Clinical and Research Measures of Grief: A Reconsideration
Takuro Tomita and Toshinori Kitamura

Bereavement, in the form of losing loved or emotionally dear persons, is common and generally induces psychological and physical distress. An extensive body of literature on bereavement and bereavement counseling has been produced in the last four decades in Western countries. For example, there is ample evidence to indicate the negative effects of bereavement on psychiatric and physical morbidity,1 and an increased risk and severity of depressive symptoms,2-4 anxiety,5 poor physical health,6,7 immunological dysfunction,8,9 increased adrenocortical activity,10 and increased mortality.11 Since the early works of Freud12 and Lindemann,13 a considerable number of conceptual and empirical studies on grief have been performed. A question common to most of the empirical studies is whether grief can influence the future health of the bereaved. In light of this issue, it is essential to develop valid and reliable measures to assess perceived grief.

This report will review currently available measures of grief and examine the literature that differentiates normal grief from pathological grief and bereavement-related depressive disorders. Finally, we will propose future directions for research on the effects of normal and pathological grief on psychological and physical health.

Although the term grief is in a general sense interchangeable with the term bereavement, bereavement indicates an objective state in the wake of the death of the beloved, whereas grief includes diverse reactions to the death of the beloved.14-17 Grief includes syndromal clusters of cognitive, emotional, somatic, and behavioral symptoms,13,18,19 and consists of multidimensional processes.20

MEASUREMENT DEVICES: RELIABILITY, VALIDITY, AND PREDICTION

Explicit measures for assessing perceived grief are necessary for examining the causal link between grief and psychological, behavioral, and physical outcomes.21 The last two decades have seen the development of many kinds of measurement devices for the assessment of grief (Table 1). While many measures were developed to comprehensively assess grief in general, others sought to measure grief in specific situations. Such specialized instruments include those for the study of grief during pregnancy or after miscarriage and fetal death, grief following sudden death (e.g., suicide), grief occurring prior to loss, and pathological grief only.

It must be noted that we are not concerned here with measures that assess only nonspecific symptoms, such as depressive mood, anxiety, the reactions induced by post-traumatic stress disorder (PTSD), and the extent of psychological and physical adaptation after bereavement.

General Reactions to Grief

Psychological assessment of grief in general measures several aspects of internal reaction, such as sadness, searching for the deceased, crying, and yearning. Some instruments measure behavioral elements when subjects are confronted with bereavement and overcome grief, such as coping with death and readjustment to life. The best known measures of grief in general are the Texas Inventory of Grief22 (TIG), the Grief Experience Inventory23 (GEI), and the Grief Measurement Scale24,25 (GMS).

