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Public stigma of prolonged grief disorder: An experimental study

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Abstract

Prolonged grief disorder (PGD), characterized by severe, persistent and disabling grief, is being considered for inclusion in the International Classification of Diseases' 11 (ICD-11) and a related disorder, Persistent Complex Bereavement Disorder (PCBD), is included for further investigation in the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5). Establishing diagnoses for pathological grief may lead to stigmatization. Additionally, it has been argued that people experiencing severe grief responses after loss of non-family members (i.e., disenfranchised grief) may experience more stigmatizing reactions. Yet, no research to date has investigated this. To fill this gap in knowledge, 379 adults from the general population were randomly allocated to read one of 4 different vignettes of a person with and without a grief disorder diagnosis who had lost a friend or a spouse. After reading the vignettes, we assessed: 1) characteristics ascribed to the person, 2) emotional reactions to the person, and 3) desire for social distance. Notably, people with a diagnosis were attributed relatively more negative characteristics, and elicited more anger, anxiety and pro-social emotions and a stronger desire for social distance. Stigmatization and its negative consequences appear a valid concern to the establishment of pathological grief disorders in diagnostic manuals.

Keywords: traumatic grief, complicated grief, public stigma, social distance, negative attributions, negative emotions

1. Introduction

There is increasing recognition that bereavement can lead to severe, persistent and disabling grief reactions, also named 'complicated grief' or 'prolonged grief', among a minority of bereaved individuals (Lundorff et al., 2017; Boelen and Smid, 2017). Currently,

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prolonged grief disorder (PGD) is under consideration for inclusion in the International Classification of Diseases'11 (ICD-11; Maercker et al., 2013), and a related disorder, Persistent Complex Bereavement Disorder (PCBD) is included in the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5: American Psychiatric Association, 2013) as a diagnosis for further study. The most recent proposed criteria for PGD hold that one must experience severe yearning for the deceased and/or cognitive preoccupation with the deceased and three of five additional symptoms (i.e., difficulty accepting the loss, feelings of guilt, feelings of anger, feeling a part of oneself died, difficulty engaging in new activities) until at least six months after bereavement (Maercker et al., 2013; cf. Prigerson et al., 2009).

Proponents of the establishment of grief disorders argue that it will lead to increased research into (and clinical application of) grief-specific treatments that effectively reduce PGD or PCBD (Doering and Eisma, 2016), yet researchers, clinicians and members of the public have flagged potential negative consequences of this development, such as stigma (Bandini, 2015; Breen et al., 2015; Ogden and Simmonds, 2014). Stigma has been defined as the co-occurrence of labeling, stereotyping, separation, status loss, and discrimination in a context in which power is exercised (Link and Phelan, 2001). Indications of stigma, such as negative attitudes, negative emotional reactions and a larger preferred social distance toward persons with a mental disease, have been observed towards individuals suffering from a wide range of mental disorders (Pescosolido et al., 2010; Schomerus et al., 2012).

Public stigma towards people with a mental illness can have severe adverse consequences. Mental health stigma is associated with self-stigma (Evans-Lacko et al., 2012), depression and suicidality (for a review: Carpiniello and Piena, 2017), reduced help-seeking from mental health services (for a review: Clement et al., 2015), and disruption of mental health treatments (Sirey et al., 2001).

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Despite the clinical importance of stigma for grief-related disorders, no studies to date have examined this topic. However, research has demonstrated that individuals bereaved by suicide or other violent loss, and people who experience severe loss-related distress perceive more stigmatizing reactions from others (Chapple et al., 2015; Johnson et al., 2009; Pitman et al., 2016). For instance, suicide bereaved persons perceived more discrimination and loss of social support by others than people who experienced other types of bereavement (Pitman et al., 2016). Relatedly, it has been argued that experiencing disenfranchised grief (i.e., grief after a loss that is not or cannot be openly acknowledged, publicly mourned, or socially supported) might increase negative reactions of and reductions in support from one's social network (Doka, 1989). Additionally, if a person does not follow "appropriate" grieving rules (e.g., grieving too long), his or her grief can also become disenfranchised (Corr, 2002), and this may elicit similar negative reactions. Indeed, a recent systematic review shows (Logan et al., 2017) that greater social recognition may be given to bereaved children, spouses and parents, than to more distal relatives and friends (e.g., Thornton et al., 1991; Johnsen and Dyregrov, 2016). As such, developing PGD after the death of a non-family member could elicit more stigmatizing responses as less severe grief is expected in response to such events.

