Journal of Psychopathology and Behavioral Assessment, Vol. 11, No. 1, 1989

Measuring Grief: A Short Version of The Perinatal Grief Scale

Louise Potvin,¹ Judith Lasker,^{2,3} and Lori Toedter⁴

Accepted: October 3, 1988

Despite a considerable number of studies, there are two major drawbacks in the literature on grief and bereavement. One is a lack of adequate and generally agreed upon measures for assessing grief. The second is a lack of ability to predict from existing measures the likelihood of what has been termed "chronic" or "pathological" grief reactions. This paper reports the results of the development of a bereavement measure for the study of perinatal loss which attempts to address these gaps. The measure is specific to a pregnancy-related loss, although it has the potential for adaptation to use for other types of loss. Analysis of responses from 138 women has resulted in the reduction of the original measure from 104 to a more manageable and almost equally comprehensive and reliable 33 items. In addition, a factor analysis has produced three factors, two of which indicate the possibility for longer-term and more severe grief reactions. Because of its sound psychometric qualities and interesting factor structure, the measure shows promise of being useful for both research and clinical purposes.

KEY WORDS: grief; measurement; reliability; pregnancy; stillbirth.

This research was funded by National Institute of Child Health and Human Development Grant R01 H18431-04, with additional assistance from the Center for Social Research at Lehigh University. Dr. Potvin is supported by the Quebec Health Research Fund.

Division of Clinical Epidemiology, McGill University, Montreal, Quebec, Canada.

²Center for Social Research, Lehigh University, Bethlehem, Pennsylvania 18015. ³To whom correspondence should be addressed.

Department of Psychology, Moravian College, Bethlehem, Pennsylvania 18018.

Gurra / Bilei I

INTRODUCTION

The purpose of this paper is to describe a short version of a grief scale developed for research on pregnancy loss (spontaneous abortion, ectopic pregnancy, fetal death, and neonatal death). Initial results on the 84-item version of the scale have been reported elsewhere (Toedter, Lasker, & Alhadeff, 1988). This shorter version of 33 items has been tested for psychometric qualities and factor structure, and the results of that analysis are presented here. The results suggest that the 33-item scale is more useful because of the shorter length and is as comprehensive and reliable as the longer 84-item version. In addition, a factor structure which differentiates between items representing "normal" grief and those which appear to represent more severe and longlasting effects of loss may prove to fill a gap in the literature on identifying those bereaved who may suffer more debilitating effects. This could have very valuable clinical applications. The measure Was developed specifically for the situation of perinatal loss, an area in which high-quality research is still rare (for a review and critique see Kirkley-Best & Kellner, 1982). The potential for adaptation to other types of bereavement exists and remains to be tested.

Researchers have adopted several different strategies for assessing responses to loss. A common approach is to avoid measuring grief per se and to use instead measures of expected outcomes, such as depression, somatic or psychiatric symptoms, social functioning, use of medical or psychiatric services, and mortality (e.g., Blanchard, Blanchard, & Becker, 1976; Clayton, Desmarais, & Winokur, 1968; Forrest, Standish, & Baum, 1982; Jacobs & Ostfelt, 1977; Williams & Polak, 1979; Videka-Sherman & Lieberman, 1985).

These studies indicate the possibility of adverse psychological and physical outcomes of bereavement, but they approach the problem in an indirect way and in terms of specific symptoms. Measuring symptoms, whether of depression, alcoholism, or social functioning, is not the same as measuring grief (Osterweis, Solomon, & Green, 1984).

Some psychiatrists have made a more direct effort to assess grief as a separate and distinct construct using unstructed interviews and reporting results based on their clinical judgments (e.g., Cullberg, 1971; Freud, 1917). This clinical assessment approach has yielded a richness of insights, but it also usually relies on a study of a small number of people who have sought psychiatric treatment.

Some researchers have taken a more systematic approach to the study of grief by conducting a semistructured interview based on preset criteria and then using two or more raters to judge interview transcripts for presence of those criteria (e.g., Kirkley-Best, 1981; Parkes & Weiss, 1983). Benfield,

Leib, and Vollman (1978) and Peppers and Knapp (1980) have relied on short checklists of feelings and symptoms, often borrowed from Kennell, Slyter, and Klaus (1970). The Grief Experience Inventory, with 135 items (Sanders, Mauger, & Strong, 1985), and the Texas Grief Inventory, with 58 items (Zisook, Devaul, & Click, 1982), were written to apply to bereavement in general. Reliability studies for both have been disappointing.