The TIG is a paper-and-pencil measure of the extent of unresolved grief. This measure was re-
<table>
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<th>Authors</th>
<th>Publication Year</th>
<th>Name of the Assessment</th>
<th>Subscales</th>
<th>No. of Items</th>
<th>Points of the Scale</th>
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<tr>
<td>Faschingbauer et al.</td>
<td>1977</td>
<td>Texas Inventory of Grief (TIG)</td>
<td>1 scale (not named)</td>
<td>7</td>
<td>5</td>
<td>General extent of grief</td>
<td>NR</td>
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<td>Zisook et al.</td>
<td>1982</td>
<td>Expanded Texas Inventory of Grief (ETIG)</td>
<td>Present feeling</td>
<td>34</td>
<td>5</td>
<td>General extent of grief</td>
<td>NR</td>
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<td>Faschingbauer et al.</td>
<td>1987</td>
<td>Texas Revised Inventory of Grief (TRIG)</td>
<td>2 factors: “past behavior” and “present feeling”</td>
<td>21</td>
<td>5</td>
<td>General extent of grief</td>
<td>.87-.89</td>
<td>Factor structure</td>
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<td>Sanders et al.</td>
<td>1979 (revised in 1985)</td>
<td>Grief Experienced Inventory (GEI)</td>
<td>9 bereavement scales, 3 validity scales, and 6 research scales</td>
<td>135</td>
<td>2</td>
<td>General extent of grief</td>
<td>.52-.81</td>
<td>NR</td>
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<tr>
<td>Singh &amp; Raphael</td>
<td>1981</td>
<td>Present Feeling about Loss (PFL)</td>
<td>6 research scales</td>
<td>16</td>
<td>2</td>
<td>General extent of unresolved grief</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>Remondet &amp; Hansson</td>
<td>1985</td>
<td>Grief Resolution Index (GRI)</td>
<td>1 factor: “success in coming to terms with the death and getting”</td>
<td>7</td>
<td>5</td>
<td>General extent of unresolved grief</td>
<td>.87</td>
<td>Factor structure</td>
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<td>Zisook &amp; Shuchter</td>
<td>1985 (revised in 1991)</td>
<td>Widowhood Questionnaire (WQ)</td>
<td>Feeling states, coping, new/old and continuing relationships with the deceased, functioning, self-image, and worldview</td>
<td>19 (1985 version)</td>
<td>2</td>
<td>General grief reactions to spousal bereavement</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>Jacobs et al.</td>
<td>1986</td>
<td>&quot;Grief Measurement Scales&quot; (GMS)</td>
<td>4 factors: “sadness, loneliness, and crying,” “numbness and disbelief,” “perceptual set and searching,” and “distress yearning”</td>
<td>38</td>
<td>4</td>
<td>General extent of grief</td>
<td>.84 (at 1 month)</td>
<td>.86 (at 6 months)</td>
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<td>Vargas et al.</td>
<td>1989</td>
<td>Grief Reaction Measure (GRM)</td>
<td>4 factors: “depressive symptoms,” “preservation of the lost object,” “suicidal ideation,” and “decedent-directed anger”</td>
<td>20</td>
<td>4</td>
<td>General grief reactions to loss induced by sudden death</td>
<td>.69-.87</td>
<td>Factor structure</td>
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<tr>
<td>Barrett &amp; Scott</td>
<td>1989</td>
<td>Grief Experience Questionnaire (GEQ)</td>
<td>Physical reactions, general grief reactions, search for explanation, loss of social support, stigmatization, guilt, responsibility, shame, rejection, self-destructive behavior, and reactions to a unique form of death</td>
<td>55</td>
<td>5</td>
<td>Extent of suicide-induced grief</td>
<td>.68-.97</td>
<td>NR</td>
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<tr>
<td>Thuet et al.</td>
<td>1989</td>
<td>Perinatal Bereavement Scale (PBS)</td>
<td>Thoughts and feelings, including sadness, guilt, anger, and preoccupation with the loss</td>
<td>26</td>
<td>4</td>
<td>General extent of grief induced by pregnancy loss</td>
<td>.83-.91</td>
<td>NR</td>
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<tr>
<td>Toedter et al.</td>
<td>1988 (shortly revised in 198960)</td>
<td>Perinatal Grief Scale</td>
<td>3 factors: “active grief,” “difficulty coping,” and “despair”</td>
<td>84 (1988 version)</td>
<td>5</td>
<td>General extent of grief induced by pregnancy loss</td>
<td>.87-.95</td>
<td>Factor structure/positive correlations of subscales with depression</td>
</tr>
<tr>
<td>Thuet et al.</td>
<td>1991</td>
<td>Anticipatory Grief Scale (AGS)</td>
<td>Anger, guilt, anxiety, irritability, sadness, feeling of loss, and decreased ability to function at usual tasks</td>
<td>27</td>
<td>5</td>
<td>Extent of anticipatory grief</td>
<td>.84</td>
<td>Positive correlations of subscales with depression, anxiety, and hostility</td>
</tr>
<tr>
<td>Byrne &amp; Raphael</td>
<td>1994</td>
<td>Bereavement Phenomenology Questionnaire (BPO)</td>
<td>The feeling of grief, other emotions like guilt and anger, images and thoughts of the deceased, and degree and form of attachment behaviors</td>
<td>22</td>
<td>4</td>
<td>General extent of grief</td>
<td>.93</td>
<td>No significant correlations of subscales with physical health</td>
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<tr>
<td>Prigerson et al.</td>
<td>1995</td>
<td>Inventory of Complicated Grief (ICG)</td>
<td>1 factor: “complicated grief”</td>
<td>19</td>
<td>5</td>
<td>Extent of pathological grief</td>
<td>.94</td>
<td>Factor structure/negative association of higher ICCs with health</td>
</tr>
<tr>
<td>Burnett et al.</td>
<td>1997</td>
<td>Core Bereavement Items (CBI)</td>
<td>7 factors: “image and thoughts,” “sense of presence,” “dreams,” “acute separation,” “grief,” “nonresolution/conflict,” and “personal resolution”</td>
<td>35</td>
<td>4 or 5</td>
<td>General extent of bereavement-induced phenomena</td>
<td>.65-.89</td>
<td>Factor structure</td>
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Abbreviation: NR, not reported.
vised at least twice by the group that developed it: as the Expanded Texas Inventory of Grief (ETIG), then as the Texas Revised Inventory of Grief (TRIG). Faschingbauer et al. assessed the discriminant validity of TRIG, evaluating whether the scale scores reflected the expected outcome when normal and pathological groups were compared. Although the results showed that the subjects who had low scores of grief were likely to indicate lower severity of illness, no difference between normal and pathological grief was found.

