

# Evidence on the Conceptual Distinctness of Normal Grief From Depression

## A Multi-Faceted Analysis of Differential Validity

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**Abstract:** *Background*: The distinctness of grief from depression has been the subject of a long scholarly debate, even influencing definitions of diagnostic criteria. *Aims*: This study aims at clarifying the issue by a multifaceted analysis of data from a large German sample. *Method*: A community sample of 406 bereaved persons answered the Wuerzburg Grief Inventory (WGI), a multidimensional grief questionnaire designed to measure normal grief in the German language, and the General Depression Scale – Short Version (GDS-S), a self-report depression scale. Data were analyzed by factor analysis to identify structural (dis-)similarities of the constructs, and analysis of variance (ANOVA) to identify the influence of the factors *relationship to the deceased, type of death*, and *time since loss* on grief measures and depression scores. *Results*: Factor analysis clustered items referring to grief-related impairments and depression into one factor, items referring to other dimensions of grief on separate factors, however. Relationship to the deceased influenced the grief measures impairments and nearness to the deceased, but not depression scores if controlled for impairments. Type of death showed specific effects on grief scores, but not on depression scores. *Time* since loss influenced grief scores, but not depression scores. *Limitations*: The analysis is based on a self-selected community sample of grieving persons, self-report measures, and in part, on cross-sectional data. *Conclusion*: Factor analysis and objective data show a clear distinction of dimensions of grief and depression. The human experience of grief contains a sense of nearness to the lost person, feelings of guilt, and positive aspects of the loss experience in addition to components resembling depression.

Keywords: depression, grief, time since loss, type of death, Wuerzburg Grief Inventory (WGI)

For more than a decade, the issue of how to conceptualize grief in contrast to depression has been the subject of scholarly debate. A sound and empirically founded concept of grief and its differentiation from similar constructs such as depression have theoretical as well as practical relevance. The prevalence of Complicated Grief (CG) is estimated between 2.4% and 4.8% in international studies (Fujisawa et al., 2010; Newson et al., 2011). In a representative sample of the German population, Kersting et al. (2011) found that 3.7% of all participants showed abnormal grieving (N = 2,520) and a prevalence of CG of 6.7% in those after the loss of a significant other (N = 1,445). A meta-analysis of 14 original studies yielded a prevalence rate of 9.8% of Prolonged Grief Disorder (PGD) in bereaved adults that after a correction because of a potential publication bias rose to 11.0% (Lundorff et al., 2017). Thus, the overwhelming majority of approximately 90% of people after a loss shows normal, that is, not especially strong and enduring grief reactions. Nevertheless, it seems fair to assume that a significant amount of them contacts a physician because of minor physical and/or emotional impairments. The physician's diagnosis determines whether a treatment (e.g., drugs) is indicated and also has an impact on the grieving person's self-concept. This study of a large German sample aims at clarifying the issue of whether normal grief should be conceptualized as a construct that is distinct from depression by following three approaches, namely (1) the clustering of items into factors and inspection of their correlations; (2) establishing different predictors for grief and depression, respectively; and (3) examining the relationship of time since loss with measures of grief and depression, respectively.

Normal grieving (NG) after the loss of a significant other involves cognitive, emotional, and behavioral impairments as well as some positive reactions. The intensity of normal grief-related impairments decreases over time while positive aspects, such as growth, increase and the individual gradually adapts to his or her changed living conditions. At a lower level, normal grief can last long. It shows a high variability depending on the relationship to the lost person and on the mode of his or her death (cf. Wagner, 2013, pp. 2–5). In contrast, PGD is characterized by continuing impairments of high intensity.

Two concepts have emerged with respect to the relationship between grief and depression. First, the two phenomena are conceived as qualitatively distinct constructs although some overlapping of symptoms occurs. This concept primarily refers to complicated grief (CG)/prolonged grief disorder (PGD) and Major Depressive Disorder (MDD). According to this view, typical symptoms of MDD are sadness accompanied by feelings of helplessness, hopelessness, and worthlessness, a lack of interest and activity, a negative view of oneself and the world in general and suicidal ideation. In contrast, the grief experience is characterized by sadness and a sense of emptiness in combination with a yearning for the deceased, disturbed thinking/cognitive impairments, a sense of alienation and social isolation, an oscillation of strong positive and negative emotions. Broadly speaking, PGD and MDD are similar in their experienced emotions while differing in their cognitive components. As Stroebe et al. (2010) point out, yearning for the deceased is the key symptom of grief and the one that is not discernible in depression. The notion of grief and depression being qualitatively distinct constructs is supported by various empirical studies and review articles (e.g., Balk et al., 2011; Bonanno et al., 2007; Dillen et al., 2009; Golden & Dalgleish, 2012; Jacobsen et al., 2010; Melhem et al., 2004; Momartin et al., 2004; Pivar & Field, 2004; Prigerson, Frank et al., 1995; Prigerson et al., 2009; Shear et al., 2005; Stroebe et al., 2000; van der Houwen et al., 2010; Wijngaards-de Meij et al., 2005). However, no careful distinction has been made between both "normal" and "complicated" grief and between subclinical depression and clinically relevant depression.

