

BRIEF REPORT

Intense grief attacks: An investigation into
the factor structure of a bereavement-related
phenomenonSherman Aclaracion Lee^{1*}, Tomás Caycho-Rodríguez², Lindsey W. Vilca³,
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Abstract

Grief attacks are a highly distressing and potentially debilitating bereavement-related experience. Although empirical research on these intense eruptions of loss-related anguish is limited, the literature suggests that this phenomenon consists of a mixture of both panic attack and grief symptoms. The present study examined the factor structure of intense grief attack symptoms using data from 303 bereaved adults. The confirmatory factor analysis results corroborate the literature by supporting a two-factor model of the phenomenon. These findings not only support anecdotal and clinical accounts of grief attacks but also provide partial psychometric support for the Grief Attack Questionnaire in measuring these sudden, unanticipated, and overwhelming responses to bereavement.

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(sherman.lee@cnu.edu)**Citation:** Lee SA, Caycho-Rodríguez T, Vilca LW, Neimeyer RA. Intense grief attacks: An investigation into the factor structure of a bereavement-related phenomenon. *J Clin Basic Psychosom.* 2026;4(2):025290052. doi: 10.36922/JCBP025290052**Received:** July 15, 2025**Revised:** September 2, 2025**Accepted:** September 10, 2025**Published online:** September 25, 2025**Copyright:** © 2025 Author(s). This is an Open-Access article distributed under the terms of the Creative Commons Attribution License, permitting distribution, and reproduction in any medium, provided the original work is properly cited.**Publisher's Note:** AccScience Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

1. Introduction

A grief attack is a sudden and often unexpected upsurge of overwhelming grief-related anguish.^{1,2} Anecdotal and clinical observations suggest that a grief attack consists of an amalgamation of somatic distress, such as that found in panic attacks, and classic expressions of grief, such as crying aloud for the deceased and feeling painful emotions.¹⁻⁵ In addition to being highly unpleasant to experience and disruptive to ongoing activities, grief attacks can also be dangerous, contributing to occupational injuries and automobile accidents.¹ Surprisingly, empirical research on grief attacks is limited and no instrument to measure this phenomenon existed before the development of the Grief Attack Questionnaire (GAQ).²

The GAQ was recently created and validated in a study of 247 adults struggling with grief.² In this study, Lee and Neimeyer asked participants how intensely they experienced

13 panic attack symptoms and 10 grief symptoms during a recent grief attack.² Results of a principal component analysis identified a four-component solution. The first component, which was named panic, reflected somatic-based, panic attack symptoms (e.g., numbness or tingling sensations). The last three components, which were named yearning (e.g., feelings of longing or yearning for the deceased), disorganization (e.g., fear of losing control), and despair (e.g., “wanting to die rather than live without the deceased”), reflected different dimensions of grief.³

A self-report scale called the GAQ was created from the results of this analysis to further scientific inquiry into the grief attack phenomenon.² Specifically, four of the psychometrically strongest items from each component were used to create the subscales of the GAQ. The GAQ subscales were shown to be highly reliable (Ω s ranged from 0.80 to 0.81) and demonstrated evidence of convergent validity with moderate-to-strong correlations with a measure of grief-related impairment (r s ranged from 0.28 to 0.52). Despite the promise of these initial findings, the factor structure underlying grief attacks remains unknown. Thus, the present study extends this literature by confirming the factor structure of the phenomenon using the GAQ with an independent sample of bereaved adults struggling with their grief.

2. Materials and methods

2.1. Materials

The survey tools employed in the study are as follows:

2.1.1. Basic information

Participants were asked to report their age, gender, and ethnicity (i.e., white; Black/African American; Hispanic/Latino; Asian; Native American/Alaskan native; two or more races; other). Participants were also asked questions regarding a significant person in their life who died and for whom they were currently struggling with grief. Specifically, the participants were asked to report their relationship to the deceased, how long ago they died, and how they died.