The GEI was based on an item pool of 180 statements to which respondents could answer on a true or false basis. Sanders et al. created nine subscales that measured despair, anger, guilt, social isolation, loss of control, rumination, depersonalization, somatization, and death anxiety. Three scales relating to denial, atypical responses, and social desirability were added, as well as four “research scales.” A revised version of the GEI was published. An exploratory higher-order factor analysis of the GEI produced three factors: “general grief,” “deep and severe form of bereavement,” and “determined optimism.” The GEI does not contain items that describe sadness or crying, which are usually considered normal reactions to bereavement.

Jacobs et al. developed a practical interview assessment device for measuring grief based on a theoretical framework grounded in attachment theory. Recently, this instrument has been referred to as the Grief Measurement Scales (GMS). Thirty-eight items of the instrument were tailored to two constructs derived from attachment theory, namely, “numbness and disbelief” (six items) and “separation anxiety” (12 items). Bereaved persons scored higher on indices of separation anxiety and depressive symptoms than did nonbereaved. The GEI did not include other grief items, such as pseudohallucination of the deceased, which may characterize pathological grief.

A shortcoming of these scales of general grief is that there is no way for respondents to grade the severity of a symptom; the “yes” or “no” responses and the 5-point scale indicate only the extent of agreement (“completely true” to “completely false”) or frequency (“never or rarely” to “5-7 days per week”). Other investigators developed measurements to assess general grief reactions. These include the questionnaire on Present Feeling about the Loss (PFL), the Widowhood Questionnaire (WQ), the Grief Resolution Index (GRI), the Grief Reaction Measure (GRM), and the Bereavement Phenomenology Questionnaire (BPQ).

These instruments have several drawbacks in terms of psychometric properties and the contents of scale items. Although particular grief reactions and feelings are reported, it is unclear, for example, whether the “anger” item of these scales refers to anger in general or anger at the deceased, or anger at other specific objects or persons. It is also unclear whether items were selected based on clinical experience, previous literature, or both. Details of a factor analysis are not presented. In terms of scale structure, the “depressive” factor of the GRM is overweighted, accounting for more than 50% of the total variance. Although good internal consistency with a single factor has been found in the BPQ, a confirmatory factor analysis of the BPQ’s four dimensions gave a poor fit ($\chi^2 = 820$, fit index = 0.65).