The second concept to be considered states that there is one single construct that is comprised of NG, PGD, and MDD. In this view, PGD is fairly identical with, or at least strongly similar to, MDD. The distinctness of normal grief from clinically relevant depression is a matter of the intensity of the symptoms but not of their quality. A host of studies lends support to this view (Hogan et al., 2004; McDermott et al., 1997; Pasternak et al., 1993; Schaal et al., 2009; Utz et al., 2012; Zisook et al., 1997). Moreover, Dutton and Zisook (2005) and, notably, Wakefield (2013) with his sophisticated analysis of the "distinctive symptom argument" qualify the distinction of grief from depression as conceptually flawed and contrary to research evidence.

From a methodological point of view, three approaches to the investigation of the distinctness of grief from depression have been followed. The majority of studies used exploratory or confirmative factor analysis in order to explore the clustering of items from both domains (e.g., Bergner et al., 2009; Boelen & Prigerson, 2007; Dillen et al., 2009; Hogan et al., 2004; Jacobsen et al., 2010; Schaal et al., 2012). In addition, researchers investigated the (distinct) time course of grief and depression, respectively (e.g., Boelen & Prigerson, 2007; Bonanno et al., 2008; Utz et al., 2012; van der Houwen et al., 2010; Wittkowski & Scheuchenpflug, 2015), whereas a smaller portion of the literature aimed at finding predictors of PGD versus MDD by means of multiple regression analysis (e.g., van der Houwen et al., 2010; Wijngaards-de Meij et al., 2005) or used categorical factors like kinship relationship to the deceased and type of death to explain variability in grief reactions (Wittkowski & Scheuchenpflug, 2016).

The aim of this study is to add evidence for the distinctness of grief from depression by analyzing data from a large sample of the German population that was collected by means of the WGI, a questionnaire designed to assess normal grief. Thus, we are dealing with normal grief and different levels of depression, not specifically with MDD. The purpose of the study primarily is a contribution to basic research in the neglected area of normal grief. Its benefit for clinical practice can be seen in improving differential diagnoses between lower degrees of grief and symptoms of depression and in the end in adequate treatment of people grieving normally.

The following hypotheses were examined:

*Hypothesis 1 (H1)*: Grief, as measured by the WGI, is a construct distinct from depression. While we expect a substantial correlation between (a measure of) depression and the scale "Emotional and Cognitive Impairments" of the WGI because of semantic and conceptual similarity of the items used in the questionnaires, the other scales of the WGI (Feelings of Guilt, Growth of Personality, Increase of Empathy for Others, Sense of Nearness to the lost Person) are expected to not substantially correlate with depression. We also expect items of the depression scale and "Emotional and Cognitive Impairments" subscale of the WGI to form a common factor in factor analysis.

*Hypothesis 2 (H2)*: Research has shown grief to be influenced by factors such as kinship relationship to the deceased and type of death. There will be no such influence on depression.

*Hypothesis 3 (H3)*: Previous research has demonstrated a specific variation of grief reactions over time since the loss. We do not expect any effect of time since a loss on mean scores for depression.

## Method

#### **Participants and Procedure**

The original sample used in the development of the WGI consisted of 521 bereaved German adults. For this analysis, we retained subjects if their score on the Impairments subscale was smaller than 14 and time since the loss was lower than 10 years (N = 406) in order to analyze data from subjects experiencing normal grief only.

