

The Version of Record of this manuscript has been published and is available in *Journal of Nervous and Mental Disease Studies* 11th October 2021
<https://doi.org/10.1097/NMD.0000000000001427>

Public Stigma of Prolonged Grief Disorder: An Experimental Replication and Extension

Hayley Dennis BPsych(Hons)¹

Maarten C. Eisma PhD²

Lauren J. Breen PhD, BSc(Hons)^{1,3}

¹ Curtin School of Population Health, Curtin University, Perth, Western Australia, Australia

² Department of Clinical Psychology and Experimental Psychopathology, University of Groningen, The Netherlands

³ Curtin enAble Institute, Faculty of Health Sciences, Curtin University, Perth, Western Australia, Australia

Address correspondence to: Associate Professor Lauren J. Breen, Curtin School of Population Health, Curtin University, GPO Box U1987, Perth, Western Australia, 6845 Australia. Tel: +61 89266 7943. Email: Lauren.Breen@curtin.edu.au

Acknowledgments: We thank Andrew R. Johnson PhD, MBiostat, BPsych(Hons) for statistical advice and assistance.

Conflicts of Interest and Source of Funding: This study received no funding. The authors declare no conflicts of interest.

Ethics: This study was approved by the Curtin Human Research Ethics Committee (HRE2020-0280).

Disclosures: The authors declare no conflicts of interest.

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Abstract

Prolonged grief disorder's (PGD) recent recognition as a psychiatric diagnosis has elicited concerns about stigmatization. Whilst prior research demonstrated that PGD elicits public stigma, moderators of this effect are unclear, and the effect requires replication in an English-speaking population. Therefore, we investigated effects of PGD, gender of the bereaved, and death expectedness on public stigma towards bereaved persons. We randomly assigned 195 Australian adults (77% female; $M_{\text{age}} = 35.7$ years) to read one of eight vignettes describing a bereaved male or female, with or without PGD, following an expected or unexpected death. Participants reported their emotional reactions and negative attributions towards, and desired social distance from, the bereaved person. A person with PGD (vs. without) elicited stronger emotional reactions, negative attributions, and desired social distance. No robust moderator effects emerged. Results validate concerns that PGD causes stigma. Stigmatization may be targeted by information campaigns or psychological treatment.

Keywords: Complicated grief; prolonged grief; social distance; attributions; mental health stigma; vignette

Introduction

Grief is the normal and multifaceted response to a loss, most commonly associated with bereavement (Stroebe et al., 2008). For an estimated one in 10 individuals bereaved due to natural causes, grief can become severe, persistent, and debilitating, resulting in prolonged grief disorder (PGD; Lundorff et al., 2017; Prigerson et al., 2009). Higher estimates apply to people bereaved due to unexpected and violent losses (Djelantik et al., 2019). PGD was recently included in the 11th revision of the International Classification of Diseases (ICD-11; World Health Organization, 2020), and is scheduled to be included in the text revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR; American Psychiatric Association, 2020; for a discussion: Boelen et al., 2020). In both conceptualizations, core symptoms include an intense preoccupation with and longing for the deceased, which are accompanied by additional symptoms indicative of severe emotional distress and functional impairment at least six (ICD-11) or 12 (DSM-5-TR) months after loss.

However, the notion that some expressions of grief could classify as a mental disorder not without controversy. For example, researchers, health professionals, and the general public are concerned that establishing a PGD diagnosis will lead to stigma (e.g., Breen et al., 2015; Ogden and Simmonds, 2014; Dietl et al., 2018). Stigma can be defined as the co-occurrence of labelling, stereotyping, separation, status loss, and discrimination in a context in which power is exercised (Link and Phelan, 2001). Public stigma involves a motivation to reject, avoid, fear, and discriminate against others perceived to be different based on negative attitudes and beliefs (Parcesepe and Cabassa, 2013). Public stigma can be expressed in negative emotions toward the stigmatized group, negative attributions about them, and a desire for social distance from them (Link and Phelan, 2001). Generally, mental health stigma can have severe consequences for those targeted, including reduced

help-seeking behaviors and internalization of stigmatizing stereotypes, also termed self-stigma (Clement et al., 2015; Corrigan and Watson, 2002). Self-stigma, in turn, can trigger feelings of shame and increase the likelihood of depression and suicidality (Carpiniello and Pinna, 2017; Vogel et al., 2007) and lead to premature termination of mental health treatments (Sirey et al., 2001). These consequences may be particularly detrimental in individuals with PGD. Bereaved individuals with more severe grief reactions are more likely to desire help, yet less likely to access mental health services (Lichtenthal et al., 2011).