2.1.2. GAQ

The GAQ is a 16-item scale that was developed by Lee and Neimeyer.² It was designed to measure the intensity of a grief attack by asking participants to indicate how intensely they experienced each symptom (e.g., trembling or shaking), using a 5-point scale (0 = not at all; 4 = overwhelming), during their most recent grief attack. For this study, however, the directions were modified to focus on the participants' most intense grief attack. Given the aversive nature of grief attacks, we expected

participants to have a better recall of their experience if we had them focus on their most intense episode.

2.2. Methods

The present study is an analysis of online survey data from 303 bereaved adults from the United States. The study protocol was approved by the institutional review board of Christopher Newport University. To be included in this study, participants had to be struggling with grief over the death of a significant person and have experienced a grief attack. The participants were recruited through Prolific and were paid (\$1.00) to complete this study. Prolific is an online research platform that has been shown to produce high-quality data for online behavioral research.⁶ Data were collected on May 20, 2025. Participants were mostly white (58.7%) with a mean age of 38.78 years. Gender was relatively balanced (52.5% women and 46.9% men). The deceased were mostly family members (72.6%) who had died within 1 year (65.7%). Most of the deceased passed away due to either a progressive/chronic illness (46.5%) or a sudden, natural death (37.0%).

2.3. Statistical analysis

The robust maximum likelihood (MLR) estimator⁷ was used to test factorial structures of intense grief attacks. Criteria for determining confirmatory factor analysis (CFA) model fit were defined by a standardized root-mean square residual (SRMR) value ≤ 0.05 , root-mean square-error of approximation (RMSEA) value ≤ 0.10 , and comparative fit index (CFI) and Tucker–Lewis index (TLI) values ≥ 0.90 .^{8,9} Factor invariance testing using multi-group CFA was used to determine if a gender difference exists in the best-fit factor structure of intense grief attacks. Criteria for determining factorial invariance were defined by an RMSEA value < 0.015 and CFI differences < 0.010 .¹⁰ Statistical analyses were run using the RStudio environment for R.¹¹ Specifically, the “lavaan” package¹² was used to perform CFAs and the “semTools” package was used to perform factorial invariance testing.¹³

3. Results and discussion

Nine different CFA models were tested (Table 1). The first model (Model 1) examined was a four-factor, correlated-factors model that included all four of the GAQ subscales. The results showed some problems with fit (RMSEA = 0.091; TLI = 0.884) and very strong associations between the Panic (F1) and Disorganization (F3) subscales (0.83), as well as between the Disorganization (F3) and Despair (F4) subscales (0.95). These results suggest that the items in each pair of dimensions do not discriminate well between the two subscales comprising it or that they refer to the same construct.

Table 1. Confirmatory factor analysis models

Models	χ^2	df	p	CFI	TLI	SRMR	RMSEA [90%CI]	Correlations						Reliabilities (ω)			
								F1-F2	F1-F3	F1-F4	F2-F3	F2-F4	F3-F4	F1	F2	F3	F4
Model 1	306.21	98	0.000	0.905	0.884	0.076	0.091 (0.079–0.102)	0.43	0.83	0.72	0.51	0.60	0.95	0.83	0.81	0.83	0.83
Model 2	123.77	51	0.000	0.949	0.933	0.060	0.074 (0.057–0.090)	0.43	0.84	—	0.52	—	—	0.83	0.81	0.83	—
Model 3	56.52	19	0.000	0.956	0.935	0.052	0.084 (0.059–0.106)	0.42	—	—	—	—	—	0.83	0.81	—	—
Model 4 ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Model 5 ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Model 6 ^b	317.92	100	0.000	0.901	0.881	0.082	0.092 (0.080–0.103)	—	—	—	—	—	—	—	—	—	—
Model 7 ^b	124.72	51	0.000	0.948	0.933	0.060	0.074 (0.058–0.091)	—	—	—	—	—	—	—	—	—	—
Model 8 ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Model 9	606.61	104	0.000	0.764	0.727	0.099	0.139 (0.129–0.150)	—	—	—	—	—	—	0.92	—	—	—