Data collection was from August 2008 through October 2010 via the Internet (n = 300) and using paper and pencil (n = 106). Among other socio-economic data, time since the loss was assessed by the date it had happened (year, month). The mixed data collection strategy has the advantage of compensating for the weaknesses of each strategy while gaining both of their advantages. This is particularly relevant with respect to the undercoverage of certain kinds of participants via the Internet. Every individual was considered qualified to participate in this study if he/she considered him- or herself to be grieving the loss of a person, irrespective of duration. Participants responded voluntarily, anonymously, and without payment or another form of gratification. The study has been approved by the Ethics Committee of the Faculty of Human Sciences of the University of Würzburg.

#### Instruments

#### Wuerzburg Grief Inventory (WGI)

The WGI (Wittkowski, 2013) is a multidimensional selfreport measure consisting of 24 items in the German language. At the time of data collection, it was the only instrument of this kind available in the German language, that is, multidimensional without focussing on clinically relevant grief reactions. The items belong to five scales: Acute Emotional and Cognitive Impairments (Impairments,  $\alpha$  = .90 in this sample, 8 items, e.g., "... I felt there wasn't a stone left standing.", "... I inwardly felt motionless."); Growth of Personality (Growth,  $\alpha = .90$ , 4 items, e.g., "... I thought that grieving for him/her made me inwardly stronger."); Feelings of Guilt (Guilt,  $\alpha = .85$ , 4 items, e.g., "...I reproached myself."); Increase of Empathy for Others (Empathy,  $\alpha$  = .81, 4 items, e.g., "...I was more tolerant toward others than before the loss."); Sense of Nearness to the lost Person (Nearness,  $\alpha = .68$ , 4 items, e.g., "...I talked to him/her."). Each page of the questionnaire shows as a headline the same sentence stem: "I experienced a loss because he/she is no longer alive. Within the last 14 days ..." This sentence stem is complemented by the items (e.g., "... I talked to him/her."). The response format is a four-point rating scale consisting of the verbal categories "agree not at all – somewhat – for the most part – almost *totally*," scored from 1 to 4. In the bottom line of each page, the participant is asked whether his or her responses really refer to the last 14 days. For the analyses in this paper, Impairments scores were rescaled to the range [4; 16] to be directly comparable to the other scales. Both intercorrelations of the scales (Wittkowski, 2013) and their analysis depending on the time since the loss (Wittkowski & Scheuchenpflug, 2015) confirm construct validity and differential validity of the WGI.

## General Depression Scale – Short Version (GDS-S)

The GDS (Hautzinger & Bailer, 1993) is the German adaptation of the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) that was specifically designed for use with non-clinical populations. Its short version (GDS-S) consists of 15 items, the internal consistency of which is  $\alpha = .92$  in this sample. Hautzinger and Bailer report a mean of 10.74 in a large community sample (range = [0; 45]). A typical item would be "During the last week, I was sad."

## Results

#### Sample

The sample contains 104 men and 295 women (7 persons did not provide gender information) ranging in age from 16 to 87 years (M = 45.7; SD = 14.1). 62.6% of the sample report a religious confession (33.3% protestant, 26.6% Roman Catholic, 2.7% others). Participation in a bereavement group was answered affirmatively by 33 % of the sample. 29.3% of participants received some kind of psychotherapy.

The majority of the participants had lost a child (38.8%). Further losses are a spouse (17.7%), and a sibling (14.4%). The most frequent mode of death reported is an illness (51.5%), followed by accidents (25.4%), and suicide (8.5%) (see Table 1).

#### **Clustering and Correlational Pattern**

To test whether depression as measured by the GDS-S and subdimensions of grief as measured by the WGI are different constructs, we entered all items of the WGI and GDS-S in a common principal component analysis using parallel analysis (Horn, 1965) as criterion for the number of factors to retain. The resulting five dimensions were Varimax rotated and explained 57% of the variance; a complete

% 51.5 25.4 8.5 5.2 7.0 1.2

1.2 100.0

	Kinship to the deceased									
Cause of death	Spouse	Partner	Friend	Father	Mother	Sibling	Grandparent	Child	Other person <sup>a</sup>	n
Illness	59	7	10	18	26	19	7	51	10	207
Accident	2	1	1	1	0	22	0	68	7	102
Suicide	4	1	1	1	0	10	0	16	1	34
Unexplained	2	3	0	1	0	3	0	12	0	21
Natural <sup>b</sup>	4	0	1	4	7	3	7	1	1	28
Stillbirth	0	0	0	0	0	0	0	4	1	5
Violence/crime	0	0	0	0	0	1	0	4	0	5
Total	71	12	13	25	33	58	14	156	20	402

Table 1. Number of observations by reported cause of death and kinship to the deceased

Note. <sup>a</sup>Other persons were nephews, uncles, in-laws, and stepchildren/parents; <sup>b</sup>death by old age.