Despite the clinical relevance of the topic, only a handful of studies have specifically sought to clarify the relation between PGD and stigma. An early survey demonstrated that bereaved persons with more severe grief reactions experience more negative social reactions from family and friends (Johnson et al., 2009). More recently, three vignette-based experiments demonstrated that people with PGD symptoms and a diagnosis elicit more public stigma than those with recovered grief (Eisma, 2018; Eisma et al., 2019; Gonschor et al., 2020). Specifically, people in the Netherlands (Eisma, 2018; Eisma et al., 2019) and Germany (Gonschor et al., 2020) attributed relatively more negative attributes to people with PGD, and experienced stronger negative emotional reactions and a stronger desire for social distance in response to them. Notably, PGD criteria differed somewhat between studies, with only the two most recent studies employing current PGD ICD-11 criteria, yet the effects were generally strong and consistent. A related study demonstrated that higher grief severity in a vignette (no PGD diagnosis mentioned) related to greater reported social discomfort towards the bereaved person described in a vignette in an American sample (Kahler et al., 2018). Together, these studies illustrate that people with severe grief perceive negative social reactions (Johnson

et al., 2009) which may result from public stigmatization of their grief reactions (Eisma, 2018, Eisma et al., 2019, Gonschor et al., 2020; Kahler et al., 2018).

Despite this convincing and consistent evidence, little is known about the moderators of these effects. Identifying such moderators appears critical to identify who is most at risk to be stigmatized and thus most in need of help. Prior vignette-based experiments investigated various moderators, including the relationship with the deceased (Eisma, 2018), cause of death (Eisma et al., 2019), and gender (Gonschor et al., 2020), with none of these factors emerging as significant moderators of the effect of PGD on public stigma. In the present experimental study, we sought to shed further light on two potential moderators, namely gender and the expectedness of the death.

Gender of the bereaved individual and resulting stigmatization have been extensively studied in non-clinical and bereaved populations, with mixed results (for a review: Logan et al., 2018a). However, a majority of studies have found that the gender of a bereaved individual influenced aspects of public stigma. For example, participants reported a larger desired social distance if the individual was male compared to female (Gonschor et al., 2020; Logan et al., 2018a, 2018b; Penman et al., 2014). A majority of studies investigating the gender of the bereaved discovered an association with participants' willingness to provide support (Logan et al., 2018a). Females were found to be offered more opportunities to talk and were perceived to have less difficulty in confronting their grief, compared to males (Logan et al., 2018a). The difference in support may be due to Western social norms, which hold that men grieve through anger, stoicism, or rationality, whereas women grieve through emotional outpourings (Martin and Doka, 2000; Creighton et al., 2013). Grieving in line with these expected responses may be socially acceptable, and a violation of these expected responses may leave individuals feeling alienated or judged (Breen and O'Connor, 2010; Creighton et al., 2013; Martin and

Doka, 2000). Given the difference in perceptions of grieving men and women, it may be the case that men with PGD elicit different responses than women with PGD (but see: Gonschor et al., 2020, for a null result).

Furthermore, the expectedness of the death may also influence stigmatization. The effect of cause of death on stigmatization has also yielded mixed results, but the majority of studies report unexpected deaths elicit higher attributions of shame, blame, and guilt in grieving persons, as well as anticipated difficulties in interactions with, and providing sympathy to, the bereaved persons (Logan et al., 2018a). This effect may be due to unexpected deaths being traumatic for bereaved individuals and associated with an increased the likelihood of mental disorders (Keyes et al., 2014; Sanderson et al., 2013). For example, bereaved family members who are unprepared for the death of their loved one report higher rates of depression, prolonged grief, and other psychiatric complications (Valdimarsdóttir et al., 2004).

We designed the present vignette-based experiment to elucidate whether PGD, gender of the bereaved, and the expectedness of the death cause public stigma (i.e., emotional reactions, negative attributions, and desired social distance) in an Australian sample. In line with prior research, we expected that a person with PGD will elicit more stigmatizing reactions than a person without PGD. We further hypothesized that both gender and expectedness would show main effects, with males and unexpected deaths yielding more public stigma. Lastly, we explored interaction effects between PGD diagnostic status, gender, and expectedness of the death.

Method

Design

We conducted a between-groups, 2 (PGD: present or not present) x 2 (gender: male or female) x 2 (expectancy of death: expected or unexpected) vignette-based experiment.

Participants

Inclusion criteria were: being a member of the Australian general public, having the ability to read and write in English, and having Internet access. Participants were a convenience sample recruited via social media. An a-priori power analysis (Faul et al., 2007) determined that 269 participants were needed to detect a small-to-moderate ($f^2 = 0.03$) 3-way interaction at an alpha level of 0.05. The final sample comprised 195 participants, with sample characteristics sorted by condition presented in Table 1. Since the goal of 269 participants was not reached, we provided 95% Confidence Intervals where necessary to facilitate interpretation of results (Levine and Ensom, 2001). Participants were on average 36 years old (Mean = 35.7, $SD = 15.0$), mostly female (77%), and university educated (69%). About a quarter reported having been significantly impacted by bereavement. See Table 1 for full sample characteristics.