Notes: χ^2 : Chi square; CFI: Comparative fit index; df: degrees of freedom; ω : McDonald's Omega; RMSEA: Root mean square error of approximation; SRMR: Standardized root mean square residual; TLI: Tucker–Lewis index. Model 1=Four related dimensions; Model 2: Three related dimensions; Model 3: Two related dimensions; Model 4: Bifactor model with four related dimensions; Model 5: Bifactor model with three related dimensions; Model 6: General second-order factor model for four dimensions; Model 7: General second-order factor model for three dimensions; Model 8: General second-order factor model for two dimensions; Model 9=Unidimensional model with 16 items; F1: Panic subscale; F2: Yearning subscale; F3: Disorganization subscale; F4: Despair subscale; a: Model estimation failed; b=some estimated variances are negative; c: The model is not identified.

A second model (Model 2) was tested that excluded F4, but correlated F1, F2, and F3, based on the issues presented in the first model. This three-factor, correlated factors model yielded adequate data fit for most indices (RMSEA = 0.074; CFI = 0.949; TLI = 0.933). However, SRMR was slightly below standard (0.06), and F1 and F3 continued to show a strong association (0.84). Therefore, a third model (Model 3) was tested that excluded F3, but correlated F1 and F2 (Figure 1). This two-factor, correlated-factors model met all of the criteria for fit and showed adequate discrimination between the factors (0.43).

For exploratory purposes, five additional models were tested (Models 4–9). Specifically, these models included bi-factor models (Models 4 and 5), second-order factor models (Models 6–8), and a unidimensional model that included all of the GAQ items (Model 9). All of these exploratory models displayed problems with fit or estimation. Because the correlated-factors model (Model 3) best represented the data, an additional factorial invariance test was performed on this model. The results showed that the factorial structure for Model 3 was invariant across gender [metric invariance ($\Delta\text{CFI} = -0.001$; $\Delta\text{RMSEA} = -0.036$), scalar invariance ($\Delta\text{CFI} = -0.007$; $\Delta\text{RMSEA} = 0.005$), and strict invariance ($\Delta\text{CFI} = -0.001$; $\Delta\text{RMSEA} = -0.007$)]. Taken together, the two-factor, correlated-factors model (Model 3) best represented the data and suggests that intense grief attacks are best explained as a composition of somatic-based panic attack symptoms (F1) and grief symptoms of intense yearning (F2). Moreover, such attacks are structurally similar between men and women.

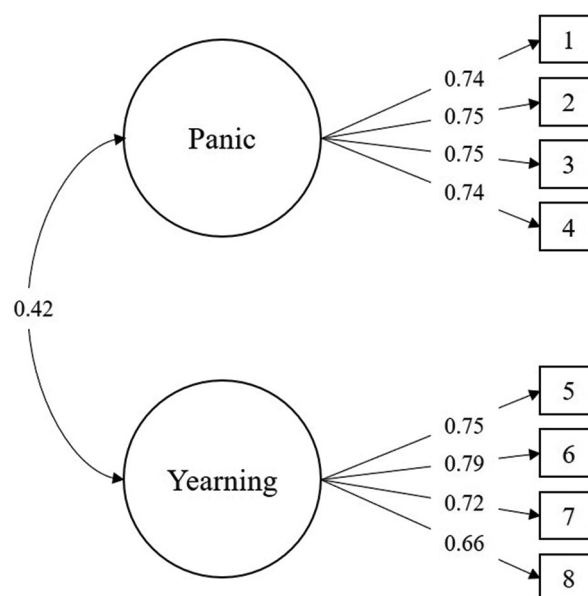


Figure 1. Two-factor model

Notes: Panic: Grief Attack Questionnaire (GAQ) panic subscale; Yearning: GAQ yearning subscale; 1: Trembling or shaking; 2: Sweating; 3: Numbness or tingling sensations; 4: Feeling dizzy, unsteady, lightheaded, or faint; 5: Had thoughts about the deceased; 6: Feelings of longing or yearning for the deceased; 7: Feeling emotional pain related to the death of the deceased (e.g., anger, bitterness, sorrow); 8: Irresistible sobbing or crying.

