Self-Report Measures of Mood and Morale in Elderly Depressives

C. J. GILLEARD, M. WILLMOTT and K. S. VADDADI

Summary: Two self-report scales of mood and morale were administered to 45 elderly in-patient depressives and 45 non-patient controls, matched for age and sex. The responses of the two groups differed significantly in the predicted direction. When 18 patients from the depressive group were re-tested 6 to 8 weeks later, at discharge, significant declines in self-reported depression, and increases in 'life-satisfaction' were reported. Within the depressive group, there was a significant relationship between 'overt' depressive behaviour on the ward and self-reporting of greater depressive symptoms, and lower 'life-satisfaction'. The importance of independent validation of self-report measures of mood and morale in elderly populations is discussed.

Despite the fact that depression remains the most common psychiatric disorder in the elderly (Gurland, 1976), and is also one of the health problems most frequently missed by general practitioners (Williamson et al, 1964), little research interest has been shown in developing instruments to identify and measure emotional states in the elderly. The validity of existing self-report measures of depression with elderly subjects has recently been questioned by several studies (Blumenthal, 1975; Harmatz and Shader, 1975; Zemore and Eames, 1979; Oltman et al, 1980). These have indicated that the pattern of response to such self-report measures by elderly subjects is distorted by the overlap between typical depressive symptomatology and changes associated with the ageing process itself. Thus, alterations in sleep, appetite, drive, social and cognitive behaviour, and in physical health and vigour, associated with ageing, are seen as leading to apparently 'depressive' responses, which do not truly reflect clinical depressive conditions. It has also been argued that age produces a differential pattern of response to depression questionnaires, with somatic 'psychological' symptoms being preferentially responded to, while emotional-'psychological' symptoms are under-reported (Gaitz and Scott, 1972; Schwabb et al, 1973; Zemore and Eames, 1979). On the other hand, some workers have suggested that age leads to a significant under-reporting of symptoms on self-rating scales, both in clinical populations (Paykel and Prusoff, 1973) and in the general population (Craig and Van Netta, 1979).

Such confusing evidence, serves to emphasize the importance of independently validating self-report measures of emotional disorder within elderly groups, if effective screening instruments are to be developed. Since many self-report measures are administered as quasi-structured interviews with the elderly, it is clear that the problems involved are not limited to pencil and paper evaluations.

Janke and Baitsson (1979) in a recent review of this field have noted that the principal 'measures' developed specifically with elderly populations have been life-satisfaction or morale questionnaires, which are usually considered to reflect fairly stable traits or attitudes, rather than emotional states. However, there is some evidence to indicate considerable common variance between 'mood' and 'morale' scales (Morris et al, 1975) which makes it possible that life-satisfaction questionnaires can function as effectively as standard self-report mood questionnaires in evaluating emotional disorders.

In the light of these issues, the present study examined the effectiveness of two questionnaires, designed to measure mood and morale respectively, in identifying and measuring clinical depression in the elderly.

Method

Measures: Both scales were selected because they had been developed with and applied to elderly populations, and could be administered either as written questionnaires or within a structured interview.

(i) A 10-item depression scale, drawn from the depression section of the structured interview employed by Schwebb et al (1973) in their study of age and mental health.
(ii) An 8-item life-satisfaction scale developed by Bigot from a longer life-satisfaction inventory (Bigot, 1974).

Both scales are reproduced in the Appendix.

Subjects: The patient samples were drawn from a general psychiatric admission ward at Stanley Royd Hospital, Wakefield (15) and a psychogeriatric 'functional' ward at the Royal Edinburgh Hospital (30). Patients were mostly consecutive admissions and were asked to complete the questionnaires within the first week of admission and, when possible, 6–8 weeks later at discharge. All patients had a clinical diagnosis of depression, without signs of organic deterioration. Amongst the Edinburgh sample, a significant proportion (8) were also considered to have long-standing personality disorders, which contributed to their admission. Sex and age distribution was similar in both Edinburgh and Wakefield populations (9 men and 21 women, mean age 73.9 (sd 5.4) in Edinburgh; 5 men and 10 women, mean age 71.9 (sd 6.0) in Wakefield).

The control samples were drawn from a general adult volunteer pool at the Royal Edinburgh Hospital, together with some additional elderly volunteers drawn from local day centres. All were living independently in the community, and none were receiving psychiatric attention. There were 45 subjects in all (15 men, 30 women, mean age 71.4 (sd 7.1). All volunteers seemed motivated to report honestly on their feelings.

Procedure: While most of the volunteers completed the questionnaires independently, the majority of patients initially completed them in the presence of an examiner, in many cases with the questions being read out. Eighteen of the patients had the questionnaires re-administered to them 6–8 weeks later, at discharge. Early discharge, or protracted length of stay accounted for the other patients who did not complete a second testing.