Materials

Vignettes

Vignettes, or fictional stories, are often used to measure public stigma (Link and Phelan, 2001) and are recognized as an approximation of real-life scenarios (Hughes and Huby, 2004). We developed eight vignettes adapted from Eisma et al. (2019) to include this study's independent variables, creating eight conditions (see Table 2). Each vignette differed by the gender of the bereaved individual (male vs female), the expectedness of the death (expected vs unexpected), and whether the person had PGD (present vs not present). The names "Lisa" and "Mark" were chosen for the fictitious individuals, due to their popularity at the time of birth of the described person (50 years prior; Department of Justice, 2020, see https://bdm.justice.wa.gov.au/_apps/BabyNames/Default.aspx). The vignettes included two criteria for PGD (lasting over 6 months, and impaired functioning), and four symptoms (guilt, difficulty accepting the death and engaging in activities, and

longing; Eisma et al., 2019; ICD-11, World Health Organization, 2020). We set time since the death at ‘more than two years’, to be over the 6-month required period for a PGD diagnosis, and to avoid any suggestions of a death anniversary. We chose spousal death because it is a common form of bereavement and likely to result in grief that is socially accepted (Logan et al., 2018a).

Public stigma

Following the vignettes, participants were asked to complete a set of measures of public stigma.

Emotional reactions. Three types of stigma-related emotions have been previously identified by Angermeyer and Matschinger (2003), consisting of anger, fear, and prosocial reactions. The Emotional Reaction scale (ERS) was created by Angermeyer and Matschinger (2003). We used the scale version adapted by Eisma et al. (2019), which is a 13-item self-report measure with 3 subscales measuring fear (5 items), anger (4 items) and prosocial emotions (4 items) to a bereaved individual. Items were rated on a 4-point Likert scale, ranging from completely disagree (1) to completely agree (4), with higher scores on each subscale indicating more anger, fear, and prosocial reactions. Example questions include “I feel annoyed by this person”, “I feel uncomfortable”, and “I feel the need to help this person” from the anger, fear, and prosocial subscales, respectively. We summed each item in their respective subscale. In the present sample, internal consistencies of subscales were acceptable to good ($\alpha = .89$, $\alpha = .87$, and $\alpha = .74$, for anger, fear, and prosocial emotion subscales, respectively).

Negative attributions. The attribution measures created by Eisma (2018), measure the attributes participants associate with a bereaved individual described in the vignette. It has 5 single-item self-report questions, asking participants if the described person is competent, warm, emotionally stable, dependent, and sensitive. The questions were

presented on a 4-point Likert scale, ranging from completely disagree (1) to completely agree (4).

Desired social distance. The Social Distance scale (SDS) is used to measure desired social distance from the bereaved person (Link and Phelan, 2001). It is a 7-item self-report scale, with each item presented on a 4-point Likert scale, ranging from definitely willing (1) to definitely unwilling (4). An example item is “How would you feel about introducing the person in the story to a friend?”. We have made some modifications to reflect modern language, such as ‘a young woman you are friendly with’ to ‘friend’, and ‘Jim Johnson’ to ‘person described in the vignette’. This scale is a commonly used to measure preferred social distance in grief research (Eisma et al., 2019; Penman et al., 2014). Higher scores indicate a larger desired social distance from the individual in the vignette. Within our sample, the internal consistency of this scale was good ($\alpha = .88$).

Background characteristics

We asked participants to indicate their age (in years), gender (“male”, “female”, “other – please specify”), education level (“primary education”, “secondary education”, “vocational education”, “undergraduate degree”, “postgraduate degree”), and bereavement experience (“none”, “yes but not significantly impacted”, “yes and significantly impacted”).

Manipulation check

We included manipulation checks in the form of three multiple-choice questions to confirm that participants attended to the manipulations: “What was the gender of the person in the story?” (Male/Female/Don’t know); “Was the death expected?” (Yes/No/Don’t know); and “Was the person in the story diagnosed with prolonged grief disorder?” (Yes/No/Don’t know).