A unique approach to measuring grief is seen in the development of the Core Bereavement Items (CBI). Burnett et al. tried to identify the “core symptoms” of grief. A principal component analysis of the CBI items with varimax rotation revealed seven factors: image and thoughts, sense of presence, dreams, acute separation, grief, nonresolution/conflict, and personal resolution. Based on the frequency of experience and item contents, the authors chose three of the seven factors as a reliable distillation of items measuring core bereavement phenomena. The subfactor scores discriminated among bereaved parents, bereaved spouses, and bereaved adult children in the order of severity of symptoms.

**Grief in Specific Situations**

The experience of grief and of its subsequent resolution in cases following the suicide of a loved one seems to be a specific kind of grief. The Grief Experience Questionnaire (GEQ) measures various aspects of grief (55 items), including physical reactions, general grief reactions, search for an explanation, loss of social support, stigmatization, guilt, responsibility, shame, rejection, self-destructive behavior, and reactions to this specific category of death. Initial results with the GEQ suggest its potential to differentiate grief reactions experienced by suicide survivors from those experienced by survivors of accidental death, unexpected natu-
otal death, and expected natural death. There are 11 subcales based on clinical significance. The factorial validity of GEQ has not yet been empirically confirmed.

Two instruments for measuring grief responses to pregnancy loss were developed independently: the Perinatal Grief Scale (PGS)44 and the Perinatal Bereavement Scale (PBS).4,5 The PGS is a well-known device for measuring the intensity of affective symptomatology following the loss of a baby. A short version of the PGS with 33 items was developed (PGS-S).46 The “active grief” subscale measures distress due to the loss. The “difficulty coping” subscale measures adaptive behavior. The scale has been validated by moderate to high correlations with the Symptom Checklist-90 (SCL-90) depression subscale44 and by convergence with other measures of parental distress.47 The PBS was designed to measure the bereavement of parents who had experienced a perinatal loss, and was based on a series of interviews that focused on the thoughts and feelings (including sadness, guilt, anger, and preoccupation with the loss) experienced by these parents after the death of an infant.

Although most devices discussed thus far measure grief experiences after the death of a loved one, Theut et al.48 developed a unique self-report device, the Anticipatory Grief Scale (AGS), to assess “any grief occurring prior to the loss, as distinguished from the grief that occurs at or after loss.”49 A total of 27 wives (aged 59 to 76 years) who had cared for a spouse (aged 61 to 88 years) suffering from dementia completed the AGS and the SCL-90-Revised (SCL-90-R). The AGS was positively and significantly correlated with the depression, anxiety, and hostility dimensions of the SCL-90-R, demonstrating good validity. We are unaware of a report on the factor structure of the AGS.

The Inventory of Complicated Grief (ICG)50 was developed to assess a distinct cluster of symptoms that have been found to predict long-term dysfunction. This inventory is based on previous literature, in which certain symptoms of complicated grief were found to be distinct from the symptoms of depression and anxiety. The ICG items were selected based on clinical experience with bereaved persons and on seven symptoms that were found to have loaded highly on the grief factor.51 Exploratory factor analyses indicate that the ICG measures a single underlying construct of complicated grief. Conjugally bereaved elderly subjects with high ICG scores were significantly more impaired in social, general, mental, and physical health functioning and in bodily pain than were those with low ICG scores.

DIAGNOSTIC ISSUES OF GRIEF

Normal and Pathological Grief

In general, normal grief is considered as a typical or usual reaction to bereavement assumed to be followed by a gradual return of the capacity for reinvestment in new interests, activities, and relationships,20 whereas pathological grief is considered as certain maladaptive reactions to bereavement assumed to be manifest as psychological and physical impairments. In the DSM-III-R, “uncomplicated bereavement” can be used as a V code when the focus of clinical attention is “a normal reaction to the death of a loved one” (p. 361). DSM-IV deletes the term “normal” in this statement on the category of bereavement (p. 684), although six certain symptoms (e.g., guilt, thought of death) that are not characteristic of a “normal” grief reaction are mentioned. This difference may be derived from the diversity of the effect of bereavement reaction on health. While an appropriate grief reaction may contribute to better adaptation after bereavement,32,52 a pathological grief reaction may have some harmful effects on the psychological and physical health of the bereaved.