 \bigcirc

The original Perinatal Grief Scale (PGS) administered in this study consisted of 104 Likert-type items whose answers vary from strongly agree (1) to strongly disagree (5). The measure was constructed based on items used by other perinatal loss researchers, some questions from the Texas Inventory of Grief, and additional items constructed to fit the 21 dimensions of perinatal gried we considered to be most important (see Toedter *et al.*, 1980). Although the 104 item version of the PGS yielded a standardized alpha coefficient of .90, 20 items had corrected item-total correlations of .20 or less. Removing these items yielded an alpha coefficient of .97, with corrected item-total correlations ranging from .22 to .78 (mean corrected item-total correlation, .52). The construct validity of this scale was highly satisfactory.

The remaining 84 items were then subjected to factor analysis, resulting in three factors, which differentiated among level of severity of response to the loss. The first, which we label "active grief," could also be called "normal grief" for it incorporates questions regarding sadness, missing the baby, and crying for the baby. In contrast, the second factor included items suggesting difficulty in dealing both with activities and with other people. We call this "difficulty coping" and believe that it may indicate more severe depression because of the impression that people who are high on this factor are withdrawing from others and having trouble functioning. Finally, items such as "The best part of me died with the baby," "I try to laugh but nothing seems funny anymore," and "It is safer not to love" describe a level of what we have called "despair," which suggests the potential for serious and long-lasting effects for the loss.

We considered 84 items to be too long for the scale to be easily utilized by other researchers and by clinicians working with bereaved families. Therefore, while keeping the same factor structure, we analyzed the interitem correlation matrix for each factor or subscale. The items which had low correlations with most of the other items in the scale were dropped. Cronbach's alpha was computed again on the remaining items, and those with item-total correlations that were lower than most were omitted. Finally, a check for single factorness was done using maximum-likelihood factor analysis on each scale, leading to the elimination of items which did not belong as part of that single factor. The final result was three subscales, each consisting of 11 items (see Appendix A for a complete list). Six of the 33 items were taken from

the Texas Inventory of Grief, a somewhat smaller proportion compared to 24 items in the original 104-item PGS.

The purpose of the present paper is to compare the short and long versions of the scale and to examine the usefulness of the three-factor structure. The factor analysis has several advantages which speak to the limitations on measurement cited above in the review of literature. First, it permits the elimination of items which are unimportant in explaining the variance in a particular dimension. Second, it allows us to ascertain the dimensions of grief identified by the subjects themselves, rather than analyzing the results based on the categories which we thought *should* be important. Third, in this instance it succeeded in sorting the items into three factors of increasing severity, allowing us to distinguish those individuals who are high on "normal" grief from those who are experiencing more debilitating, and presumably longerlasting, reactions.

We have called this measure the Perinatal Grief Scale, even though it was used with individuals who experienced losses at all stages of pregnancy. While, strictly speaking, the perinatal period refers only to the time between the 28th week of gestation and 28 days after birth, the term hag increasingly been used in medical settings to refer to the entire pregnancy and postpartum period.

METHOD

Study Design

The perinatal loss project employed a longitudinal design which included a "retrospective pretest" (Campbell & Stanley, 1963) of the loss group and three waves of interviews at 6 to 8 weeks following the loss, 1 year later, and 2 years later. The women who had agreed to participate in the study were interviewed in their homes. The semistructured interview included openended questions as well as structured scales and closed-ended items, covering the circumstances of the loss, fertility history, quality of the marital relationship, mental-health status of the respondent, social support\$, stressful life events and conditions, religiosity, effects on the children, and demographic variables. The PGS was self-administered during that interview, with the help of the interviewer if necessary.

Sample

One hundred thirty-eight women who had experienced a perinatal loss were recruited by participant physicians in 22 obstetrical clinics and private

32

obstetrical and gynecological practices in the Allentown-Bethlehem-Easton (Pennsylvania) area. The losses included spontaneous abortion (63 women), ectopic pregnancy (18 women), fetal death (39 women), and neonatal death (18 women). The request to participate was made by the office of clinic staff at the time of the woman's 4-to-6-week checkup. Although the husbands (or partners) were also interviewed whenever possible, only 56 men participated. The current analysis, therefore, is based on the women only.