The results of this study support clinical and anecdotal reports that describe grief attacks in terms of panic symptoms and expressions of acute grief.¹⁻⁴ From the perspective of attachment theory, the panic experienced

during a grief attack reflects an instinctual alarm response that is triggered when one is separated from an attachment figure.³ The unsettling physical reactions that characterize this form of panic drive search-and-recover activity, despite its futility in the case of bereavement.³ Our finding that panic symptoms represent a core component of intense grief attacks supports past research that has shown that panic attacks are highly prevalent among those experiencing elevated levels of grief.^{14,15} The second component of intense grief attacks identified in this study, which is represented by the yearning subscale of the GAQ, consists of the yearning and searching aspects of grieving.² From the perspective of attachment theory, these grief symptoms reflect both the acute psychological pain over the loss of a loved one (e.g., anger, sorrow, and crying), as well as the strong urge to search for and recover them (e.g., thoughts about the deceased; yearning).^{3,5} Clinically, the confirmation of a prominent panic component of intense grief attacks supports a treatment approach that focuses on emotion regulation strategies, such as grounding and mindful breathing, as well as progressive exposure to fearful environmental cues. Similarly, the simultaneous prominence of overwhelming yearning calls for attachment-informed interventions focused on restoring a secure but non-physical bond with the deceased, as through ritual and symbolic interactions.²

The finding that the four GAQ subscales did not collectively represent intense grief attacks was not expected. One reason that the findings are different in this study from the original GAQ study² may be due to the different instructions given to the participants. In this study, we asked the participants to report on their most intense grief attack, while in the original GAQ study,² Lee and Neimeyer asked them to report on their most recent grief attack. Perhaps grief attacks are structurally different across levels of intensity. Future research should clarify these different findings. Future research should also demonstrate empirical distinctions between the GAQ subscales themselves as well as other measures of bereavement-related constructs. Relatedly, future research should determine if item order, inattention, social desirability, self-report methodology, demographic biases, and other related factors affect the validity of the GAQ. This study is also limited to an attachment theory perspective. Other perspectives, such as an affective neuroscience perspective, may also provide clarity on these results. Despite these issues, this study provides empirical confirmation that grief attacks are composed of panic attack and grief symptoms. In addition, this study shows that this grief-related phenomenon is not different across gender groups and that the two GAQ subscales have solid psychometric properties.

4. Conclusion

The results of this survey study of 303 adults struggling with grief revealed that intense grief attacks reflect two related but distinct phenomena. Specifically, intense grief attacks consist of physiological symptoms of panic attacks and grief symptoms that focus on overwhelming yearning. Moreover, this bereavement-related experience appears to be similar for both men and women. This study also finds support for the psychometric integrity of the GAQ's panic and yearning subscales. Given that grief attacks are a highly distressing but understudied phenomenon, we recommend that clinicians and researchers continue to document and investigate this grief-related experience.

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Conflict of interest

Sherman Aclaracion Lee is an Editorial Board Member of this journal, but was not in any way involved in the editorial and peer-review process conducted for this paper, directly or indirectly. Separately, other authors declared that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

Author contributions

Conceptualization: Sherman Aclaracion Lee, Robert A. Neimeyer

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Ethics approval and consent to participate

All procedures performed in this study were in accordance with the ethical standards of Christopher Newport University's (CNU) institutional research committee and with the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. The CNU IRB reviewed and approved the present study's research project (2046115-2 Investigations into Emotional Experiences) on March 7, 2025, according to federal regulations. Informed consent, using an online form, was

obtained from all individual adult participants included in the present study.

Consent for publication

The data used in this study were granted permission by the participants using an online consent form. The data are based on survey research using rating-type scales and choice options, with no personal identifying information.

Availability of data

Data in this study are not openly available. Only certain statistical information is available upon request via Sherman Aclaracion Lee (sherman.lee@cnu.edu).

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