Procedure

We received ethics approval from the [Curtin](#) University Human Research Ethics Committee (approval number HRE2020-0280) and recruited participants through advertisements on online social media platforms and word of mouth. People were asked if they would like to participate in a study about their opinions of grief. Participants were directed to Qualtrics®, which hosted the information sheet, consent form, questionnaire, and debriefing sheet. Informed consent was provided by all participants before the questionnaire could be accessed. Participants read one of eight randomly selected vignettes, then completed the stigma measures, presented in a random order. Following this, they completed the manipulation check and demographic questions, and were provided information about relevant grief support services. We provided participants the option to leave a name and email address to enter the prize draw to win 1 of 2 AUD\$50 electronic gift cards and/or receive a summary of the study findings.

Statistical analyses

The manipulation check and randomization check of participants to conditions, by demographics, were performed prior to the analyses, using ANOVAs and χ^2 tests as required. Assumption testing was also completed prior to the analyses. A three-way multivariate analysis of variance (MANOVA) was used to test the interaction effects hypothesis. Follow-up analysis of variance (ANOVA) for significant results of the MANOVA were calculated, for our main hypotheses. These tests were conducted using the Statistical Package for the Social Sciences (SPSS version 22). Partial η^2 were calculated to determine effect size, with 0.01 as small, 0.06 as medium, and 0.14 as large (Cohen, 1988). A two-tailed significance level of .05 was used for the MANOVA.

Results

Preliminary analyses

Data quality

Responses from 227 participants were collected over a 12-week period from June 28th to September 20th, 2020. Eighteen cases were deleted due to providing no data. A missing values analysis revealed that 4.2% of the data were missing overall. Little's MCAR test determined missing data was Missing Completely at Random ($\chi^2[130, N = 207] = 140.17, p = .256$); therefore, listwise deletion of cases ($n = 12$) with extensive missing data for single-item questionnaires and/or entire missing constructs, therefore was acceptable because imputation methods could not be performed (Tabachnick and Fidell, 2013). During assumption testing, two cases were identified as multivariate outliers, and were subsequently removed, leaving 195 cases suitable for further analysis.

Randomization check

Prior to the main analysis, a randomization check was performed. There were no significant differences between the eight groups based on gender, $\chi^2(7, N=194) = 7.10, p = .42$, age, $F(7, N = 186) = .76, p = .620$, education level, $\chi^2(21, N = 195) = 16.460, p = .743$, or bereavement status, $\chi^2(14, N = 195) = 9.213, p = .871$. This indicates randomization of participants based on demographics was successful.

Manipulation check

Manipulation checks were performed before the main analyses were conducted. Most participants correctly identified the gender of the bereaved (97.6%), the presence or absence of a PGD diagnosis (94.4%), and expectedness of the death (89.9%). Subsequent analyses were run with and without participants who failed the checks, revealing no differences (i.e., significant results remained significant, non-significant results remained non-significant). Therefore, analyses with all participants are reported below (cf. Eisma, 2018).

Assumption testing

We assessed normality through visual inspection of histograms and skewness and kurtosis statistics of each group. Outliers were detected via visual inspection of boxplots. Two responses were identified as multivariate outliers via Mahalanobis Distance statistics, and their influence as measured by Cook's Distance exceeded 1. As mentioned above, they were therefore removed from further analyses (Stevens, 2012). The influence of univariate outliers was inspected via Cook's Distance, and none exceeded 1. Therefore, they were not removed from further analyses (Stevens, 2012). Group sizes ranged $n = 20$ to $n = 28$. Since MANOVAs are robust to normality violations of this nature when group sizes are $n = 20$ or higher (Tabachnick and Fidell, 2013), we concluded that minor deviations from normality we detected were not problematic. Homogeneity of variance was assessed via Levene's Test of Equality of Error Variances and Box's Test of Equality of Covariance Matrices test. As the observed variables were skewed, the median results of Levene's Test were interpreted. They were non-significant for all dependent variables. Additionally, we found that Box's $M = 385.36$, $p = .365$, further providing evidence that covariance matrices do not significantly differ. Therefore, MANOVA was considered appropriate to conduct.

Main analyses

Mean and standard deviations of dependent variables, per group, are presented in Table 3. The MANOVA did not find a significant interaction effect between diagnostic status (PGD vs. no PGD), death expectedness, and gender of the bereaved, Wilks' Lambda = .94, $F(9, 179) = 1.29$, $p = .244$, $\eta_p^2 = .06$. As this interaction was not significant, follow-up ANOVAs were not conducted (Field, 2009).