Table 2. Correlations of measures of depression (GDS-S) and grief (subscales of WGI)

	1	2	3	4	5	6
1. Depression		.821**	450**	.473**	168**	.190**
2. Impairments	.724**		441**	.478**	136**	.256**
3. Growth	233**	194**		302**	.369**	.114**
4. Guilt	.420**	.452**	.087**		073**	.173**
5. Empathy	103**	.042**	.498**	.197**		.123**
6. Nearness	.335**	.377**	.101**	.105**	.076**	

Note. Upper diagonal matrix shows data of female respondents (n = 295), lower diagonal matrix shows data of male respondents (n = 100). \*p < .05; \*\*p < .01.

listing of factor loadings can be found in the Electronic Supplementary Material, ESM 1, Table E1. After rotation, WGIitems of the subscale Impairments and all items of the GDS-S loaded highly on Factor 1, showing that these items refer to a similar concept. Only the four items of subscale Growth loaded substantially on Factor 2 (r = .806/.790/.785/.726). The largest item-factor-correlation for depression was -.405 ("enjoyed life," reversed). No items besides the four items of subscale Guilt loaded substantially on Factor 3 (r = .828/.802/.791/.712). The largest item-factor correlation for depression measures was .326 ("my life is one failure"). Solely the four items of subscale Empathy loaded on Factor 4 (r = .868/.832/.760/.567). The largest item-factor correlation for depression-measures was -.138 ("people do not like me"). Only the items of the WGI subscale Nearness loaded substantially on Factor 6 (r =.703/.667/.636/.583). The largest correlation with items of the depression scale was r = .188 ("enjoyed life," reversed).

Zero-order correlations between scale values of the WGI and the sum score of the GDS-S are shown in Table 2. Basically, correlations reflect valence of the scales: Scales with a negative connotation such as depression score, Impairments and Guilt correlated positively with each other but negatively with scales having a positive connotation like Growth and Empathy. Sense of Nearness to the lost Person was an exception, showing (small) positive associations with all other dimensions. The calculation of partial and semipartial correlations showed the same relationship patterns (see ESM 1, Table E2).

## Influence of Relationship to the Deceased on Measures of Grief and Depression Score

In this study, loss of a child or spouse resulted in larger measures of Impairments (4.2 points, F(1, 353) = 19.10, p < .0005,  $\eta^2 = .051$ ) and Nearness (2.1 points, F(1, 353) = 4.74, p = .030,  $\eta^2 = .013$ ) than loss of a parent or sibling. Computing the same comparison for depression scores also resulted in a significant contrast, F(1, 349) = 5.79, p = .017,  $\eta^2 = .016$ : Depression scores of persons bereaved of a child or spouse were 8.3 points higher than scores of persons who lost a parent or sibling (see Figure 1).

Since depression and Impairments scores correlate highly (r = .802 in this sample), the significant contrast for depression could result from a common component of both variables. To consider only unique variance components, depression scores were adjusted for Impairments and Impairments scores were adjusted for depression, and both contrasts recomputed. After adjustment of depression scores for Impairments, the contrast loses its significance, F(1, 349) = 2.33, p = .128,  $\eta^2 = .007$ , but is still highly significant for Impairments adjusted for depression, F(1, 349) = 13.9, p < .0005,  $\eta^2 = .038$ .

GDS-S depression scores above 18 points are interpreted as an indication of a clinically relevant depression. Therefore, the contrast analysis above could be repeated with observed frequencies of clinically relevant depression. Table 3 shows the number of subjects with subclinical vs.

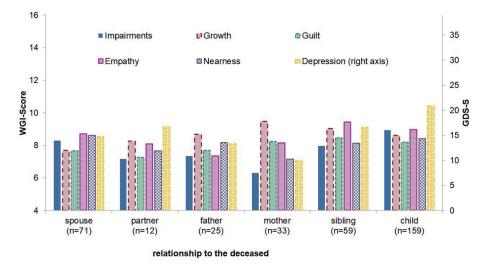


Figure 1. Mean scores of grief and depression measures by relationship to the deceased. Impairments, Guilt, Nearness, Growth and Empathy are subscales of the WGI questionnaire measuring grief reactions, plotted on the left ordinate. Depression is measured by the GDS-S, values are plotted on the right ordinate. Error bars are omitted to reduce visual clutter.