Against this background, it was hypothesized that, in a vignette-based experiment, people may be particularly likely to show stigmatizing reactions (i.e., negative attributions, negative emotional reactions, larger preferred social distance; Link and Phelan, 2001) in response to people diagnosed with a PGD diagnosis (versus without), especially when developed in response to the loss of a friend, instead of a spouse.

2. Methods

2.1 Sample and procedure

Recruitment took place in several locations in a village and a city in the Netherlands, and through posting ads on Facebook (on publicly accessible community websites). The study

could be accessed via a weblink that could be accessed online or via e-mail. The study had an experimental design and was programmed in Qualtrics. Only adults (age > 18 years) were allowed to participate. All participants read information about the study aims and procedure and provided informed consent. Table 1 shows sample characteristics of all 379 participants. Compared to the general Dutch population (CBS, 2017), the sample had a similar age (M = 38.3 vs. M = 41.5), yet contained more people with higher educations (47.8% vs. 30.0% college/university) and more females (82.7% vs. 50.5%).

<<< Insert Table 1 here >>>

2.2 Materials

2.2.1 Vignettes

The vignettes developed for this study varied on the independent variables presence of a grief disorder (PGD diagnosis and symptoms vs. no PGD diagnosis and symptoms) and relationship with the deceased (spouse vs. friend), creating four unique vignettes (see Table 2). Conditional criteria (i.e., time since loss, impairment in functioning) and five symptoms were selected to meet the proposed criteria for PGD by Prigerson and colleagues (2009), which forms the basis for newer proposals for PGD (Maercker et al., 2013). The design of the vignettes was partly based on research into public stigma for bereaved individuals (Penman et al., 2014). The time since loss in each vignette was set at two years, as this is beyond the timing criteria for both PGD (6 months) and PDBD (12 months) (American Psychiatric Association, 2013; Maercker et al., 2013). Gender was not varied in the vignettes, as previous similar research indicated no influence of gender on public stigma for bereaved persons (Penman et al., 2014). Another reason not to include gender in the vignettes was to limit the number of independent variables so that the power of the experiment would not be

compromised. Each participant was presented with one of these four vignettes, which was randomly selected by Qualtrics. Participants could revisit the vignette if they wanted to.

<<< Insert Table 2 here >>>

2.2.2 Questionnaires

A background questionnaire was administered prior to presentation of a vignette and all other questionnaires were administered after a vignette was shown.

Background questions. A self-constructed questionnaire was used to assess gender, age (in years), education level (primary school, high school, vocational education, college/university), religiosity (yes/no), employment status (student, full-time, part-time, unemployed, incapacitated, retired, housewife/houseman – multiple answers possible), and the experience of bereavement in the past year (yes/no).

Stigma questionnaires. Three aspects of stigma were assessed (Link and Phelan, 2001): (1) characteristics ascribed to the person (attributions), (2) emotional reactions to the person, and (3) desire for social distance from the person.

Attributions. Based on an attribute scale for research on public stigma in depression (Angermeyer and Matschinger, 2003), research findings on personality characteristics that are associated with grief severity, namely emotional instability and dependency (e.g., Denckla et al., 2011; Wijngaards-de Meij et al., 2007), and results of a pilot study (which showed that people with persistent grief over longer periods of time were judged to be less "warm" and "competent") five attributes were selected on which different reactions towards people with and without PGD were expected. Participants were asked to indicate on 4-point Likert scales ranging from "completely disagree" (1) to "completely agree" (4) if the described person is competent, warm, emotionally stable, dependent, and sensitive.

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Emotional reactions. Three types of emotional reactions to people with mental illness were discerned by Angermeyer and Matschinger (2003): fear, anger, and pro-social reactions. Following Knesebeck and colleagues (2016), a list of nine items was used to assess these emotional reactions. All items were rated on Likert scales ranging from "completely disagree" 1) to "completely agree" (4). Three items (e.g., "I react angrily") assessed anger, $\alpha = 0.73$. Three items (e.g., "He/she scares me") measured fear, with an internal consistency $\alpha = 0.64$. Lastly, three items (e.g., "I feel pity"") aimed to tap pro-social reactions. To increase the reliability of the pro-social emotions subscale ($\alpha = .45$), the item "I feel sympathy" was dropped, yielding a final subscale α of 0.60.