The great majority of the women in this sample were, at the time of the interview, living with their husband or partner. Their mean age was 28.5 years and they had an average of 13.5 years of education. Eighty-six percent were white, and less than 1% were Black; the remainder were Hispanic and "other." They represented a wide range of socioeconomic statuses. Two-thirds of them had never experienced a pregnancy loss before. In our sample, spontaneous abortions are heavily represented, and 55% of the losses occurred prior to the 16th week of pregnancy.

The clinics and private practices were asked to provide information about demographic characteristics, length of the pregnancy, and history of previous losses for both women who agreed to participate and those who refused (25.4%). There were no significant differences between these two groups. Hoever, due to the demographic composition of the area where we selected our sample (the small proportion of Blacks, in particular), it may not be representative of all people experiencing loss nationwide.

RESULTS

To assess the psychometric properties and the adequacy of this short version of the PGS, we conducted five categories of analyses. (1) We assessed the reliability of the total scale and of each subscale by means of item analysis and Cronbach's alpha. (2) We showed the adequacy of the item reduction to maintain the factorial structure previously identified with the 84-item version. (3) We examined the distribution of scores within each subscale for different subgroups as a check on construct validity. (4) We tested the consistency between results obtained with both the long and the short versions. (5) We considerd the test-retest reliability of the PGS using 1-year followup data. The complete matrix of interitem correlations is reproduced in appendix B.

Reliability

The reliability of the total scale and of each subscale was assessed separately and the results are presented in Table I. The total scale shows the

Potvin,	Lasker,	and	Toed	ter
---------	---------	-----	------	-----

SC	ale of the FOS-S			
	1997 N. 19	S	Subscal	e
	Total scale	I	II	III
Reliability				
Cronbach's alpha	.95	.92	.91	.86
Internal consistency				
Average interitem				
correlation	.40	.52	.48	.38
Lowest interitem				
correlation	.03	.34	.34	.19
Highest interitem				
correlation	.77	.77	.61	.69
Average item-total				
correlation ^a	.60	.69	.66	.57
Lowest item-total				
correlation ^a	.38	.58	.60	.46
Highest item-total				
correlationa	.75	.79	.74	.75

Table I. Reliability	Analysis for	Three Subscales	and the Total
	Scale of th	ne PGS-S	

^aThe item-total correlation is computed without including the item in the total score.

highest values for Cronbach's alpha. However, the value for each subscale is higher than .85, indicating very reliable subscales. The analysis of the interitem correlations indicated that the first subscale showed the highest consistency of results. The third subscale showed the lowest consistency, with the widest range (among subscales) of interitem correlations (from .19 to .69). However, it is the total scale that showed the lowest average interitem correlations (.38) and the widest range for both the interitem and the item-total correlations.

This lowest consistency and highest alpha for the total scale do not necessarily contradict each other. The formula for Cronbach's alpha puts an important weight upon the length of the scale. With three times more items than any of its subscales, one can expect that the total scale will have a higher alpha. However, considering the very high alphas for the subscales even with a relatively small number of items, and considering also that each of them shows a relatively high degree of consistency, we may conclude that each subscale gave a consistent and reliable estimate of the concept it is supposed to measure and that these concepts are related to each other. If this is true, the high reliability of the total scale, besides being due to the large number of items, is also caused by highly consistent, related measures (the three subscales), even though the interitem interscale correlations are relatively low when considered one by one. In fact these low interitem interscale correlations are a sign that our three subscales are tapping different aspects of grief.

34

Factor Structure

The results of four series of factor analyses are presented in Table II. In this table, the items are grouped according to the subscale to which they belong. Columns 3 through 5 show the factor loadings after Varimax rotation, for each item on three factors extracted by principal axis factoring (SPSSX 1986) from the 33 items contained in the total scale. Column 6 is the communality of each item with the three factors extracted. The last row is the eigenvalue of each factor after rotation. The last column is the result of three different factor analyses. Each of the 3 sets of 11 items was factor analyzed on a single factor.