**Table 3.** Number of subjects diagnosed as not/clinically depressed (GDS-S below/above 18), by relationship to the deceased. Groups contrasted in statistical analysis are marked in bold versus normal font. For details see text

	Depression diagr	nosis (by GDS-S)	
Deceased person was	None or subclinical	Clinically relevant	Total
Spouse	38	29	67
Father	14	11	25
Mother	23	10	33
Sibling	31	28	59
Child	64	95	159
Total	170	173	343

clinically relevant depression scores by relationship to the deceased. Group 1, subjects who lost a spouse or child, showed a higher incidence of depression than group 2, subjects who lost a parent or sibling,  $\chi^2(1, N = 343) = 5.20$ , p = .023. The difference was mostly due to reactions of bereaved parents who showed a comparatively high rate of clinically relevant depression scores,  $\chi^2(1, N = 343) = 10.28$ , p = .001.

## Influence of Type of Death on Depression Scores

For the analysis of the factor type of death, the causes of "violence" (n = 5) and "stillbirth" (n = 5) were excluded because of the low number of observations (see Table 1). Omnibus tests of differences in scores between subjects who experienced their loss because of illness, accident, suicide, unexplained, and natural death by old age were

**Table 4.** Results of univariate omnibus ANOVAs of the between factor"type of death" (illness, accident, suicide, unexplained, natural deathby old age) for depression score (GDS-S) and measures of grief (WGI)

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Variable	F	df	р	$\eta^2$
Depression	3.35	4, 383	.010	.034
Impairments	3.91	4,383	.004	.039
Growth	0.19	4,383	.946	.002
Guilt	3.67	4,383	.006	.037
Empathy	1.81	4,383	.125	.019
Nearness	0.55	4, 383	.703	.006

significant for depression (GDS-S sum score) and for WGI Impairments and Guilt, but they were not significant for Growth, Empathy, and Nearness (statistical data in Table 4).

Testing the influence of unexpectedness of loss on depression scores by computing a contrast between persons who lost someone by accident vs. by illness did not reveal a significant difference, F(1, 383) = 1.26, p = .262,  $\eta^2 = .003$ . A comparison of depression scores of persons who lost someone due to suicide vs. due to accident or illness also did not result in a significant difference, F(1, 383) = 1.63, p = .202,  $\eta^2 = .004$ .

### Influence of Time on Measures of Grief and Depression

When participants are grouped by time since loss, mean depression scores descriptively show lower values in groups whose loss occurred long ago, while mean scores for measures of the WGI descriptively show other patterns when participants are grouped similarly (see Figure 2). The

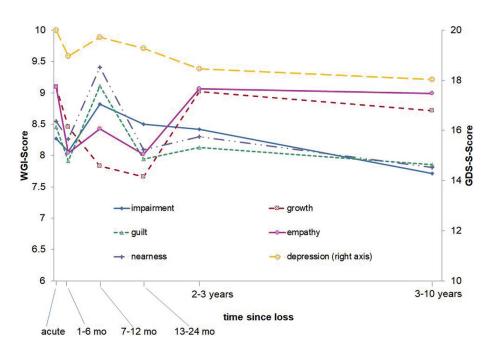


Figure 2. Mean scores for survey participants whose loss occured different times ago. Impairments, Guilt, Nearness, Growth and Empathy are subscales of the WGI questionnaire measuring grief reactions, plotted on the left ordinate. Depression is measured by the GDS-S, values are plotted on the right ordinate. Note that both ordinates are scaled to maximize visibility, not to minimal/maximal values possible. Also note that data are not longitudinal, but show mean scores of cross-sectional samples created after data collection based on time since loss. Error bars are omitted to reduce visual clutter

differences between means for depression scores were not significant, F(5, 396) = 0.34, p = .887,  $\eta^2 = .004$ , whereas there was a significant effect of time since loss on Nearness in this sample,  $F(5, 400) = 2.60, p = .025, \eta^2 = .032$ .