Preferred social distance. Desired social distance from the person in the vignette was assessed with the Social Distance Scale (Link et al., 1987; 6-item Dutch version: de Ruddere et al., 2016), which assesses a person's willingness to interact with a person in different social relationships (e.g., neighbor, colleague). Respondents were asked to indicate to what extent they agree with statements accepting the person in the vignette in these relationships to them using a four-point Likert scale ranging from completely disagree (1) to completely agree (4). Lower scores indicate higher preferred social distance. Reliability was good, $\alpha = 0.82$.

2.3 Analyses

Prior to the main analyses, a randomization check was performed on all background variables to check for experimental group equivalence, using a combination of ANOVAs (for continuous variables) and χ^2 -tests (for categorical variables). Subsequently, a 2 (PGD diagnosis vs. no diagnosis) x 2 (deceased spouse vs. deceased friend) between-group MANOVA was performed to test the hypotheses that a person with PGD would elicit more stigmatizing responses than a person without a disorder, and that this effect would be more pronounced when a friend died instead of a spouse. Nine dependent variables were 5 different attributions (competent, warm, emotionally stable, dependent, and sensitive), 3 different

emotional reactions (fear, anger, pro-social) and preferred social distance. A two-sided significance level of 0.05 was used. Partial η^{2} 's were calculated, for which 0.01, 0.06 and 0.14 are viewed as small, medium and large effect sizes, respectively (cf. Cohen, 1988).

3. Results

3.1. Preliminary analyses

3.1.1 Assumptions check

Multiple outliers were detected and normality of residuals was violated in the comparison groups for a majority of dependent variables. Parametric analyses were therefore rerun using two non-parametric tests, namely the Adjusted Rank Transform Test to test for interactions (Leys and Schurmann, 2010) and Kruskall-Wallis tests to assess main effects (Kruskall and Wallis, 1952). Since results of the non-parametric analyses were highly similar to findings with parametric tests, only the latter are reported.

3.1.2 Randomization check

To check for group equivalency, all vignette groups were compared on all background characteristics. There were no significant differences between the four different vignette groups on age, F(3, 375) = 0.13, p = 0.94, gender, $\chi^2(3) = 0.74$, p = 0.86, education (primary school/ high school vs. vocational education vs. college/university), $\chi^2(6) = 9.8$, p = 0.13, religiosity, $\chi^2(3) = 3.34$, p = 0.34, the number of full-time students, $\chi^2(3) = 1.21$, p = 0.75, part-time workers, $\chi^2(3) = 1.20$, p = 0.75, full-time workers, $\chi^2(3) = 2.26$, p = 0.52, and experience of bereavement in the past year, $\chi^2(3) = 3.92$, p = 0.27 (see Table 1).

3.2 Main analyses

The MANOVA demonstrated that the PGD diagnosis * relationship with the deceased interaction was non-significant, Roy's Largest Root = 0.02, F(2,277) = 0.74, p = 0.67, partial $\eta^2 = 0.02$, and the main effect of relationship with the deceased (spouse vs. friend) was also non-significant, Roy's Largest Root = 0.03, F(9,367) = 1.29, p = 0.24, partial $\eta^2 = 0.03$.

However, the main effect of PGD diagnosis (yes vs. no) on indicators of stigma was significant, Roy's Largest Root = 1.78, F(9,367) = 72.54, p < 0.001, partial $\eta^2 = 0.64$. This main effect was followed up with univariate ANOVAs. Table 3 shows Means and *SDs* of dependent variables of each vignette group.

<<< Insert Table 3 here >>>

Univariate analyses indicated that a person with PGD compared to a person without a disorder was judged to be relatively less competent, F(1, 375) = 70.43, p < 0.001, partial $\eta^2 = 0.16$, $M_{PGD} = 2.65$, $M_{NO PGD} = 3.22$, warm F(1, 375) = 27.73, p < 0.001, partial $\eta^2 = 0.07$, $M_{PGD} = 2.91$, $M_{NO PGD} = 3.24$, and emotionally stable, F(1, 375) = 495.11, p < 0.001, partial $\eta^2 = 0.56$, $M_{PGD} = 1.84$, $M_{NO PGD} = 3.21$, and more dependent, F(1, 375) = 148.47, p < 0.001, partial $\eta^2 = 0.28$, $M_{PGD} = 2.76$, $M_{NO PGD} = 1.91$, and sensitive, F(1, 375) = 28.61, p < 0.001, partial $\eta^2 = 0.07$, $M_{PGD} = 3.39$, $M_{NO PGD} = 3.08$. A person with PGD also elicited relatively more anger, F(1, 375) = 42.39, p < 0.001, partial $\eta^2 = 0.10$, $M_{PGD} = 4.47$, $M_{NO PGD} = 3.48$, anxiety, F(1, 375) = 21.24, p < 0.001, partial $\eta^2 = 0.05$, $M_{PGD} = 4.72$, $M_{NO PGD} = 4.03$, and pro-social emotions, F(1, 375) = 64.06, p < 0.001, partial $\eta^2 = 0.15$, $M_{PGD} = 8.90$, $M_{NO PGD} = 7.97$, and a larger preferred social distance, F(1, 375) = 70.05, p < 0.001, partial $\eta^2 = 0.16$, $M_{PGD} = 14.25$, $M_{NO PGD} = 17.04$ (lower scores = higher preferred social distance).

