the inclusion of disrupted meaning and the covariates into the model, indicating a partially mediated effect. Thus, the relationship between risk factors and distress was partially mediated by disrupted meaning-making. This is visually presented in Figure 2.

PTSD Symptoms. A third mediation model consistent with the previous PROCESS analysis, but with PTSD symptoms as the outcome variable, was performed. In combination, risk factors, disrupted meaning, and covariates (age, gender, and time since death) predicted a statistically significant and substantial 43.79% of the variance in dysfunctional grief symptoms, Model R^2 = .44, $F(5, 177)$ = 27.58, $p < .001$, and was a large effect f^2 = 0.79.

Results indicated that the indirect effect of risk factors on PTSD symptoms via disrupted meaning-making was significant (B = .04, 95% BcA CI [0.19, 0.59]), partially standardised β = .03. This indirect effect represented approximately 42.22% of the total effect of risk factors on PTSD symptoms, representing a large effect. The direct effect of risk factors on PTSD symptoms was reduced (from B = 0.09 to B = 0.05) but remained statistically significant after the inclusion of disrupted meaning and the covariates into the model, indicating a partially mediated effect. Thus, the relationship between risk factors and PTSD symptoms was partially mediated by disrupted meaning-making. This is visually presented in Figure 3.

Functional Impairment. Finally, results from the mediation analysis using PROCESS demonstrated that 60% of the variance in functional impairment could be explained by risk

factors, disrupted meaning, and covariates (age, gender, and time since death), Model $R^2 =$ .60, $F(5, 177) = 53.54$, $p < .001$, and was a large effect $f^2 = 1.51$.

Results indicated that the indirect effect of risk factors on functional impairment via disrupted meaning-making was significant ($B = 0.42$, 95% BcA CI [0.29, 0.56]), partially standardised β = .04. This indirect effect represented approximately 48.46% of the total effect of risk factors on functional impairment, representing a large effect. The direct effect of risk factors on functional impairment was reduced (from $B = 0.86$ to $B = 0.45$) but remained statistically significant after the inclusion of disrupted meaning and the covariates into the model, indicating a partially mediated effect. Thus, the relationship between risk factors and functional impairment was partially mediated by disrupted meaning-making. This is visually presented in Figure 4.

Discussion

This study extends previous findings from American community-based samples of people bereaved during the pandemic responding to the same measures (Breen, Lee et al., 2021; Breen, Mancini et al., 2022; Lee & Neimeyer, 2022; Lee et al., 2021; Neimeyer & Lee, 2022) by investigating a British treatment-seeking sample bereaved from COVID-19 deaths, using the same psychometrically validated measures. Replicating earlier research, the present sample displayed alarming rates of clinical elevation on all measures, including dysfunctional grief, general psychiatric distress, PTSD symptoms, and functional impairment, documenting that the impact of the "shadow pandemic" of complicating bereavement in the wake of COVID-19 loss (Neimeyer & Lee, 2022) is not a uniquely American phenomenon. In contrast to the American samples (Breen, Lee et al., 2021; Breen, Mancini et al., 2022; Lee & Neimeyer, 2022; Lee et al., 2021), however, the present UK sample reports *less* dysfunctional grief and *higher* symptoms of psychiatric distress and especially PTSD symptoms. An explanation for this higher profile of trauma over grief symptomatology is not readily

apparent, but at least two hypotheses merit consideration in future research. The first is that heightened anxiety could be a function of the higher population density in the UK and the higher incidence of COVID-19 infection in that country during the period in which we collected the data, heightening alarm and vigilance about the prospect of further loss. The second is that the present sample could be self-selected for high levels of traumatisation, which could have played a key role in their decision to seek treatment. Regardless of the explanation, over 80% of British mourners of COVID-19 deaths seeking treatment through the National Bereavement Partnership exceed the cut-point for clinically significant PTSD. One implication of this finding is that counsellors in the UK should be alert to a broad band of pandemic-related psychological distress in such mourners, and not concentrate solely on symptoms of grief. In particular, these findings underscore the need to screen for high levels of trauma as well as grief, for potential referral to counsellors with specialised skills in treating the intersection of trauma and bereavement (Neimeyer & Rynearson, 2022).