A significant main effect was found for diagnostic status, Wilks' Lambda = .47, $F(9, 179) = 22.69$, $p > .001$, $\eta_p^2 = .53$, indicating that bereaved individuals with PGD elicited more public stigma than those without. Follow-up ANOVAs indicated that the presence of PGD elicited more prosocial emotions, $F(1, 187) = 84.21$, $p > .001$, $\eta_p^2 = .31$,

more fear, $F(1, 187) = 10.04, p = .002, \eta_p^2 = .05$, anger, $F(1, 187) = 5.50, p = .020, \eta_p^2 = .03$, and more desired social distance, $F(1, 187) = 66.29, p > .001, \eta_p^2 = .26$, compared to bereaved individuals without PGD. Furthermore, bereaved individuals with a PGD diagnosis were perceived as less competent, $F(1, 187) = 64.51, p > .001, \eta_p^2 = .26$, less warm, $F(1, 187) = 17.13, p > .001, \eta_p^2 = .08$, and less emotionally stable, $F(1, 187) = 154.74, p > .001, \eta_p^2 = .45$, than bereaved individuals without a PGD diagnosis. However, people with PGD were also not judged more dependent, $F(1, 187) = 3.29, p = .071, \eta_p^2 = .02$, or sensitive $F(1, 187) = 0.16, p = .694, \eta_p^2 = .001$. No significant main effect was found for expectedness of the death, Wilks' Lambda = .956, $F(9, 179) = .92, p = .508, \eta_p^2 = .04$, and gender of bereaved, Wilks' Lambda = .952, $F(9, 179) = 1.00, p = .438, \eta_p^2 = .05$.

Discussion

This is the first study to comprehensively assess stigmatizing public reactions towards bereaved individuals with PGD (vs. without), in an English-speaking sample. Since prior experiments on this topic were limited to Dutch or German samples (Eisma, 2018; Eisma et al., 2019; Gonschor et al., 2020), this study provided a unique insight into the international generalizability of the link between PGD and public stigma. Furthermore, this study uniquely shed light on potential interactions between diagnostic status, gender of the bereaved, and death expectedness on public stigma for the bereaved. A main finding was that people with PGD were judged more negatively and elicited more negative and prosocial emotions and a stronger desire for social distance than people without PGD. However, no significant interactions emerged between diagnostic status, gender, and expectedness of the death.

We found bereaved individuals with PGD were judged to be less competent, less warm, and less emotionally stable than bereaved individuals without PGD. Bereaved individuals with PGD also elicited more fear, anger and prosocial emotions and a stronger

desire for social distance in participants. These results cross-validate previous literature, which has demonstrated bereaved individuals with PGD elicit more stigmatizing reactions, compared to bereaved individuals with recovered grief (Eisma, 2018; Eisma et al., 2019; Gonschor et al., 2020). It is notable though that findings were not entirely consistent. For example, we did not find a significant effect of diagnostic status on attributions of sensitivity and dependency. This appears partly due to the limited power of the present study, given that the effects on dependency were small to moderate, and past studies that did show these effects had larger samples (Eisma, 2018; Eisma et al., 2019; Gonschor et al., 2020). Therefore, we conclude that findings were generally consistent with prior experiments in European samples. Specifically, we conclude that people are likely to avoid individuals with PGD due to fear, anger, and negative stereotypes about them, yet also feel more sympathy and a desire to help. This is in accordance with research showing that potential supporters do sympathize with bereaved people, yet are fearful of approaching them (Dyregrov, 2006). This may be particularly problematic because people with severe grief reactions experience a higher need for formal and informal support (Aoun et al., 2015; Aoun et al., 2020), yet may be less willing to seek professional mental health care or are unable to access such care (Lichtenthal et al., 2011; Lenferink et al., 2021).

No main effects of gender of the bereaved and death expectedness emerged for public stigma. Additionally, no interactions emerged between diagnostic status, gender of the bereaved, and death expectedness on public stigma. Whilst unexpected, we note that results on gender have not consistently been found in prior literature either (for a review: Logan et al., 2018a). It is interesting to note here that Gonschor et al. (2020) did report a significant and small effect of gender in their comparable, but much larger vignette-experiment, with males eliciting a stronger desire for social distance. So, findings appear to indicate that gender effects are small and, seemingly in part due to this fact, not

consistently found across studies. The fact that expectedness did not show an impact on public stigma indicators is more difficult to interpret, but does appear in line with Eisma et al. (2019) who found that suicide bereavement did not cause public stigma when diagnostic status (PGD vs. recovered grief) was mentioned in the vignette of a bereaved person. A possible explanation for diverging findings could be that people show stigmatizing reactions toward all distressed bereaved persons (e.g. experiencing PGD), and that reigning stereotypes hold that people who experience unexpected loss are by definition severely distressed (cf. Logan et al., 2018a). As such, information about actual experienced distress (i.e., having or not having a PGD diagnosis) could have cancelled out any effects of death expectedness on public stigma.