 Table II. Factor Loadings of Each Item in a Factor Analysis for 33 Items and for the 11 Items of the Subscale to Which It Belongs

Subscale	Item	F1	F2	F3	h2	Loading on its subscale
Active Grief	1	.660ª	.392	.194	.627	.792
Active Offer	2	.600 .627ª	.392	.194	.567	.732
	3	.627 .634ª	.393	.135	.307	.664
	4	.818 ^a	.229	.071	.439	.835
	5	.457	.238 .579°	.021	.553	.626
	6	.437 .761ª	.167	.156	.631	.803
	7	.603ª	.097	.130	.390	.603
	8	.003 .724 ^a	.097	.132	.590	.727
	9	.724 .753ª	.083	.319	.676	.775
	10	.735 .496ª	.150	.450	.471	.611
	10	$.490^{a}$.281	.450	.646	.738
Difficulty Coping	1	.344	.201 .443ª	.329	.040	.691
Difficulty Coping	2	.344	.445 .549ª	.329	.422	.635
	2			.514 .552ª	.440 .476	.676
	3	.162	.380 .370	.332 .385ª	.470	.676
	5	.302		.385 .506°	.454	.669
	6	.227	.383 .476 ^a		.434	.702
	7	.234		.393 .357	.592	.719
	8		.638ª	.557	.592	.678
		.382	.290			
	9	.474	.517ª	.368	.627	.745
	10	.292	.467	.539ª	.595	.778
	11	.154	.329	.629 ^a	.528	.678
Despair	1	.024	.259	.483ª	.301	.516
	2	.100	.055	.470 ^a	.234	.470
	3	.059	.053	.541ª	.299	.526
	4	.209	.342	.474ª	.385	.643
	5	.219	.108	.711ª	.565	.702
	6	.272	.223	.739ª	.670	.783
	7	.131	.095	.517ª	.294	.529
	8	.138	.298	.730 ^a	.641	.822
	9	.070	.339	.508"	.378	.581
	10	.285	.542ª	.348	.497	.589
	11	.142	.298	.484"	.343	.605
Eigenvalue		5.996	4.002	6.445		

"Factor for which the loading is highest.

The results of the factor analysis extracting three factors from the 33-item version differ slightly from the results obtained with the 84-item version. The main difference concerns the Difficulty Coping subscale, whose items were less related to other factors in the 84-item factor analysis.

The factor analysis done on 33 items shows that the three factors explain 49.8% of the total variance. After rotation, the first factor is associated with 19.5% of the total variance, the second with 19.1%, and the third with 19.5%. The items on the Despair scale are all highly associated with the third factor and only one is most highly associated with Active Grief. The 11 items on the Active Grief subscale are all highly associated with Difficulty Coping. The items of the Difficulty Coping subscale present a different pattern of results. Even though most of them are highly associated with the second factor, half of the items share more variance with the third factor. This general pattern among the factor loadings indicates that the Difficulty Coping subscale shares more variance with each of the other subscales than the latter share with each other. In that respect the Difficulty Coping subscale may be seen as an intermediate state between active grief and despair.

The correlation between subscales adds evidence to support that hypothesis. The correlations are all relatively high. The lowest (.56) is between Active Grief and Despair, while the highest (.80) is between Difficulty Coping and Despair, showing clearly that these two states are closely related. Given that close relationship, one may wonder about the advantages of keeping the Difficulty Coping subscale as a distinct one. From the factor analysis, it is very clear that Active Grief and Despair are different aspects of grieving. The link between them appears to be the Difficulty Coping subscale. Integrating the latter within Despair would attenuate this distinction, while deleting it would weaken the total scale, since it is this subscale with which the total scale has the highest correlation.

Another argument for keeping the Difficulty Coping subscale as a distinct one comes from the factor analyses extracting a single factor from each subset of 11 items, the results of which are shown in the last column in Table II. The loadings are all very high, showing that each of them is highly associated with the concept underlying the subscale to which they belong. These single factors share 52.3% of variance in the case of the Active Grief subscale, 48.0% in the case of the Difficulty Coping subscale, and 39.0%in the case of the Despair subscale. The internal consistency of the Difficulty Coping subscale is almost as high as it is for the Active Grief subscale.