A second finding of note was the consistency with which the multifaceted pandemic grief risk factors for all clinical outcomes were mediated by disrupted meaning, which accounted for a substantial 40-60% of their impact, after controlling for age, sex, and time since death. This pattern converges with a growing body of evidence from both contemporaneous and longitudinal studies that the capacity to find sense and orientation in bereavement predicts better grief adaptation, and conversely, that an inability to find meaning in the experience forecasts prolonged and preoccupying bereavement irrespective of the cause of death (Milman et al., 2019; Neimeyer, 2019). The suggestion that meaning making mediates the impact of uniquely stressful circumstantial risks in the present study of treatment-seeking British mourners therefore points to the possible contribution of meaning reconstruction procedures in grief therapy, to address both the traumatic impact of such loss and the unresolved relational issues that result (e.g., guilt over abandoning loved ones at the

end of life or being unable to memorialise them adequately). Such procedures are all the more relevant for practicing counsellors, as meaning is mutable, whereas the objective circumstances that complicated the loss are not (Neimeyer, 2022b).

Limitations

One constraint in the current study is that the UK sample consisted almost entirely of women, who historically have reported more favourable attitudes to grief counselling (Breen, Croucamp, & Rees, 2019). This limits the generalisation of the present findings to men (as well as to other genders), who are more adequately represented (and equally distressed) in community samples of COVID-19 mourners (e.g., Breen, Lee et al., 2021; Breen, Mancini et al., 2022; Lee & Neimeyer, 2022; Lee et al., 2021). At a public health level, this pattern suggests the need to promote the availability of counselling services to all mourners, perhaps encouraging self-screening using measures like those included in this study to foster greater awareness of the severity of their distress and to motivate their reaching out for support or treatment.

Extensive research across several nations (Caycho-Rodríguez et al., 2021; El Sayed, Gomaa, Aboelfotoh, & El Wasify, 2021; Evren, Evren, Dalbudak, Topcu, & Kutlu 2021; Skalski, Konaszewski, Dobrakowski, Surzykiewicz, & Lee, 2021) supports the cross-cultural relevance of core symptoms of pandemic grief and their health and mental health correlates. However, it is possible that specific risk factors for dysfunctional grief could vary across settings, as a function of the availability of medical, social, family, and religious systems. These broader systemic factors that could influence the form and intensity of mourner distress deserve greater attention, as the current findings suggest lower incidence of dysfunctional grief per se, but higher posttraumatic symptomatology, among those bereaved by COVID-19 in British versus American samples.

Finally, as a contemporaneous rather than longitudinal study, the current research cannot resolve issues of causality in theory-driven mediational models linking grief, disruptions in meaning making, and adverse clinical outcomes. Indeed, complex patterns of interaction among these variables are not only possible but also probable, as mourners with historical vulnerability to depression or anxiety might be more likely to respond to tragic loss with PTSD symptomatology, just as those with characteristically resilient meaning systems (whether secular or spiritual) might be buffered from the effects of pandemic risk factors. As the course of the pandemic continues even with reductions in infection and mortality rates, research can begin to document these and other possible interactions, as well as the extent to which acute distress of the kind this study documents foreshadows sustained struggles with prolonged and preoccupying grief of a sort that clearly requires professional intervention.

Conclusion

The present study documents the high incidence of clinically significant grief, general psychiatric distress, functional impairment, and especially PTSD symptomatology in a sample of 183 treatment-seeking mourners of COVID-19 deaths in the UK. The impact of circumstantial risk factors on all of these worrisome outcomes proved to be substantially accounted for by disruptions in participants' ability to find meaning in their experience of loss. Taken together, these results suggest the relevance of meaning-focused counselling with this cohort of highly distressed mourners, as well as the importance of specialised training in the mental health fields on the convergence of trauma and loss in the context of pandemic bereavement.

Data Availability

Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data are not available.