## Discussion

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Our contribution to the investigation of the relationship between depression and grief is situated in the German language, whereas the majority of work to date has been conducted with English-speaking populations. This provides an important level of generalization regarding the findings. The findings from the three approaches to the study of the distinctness of grief from depression, namely clustering items by means of factor analysis, determining predictors of grief versus depression, and analyzing the patterns of both grief and depression depending on the time since loss, confirm some of our expectations derived from the literature and our own previous research. The results of this multifaceted analysis foster a differentiated view of the issue under investigation and they point to fundamental shortcomings in previous research.

Using data from two questionnaires for the assessment of grief and depression, respectively, factor analysis revealed both correspondence and distinctness of these constructs.

In line with our first hypothesis, the items of GDS-S and those of the Impairments scale of the WGI form one single factor - a result that confirms previous research (e.g., Hogan et al., 2004; Schaal et al., 2012) that in part refers to normal and in part to prolonged grief, but is in contrast to the cross-validated finding of Pivar and Field's (2004) factor analysis. Moreover, there is a strong positive association between the depression score and the Impairments scale. Thus, not surprisingly, a narrow operational definition of grief in terms of helplessness, hopelessness, and lack of interest and orientation corresponds to depression. In contrast, features of grief such as feelings of loss-related guilt, a sense of nearness to the lost person, empathy for others, and personal growth are distinct from depression. The discrepancies between these latter four aspects of grief and depression remain if confounding variance is controlled for and they exist in men and women alike, indicating that gender does not operate as a moderator. In the end, whether grief and depression are distinct or identical constructs depends on how "grief" is operationally defined. With respect to the WGI, the operational definition of grief is based on a careful and comprehensive description of reactions to loss, not, however, of clinical symptoms.

Our second hypothesis stated a differential association between kinship relationship to the deceased and type of death on one hand and grief and depression, respectively,

on the other. This expectation is not confirmed by the present results. Kinship relationship to the deceased had an effect on both Impairments measured with the WGI and depression assessed by means of the GDS-S. Moreover, "type of death" turned out not to be a significant predictor either of grief or depression. Thus, in contrast to Harper et al. (2015), van der Houwen et al. (2010), and Wijngaards-de Meij et al. (2005), the unexpectedness of death is not a predictor of bereavement outcome in the present study. One can only speculate whether threatening grief interpretations and especially rumination plays a mediating role both for grief and depressive symptoms (cf., van der Houwen et al., 2010).

Our third hypothesis was partially confirmed. In contrast to Nearness, depression does not show a significant variation by time since loss, especially within 2–3 years post-loss in this sample of normally grieving individuals. Given the conceptual and empirical overlapping of the Impairments scale and the GDS-S as demonstrated in the preceding paragraph, this relative invariance is remarkable. Thus, this finding points to the incremental validity of the WGI Nearness scale. The distinct patterns of grief and depression scores found in the present study on the basis of clustering subjects by time since loss correspond to the findings of longitudinal studies on various kinds of bereaved individuals (Beutel et al., 1995; Boelen & Prigerson, 2007; Bonanno et al., 2008; Farberow et al., 1992).

The present findings on "normal" grief in relation to depression, although not completely independent from one another, stem from three different approaches. Taken together, they seem inconsistent with respect to the issue of distinctness vs. uniformity of these constructs at first sight. Among various components of grief, grief-specific distress and depression constitute one single factor. This is in line with findings both on normal and pathological grief, namely with Hogan et al. (2004) who used the Hogan Grief Reaction Checklist (HGRC; Hogan et al., 2001) and with Schaal et al. (2009, 2012) who used the PGD Questionnaire (PG-13; Prigerson et al., 2009). Other researchers, however, using predominantly the Inventory of Complicated Grief (ICG; Prigerson, Maciejewski et al., 1995), "that was designed to focus on symptoms that are pathognomic for a diagnosis of CG or PGD and associated with adverse health and mental health outcomes" (Neimeyer et al., 2008, p. 141) found separate clusters (Boelen & van den Bout, 2008). The reason for this contradictory picture can be seen in the insufficient validity of the instruments used. Neimeyer and Hogan (2001) state that "most investigators of bereavement rely on generic measures of psychiatric symptomatology, as opposed to scales tailored to the assessment of grief per se" (p. 91). Other reviewers, even with a psychiatric background, reached similarly critical conclusions (Kersting et al., 2003; Tomita & Kitamura, 2002). As a consequence, it remains unclear which construct is actually assessed: "normal" grief, pathological grief, depression of low to medium intensity, or clinically relevant depression?