Score Distributions

An important characteristic of the PGS is that it can distinguish between women experiencing a "normal" grieving process and women who seem

Table III. Mean, 95% Confidence Interval, and Standard deviation of Subscales and Total Scale for (A) The total group and for Subgroups Divided by (B) Gestational Age at the Loss and (C) Type of Loss^a

		Active Grief	Grief	Difficult	Difficulty Coping	Des	Despair	Total	Total Scale
		Mean SI (95% CI)	CI) SD	Mean SI (95% CI)	sD CI)	Mean (95% 0	an SD (95% CI)	Mean (95%	an SD (95% CI)
(+	(A) Total ($N = 138$)	35.75 10.14 (34.04-37.46)	10.14 37.46)	24.09 9.03 (22.57–25.61)	4.09 9.03 (22.57–25.61)	22.26 7.41 (21.01-23.50)	7.41 23.50)	82.10 23.61 (78.13-86.08)	.10 23.61 (78.13-86.08)
(B)	Gestational age $0-15$ weeks ($N = 82$)	32.55 9.93 (30 37-34 73)	9.93	22.16 8.41 (20.31-24.01)	2.16 8.41 (20.31-24.01)	20.88 6.51 (19.45-22.31)	0.88 6.51	75.58 21.97 (70.76-80.42)	5.58 21.97 (70.76-80.42)
	16-27 weeks (N = 34)	37.71 8.06 (34.89-40.52)	8.06	25.56 8.05 (22.75-28.37)	5.56 8.05 (22.75-28.37)	23.41 7.83 (20.68–26.14)	3.41 7.83 (20.68-26.14)	86.68 21.37 (79.22-94.13)	5.68 21.37 (79.22-94.13)
	28 weeks & over $(N = 22)$	44.64 7.69 (41.23-48.04)	7.69 48.04)	29.05 10.65 (24.32-33.77)	9.05 10.65 (24.32-33.77)	25.64 8.74 (21.76-29.51)	5.64 8.74 (21.76-29.51)	99.32 23.37 (88.96-109.68)).32 23.37 (88.96-109.68)
	(C) Type of loss Spont. abort. $(N = 63)$	31.85 10.18 (29.29-34.42)	10.18 34.42)	21.40 8.32 (19.30-23.49)	1.40 8.32 (19.30–23.49)	20.51 6.83 (18.79-22.23)	0.51 6.83 (18.79–22.23)	73.76 22.67 (68.05-79.46)	3.76 22.67 (68.05-79.46)
	Ectopic $(N = 18)$	33.93 9.78 (29.06–38.79)	3.93 9.78 (29.06–38.79)	24.17 (19.74-28	8.89 -28.59)	22.06 5.75 (19.19-24.92)	2.06 5.75 (19.19-24.92)	80.15 21.03 (69.69-90.61)).15 21.03 (69.69-90.61)
	Fetal death $(N = 39)$	39.92 8.25 (37.25-42.60)	9.92 8.25 (37.25-42.60)	26.97 8.53 (24.21-29.74)	6.97 8.53 (24.21–29.74)	24.41 7.70 (21.91-26.91)	4.41 7.70 (21.91-26.91)	91.31 21.16 (84.45-98.17)	(.31 21.16 (84.45-98.17)
	Neonatal ($N = 18$)	42.17 7.70 (38.34-46.00)	0.17 7.70 (38.34-46.00)	27.22 (22.08-	27.22 10.34 (22.08-32.36)	23.94 9.01 (19.46–28.43)	3.94 9.01 (19.46-28.43)	93.33 24.16 (81.32-105.35)	1.33 24.16 (81.32-105.35)

,

 \bigcirc

Perinatal Grief Scale

37

to be at risk of more severe consequences from their loss. Table III shows that going from Active Grief to Despair, the means decrease sharply [F(2, 274) = 276, p < .001]; this comparison can be made since the number of items per subscale is equal. This decrease in the means indicates that high levels of Active Grief are more prevalent in the sample than are high levels of Difficulty Coping or Despair.

We can think of these three subscales as indicators of the problems one faces following the loss of a baby or a pregnancy. "Active grief" seems to be a frequent phenomenon and its moderately strong association with gestational age at the time of the loss (r = .430) contributes to the hypothesis that it is a normal feeling. "Difficulty coping" and "despair" affect most people to a lesser degree. There is a very high correlation between Difficulty Coping and Despair (.80); this may be due to the large number of people who are low on both subscales. The moderately high correlation between those subscales and Active Grief (.70 and .56, respectively) indicates a strong association among the three scales. Those who are low on Active Grief are also low on Difficulty Coping and Despair.

