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THE MEASUREMENT OF PESSIMISM:
THE HOPELESSNESS SCALE [1]

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A scale designed to quantify hopelessness was administered to several diverse samples of patients to assess its psychometric properties. This scale was found to have a high degree of internal consistency and showed a relatively high correlation with the clinical ratings of hopelessness and other self-administered measures of hopelessness. Furthermore, the scale was sensitive to changes in the patient's state of depression over time. An affective, a motivational, and a cognitive factor were extracted.

Considerable work in recent years has focused on the importance of hopelessness in a variety of psychopathological conditions. Thus, hopelessness has been identified as one of the core characteristics of depression (Beck, 1963, 1967; Melges & Bowlby, 1969) and has been implicated in a variety of other conditions such as suicide (Beck, 1963), schizophrenia (Laing & Esterson, 1965), alcoholism (Smart, 1968), sociopathy (Melges & Bowlby, 1969), and physical illness (Schmale, 1958).

Surprisingly, there has been a dearth of controlled clinical studies designed to explore these relationships. One explanation is that many clinical investigators believe that hopelessness is simply a diffuse feeling state and consequently too vague and amorphous for quantification and systematic study. Stotland (1969), however, in his review of the literature on hopelessness, argued against this belief and proposed that a person's hopelessness can be objectified by defining it in terms of a system of negative expectancies concerning himself and his future life. Although a number of measures of attitudes toward the future have been developed, they have not been designed to quantify hopelessness specifically (Crumbaugh & Maholick, 1969; Gunn & Pearman, 1970; Stein, Sarbin, & Kulik, 1968; Yufit, Benzies, Fonte, & Fawcett, 1970).

In order to facilitate the study of hopelessness in various psychopathological conditions, Beck constructed an instrument designed to reflect the respondent's negative expectancies. This measure has been evaluated in a number of studies and has been found to be reliable, sensitive, and easily administered.

Construction of the Hopelessness Scale

Two sources were utilized in selecting items for the 20-item true–false Hopelessness Scale (HS). Nine items were selected from a test of attitudes about the future structured in a semantic differential format (Heimberg, 1961). These items were then revised to make them appropriate for the present test. The remaining 11 items were drawn from a pool of pessimistic statements made by psychiatric patients who were adjudged by clinicians to appear hopeless. Those statements were selected which seemed to reflect different facets of the spectrum of negative attitudes about the future and which recurred frequently in the patient's verbalizations.

Initially, the scale was administered to a random sample of depressed and nondepressed patients who were apprised of the purpose of the test and who provided their opinions regarding the relevance of the content and clarity of each statement. The scale was then

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appraised by several clinicians regarding the face validity and comprehensibility of the items. Further modifications in wording were made on the basis of the opinions obtained from these sources.

The final format consisted of 20 true–false statements of which 9 were keyed false and 11 were keyed true. For every statement, each response was assigned a score of 0 or 1, and the total "hopelessness score" was the sum of the scores on the individual items. Thus, the possible range of scores was from 0 to 20.

TABLE 1

INTERNAL CONSISTENCY OF THE HOPELESSNESS SCALE

Key	Item	Item-total correlations
True	2. I might as well give up because I can't make things better for myself.	.63
	4. I can't imagine what my life would be like in 10 years.	.39
	7. My future seems dark to me.	.72
	9. I just don't get the breaks, and there's no reason to believe I will in the future.	.64
	11. All I can see ahead of me is unpleasantness rather than pleasantness.	.76
	12. I don't expect to get what I really want.	.70
	14. Things just won't work out the way I want them to.	.63
	16. I never get what I want so it's foolish to want anything.	.67
	17. It is very unlikely that I will get any real satisfaction in the future.	.72
	18. The future seems vague and uncertain to me.	.62
	20. There's no use in really trying to get something I want because I probably won't get it.	.71
False	1. I look forward to the future with hope and enthusiasm.	.69
	3. When things are going badly, I am helped by knowing they can't stay that way forever.	.49
	5. I have enough time to accomplish the things I most want to do.	.50
	6. In the future, I expect to succeed in what concerns me most.	.62
	8. I expect to get more of the good things in life than the average person.	.51
	10. My past experiences have prepared me well for my future.	.49
	13. When I look ahead to the future, I expect I will be happier than I am now.	.66
	15. I have great faith in the future.	.74
	19. I can look forward to more good times than bad times.	.70

Note. All correlations were significant at .01 level.

RELIABILITY

A population of 294 hospitalized patients who had made recent suicide attempts provided the data for determination of the internal consistency of the HS. Table 2 shows the breakdown of this sample by sex, race, age, last grade completed, and civil status.

The internal consistency of the scale was analyzed by means of coefficient alpha (KR-20), which yielded a reliability coefficient of .93.

Scale Intercorrelations

All of the 190 coefficients in the interitem correlation matrix were significant ($N = 294$). The same sample of hospitalized pa-

TABLE 2

DEMOGRAPHIC INFORMATION FOR 294 HOSPITALIZED SUICIDE ATTEMPTERS

Variable	Male (42.5%)	Female (57.5%)
Race (%)		
Caucasian	60.8	43.8
Negro	36.0	55.6
Other	3.2	.6
Age (in years)		
M	31.35	29.84
SD	10.39	9.91
Last grade completed		
M	10.84	10.86
SD	2.37	2.34
Civil status (%)		
Unknown	.8	.0
Cohabitation	2.5	8.9
Single	52.1	33.9
Married	14.1	19.6
Widowed	3.3	2.4
Separated/living apart	23.1	31.0
Divorced	4.1	4.2

tients showed highly significant correlations between each item and the total HS score. The item-total correlation coefficients ranged from .39 to .76 (see Table 1).