Clinical implications

This study shows that the causal link between PGD and public stigma is robust and generalizes across cultures and languages. There are currently no reasons to assume that the manifold negative consequences of stigmatization do not apply to people diagnosed with PGD. For instance, it could be that the public stigma elicited by PGD, and the internalized stigma associated with it, lead to reduced help-seeking, premature termination of treatments, and depression and suicidality (e.g., Carpinello and Pinna, 2017; Sirey et al., 2001; Vogel et al., 2007). Therefore, it is pertinent that people experiencing severe grief reactions and a need for mental health services are provided with effective, efficient, and easy-to-access care as treatment of PGD will likely reduce the associated stigma. Media campaigns and direct contact with individuals with PGD can also help disconfirm mental health stereotypes and associated feelings and behaviors, as demonstrated in prior research on related mental health problems (Sampogna et al., 2017).

Strengths, limitations, and future directions

This study is the first to investigate effects of PGD on public stigma in an English-speaking sample. Its strengths include a robust experimental design, with randomization and manipulation checks (uncommon in vignette-based studies in bereaved samples: Logan et al., 2018a), and a comprehensive assessment of public stigma indicators.

However, some limitations also warrant mention. First, the present convenience sample was not representative of the general Australian population, being relatively young, mostly female, and highly educated, which may threaten generalizability of the findings. However, it should be noted here that prior experiments, conducted in different cultures, with different distributions of age, gender, and education levels, yielded highly similar main results (Eisma, 2018; Eisma et al., 2019; Gonschor et al., 2020; Kahler et al., 2018). Future researchers could aim to recruit representative samples to replicate and extend current findings. Second, the study was underpowered to detect smaller effects, because of recruitment difficulties experienced during the limited time that this study ran. In order to detect smaller effects (e.g., of gender of the bereaved on public stigma: Gonschor et al., 2020), a larger sample is recommended for future research.

Third, within the present study, the people with PGD were presented as having a number of PGD symptoms as well as a PGD diagnosis. Past research has demonstrated that PGD symptoms without a diagnosis yield similar stigmatizing responses as PGD symptoms with a diagnosis (Gonschor et al., 2020). Therefore, although our findings suggest that the label of PGD may cause stigma, knowledge about severe grief reactions of a bereaved person seem to drive this effect. While this does not invalidate our results, it does suggest that a diagnosis of PGD only induces stigma to the extent that it signals such severe grief reactions. Relatedly, within the present study, we selected PGD symptoms based on symptom selections from prior studies (e.g., Eisma et al., 2019) to retain and maximize study comparability. However, perhaps a different selection of symptoms can

elicit different reactions, or that characteristics of the bereaved could interact with the effects of specific symptoms. For example, some PGD symptoms may be more in line with grieving norms for men (e.g. guilt, anger; Martin and Doka, 2000; Creighton et al., 2013) and thereby less likely to elicit stigmatizing responses for male compared to female bereaved persons. Future research needs to further elucidate whether a diagnosis with PGD in and of itself can yield public stigma and if and how specific symptoms may enhance or reduce public stigma. Lastly, whilst vignettes are an accepted method to study stigma, it should be better established how these experimental findings translate into real-life experiences of bereaved persons. The finding that people with severe grief reactions also perceive more negative reactions from others (Johnson et al., 2009) clearly support the external validity of our findings, but more research on perceived (and internalized) stigma during severe and persistent grief is warranted.

Conclusions

Despite these limitations, the present findings together with prior research show that bereaved individuals with PGD are stigmatized by the general public across cultures. In line with prior experiments, we found that the presence of severe grief reactions alone was the single most important factor in stigmatization of bereaved individuals. In light of the manifold negative consequences of stigmatization, important goals for future research are to better understand the factors that influence stigmatization of bereaved individuals with PGD, bereaved people's experiences with such stigmatization, and the most effective methods to reduce it.

