

A SCALE FOR MEASURING EXPERIENCED LEVELS OF EMPTINESS AND EXISTENTIAL CONCERN*

J. D. Hazell Associates

CLIVE G. HAZELL

SUMMARY

Systematic measures are developed, with 270 Ss, predominantly students, for the concepts of experienced levels of emptiness and existential concern. These measures are then correlated with a measure of depressive affect. The measures were again correlated, this time with a sample of 24, with level of religious interest. Factor analysis demonstrates the two concepts of emptiness and existential concern to be discrete and stable. Experienced level of emptiness correlated highly with level of depressive affect. Existential concern, however, was not correlated with depressive affect, but was correlated with level of religious interest (as measured on the Allport, Vernon, and Lindzey *A Study of Values*).

A. INTRODUCTION

The experience of emptiness was examined by Tolstoy (22), Dostoyevsky (6, 7) and more expansively by Kafka (15) and Beckett (2). Much post-impressionist art deals with the experience of emptiness. Edward Hopper's paintings frequently depict this emotional state.

Sartre (21) explored the experience of emptiness as a philosophical form and related it to modern existential thought. Not until relatively recent times has the experience of emptiness been investigated by psychologists—at first by the more philosophically oriented, such as May (20) and Frankl (9, 10, 11, 12, 13), and later by the psychoanalytically oriented such as Kernberg (17) and Kohut (18).

Crumbaugh and Maholick (5) developed the Purpose in Life test, based on Frankl's "existential vacuum." Frankl's writings indicate the latter concept to be an admixture of concepts including existential concern, depression, and boredom (9). Kernberg (17), offers a thorough differentia-

* Received in the Editorial Office on April 6, 1984, and published immediately at Provincetown, Massachusetts. Copyright by The Journal Press.

tion of the concept of emptiness, and it is the measurement of his delineation of the experience at which the emptiness scale in his study is primarily aimed.

Emptiness is an artistic, philosophical, theological, and psychological concept. As yet it is unmeasured. The experience of emptiness, even in its most substantial forms, is an elusive phenomenon. Sometimes the insubstantiality of the experience causes us to suspect that the phenomenon is, in fact, nothing but a chimera. It is the purpose of the present study to develop an instrument that will reliably measure the experience of emptiness so that the concept may be related to other personality measures.

B. METHOD

1. *Inventory*

After a thorough review of the literature on the experience of emptiness and related issues (14), the author developed an eighteen-item Likert-scaled questionnaire. Nine of the items tap the level of the experience of emptiness (E): e.g., "I feel a vague inner numbness" and "I feel as though I am not real." Ss are asked to indicate, on a nine-point scale ranging from "always" to "never," how frequently they have the feelings.

Nine items are aimed at tapping the level of existential concern (X); e.g., "I try to discover my life's purpose" and "I think about the harmony between 'who I am' and 'what I do.'" The scale is the same as the E scale.

2. *Subjects*

The questionnaire was administered, along with the Costello-Comrey depression scale (3) and a brief demographic questionnaire, to a sample of 270 Ss: 265 students in universities or junior colleges and 5 clients in psychotherapy; age range 17-64 (four percent over 40); 178 female, 92 male; 233 with a high school diploma, others with some further certification; 227 single, 35 married, 6 divorced or separated, and 2 with a deceased spouse.

To reduce biasing from response sets the order of the questionnaire material was rotated so that in approximately fifty percent of the questionnaires the depression schedule was first while in the remainder the E and X scales came first. The demographic data were always the first page. The order of the items on the pages was always the same.

3. *Procedure*

Factor analysis was performed according to seven steps suggested by Marradi (19). A matrix of pairwise correlations was created between all

eighteen E and X items and was subjected to three tests suggested by Dziuban and Shirkey (8). The Bartlett test of sphericity, the inspection of the off-diagonal elements of the anti-image covariance matrix, and the Kaiser, Meyer, Olkin measure of sampling adequacy indicated the matrix to be suitable for analysis.

A principal components analysis and varimax rotation were carried out upon the eighteen E and X items. Factors with eigenvalues of less than one were not retained as factors; items were held to load on a factor if their loading exceeded .3.