4. Discussion

The aim of the present study was to assess public stigma for persons with and without PGD, and for people who experienced the death of a spouse or a close friend. Additionally, the interaction between a grief disorder and relationship with the deceased on public stigma was assessed. A striking finding was that a person with PGD yielded more stigmatizing responses than a person without a disorder. Specifically, a person with PGD was judged to be

relatively less competent, warm, and emotionally stable, and more dependent and sensitive, and elicited more feelings of anger and anxiety and pro-social emotions, and a stronger need for social distance. These effects were consistent across all indicators of stigma and moderate to large in size.

Findings complement previous investigations demonstrating more perceived negative social reactions such as discrimination and loss of social support in people who experience, or at risk of experiencing, more severe mental health problems after bereavement (Chapple et al., 2015; Johnson et al., 2009; Pitman et al., 2016). This study also critically extends these findings by demonstrating for the first time that persons presenting with a PGD diagnosis and symptoms are judged more negatively and elicit more negative emotions and a higher preferred social distance in others. As such, findings generally support the shared concerns of lay persons, clinicians and researchers that introducing a grief disorder into the ICD-11 and DSM-5 will lead to stigmatization of bereaved people diagnosed with these disorders (Bandini, 2015; Breen et al., 2015; Ogden and Simmonds, 2014). While a majority of distressed bereaved people who experience negative social reactions from others still indicates a need for professional intervention (Johnson et al., 2009) and stablishing PGD and PCBD as diagnoses would likely increase the availability of professional help, it appears that this development would come at high costs. Research on a variety of disorders has clearly demonstrated the severe negative consequences of stigmatization, including increased suicidality and reduced help-seeking behavior (for reviews: Carpiniello and Piena, 2017; Clement et al., 2015), and there are presently no reasons to assume such consequences would not apply to people with PGD or PCBD. Since bereaved people with high levels of PGD have a stronger need for support (Aoun, Breen, Howting, Rumbold, McNamara, & Hegney, 2015), yet may be less likely to seek professional help (Lichtenthal et al., 2011), a particular concern

should be that establishing a grief-related diagnosis may further reduce help-seeking behavior in (and social support for) people who need it most.

This research also yielded some unexpected results. There was no effect of the relationship with the deceased on stigma, nor did the relationship with the deceased affect the amount of stigma associated with having or not having PGD. This may imply that experiencing disenfranchised grief does not affect the nature of the social reactions of others to one's loss, contrary to professional opinion (Doka, 1989). However, our manipulation of disenfranchised grief (experiencing the loss of a friend versus a spouse) was not particularly strong. It could be that stigmatizing responses from others may be more pronounced if PGD occurs after loss that is even more difficult to publicly acknowledge or mourn, such as the loss of a lover in an extramarital affair or a loss due to infection with a sexually transmitted disease. In this particular investigation, we chose not to use stronger manipulations, because of the inherent difficulty of distinguishing the negative reactions of others to grief responses from negative reactions to being in particular circumstances (e.g., involved in an extramarital affair). Future studies could vary dimensions of the present experiment to disentangle such effects.