VALIDITY

Clinician Ratings

The clinicians in each of the studies used an 8-point scale and included the following indices in arriving at their clinical assessment of severity: Patient believes (*a*) that he will never get well, (*b*) that he will not solve his problems, (*c*) that the future looks black, (*d*) that he has nothing to look forward to, (*e*) that he will not achieve his goals. The global rating took into account the intensity of the negative expectancies and observable behaviors such as the patient's tone of voice and facial expression when talking about the future.

Concurrent Validity

The concurrent validity was determined by comparing HS scores with clinical ratings of hopelessness and with other tests designed to measure negative attitudes about the future.

The correlations of HS total scores with clinical ratings of hopelessness were compared in two samples: (*a*) 23 outpatients in general medical practice and (*b*) 62 hospitalized patients who had made recent suicidal attempts. The correlation with the clinical ratings of hopelessness in the general practice sample was .74 ($p < .001$); with the attempted suicide sample, .62 ($p < .001$). The interrater reliability of the two judges was .86 ($p < .001$).

A population of 59 depressed patients on the psychiatric unit of the Hospital of the University of Pennsylvania was used to validate the HS by comparing it with other measures of hopelessness. At the time of admission, the correlation of the HS with the Stuart Future Test (a semantic differential test; Stuart, 1962) was .60 ($p < .001$); the correlation with the pessimism item of the Depression Inventory (DI) (Beck, 1967) was .63 ($p < .001$). The HS correlated more highly with this item than with any of the other items on the DI.

At the time of discharge, the patients received the same battery of tests. There was a significant reduction in mean scores on the HS and the Stuart Future Test. The changes in the HS scores correlated .49 with change scores on the Stuart Future Test and .49 with the change scores on the DI, respectively ($p < .01$).

Construct Validity

Another index of the validity of the HS was provided by its use as a measure in testing various hypotheses relevant to the construct under investigation. The HS was used in several studies, and, in each case, the hypothesis was confirmed, a finding that supports the construct validity of this instrument.

Among the hypotheses tested and confirmed were the following:

1. Depressed patients have an unrealistically negative attitude toward the future, and these negative expectancies are reduced when the patient recovers clinically from his depression (Vatz, Winig, & Beck, 1969).

2. Seriousness of suicidal intent is more highly correlated with negative expectancies than with depression. The statistical association between suicidal intent and depression is an artifact resulting from a joint attachment to a third variable, namely, hopelessness (Minkoff, Bergman, Beck, & Beck, 1973).

3. Following a successful experience on a card-sorting task, hospitalized depressed patients show an increase in optimism regarding future performance on similar tasks that generalizes to a global improvement in optimism. Failure on this task leads to a significant increase in hopelessness (Beck, 1974).

4. After completing a graded hierarchy of verbal tasks, depressed and nondepressed patients show significant decrements in hopelessness (Beck, 1974).

Factor Analysis

The data obtained from the 294 suicide attempters (see Table 2) were subjected to a factor analysis. Product-moment correlation coefficients were computed, and the resulting correlation matrix was subjected to a princi-

TABLE 3

VARIMAX ROTATED FACTOR MATRIX OF THE HOPELESSNESS SCALE

Item	Factor		
	1	2	3
1	.75	.25	.21
2	.49	.57	.02
3	.22	.50	.07
4	−.08	.11	.65
5	.45	.14	.25
6	.71	.24	.14
7	.39	.34	.54
8	.27	.07	.59
9	.16	.56	.41
10	.25	.16	.41
11	.40	.56	.39
12	.30	.50	.42
13	.74	.31	.07
14	.10	.49	.53
15	.64	.21	.47
16	.14	.80	.15
17	.45	.65	.18
18	.32	.18	.65
19	.50	.41	.37
20	.22	.74	.26
% variance	41.7	6.2	5.6

Note. $N = 294$. Items with loadings greater than .50 were used to identify the meaning of each factor.

pal-components factor analysis with varimax rotation. Three eigenvalues were greater than unity, so three factors were extracted.

The factors and their loadings are presented in Table 3.

The three factors, which made sense clinically, tapped affective, motivational, and cognitive aspects, respectively. Factor 1, defined by Items 1, 6, 13, 15, and 19, revolved around affectively toned associations such as hope and enthusiasm; happy; faith; and good times. This factor is labeled Feelings About the Future. Factor 2, labeled Loss of Motivation, is defined by Items 2, 3, 9, 11, 12, 16, 17, and 20. The items with the heaviest loadings are concerned with giving up: deciding not to want anything; and not trying to get something that is wanted. Factor 3, labeled Future Expectations, is defined by Items 4, 7, 8, 14, and 18 and includes anticipations regarding what life will be like: a dark future; getting good things; things not working out; and the future being vague and uncertain.

EVALUATION

The need for an instrument capable of assessing a respondent's negative expectancies has led to the development of the HS. The underlying assumption is that hopelessness can be readily objectified by defining it as a system of cognitive schemas whose common denomination is negative expectations about the future.

The validity data presented for the HS are deemed sufficient to justify its use on a continuing basis. In the future, the authors hope to obtain more extensive validity evidence pertaining to nonpsychiatric, as well as psychiatric, patients; the base rate of the scale; and its sensitivity through continued clinical use. The HS is an instrument that may be used by both professionals and paraprofessionals involved in the detection and assessment of hopelessness as an important variable in many psychopathological processes.

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