Towards the end of scoring the instrument's scales, the factor score coefficient for each item was calculated from the principal components factor solution (see Table 2). Then, following the suggestion of Marradi (19), the factor score coefficients were used as weights by multiplying them with the corresponding item scores on the instruments. The sum of these products for the E items gives the E score and the sum of these products for the X items gives the X score.

A small subsample ($n = 24$) of the original sample completed, among other measures, the Allport, Vernon, and Lindzey *A Study of Values* (1).

TABLE 1
RESULTS OF FACTOR ANALYSIS—PRINCIPAL COMPONENTS WITH VARIMAX
ROTATION—OF ITEMS E1 TO X9

Items	Principal components loadings		Communality	Varimax rotation loadings	
	Factor A	Factor B		Factor 1	Factor 2
E1	.31	.24	.15	.39	.05
E2	.57	-.38	.47	.14	.67
E3	.55	-.42	.47	.09	.68
E4	.57	-.50	.58	.05	.76
E5	.63	-.55	.69	.06	.83
E6	.66	-.54	.72	.09	.86
E7	.60	-.46	.57	.10	.75
E8	.52	-.51	.52	.01	.72
E9	.62	-.56	.70	.05	.84
X1	.55	.51	.56	.75	.02
X2	.68	.43	.65	.79	.17
X3	.68	.49	.70	.83	.13
X4	.43	.18	.22	.44	.18
X5	.67	.31	.54	.69	.25
X6	.63	.46	.62	.78	.11
X7	.56	.56	.63	.79	-.01
X8	.49	.52	.52	.72	-.03
X9	.37	.50	.38	.61	-.09
Eigenvalue	5.85	3.87			
% common variance	60.2	39.8			

Note. Factor loading criterion .3.

Pearson product moment correlation coefficients were calculated for relationships between X, E, and Depression. In addition, Pearson r values were calculated for X, E, and Level of Religious Interest.

C. RESULTS

All eighteen items loaded on Factor A and sixteen items loaded on Factor B (Table 1). The varimax rotated factor solution with Kaiser normalization produced two factors in the initial eighteen-item instrument: Factor 1, consisting of items E1 and X1-X9, and Factor 2, consisting of items E2-E9 (Table 1).

Prior to the factor analysis, item E1 ("I do things because they make me feel I exist") was believed to be an item that would tap experienced level of emptiness since it was developed from interviews and pretesting with this aim in mind. However, it loads (.39) on the existential concern items. An examination of the wording of the item reveals ambiguity. Because of this and its relatively low loading on Factor 1 and its effect, when included, of

TABLE 2
RESULTS OF FACTOR ANALYSIS—PRINCIPAL COMPONENTS
AND VARIMAX ROTATION—OF ITEMS E2 TO X9

Items	Principal components loadings		Communality	Varimax rotation loadings		Factor score coefficients (weight)
	Factor A'	Factor B'		Factor E	Factor X	
E2	.58	-.36	.47	.67	.14	0.9
E3	.56	-.40	.47	.68	.09	1.0
E4	.59	-.49	.58	.76	.05	1.6
E5	.65	-.52	.69	.83	.06	1.9
E6	.67	-.51	.72	.84	.09	2.2
E7	.61	-.44	.57	.75	.10	1.0
E8	.54	-.48	.52	.72	.02	1.1
E9	.65	-.53	.70	.84	.06	2.1
X1	.53	.53	.55	.02	.74	1.3
X2	.66	.45	.65	.17	.79	1.6
X3	.66	.51	.70	.13	.83	2.2
X4	.43	.20	.23	.18	.44	0.5
X5	.65	.33	.54	.25	.69	1.0
X6	.62	.49	.63	.11	.78	1.7
X7	.54	.59	.64	-.01	.80	2.1
X8	.48	.54	.52	-.03	.72	1.1
X9	.35	.50	.37	-.09	.61	0.8
Eigenvalue	5.65	3.81				
% common variance	60.2	39.8				

Note. Factor loading criterion .3.

lowering the coefficient alpha for both the X and E scales (i.e., Factors 1 and 2, respectively), the item was dropped from the instrument (19).