The clinical implications of these findings are twofold. In the ongoing discussion about the potential inclusion of PGD in ICD-11 (and PCBD in DSM-5), stigmatization and its negative consequences are a valid concern that should be taken into account. Additionally, should PGD or PCBD indeed be formally included in new versions of the ICD or DSM, there is a clear need to chart public stigma, self-stigma and its implications among persons diagnosed with these disorders. Should these investigations confirm and extend current results, this would imply the need to thoroughly investigate to what extent proven-effective interventions to reduce stigma (for reviews: Rüsch et al., 2005; Thornicroft et al., 2016) can alleviate the burden of stigma in persons diagnosed with PGD or PCBD. For example, public

stigma for grief-related disorders may potentially be decreased through media campaigns and personal contact with persons with a disorder (Corrigan, Morris, Michaels, Rafacz, & Rüsch, 2012) and persons with PGD or PCBD diagnoses may reduce self-stigma through participation in training programs (Mittal, Sullivan, Chekuri, Allee, & Corrigan, 2012).

Clear strengths of the present study are its large sample size, robust experimental design, and multifaceted assessment of stigmatizing responses. Nevertheless, a number of limitations warrant mention. First, the present sample had a relative overrepresentation of higher-educated females compared to the general population and was conducted in only one country. Future research should aim to assess if current findings generalize to different countries, and samples with lower education levels and more men. To accomplish this, a random sampling procedure to select independent members of the general population is recommended for future research. Second, the internal consistency of two of three subscales to measure emotional reactions was relatively low (.60 and .64). While this is likely in part due to the brevity of these scales and the lack of robustness of Cronbach's alpha to the number of items in a scale (Cortina, 1993), and in line with previous research (Knesebeck et al., 2017), future studies should aim to improve the internal consistency of these subscales. Third, unlike established mental disorders such as depression and psychosis, PGD is likely less known among the general public. It is thus unclear to what extent the diagnosis in the vignette is a credible manipulation for participants, and to what extent results can be attributed to the mere description of a person experiencing prolonged, severe, and disabling grief reactions. While the findings are clinically relevant in either case (and the design of vignettes correspond with studies in other areas) it could be worthwhile to establish experimentally whether the mention of a PGD diagnosis, PGD symptoms, or their combination yields the most stigmatizing responses. Fourth, it remains to be established to what extent responses to a vignette generalize to real-world situations, although studies assessing perceived stigma in

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distressed and at-risk bereaved persons appear to provide tentative support the external validity of our results (e.g., Johnson et al., 2009; Pitman et al., 2016). Fifth, vignettes contained two conditional criteria plus five symptoms of PGD (Prigerson et al. 2009), to describe a person with a grief disorder in our vignette. It could be that the choice and number of selected symptoms co-determines stigmatizing reactions. Effects of variations in grief symptom profiles on stigma could therefore be a focus of future studies. Sixth, a further limitation was that there was no check if participants noticed specific elements of the vignettes (e.g., the diagnosis), although they could revisit the vignette if they felt they needed to. Future studies should aim to include a manipulation check (Logan et al., 2017). Lastly, in the current experiment, time since loss was set at two years in the vignettes. This may have been interpreted by some participants as the anniversary of the death, and perhaps this has influenced results. It is recommended to avoid this in future research, or, alternatively, to investigate if such anniversaries influence public responses to bereaved persons.

Notwithstanding these limitations, the present investigation is the first to demonstrate the existence of public stigma for a grief-related disorder. Overall, people with PGD were attributed substantially more negative characteristics, and elicited stronger negative and prosocial emotional reactions and a higher preferred social distance. Given that findings were consistent and effects were moderate to large, this indicates that stigmatization should be regarded as a serious concern when aiming to introduce grief-related disorders into diagnostic classification systems. Should PGD or PCBD be formalized as a disorder, research and intervention efforts should focus on clarifying ways of effectively minimizing the effects of stigmatization in individuals receiving these diagnoses.

Table 1

Sample characteristics

	PGD	PGD	No	No	Total					
	disorder	disorder	disorder	disorder	(<i>N</i> = 379)					
	spouse	friend	spouse	friend $(N =$						
	(<i>N</i> = 90)	(N = 94)	(<i>N</i> = 92)	103)						
Female $(N(\%))$	72 (80.0)	78 (83.0)	78 (84.8)	43 (91.5)	313 (82.6)					
Age in years $(M(SD))$	38.1 (15.6)	38.5 (14.9)	37.5 (15.3)	38.3 (15.1)	38.3 (15.2)					
Lower education (N	51 (56.7)	45 (47.9)	57 (62.0)	45 (42.7)	198 (52.2)					
(%))										
Higher education (N	39 (43.3)	49 (52.1)	35 (38.0)	58 (57.3)	181 (47.8)					
(%))										
Work status $(N(\%))$										
Student	27 (30.0)	26 (27.7)	26 (28.3)	24 (23.3)	103 (27.2)					
Full-time employed	19 (21.1)	28 (29.8)	27 (29.3)	29 (28.2)	103 (27.2)					
Part-time employed	32 (35.6)	36 (38.3)	31 (33.7)	42 (40.8)	141 (37.2)					
Other	25 (27.7)	13 (13.8)	18 (19.6)	17 (16.5)	73 (19.2)					
Religious (N (%))	27 (30.0)	20 (21.3)	22 (23.9)	20 (19.4)	89 (23.5)					
Bereaved past year (N	24 (26.7)	35 (37.2)	31 (33.7)	27 (26.2)	117 (30.9)					
(%))										