On the Edinburgh unit, a record has been maintained of the occurrence of a set of 16 symptom-sign observations in all admissions. In the present study, two of these items—observed weeping and 'expresses the wish to die' were used to sub-divide this sample into those with such overt depressive features and those without.

Results

The scores from the depression and life-satisfaction scales were compared between the depressive patients and the controls. It was expected that if self-report measures are valid in an elderly population, there should be significant differences in scores between the two groups. The life-satisfaction questionnaire is made up of two sub-scales—'current contentment' and 'satisfaction with past achievement'—which combine to form the total life-satisfaction score. Since the 'past achievement' sub-scale may well reflect a more stable 'attitudinal' component of morale, no predictions were made about its validity to distinguish between the two groups, although both 'current contentment' and 'total life-satisfaction' were expected to differentiate the depressives from the controls. Mean scores and their standard deviations are presented in Table I, together with the results of t-tests for the significance of the differences between each group's mean scores.

Significant differences exist on all four scales: the depressives report higher depression scores, lower 'contentment' and 'past achievement' and lower overall life-satisfaction.

If the scales are sensitive measures of mood, it might be predicted that significant reductions in the reporting of depressive symptoms, and significant increases in life-satisfaction scores would occur.

<table>
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<th>Table I</th>
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<tr>
<td>Depression scale and life-satisfaction scale scores for elderly depressive in-patients and normal controls</td>
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<td>Depressives (n = 45)</td>
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<td><strong>x</strong></td>
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<tr>
<td>Depression scale</td>
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<td>Life-satisfaction (contentment factor)</td>
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<td>Life-satisfaction (achievement factor)</td>
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<td>Life-satisfaction (total score)</td>
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*** P < .001.
between admission and discharge. The results of re-testing 18 of the patients 6-8 weeks later, at discharge, are presented in Table II. The scores on admission and at discharge from all four scales were compared and Z ratios calculated to test the significance of any changes in scores. The values of Z for each comparison are also shown.

The results indicate a significant reduction in self-reported depressive symptoms, a significant increase in total life-satisfaction, contributed chiefly by a significant increase in the ‘contentment’ sub-scale. The ‘past achievement’ sub-scale shows no significant change—a finding which supports the view that this construct is a more stable and attitudinal variable in determining general life-satisfaction.

At admission, this sub-sample of depressives did not score significantly differently from the depressive group as a whole. At discharge, compared with the normal control sample, the only significant difference in their scores is on the ‘past achievement’ sub-scale (t = 2.01, df 61, P < .05). The discharged patients continue to obtain lower scores then, presumably indicating a lower level of satisfaction with

### Table II

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<th>Admission (n = 18)</th>
<th>Discharge (n = 18)</th>
<th>Difference between means Z</th>
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<td>x</td>
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<tr>
<td>Depression scale</td>
<td>15.06</td>
<td>(6.47)</td>
<td>9.23</td>
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<tr>
<td>Life-satisfaction (contentment factor)</td>
<td>2.38</td>
<td>(1.73)</td>
<td>5.33</td>
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<tr>
<td>Life-satisfaction (achievement factor)</td>
<td>4.21</td>
<td>(2.18)</td>
<td>4.50</td>
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<tr>
<td>Life-satisfaction (total score)</td>
<td>6.60</td>
<td>(3.04)</td>
<td>9.83</td>
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** P < .01  
*** P < .001

### Table III

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<th>Frequency of life-satisfaction scale item* endorsement by Edinburgh and U.S.A. elderly normals</th>
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<td>Item</td>
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their past life than the normal elderly group, despite the lifting of their mood.

Next, examination was made within the depressive group, of the relationship between self-report and observed overt depressive signs. In the Edinburgh sample, 11 patients were recorded as having spent some time weeping, and/or expressing the wish to die. Comparison of the responses of this group of ‘overtly’ depressed patients with the remaining 19 without these signs indicated significant differences in depression score (‘overt’ mean = 20.3 (sd 5.8), ‘others’ mean 11.3 (sd 5.8); t = 3.3, df 28, P < .01); in total life-satisfaction score (‘overt’ mean = 5.9 (sd 2.8), ‘others’ mean 8.1 (sd 3.0); t = 3.5, df 28, P < .01); in contentment score (‘overt’ mean = 1.1 (sd 1.4), ‘others’ mean 2.8 (sd 2.3); and in achievement score (‘overt’ mean = 2.8 (sd 2.1), ‘others’ mean 5.3 (sd 1.6), t = 3.2, P < .01). While it is not suggested that the ‘overt’ depressive behaviour recorded is a measure of clinical severity, these results do suggest a systematic relationship between the self-report of elderly depreessives and their overt behaviour on the ward. Since recording of signs and completion of questionnaires were done with no knowledge of each other, contamination effects are likely to be minimal.