These observations suggest that each subscale represents a qualitatively different aspect of grieving and that there is a progression in the severity of subscales from Active Grief to Despair. This adds to the construct validity of the scale. One would expect the more severe manifestations of grief to be less common and that those who experience the most troubled reactions would also be likely to report the more common symptoms of grief.

One might argue that rather than representing qualitatively different responses to a single event, these subscales represent responses to different types of loss. If so, we should observe a very different pattern of results with each type of loss or with each category of gestational age at the time of the loss. This is not the case, as shown in Table III. The subgroups differ from each other primarily on Active Grief, which makes sense since one would expect that the normal grieving process would be highly responsive to the length of preganancy. The patterns are not so different, however, for Difficulty Coping and Despair. In particular, there are no significant differences in Despair among the four loss groups, indicating that a more severe response is not tied to the characteristics of the event.

Comparison Between the Long and the Short Versions of the PGS

The short version of the PGS is essentially equivalent to the long one. The very high correlations between the subscales of the long and those of the short versions (ranging from .94 to .96) and the correlation of .98 between both versions of the total score provide evidence that they are measuring essentially the same thing. We also correlated each subscale of both

38

versions with 19 other variables included in our study. A comparison of the two sets of correlations shows that both versions result in similar correlations.

Test-Retest Reliability

The longitudinal nature of the research allowed us to administer the PGS to the same sample approximately 12 to 15 months after the first interview. Of the 138 women who participated in the study, 112 could be interviewed a second time, and the test-retest reliability was computed using only these 112 women. It should be noted that, unlike other scales which are expected to measure a stable trait, we had predicted that the level of grief would decline over time, as indicated by all of the studies in this field. Thus, the correlations between first- and second-round responses should be significant but not as high as the initial internal reliability.

This proved to be the case. Correlations between the first and the second rounds for each of the three factors and for the total scale range from .59 to .66, all at a significance level of <.001. These results demonstrate the stability of the measure and of the factors over time but also reflect the fact that the mean scores are all lower at the time of the second interview than at the first.

The PGS and Depression

Since grief has a great deal in common with depression, we were interested to see how closely related the PGS is to a measure of depression. We used an abbreviated version of the Symptom Checklist 90 (Derogatis, Rickels, & Rock, 1976) and compared the depression subscale to our total grief scale. The two measures were highly correlated (r = .785). This is to be expected since not only is depression a major component of grief, but both scales are symptom-based self-report measures. However, when one looks at the PGS subscales, an interesting pattern emerges. The scale which correlates most with depression is, as we expected, Difficulty Coping (r =.798), since this is the one which most represents a picture of depressive reaction. Despair, however, correlates with depression at .677, and Active Grief at .620, suggesting that these represent different and important dimension**S** of grief which are not assessed by standard measures of depression.

DISCUSSION AND CONCLUSION

These results are very encouraging, both from a psychometric and from theoretical and clinical perspectives. From a psychometric point of view, there

is an high internal reliability as measured by Cronbach's alpha for both the total scale and each of the three subscales. There is also evidence of construct validity in the distribution of scores in each subscale, confirming that, as the form of grief becomes more severe and debilitating, smaller numbers of bereaved are affected. Comparability and consistency with the long version of the factor structure give us confidence that the 33-item version is as powerful a measure as the 84-item version and a definite improvement over the original 104-item scale.

0

We are well aware that the sample is not as large as we would like, nor does it include enough minority women, teenagers, and unmarried women to be representative of the women who experience losses outside the Lehigh Valley region. However, Kirkley-Best's (1981) study, which is most like the present one in including women who have had miscarriages, stillbirths, and neonatal deaths and interviewing them approximately 1 month following the loss, had very similar results to ours regarding the variables most highly correlated with grief, and she had a sample that was 60% Black and 45% unmarried. This gives us some confidence that the possible bias introduced by the composition of the sample is not a serious one.

These analyses should also be carried out with a larger sample of bereaved fathers. Our sample of men was too small to carry out the analyses on them separately, as we believed it essential to analyze the men separately from the women. A replication of the factor structure found with the sample of women would add validity to the scale. Since the structure reflects severity of grief, it is possible that it will be the same for males.