Note. Lower education = primary school, high school or vocational school. Higher education = college or university• Bereaved past year = loss of any close other in the past year. Work status: Other = unemployed, pensioner, housewife/houseman, or incapacitated. Work status does not add up to 100% because categories are not mutually exclusive. No significant differences between groups were detected.

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Table 2: Vignettes

Vignette 1: grief disorder after conjugal loss

Fifty year-old Carl has lost his wife to a stroke two years ago. He finds this extremely difficult and does not function well at work nor at home. Since the loss he yearns strongly for his deceased wife. Additionally, he has difficulties accepting the loss, does not want to be reminded of the loss, finds his life meaningless and has difficulties trusting others. On the basis of this behavior a mental health professional diagnoses him with a complicated grief disorder (prolonged grief disorder).

Vignette 2: grief disorder after friend loss

Fifty year-old Carl has lost his friend to a stroke two years ago. He finds this extremely difficult and does not function well at work nor at home. Since the loss he yearns strongly for his deceased wife. Additionally, he has difficulties accepting the loss, does not want to be reminded of the loss, finds his life meaningless and has difficulties trusting others. On the basis of this behavior a mental health professional diagnoses him with a complicated grief disorder (prolonged grief disorder).

Vignette 3: no grief disorder after conjugal loss

Fifty year-old Carl has lost his wife to a stroke two years ago. While he was very sad the first few months after the loss, he now has learned to live with the loss. He functions well both at work and at home. Carl has accepted the loss of his wife more, occasionally engages in fond reminisces of her and feels his life is meaningful.

Vignette 4: no grief disorder after friend loss

Fifty year-old Carl has lost his friend to a stroke two years ago. While he was very sad the first few months after the loss, he now has learned to live with the loss. He functions well both at work and at home. Carl has accepted the loss of his friend more, occasionally engages in fond reminisces of her and feels his life is meaningful.

Table 3

Means and standard deviations of attributes, emotions and preferred social distance per

vignette group

	PGD disorder		PGD disorder		No disorder		No disorder		
	spouse		friend		spouse		friend		
	(<i>N</i> =	(<i>N</i> = 90)		(<i>N</i> = 94)		(<i>N</i> = 92)		(<i>N</i> = 103)	
	М	SD	М	SD	М	SD	М	SD	
Attributes									
Competent	2.60	0.80	2.70	0.62	3.21	0.64	3.23	0.56	
Warm	2.84	0.72	2.97	0.56	3.14	0.60	3.33	0.55	
Emotionally stable	1.79	0.66	1.88	0.73	3.16	0.48	3.25	0.50	
Dependent	2.83	0.72	2.69	0.67	1.92	0.62	1.90	0.69	
Sensitive	3.37	0.63	3.40	0.53	3.01	0.54	3.14	0.56	
Emotional responses				0					
Anger	4.36	1.81	4.57	1.68	3.64	1.34	3.34	0.84	
Anxiety	4.61	1.51	4.82	1.51	4.08	1.44	3.99	1.34	
Pro-social	5.80	1.26	5.84	1.09	4.80	1.59	4.59	1.44	
Social distance	14.12	3.31	14.37	3.13	16.54	3.56	17.47	2.83	

Note. Significant differences were found between Vignettes with and without PGD on all outcome measures using parametric and non-

parametric tests (all p-values < .001). Lower scores on social distance indicate a higher preferred social distance

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Conflict of interest statement

The author of this paper has no conflict of interest.

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Highlights

Disorders characterized by pathological grief are considered for DSM-5 and ICD-11 A major drawback of establishing grief-related diagnoses could be stigmatization A prolonged grief diagnosis increased public stigma in a vignette-based experiment Stigma appears a valid and important concern in development of grief disorders

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