Previous literature, however, shows that few operationalized criteria are able to diagnose pathological grief. Jacobs and Kim5 insisted that the absence of standardized criteria for diagnosing pathological grief has handicapped bereavement research. Marwit55 reported the inadequacy of the DSM-III-R in classifying emotional reactions to specific life transitional events, using grief reactions as a model. Considering certain personality-based explanations of symptom formation, Horowitz et al.56 proposed a unique set of diagnostic criteria that may explicitly diagnose pathological grief. Their approach implies that the series of various reactions to bereavement has been incompletely defined in the criteria of psychiatric diagnosis. Recently, some researchers developed a unique set of criteria that may diagnose pathological grief.20,57,58 Mainly, these criteria include negative feelings to lost attachment (separation) and
intrusive symptoms, and distinguish pathological grief from normal grief by stipulating that the former is characterized by substantial prolongation of symptoms and impairment of social functioning.

In summation, although conceptual differences may exist between normal and pathological grief in clinical settings and diagnostic criteria, the question remains regarding what features may empirically characterize pathological grief and what features empirically characterize normal grief. We recommend that researchers concerned with grief and bereavement reaction examine this topic based on empirical data derived from well-controlled studies, and consider biological, psychological, and behavioral differences between normal and pathological grief based on the operationalized criteria.

**Pathological Grief and Depression**

As noted above, some researchers developed a unique set of operational criteria that may diagnose pathological grief. In these studies, the researchers found an independent (discrete) syndromal cluster concerning pathological grief, which differed potentially not only from normal grief but from mood disorder (major depressive episode) in terms of symptomatology. In DSM-IV, “bereavement” as a V code includes six specific pathological grief symptoms (e.g., guilt, thoughts of death) that are not characteristics of “Major Depression” or “normal” grief reaction. It is of therapeutic importance for mental health professionals to differentiate pathological grief from depression.

After the loss of a loved one, a condition often arises in the survivors that fulfills the criteria for a major depressive episode (excluding the criteria following bereavement). A total of 259 widows and widowers were recruited by mail, which was sent to family members of deceased persons identified by death certificates in San Diego County, CA. In this study, Zisook and Shuchter found that 2 months after the death of a spouse, 59 (23%) of their subjects met the criteria for a full major depressive episode.

It is debatable whether the condition of meeting the criteria of major depressive episode after the death of a loved one should be viewed as a form of depressive illness or as a form of grief. Psychosocial events also usher in the onset of depressive illness. For example, in a community study on women in London, Brown and Harris showed that the onset of depression often followed an event of loss. Because depressive illness has a higher likelihood of occurring after a stressful event, it may be argued that a condition after the death of a loved one, if it meets all of the other criteria, is one form of depressive illness.

The constellation of grief is an area warranting of extensive study. Prigerson and colleagues administered a set of questionnaires to elicit different aspects of grief and grief-related depression. They factor-analyzed items to yield two factors: bereavement-depression and complicated grief. The former consisted of symptoms such as hypochondriasis, apathy, insomnia, anxiety, suicidal ideation, guilt, and depressed mood, and the latter consisted of symptoms such as preoccupation with thoughts of the deceased, crying, searching for the deceased, and disbelief over his or her death. Therefore, it may be that the issue is not “either or” but “to what degree.” Bereaved people may present both grief and depression symptoms to different respective degrees.