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Table 1

Descriptive statistics and bivariate correlations for study sample ($N = 183$)

Variable	Bivariate Correlations									Descriptive Statistics		
	1	2	3	4	5	6	7	8	9	*M*	*SD*	Range
1. Risk Factors	--									19.17	7.50	0 – 30
2. Disrupted Meaning	.60**	--								23.07	5.25	6 – 30
3. Grief Symptoms	.60**	.74**	--							5.77	4.34	0 – 15
4. Functional Impairment	.64**	.72**	.70**	--						22.53	1.83	0 – 40
5. PTSD Symptoms	.54**	.57**	.51**	.57**	--					3.79	1.38	0 – 5
6. Psychiatric Distress	.60**	.68**	.72**	.75**	.54**	--				7.12	3.73	0 – 12
7. Age	-.15*	-.08	-.08	-.12	-.22**	-.11	--			47.40	11.26	18 – 65
8. Gender [a]	.12	.10	.01	.14	.09	.06	.01	--		--	--	--
9. Time since death [b]	-.14	-.19*	-.20**	-.28**	-.33**	-.23**	.10	.11	--			

*Correlation is significant at the 0.01 level (2-tailed).

**Correlation is significant at the 0.05 level (2-tailed).

[a] Gender was coded as 1 = Female, 2 = Male/Not specified to retain a binary covariate for inclusion in analyses.