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Table 1

Sample Characteristics of Total Sample (N = 195) and by Group

| Characteristic | PGD Male Unexpected (n = 28) | PGD Male Expected (n = 24) | No PGD Male Unexpected (n = 27) | No PGD Male Expected (n = 23) | PGD Female Unexpected (n = 20) | PGD Female Expected (n = 26) | No PGD Female Unexpected (n = 20) | No PGD Female Expected (n = 26) | Total N (%) |
|-----------------------------|------------------------------------|----------------------------------|---------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|---|---------------------------------------|----------------|
| Gender (N (%)) | | | | | | | | | 150 (77.3) |
| Female | 21 (75.0) | 15 (62.5) | 21 (77.8) | 18 (78.3) | 18 (90.0) | 18 (69.2) | 17 (85.0) | 22 (84.6) | |
| Male | 7 (25.0) | 9 (37.5) | 6 (22.2) | 5 (21.7) | 2 (10.0) | 8 (30.8) | 3 (15.0) | 4 (15.4) | |
| Age in years (M, (SD)) | 33.1 (15.4) | 33.1 (16.9) | 32.5 (10.7) | 35.5 (13.2) | 36.7 (15.8) | 37.50 (17.0) | 39.7 (15.0) | 38.3 (16.3) | 35.7(15.0) |
| Education (N, (%)) | | | | | | | | | |
| Secondary | 2 (7.1) | 4 (16.7) | 3 (11.1) | 3 (13.0) | 1 (5.0) | 5 (19.2) | 2 (9.5) | 8 (30.8) | 28 (14.4) |
| Vocational | 4 (14.3) | 5 (20.8) | 5 (18.5) | 5 (21.7) | 5 (25.0) | 2 (7.7) | 3 (14.3) | 3 (11.5) | 32 (16.4) |
| Undergraduate | 11 (39.3) | 7 (29.2) | 12 (44.4) | 7 (30.4) | 6 (30.0) | 10 (38.5) | 5 (23.8) | 7 (26.9) | 65 (33.3) |
| Postgraduate | 11 (39.3) | 8 (33.3) | 7 (25.9) | 8 (34.8) | 8 (40.0) | 9 (34.6) | 11 (52.4) | 8 (30.8) | 70 (35.9) |
| Bereavement status (N, (%)) | | | | | | | | | |
| Never bereaved | 4 (14.3) | 4 (16.7) | 5 (18.5) | 5 (21.7) | 5 (25.0) | 3 (11.5) | 2 (9.5) | 7 (26.9) | 35 (17.9) |
| Bereaved but not impacted | 18 (64.3) | 13 (54.2) | 15 (55.6) | 13 (56.5) | 7 (35.0) | 16 (61.5) | 15 (71.4) | 13 (50.0) | 110 (56.4) |
| Bereaved and impacted | 6 (21.4) | 7 (29.2) | 7 (25.9) | 5 (21.7) | 8 (40.0) | 7 (26.9) | 4 (19.0) | 6 (23.1) | 50 (25.6) |

Note. There were no significant differences detected on the demographic variables between groups (all *ps* > .05).

Table 2

Content of Vignettes Varying Conditions of PGD Diagnosis, Gender of Bereaved, and Expectancy of Death

| | |
|--|--|
| PGD diagnosis/Male bereaved/Unexpected death | Mark is 50 years old. His wife died more than two years ago. He had not expected her death. He finds everything extremely difficult and does not function well at work nor at home. Since the loss he yearns strongly for his deceased wife. Mark has difficulties accepting the loss and experiences strong feelings of guilt. He withdraws socially and engages in few activities. On the basis of this behavior, a mental health professional diagnosed him with Prolonged Grief Disorder. |
| PGD diagnosis/Male bereaved/Expected death | Mark is 50 years old. His wife died more than two years ago. He had expected her death. He finds everything extremely difficult and does not function well at work nor at home. Since the loss he yearns strongly for his deceased wife. Mark has difficulties accepting the loss and experiences strong feelings of guilt. He withdraws socially and engages in few activities. On the basis of this behavior a mental health professional diagnosed him with Prolonged Grief Disorder. |
| No PGD/Male bereaved/Unexpected death | Mark is 50 years old. His wife died more than two years ago. He had not expected her death. While he was very sad after the loss and strongly yearned for his deceased wife, he is now able to live with the loss. He functions well both at work and at home. Mark has accepted the loss of his wife more, experiences less feelings of guilt and participates in activities that he finds meaningful. |
| No PGD/Male bereaved/Expected death | Mark is 50 years old. His wife died more than two years ago. He had expected her death. While he was very sad after the loss and strongly yearned for his deceased wife, he is now able to live with the loss. He functions well both at work and at home. Mark has accepted the loss of his wife more, experiences less feelings of guilt and participates in activities that he finds meaningful. |
| PGD diagnosis/Female bereaved/Unexpected death | Lisa is 50 years old. Her husband died more than two years ago. She did not expect his death. She finds everything extremely difficult and does not function well at work nor at home. Since the loss she yearns strongly for her deceased husband. Lisa has difficulties accepting the loss and experiences strong feelings of guilt. She withdraws socially and engages in few activities. On the basis of this behavior a mental health professional diagnosed her with Prolonged Grief Disorder. |
| PGD diagnosis/Female bereaved/Expected death | Lisa is 50 years old. Her husband died more than two years ago. She had expected his death. She finds everything extremely difficult and does not function well at work nor at home. Since the loss she yearns strongly for her deceased husband. Lisa has difficulties accepting the loss and experiences strong feelings of |