A second principal components analysis was carried out upon the remaining items, E2-E9 and X1-X9, and a varimax rotation carried out on the factor solution. Two factors again emerged from the varimax rotation (Table 2), one comprised of the eight remaining items aimed at measuring the experienced level of emptiness (E2-E9), the other of the nine items measuring level of existential concern (X1-X9). Similar results were obtained when the data were subjected to alpha factor analysis (16). Cronbach coefficient alphas (4) were .916 for E and .904 for X. The factors were labelled Experienced Level of Emptiness (E) and Experienced Level of Existential Concern (X). E and D (Depression score from Costello-Comrey Depression scale) correlate at an extremely high level (Pearson $r = .69$, $p < .001$). However, X is directly correlated with E ($r = .18$, $p < .001$), but not with D ($r = .05$, $p < .19$). This suggests that emptiness and depression, although highly correlated, may be different dimensions of experience.

X correlated significantly with Level of Religious Interest ($r = .57$, $p < .001$). Bearing in mind the small sample size of this component of the study ($n = 24$), this tends to add a measure of construct validity to the X subscale.

REFERENCES

1. ALLPORT, G., VERNON, P., & LINDZEY, G. A Study of Values. Boston: Houghton Mifflin, 1960.
2. BECKET, S. Molloy, Malone Dies, The Unnamable: Three Novels. London: Calder & Boyars, 1966.
3. COSTELLO, C. G., & COMREY, A. L. Scales for measuring depression and anxiety. *J. of Psychol.*, 1967, **66**, 303-313.
4. CRONBACH, L. Coefficient Alpha and the internal structure of tests. *Psychometrika*, 1951, **16**(3), 297-334.
5. CRUMBAUGH, J., & MAHOLICK, L. An experimental study in Existentialism: The psychometric approach to Frankl's concept of nœogenic neurosis. *J. Clin. Psychol.*, 1964, **20**(2), 200-207.
6. DOSTOEVSKY, F. Memoirs from the House of the Dead (J. Coulson trans.). New York: Oxford University Press, 1965.
7. ———. Notes from the Underground (R. G. Durgy, ed., S. Shishkoff, trans.). Washington, D.C.: University Press of America, 1982.
8. DZIUBAN, G., & SHIRKEY, E. When is a correlation matrix appropriate for factor analysis? *Psychol. Bull.*, 1974, **81**(6), 358-361.
9. FRANKL, V. Man's Search for Meaning. New York: Simon & Schuster, 1958.
10. ———. The Doctor and the Soul. New York: Simon & Schuster, 1965.
11. ———. Psychotherapy and Existentialism. New York: Simon & Schuster, 1967.
12. ———. The Will to Meaning. New York: Simon & Schuster, 1969.
13. ———. The Unconscious God. New York: Simon & Schuster, 1975.

14. HAZELL, C. An empirical study of the experience of emptiness. Ph.D. dissertation, Northwestern University, 1982.
15. KAFKA, F. *Das Schloss*. Munich: Kurt Wolff Verlag, 1926.
16. KAISER, H., & CAFFREY, J. Alpha factor analysis. *Psychometrika*, 1965, 30, 1-14.
17. KERNBERG, O. *Borderline Conditions and Pathological Narcissism*. New York: Jason Aronson, 1975.
18. KOHUT, H. *The Analysis of the Self*. New York: International Universities Press, 1971.
19. MARRADI, A. Factor analysis as an aid in the formation and refinement of empirically useful concepts. In D. Jackson & E. Borgatta (Eds.), *Factor Analysis and Measurement in Sociological Research*. London: Sage, 1981.
20. MAY, R. *Man's Search for Himself*. New York: Norton, 1953.
21. SARTRE, J. P. *Being and Nothingness*. New York: Philosophical Library, 1956.
22. TOLSTOY, L. *War and Peace*. London: Oxford University Press, 1930 (1868).

*1241 West Ardmore
Chicago, Illinois 60660*