Given these encouraging results, efforts are now under way to increase the numbers of both men and women filling out the shorter form of the PGS. It is our intention to repeat the reliability and factor analyses on a considerably larger number of cases derived from other practices and other regions of the country.

From a clinical point of view, it seems that the three subscales make it possible to distinguish people who are high on Active Grief from those who are high on Despair or Difficulty Coping. Therefore it would be possible to identify shortly following a loss the people who are suffering the most severe effects and who are likely to have the most difficult time recovering. Those who are identified as "high-risk" are not necessarily the people who are crying the most; they are the ones who may be disturbed to the extent that they cannot cope with their daily lives and are withdrawing from the friends who might have been able to help them. They are the ones for whom the meaning of life has been seriously diminished, who are afflicted with a sense of hopelessness about themselves and their future. It is these aspects of grief which have been identified clinically as an important aspect of "pathological grief" (Bugen, 1977). Bugen (1977) describes an intense grief reaction

in similar terms: "Experientially, the intensity of our grieving is directly related to a personal feeling of depression and a profound belief that our lives have been hopelessly altered. This conviction of helplessness and utter despair may be so severe that the death of the mourner results" (Bugen 1977, p. 200).

Can this scale be used for other types of bereavement? Although the measure was designed with perinatal loss in mind, the items are easily modified to substitute the words "deceased" or "him or her" in the place of "the baby," and "bereaved person" instead of "bereaved parent." It would need to be given to people with other kinds of losses to determine its validity for anything other than pregnancy loss, but we suspect that it may prove to be useful.

The PGS is the only measure of grief after perinatal loss of which we are aware that has been checked for reliability and for internal consistency. It is a brief checklist which can be administered easily to people who have suffered all types of pregnancy losses and which can be very useful to perinatal bereavement teams, counselors, and health professionals who have been providing support for families.5

ACKNOWLEDGMENTS

Many people have contributed to this work; thanks in particular to Carole Reese for direction of interviewing and coding, Janice Alhadeff for data management and analysis, Patricia Gerstenberg for typing, and Kandi Stinson for comments.

REFERENCES

Benfield, G., Leib, S., & Volman, J. (1978). Grief response of parents to neonatal death and parent participation in deciding care. Pediatrics, 62, 171-177.

Blanchard, C. G., Blanchard, E. B., & Becker, J. V. (1976). The young widow: Depressive symptomatology throughout the grief process. Psychiatry, 39, 384-399.

Bugen, L. A. (1977). Human grief: A model for prediction and intervention. American Journal of Orthopsychiatry, 42, 196-206.

Campbell, D. T., & Stanley, J. (1963). Experimental nd Quasi-Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally College.

Clayton, P. J., Desmarais, L., & Winokur, G. (1968). A Study of normal bereavement. American Journal of Psychiatry, 125, 168-178.

13

⁵The authors welcome the use of the Perinatal Grief Scale by other researchers and clinicians and would ask that the results be shared with us as part of our effort to enlarge and diversity the sample. Scoring instructions and an accompanying cover sheet for demographic and other related information may be obtained from Dr. Lasker.

Cullberg, J. (1971). Mental reactions of women to perinatal death. Psychosomatic Medicine in Obstetrics and Gyneocology, 326-329.

(

Derogatis, L. R., Rickels, K., & Rock, A. F. (1976). The SCL-90 and MMPI: A stop in the validation of a new self-report scale, *British Journal of Psychiatry*, 128, 280-289.

Forrest, G. C., Standish, E., & Baum, J. D. (1982). Support after perinatal death: A study of support and counseling after perinatal bereavement. *British Medical Journal*, 285, 1475-1479.

Freud, S. (1917). Mourning and melancholia. *The Complete Psychological Works of Sigmund Freud* (Vol. 14). New York: W. W. Norton.

Jacobs, S., & Ostfeld, A (1977). An epidemiological review of the mortality of bereavement. *Psychosomatic Medicine*, 39, 344-357.

Kennell, J. H., Slyter, H., & Klaus, M. H. (1970). The mourning response of parents to the death of a newborn infant. *New England Journal of Medicine*, 283, 344-349.

