CROSS-VALIDATION OF PURPOSE-IN-LIFE TEST BASED ON FRANKL'S CONCEPTS[1]

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Viktor Frankl's concepts of noögenic neurosis and existential vacuum (3, 4, 5, 6) were studied earlier (2) by the Purpose-in-Life Test (PIL), an attitude scale designed to measure the degree to which the subject experiences a sense of meaning and purpose in life. The results from 225 *S*s demonstrated the predicted differences between clinical and "normal" populations, and low relationships between what the scale measures and the traditional diagnostic categories, as well as a high relationship to Frankl's own method of measuring his described existential conditions. Thus the data would support his theory that when meaning in life is not found, the result is existential frustration. Within the "normal" range this is manifested as existential vacuum; among patients it assumes the proportions of noögenic neurosis.[3]

Several other studies also suggested that Frankl's concepts have a basis in reality and offer advantages in understanding the human condition (1, 2, 7, 8, 9).

The purpose of the present study was to gather further quantitative evidence concerning the validity of Frankl's basic thesis. Our specific aims were: (*a*) to cross-validate the previous PIL findings; (*b*) to apply the test to further categories of *S*s; (*c*) to explore further the relationship of Frankl's noögenic neurosis to depression and or other traditional syndromes; (*d*) to learn whether the variable measured by the PIL can be identified as anomie; and (*e*) to examine evidence concerning the influence of social desirability on PIL scores.

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[2]The data were gathered while the writer was on the staff of the Bradley Center, Inc., of Columbus, Georgia. Appreciation is hereby expressed for the Center's support of this research.

[3]Frankl believes that noögenic neurosis constitutes about 20% of the typical present-day clinic load. In our earlier study (2) this figure was misquoted as 55% due to a misinterpretation of one of Frankl's articles. The 55% figure should have referred to the presence of at least some degree of "existential vacuum" in the general non-clinical population. The writer wishes to express appreciation to Dr. Viktor Frankl for his interest in and encouragement of the present research.

METHOD[4]

Subjects

The study was conducted on 1151 *S*s represented by 4 "normal" and 6 psychiatric patients groups as described in Table 1. All but Group P4 were Caucasian.

TABLE 1. GROUPS OF SUBJECTS

Designation	Description	N male	N female	N total
"Normal"				
N1	Successful business and professional personnel (Rotarians, Kiwanis, etc.)	214	16	230[a]
N2	Active and leading Protestant parishioners	63	79	142
N3	College undergraduates	165	252	417[b]
N4	Indigent hospital patients (non-psychiatric)	4	12	16
Psychiatric				
P1	Neurotics, outpatients, mixed diagnosis	95	124	225[c, d]
P2	Neurotics, hospitalized	6	7	13
P3	Alcoholics, hospitalized	24	14	38[e]
P4	Schizophrenics, hospitalized, Negro	7	4	11
P5	Schizophrenics, hospitalized	17	24	41
P6	Psychotics (non-schizophrenics), hospitalized	7	11	18
	Total	602	543	1151[d]

[a]Includes previous Group I, 14 males and 16 females (2).
[b]Includes previous Group II, 44 males and 31 females.
[c]Includes previous Groups III and IV, 47 males and 52 females.
[d]Includes 6 *S*s of unindicated sex.
[e]Includes previous Group V, 14 males and 7 females.

[4]Gratitude is hereby expressed to the following individuals and organizations for their vital assistance in the gathering of the data: To one of the major service clubs of Columbus, Georgia, which requested to remain anonymous, for permission to administer the PIL to its members (Group N1); to the following Protestant ministers for administering the PIL and other measures to parishioners and rating these parishioners (Group N2): Rev. A. E. Sizemore, College Park Preysbyterian Church, College Park; Rev. J. C. Pafford, Stripling Terrace Methodist Church, Columbus; Rev. A. L. Miles, Britt David Baptist Church, Columbus; Rev. J. S. Wetzel, Edgewood Methodist Church, Columbus; Rev. Loy Veal, Sherwood Methodist Church, Columbus; Rev. J. P. Ellwanger, Lutheran Church of the Redeemer, Columbus; Rev. D. M. Kea, Shiloh Methodist Church, Shiloh, all in Georgia; and Rev. Gerald Munday, Epworth Methodist Church, Phoenix City, Alabama; to the Administration of Georgia Southern College for testing 249 undergraduates (Group N3); to Dean J. E. Anderson of Columbus College, Columbus, Georgia, for administration of tests to 93 undergraduates (Group N3); to the social service department of the Columbus (Georgia) Medical Center for administering tests to indigent patients (Group N4); to Dr. Robert Wildman, Chief Psychologist of Milledgeville (Georgia) State Hospital for testing hospitalized patients in Groups P2, P3, P4, P5 and P6; and to the Family Service Agency of Columbus, Georgia, for testing their clients in Group P1.