As far as the WGI is concerned, its five scales are tailored to the assessment of grief-specific features and a result of factor analysis. The association of the Impairments scale with depression may be fostered by the fact that yearning is not included in this scale (although implicitly covered by the Nearness scale), thus omitting the most prominent feature of grief and inducing a bias toward depression. Nevertheless, the WGI's construct and discriminant validity has been documented (Wittkowski & Scheuchenpflug, 2015, 2016). In the present study, the discriminant validity of the Nearness scale is demonstrated by its pattern of mean scores for subject groups clustered by time since loss is distinct from depression. It should be noted, however, that there is probably a cultural specificity of some of the content of the grief questionnaire used, that is, in the metaphoric quality of some items, which might sound unfamiliar when translated to English. The cultural specificity of the scale may represent both strength and weakness of the measure. What counts in the end, however, is the validity of the respective subscales.

In addition, the overlapping of normal grief and depression in terms of correlations and factor analytical clustering in the present study may result, at least in part, from the fact that both have been assessed by self-report measures that may have inflated the correlations due to common method variance. Objective data (kinship relationship, cause of death) show predictive power for some of the WGI scales.

In sum, a narrow conception of normal grief consisting exclusively of cognitive and emotional impairment seems to have a strong similarity to depression but is not qualitatively identical with it. A broader concept of normal grief that also comprises a sense of nearness to the lost person, feelings of guilt (see Li et al., 2014, for a review), and positive aspects of the grief experience turns out to be distinct from depression. A consequence for the clinical practitioner is that he or she should not exclusively rely on distress when establishing a diagnosis of PGD but should also consider features such as feelings of guilt and a sense of nearness to the deceased. However, kinship relationship to the deceased and type of death should not be used as criteria for making a differential diagnosis between normal grief and various levels of depression.

From a conceptual point of view, one might speculate whether either overlapping among or difference between grief and depression exists only above a certain level of intensity, that is, for PGD and MDD, respectively. Because the WGI was designed to assess "normal" grief, because the present data are from a community sample, and because the GDS-S is not a clinical instrument, our findings refer to "normal" grief and "normal" depression, which are comparable to those found by means of the Core Bereavement Items (CBI) and are in contrast to results on PGD based on the ICG.

As is the case in the present study, researchers who were interested in the distinctness of grief from depression nearly exclusively used self-report measures for the assessment of the (subjective) experiences of the bereaved. A valuable expansion of this research strategy could be to consider physiological sequelae of loss. For example, in their Social Signal Transduction Theory of Depression, Slavich and Irwin (2014) assume that major life events, especially those involving interpersonal loss and social rejection, up-regulate pro-inflammatory cytokines which in turn can cause depressive symptoms and even clinically diagnosable forms of depression. This raises the question of whether a high level of inflammation after a significant loss is also a predictor of the cognitive and emotional processes that are characteristic of PGD (see Schultze-Florey et al., 2012). To perform this kind of biologically-oriented grief research, instruments with high discriminant validity are essential. To carry strategic reasoning one step further, one could also incorporate data from behavior observation into the analysis of the distinctness of grief from depression. Although laborious, this additional data source would enable multitrait-multimethod analysis (Campbell & Fiske, 1959), the most appropriate way to establish the validity of psychometric instruments.

The present multi-faceted analysis of normal grief in relation to depression has strengths and weaknesses. Among the former are the incorporation of both subjective and objective data, the analysis of grief reactions to losses occurring different times ago, the use of a multidimensional instrument for the assessment of grief that has been factor analytically constructed, and the large sample from the general population. A limitation results from the fact that the analysis of patterns over time (Hypothesis 3) is not based on truly longitudinal data. Instead, cohorts of participants were created a posteriori depending on their respective distance to the loss, a kind of data treatment Carnelley et al. (2006) had used as well. Thus, these findings on the basis of cross-sectional data need confirmation by longitudinal studies. A further limitation is that self-report measures were used to assess both grief and depression, which may have inflated the associations between the two. Different kinds of data sources would be an improvement. Finally, we cannot explain the high number of clinically depressed participants. Probably, we accidentally recruited a particularly distressed sample. Strengthening our methodological rigor will help to clearly delimitate the boundaries between grief and depression as a scholarly subject and will benefit clinical practice.

## **Electronic Supplementary Material**

The electronic supplementary material is available with the online version of the article at https://doi.org/ 10.1027/2512-8442/a000077

**ESM 1.** Tables E1 and E2: Factor loadings and partial correlations

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