**METHODOLOGICAL AND PRACTICAL CONSIDERATIONS OF CURRENT INSTRUMENTS AND FUTURE DIRECTIONS OF RESEARCH**

Reliable and validated measures of grief should be used to appropriately assess behavioral disorders, psychiatric diseases, and psychological adaptation. With well-validated instruments, researchers and clinicians may gain data on the development of the disease, for the prediction of the outcomes and for the evaluation of therapeutic approaches. We considered whether the grief measures described above are effective instruments for clinically judging the psychological aspects of the bereaved subjects, addressing three aspects of psychometrical validity: factorial validity, discriminant validity, and content validity.

As described earlier, grief researchers hypothesize, based on the previous literature and clinical experience, that reaction to the loss has multiple facets and consists of emotional, cognitive, and behavioral elements. With regard to *factorial validity*, however, only half of all of the instruments mentioned here were constructed by factor-analyzing item pools; the rest were not constructed psychometrically but arbitrarily, based on the theoretical or clinical perspectives of the authors.
Although a large number of grief measures have been developed since that of Faschingbauer et al., there seems to be little agreement as to the typical symptomatic dimensions of grief. If new scales are to be developed, it is imperative not to over- or under-represent specific facets of grief but to multidimensionally construct the scale in order to examine the proportional representation of items.

Second, the clinical inferences and predictions gleaned from assessment instruments depend mainly on the discriminant validity of the instrument. Research indicates that grief is often followed by somatic illness. Some instruments were developed to measure symptomatic clusters related to depressive illness and medical morbidity, pointing to maladaptive signs. It is surprising, however, that few grief measures from clinical research are available to predict the onset of psychiatric and somatic disorders of the bereaved. Moreover, it cannot be emphasized too strongly that the current devices are inadequate for differentiating between normal and pathological grief. It will be useful to develop future grief research using the new diagnostic criteria of pathological grief in order to clinically validate grief measures.

Third, we considered the content validity of grief measures. Content validity is one aspect of construct validity of psychological measurements. Although clinical judgments are strongly influenced by content validity of instruments, this issue of grief measures is problematic. Conceptually speaking, grief is an ambiguous and heterogeneous construct. To target the main construct, it is of great importance to differentiate “grief-specific” reactions from other psychological distress and physical changes, e.g., depression, anxiety, loneliness, stress, aging, and so forth. If grief measures are highly correlated with such variables, then it is possible that other factors are related to outcomes. For example, although individuals who feel grief are likely to experience depression as a result of loss, variables quite apart from bereavement, such as the depression that many people experience with aging, are also likely to be associated with high depression scores. Measures to specifically assess grief-specific reactions may be found to differentiate such phenomena from a confounding state, such as that of depression.

Finally, we would like to suggest a clinical guide for the use of these scales. In brief, we recommend that practitioners and clinicians consider the circumstances in which the grief measures are assessed. For example, in cases of sudden death due to natural disaster, traffic accidents, suicide, victims, and so on, measures that deal with pathological and traumatic grief reactions (e.g., ICG) would be recommended. In contrast, the assessment of comprehensive grief reactions including various feelings, images, coping behaviors, and human relations would evaluate whether the subjects experience only “normal” grief. That is, practitioners and clinicians should not only evaluate longitudinal changes of grievers who suffer after the death of a loved one, but should also consider the onset and time course of pathological grief. Under such a condition, comprehensive grief scales (e.g., the CBI) should be used. Also, we endorse the use of a short-form questionnaire of 20 to 30 items to facilitate more rapid administration of tests and to reduce the psychological burden of answering items about negative feelings (e.g., recalling grief), both in clinical and research settings.

Although considerable effort has been devoted to measuring the symptoms of grief, the main drawback of currently available instruments is the scarcity of psychometrical validity studies. At present, there are few standardized devices with which to assess the phenomena of grief, in either clinical or research settings. It is necessary not only to develop valid and reliable grief measures that can assess multidimensional facets of grief along with its content, but to carry out comprehensive etiological research to examine the impact of grief during bereavement on health; for example, on the onset of psychiatric disorder (e.g., depressive illness), physical disease (e.g., cancer), and physiological changes (e.g., immunological change).

REFERENCES