[b] Spearman's *rho* coefficient is reported for time since death since this variable was ordinal.
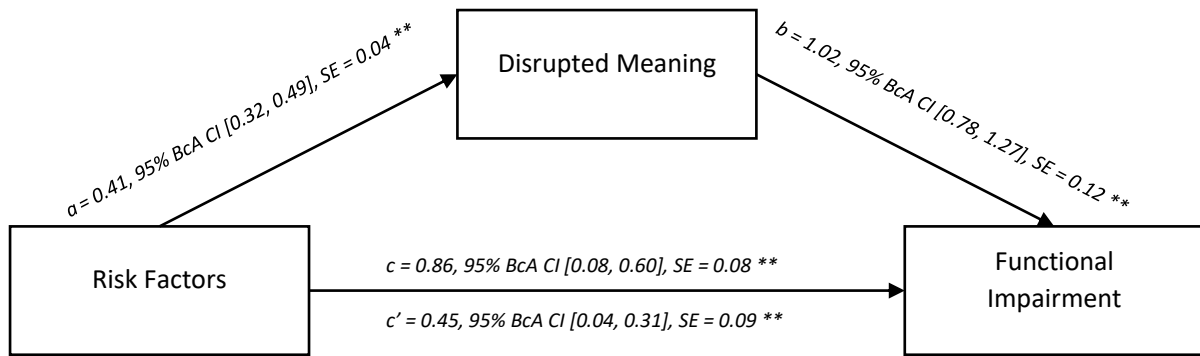
Figure 1. Mediation model demonstrating that the relationship between risk factors and dysfunctional grief symptoms was partially mediated by disrupted meaning in a treatment-seeking sample of United Kingdom residents experiencing a death due to COVID-19 ($N = 183$). Pathways depicted in this model were after controlling for the potential confounding effects of participant age and gender and time since death. This model presents the unstandardised coefficients for each pathway.
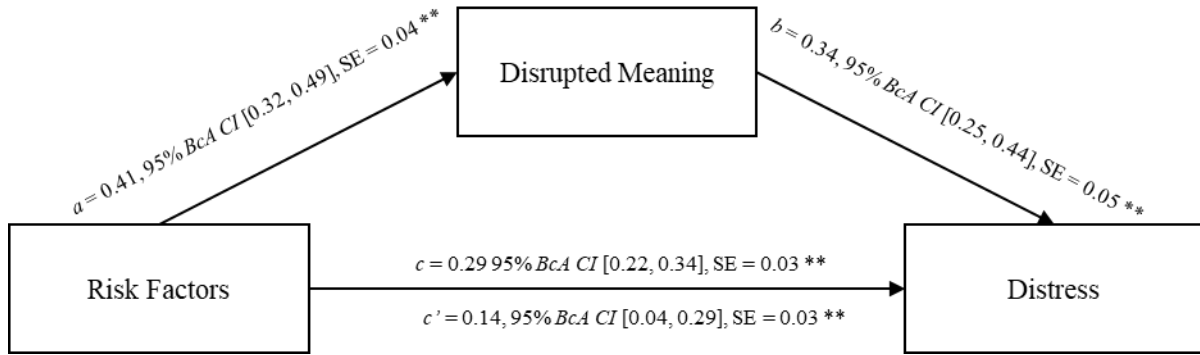
Figure 2. Mediation model demonstrating that the relationship between risk factors and general psychiatric distress was partially mediated by disrupted meaning in a sample of United Kingdom residents experiencing a death due to COVID-19 ($N = 183$). Pathways depicted in this model were after controlling for the potential confounding effects of participant age and gender and time since death. This model presents the unstandardised coefficients for each pathway.
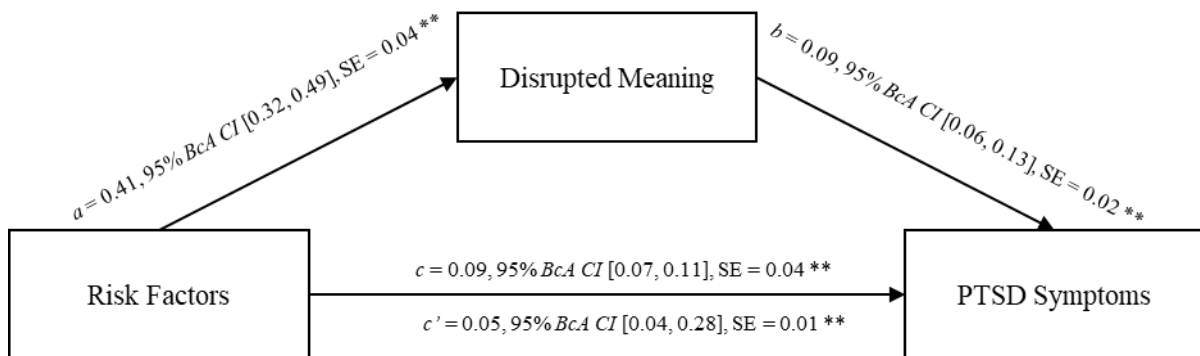
Figure 3. Mediation model demonstrating that the relationship between risk factors and PTSD symptoms was partially mediated by disrupted meaning in a treatment-seeking sample of United Kingdom residents experiencing a death due to COVID-19 ($N = 183$). Pathways depicted in this model were after controlling for the potential confounding effects of participant age and gender and time since death. This model presents the unstandardised coefficients for each pathway.
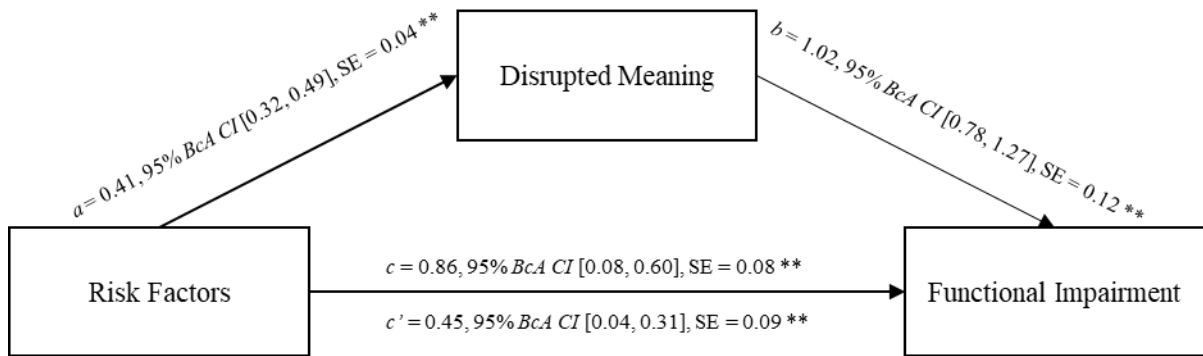
Figure 4. Mediation model demonstrating that the relationship between risk factors and functional impairment was partially mediated by disrupted meaning in a treatment-seeking sample of United Kingdom residents experiencing a death due to COVID-19 ($N = 183$). Pathways depicted in this model were after controlling for the potential confounding effects of participant age and gender and time since death. This model presents the unstandardised coefficients for each pathway.