| | |
|--|--|
| | <p>guilt. She withdraws socially and engages in few activities. On the basis of this behavior a mental health professional diagnosed her with Prolonged Grief Disorder.</p> |
| <p>No PGD/Female bereaved/Unexpected death</p> | <p>Lisa is 50 years old. Her husband died more than two years ago. She had not expected his death. While she was very sad after the loss and strongly yearned for her deceased husband, she is now able to live with the loss. She functions well both at work and at home. Lisa has accepted the loss of her husband more, experiences less feelings of guilt and participates in activities that she finds meaningful.</p> |
| <p>No PGD/Female bereaved/Expected death</p> | <p>Lisa is 50 years old. Her husband died more than two years ago. She had expected his death. While she was very sad after the loss and strongly yearned for her deceased husband, she is now able to live with the loss. She functions well both at work and at home. Lisa has accepted the loss of her husband more, experiences less feelings of guilt and participates in activities that she finds meaningful.</p> |

Table 3

Means, Standard Deviations, and Confidence Intervals of Emotional Reactions, Attributes and Social Distance Per Vignette Group

| Dependent variables | PGD Male Unexpected | PGD Male Expected | PGD Female Expected | PGD Female Unexpected | PGD Aggregation (n = 98) ^a | No PGD Female Unexpected | No PGD Female Expected | No PGD Male Unexpected | No PGD Male Expected | No PGD Aggregation (n = 96) ^a |
|------------------------------|---------------------|-------------------|---------------------|-----------------------|---------------------------------------|--------------------------|------------------------|------------------------|----------------------|--|
| Emotional Reactions (M (SD)) | | | | | | | | | | |
| Anger | 5.8 (2.2) | 6.3 (2.4) | 5.7 (2.1) | 5.6 (1.9) | 5.9 (.206) [5.453, 6.265] | 5.0 (1.7) | 5.2 (1.9) | 5.1 (1.8) | 5.4 (2.0) | 5.2 (.206) [4.768, 5.582] |
| Prosocial | 12.9 (2.1) | 11.6 (1.9) | 11.7 (1.6) | 11.6 (1.8) | 11.9 (.207) [11.540, 12.358] | 9.4 (2.6) | 9.0 (2.2) | 9.3 (2.2) | 9.2 (1.7) | 9.3 (.208) [8.844, 9.664] |
| Fear | 8.6 (3.0) | 8.8 (3.4) | 8.8 (3.0) | 7.9 (3.0) | 8.5 (.289) [7.958, 9.098] | 7.1 (2.2) | 7.7 (2.8) | 7.5 (2.5) | 6.7 (2.4) | 7.2 (.290) [6.660, 7.803] |
| Attributions (M (SD)) | | | | | | | | | | |
| Competent | 2.8 (0.6) | 2.6 (0.6) | 2.8 (0.7) | 2.7 (0.7) | 2.7 (.062) [2.586, 2.830] | 3.6 (0.5) | 3.2 (0.7) | 3.4 (0.5) | 3.5 (0.6) | 3.4 (.062) [3.290, 3.535] |
| Warm | 2.7 (0.7) | 2.7 (0.6) | 3.0 (0.7) | 3.0 (0.5) | 2.9 (.060) [2.739, 2.974] | 3.3 (0.6) | 3.0 (0.5) | 3.1 (0.6) | 3.3 (0.5) | 3.2 (.060) [3.087, 3.323] |
| Emotionally Stable | 2.1 (0.8) | 2.1 (0.5) | 2.3 (0.7) | 2.2 (0.5) | 2.2 (.060) [2.006, 2.301] | 3.4 (0.5) | 3.1 (0.6) | 3.2 (0.5) | 3.2 (0.5) | 3.2 (.060) [3.116, 3.352] |
| Dependent | 2.7 (0.7) | 2.8 (0.7) | 2.5 (0.6) | 2.7 (0.5) | 2.7 (.075) [2.539, 2.833] | 2.8 (0.8) | 2.3 (0.7) | 2.3 (0.8) | 2.6 (0.9) | 2.5 (.075) [2.347, 2.642] |
| Sensitive | 3.1 (0.7) | 3.3 (0.6) | 3.1 (0.7) | 3.0 (0.5) | 3.1 (.060) [2.981, 3.218] | 3.1 (0.6) | 2.9 (0.5) | 2.9 (0.6) | 3.3 (0.6) | 3.1 (.060) [2.947, 3.185] |
| Social Distance (M (SD)) | 15.4 (3.8) | 15.0 (3.5) | 15.2 (3.1) | 14.3 (3.8) | 15.0 (.344) [14.298, 15.656] | 10.0 (3.2) | 12.0 (2.7) | 11.5 (3.7) | 10.6 (3.0) | 11.0 (.345) [10.329, 11.690] |

Note. ^a 95% Confidence Intervals within square brackets.