Finally, in order to compare the present ‘volunteer’ sample with general elderly population norms, their responses to the life-satisfaction questionnaire items were compared with those from a nationwide stratified random sample of aged Americans (Louis Harris and Associates, 1975), examining percentage agreement/disagreement with each of the items. These figures are presented in Table III.

It can be seen that there is a broad measure of similarity between the two samples, suggesting that the ‘morale’ of the present controls does not deviate greatly from a general elderly population, and hence indicates a reasonably representative sample. Preliminary examination was also made of possible age effects in the data by correlating all four scales with age, in the normal sample. The values were, for the depression scale, -.05 (NS); for the life-satisfaction, +.21 (NS); for the contentment sub-scale, +.19, (NS); and for the achievement scale + .09 (NS). Within an over-60 population, no systematic effects occur with increasing age on the reporting of depression or morale items. Comparison of men’s and women’s responses to the questionnaires also revealed no significant differences—depression—males = 8.7 (sd 4.8), women = 9.8 (sd 4.7); contentment—men = 4.9 (sd 2.3), women = 5.0 (sd 2.2); achievement—men = 5.7 (sd 1.8), women = 5.7 (sd 2.3); total life-satisfaction—men = 10.8 (sd 3.6), women = 10.6 (sd 3.4).

It therefore seems that neither of the questionnaires is subject to noticeable age or sex effects within an elderly population, and that the present controls represent a reasonably normative sample.

Discussion

Results have been presented for two questionnaires, measuring mood and morale in the elderly. The depression scale differentiates validly between groups of elderly depressives and controls, is sensitive to change from admission to discharge, and reflects behavioural differences within the depression sample. Life-satisfaction measures are complicated by their multi-dimensionality. However, the scale used in the present study has proved useful, both in distinguishing between groups of clinically depressed and normal elderly persons, and in being differentially sensitive to the effects of change in clinical state.

The finding that satisfaction with past achievement scores differentiated the depressives from the controls, both at admission and discharge, despite a highly significant decline in self-reported depression between the two, is of some interest. It raises the question of pre-disposing personality attributes in elderly depressives. Some time ago, Vispo (1962) demonstrated significant differences in the pre-morbid personality of elderly patients admitted with functional psychoses, compared with age, sex and social status-matched controls. The two most predominant features were ‘intolerance’ and a ‘glum disposition’. The persistently negative evaluations of past life achievement, indicated in the present depressive sample, seem to support the idea of a personality pre-disposition to functional psychiatric illnesses in the elderly.

However, the principal finding of the present study remains the demonstration of the validity of self-report scales within an elderly population. Identification of depressive states in the elderly at home has long been recognized as an important goal in the provision of preventive health care for this group, and the possibility of employing such measures by health and social work staff has been raised (Williamson et al., 1964). Until recently, however, little interest has been shown in this problem, and the issue of developing valid instruments to measure the emotional state in elderly populations has been neglected. Recent research seems to indicate that existing self-report measures of mood disorder, developed on younger adult populations, cannot be assumed to be equally valid with the elderly. Nevertheless, as the present results show, there is no reason to abandon self-report questionnaires or scales of depression and morale as inevitably invalid, when investigating elderly populations.
References


Appendix

Bigot’s Life Satisfaction Index

1. I am as happy now as when I was younger.
2. Compared to others, I get down in the dumbs too often.
3. The things I do are as interesting to me as they ever were.
4. When I look back on my life I didn’t get most of the important things I wanted.
5. These are the best years of my life.
6. Compared to others my age, I’ve made a lot of foolish decisions.
7. I would not change my past life if I could.
8. My life could be happier than it is now.

Schwabb’s Depression Scale (shortened)

1. Do you feel tired in the mornings?
2. How often do you feel alone and helpless?
3. Do you feel in good spirits?
4. How often do you have crying spells, or feel like crying?
5. How often do you have trouble getting to sleep?
6. Have you ever had periods when you couldn’t take care of things because you just couldn’t get going?
7. Do you suffer from a loss of appetite?

Most of the time

(3) True (2) Cannot say (1) False (0)

(3) True (2) Cannot say (1) False (0)

(3) True (2) Cannot say (1) False (0)

(3) True (2) Cannot say (1) False (0)

(3) True (2) Cannot say (1) False (0)

(3) True (2) Cannot say (1) False (0)

(3) True (2) Cannot say (1) False (0)

(3) True (2) Cannot say (1) False (0)
How often do you feel you don't enjoy doing things any more?

(3) (2) (1) (0)

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(Received 24 July; revised 29 October 1980)