Kirkley-Best, E. (1981). Grief in response to prenatal loss: An argument for the earlier maternal attachment. Unpublished doctoral dissertation. Gainesville: University of Florida.

Kirkley-Best, E., & Kellner, K. (1982). The forgotten grief: A review of the psychology of stillbirth. American Journal of Orthopsychology, 52, 420-429.

Osterweis, M., Solomon, F., & Green, M. (Eds.), (1984). *Bereavement: Reactions, Consequences,* and Care. Washington, DC: National Academy Press.

Parkes, C. M., & Weiss, R. S. (1983). Recovery from Bereavement. New York: Basic Books. Peppers, L. G., & Knapp, R. J. (1980). Maternal reactions to involuntary fetal/infant death. Psychiatry, 43, 155-159.

Sanders, C. M., Mauger, P. A., & Strong, P. N. (1985). A Manual for *The Grief Experience Inventory*. Palo Alto, CA: Consulting Psychologists Press.

Toedter, L., Lasker, J., & Alhadeff, J. (1988). The Perinatal Grief Scale: Development and initial validation. *American Journal of Orthopsychiatry*, 58, 435-449.

Videka-Sherman, L., & Lieberman, M. (1985). The effects of self-help and psychotherapy intervention on child loss: The limits of recovery. American Journal of Orthopsychiatry, 55: 70-82.

Williams, W. V., & Polak, P. (1979). Follow-up research in primary prevention: A model of adjustment in acute grief. *Journal of Clinical Psychology*, 35, 35-45.

Zisook, S., Devaul, R. A., & Click, M. A. (1982). Measuring symptoms of grief and bereavement. American Journal of Psychiatry, 139, 1590-1593.

42

APPENDIX A

Table AI. Perinatal Grief Scale (33-Item Version)^a

Subscale I: Active Grief

- 1. I feel depressed
- I feel empty inside 2.
- I feel a need to talk about the baby 3.
- I am grieving for the baby 4.
- 5. I am frightened

- 6. I very much miss the baby
- It is painful to recall memories of the 7.
- loss 8. I get upset when I think about the baby
- 9. I cry when I think about him/her
- Time passes so slowly since the baby
- 10. died
- I feel so lonely since he/she died 11.

Subscale II: Difficulty Coping

- I find it hard to get along with certain 1. people
- I can't keep up with my usual activities 2.
- I have considered suicide since the loss 3.
- I feel I have adjusted well to the loss^b 4
- I have let people down since the baby died 5.
- I get cross at my friends & relatives 6.
- more than I should
- Sometimes I feel like I need a profes-7. sional counselor to help me get my life together again
- I feel as though I am just existing and 8. not really living since he/she died
- I feel somewhat apart and remote even 9. among friends
- I find it difficult to make decisions since 10. the baby died
- It feels great to be alive^b 11.

Subscale III: Despair

- I take medicine for my nerves 1.
- I feel guilty when I think about the 2. baby
- I feel physically ill when I think about 3. the baby
- I feel unprotected in a dangerous world 4 since he/she died
- I try to laugh but nothing seems funny 5. anymore
- The best part of me died with the baby 6.
- I blame myself for the baby's death 7
- I feel worthless since he/she died 8.
- 9. It is safer not to love
- I worry about what my future will be 10.
- Being a bereaved parent means being a 11. second-class citizen

"The items are not in the order in which they have been used.

^bItems should be reversed before analysis.

.

440

•

0

	*
Mean	8
	86.
11110	54. 196
6111	ين يز يز
1118	4 8 8 8
1117	84. 19. 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
1116	4 6 9 5 4 4 4 4 9 9 5 7 4 4 4
1115	S E S 4 8 8 4
1114	2, 6, 6, 7, 7, 8, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9,
1113	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
1112	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
ШП	23 1 1 2 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1
Mcan	8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Ш	
1110	8, 5, 6, 6, 6, 6, 7, 8, 8, 8, 9, 4, 4, 6, 7, 8, 8, 8, 9, 4, 4, 7, 7, 8, 8, 8, 9, 4, 4, 7, 7, 8, 8, 8, 9, 4, 4, 1
119	Ω & Ω 24 ≅ Ω Ω 2 4 9 38 8 6 3 4 6 1
118	8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
117	¥ 5, 9, 8 9, 8, 5, 1, 2, 1, 2, 1, 5, 1,