Instruments

1. *Purpose-in-Life Test* (PIL). The revised form used in the present study omitted for simplicity two items requiring negative scoring, leaving 20 items.[5] Typical items to be rated from 7 down to 1 are: "In life I have no goals or aims at all [1]—very clear goals and aims[7]." "I am a very irresponsible person [1]—a very responsible person [7]." "Every day is constantly new and different [7]—exactly the same as any other [1]." The score is the sum of the ratings of the 20 items.

For the 225 cases from the earlier study included here, the test was rescored for the 20 items. A Pearson's r of .995 was found between the two forms from 50 *S*s of Group P1.

2. *Minnesota Multiphasic Personality Inventory* (MMPI). This test was administered to a subgroup of 50 *S*s in Group P1. In addition D-scale (depression) scores were obtained from 93 *S*s from one college in Group N3.

3. *Srole Anomie Scale* (11), was administered to 249 *S*s from one college in Group N3.

4. *Ministers' Rating Scale for Parishioners.* This is a 6-item 7-point rating scale composed of such items as: "Subject shows evidence of possessing a clear set of life goals [7]—no life goals [1]." This scale was used by the participating ministers with Group N2.

PREDICTIONS

1. The order of mean PIL scores for our various groups will be as they are listed in Table 1: (*a*) for the "normal" groups, from successful and motivated professional persons down to indigent persons; (*b*) for the psychiatric groups, from outpatient neurotics down to hospitalized psychotics. (*c*) "Normal" *S*s will score significantly higher than psychiatric *S*s. Confirmation of these predictions would add to the *construct validity* of the PIL as a measure of existential vacuum and/or noögenic neurosis.

2. PIL scores will correlate with (*a*) therapists' ratings of patients on the PIL; (*b*) ministers' ratings of "normal" parishioners on the Ministers' Rating Scale. Confirmation of these predictions would demonstrate *concurrent validity* of the PIL.

3. There will be no significant relationships between PIL scores and any of the MMPI scales other than the D-scale, indicating that what the PIL measures is not identifiable with any of the conventional psychiatric syndromes, with the possible exception of depression.

4. There will be no more than a moderate relationship between the PIL and the Srole Anomie Scale. (Some relationship would be

[5] A copy of the PIL and all materials (other than published tests) used in this study as well as a more detailed paper from which the present report is abridged will be sent upon request. Address the writer c/o Psychology Service, Veterans Administration Hospital, Gulfport, Mississippi 39501.

predicted due to a partial overlap between the concepts of anomie and purpose in life.)

RESULTS AND DISCUSSION

The complete results from the PIL are shown in Table 2. They will be presented and discussed in the order of the predictions above. This will be followed by some further findings.

1. *Scores by groups.* (*a*) For the 4 "normal" groups the order of the means obtained perfectly corresponds to the prediction.

(*b*) Among the 6 psychiatric groups schizophrenics scored unexpectedly high, especially Group P4, the only Negro group, though their N of 11 is too small for meaningful interpretation.

Frankl[6] has suggested that schizophrenics would be expected by logotherapeutic theory to score relatively high on the PIL for the following reason: The hidden or (to the normal person) trivial meanings which typify schizophrenic thought processes do, however, constitute genuinely perceived meanings from the phenomenological point of view. The schizophrenic has created his own significant world within which he resides purposefully. It is only in relation to the "real" or external world that he experiences conflict. Thus schizophrenic *S*s should respond to items on meaning and purpose in life which tap conscious cognitive processes—as do the PIL items—in a "normal" or meaningful range, since they would tend to relate these items to their inner world of fantasy. Thus the schizophrenic may think that his life has meaning and purpose even though to the external eye this meaning is shallow, inadequate, distorted and unsatisfactory.

If this analysis by Frankl is correct, schizophrenics should have been predicted to score at the top of the psychiatric range or even within the normal range. This view, however, must await cross-validation with further schizophrenic groups.

(*c*) The difference between "normal" and psychiatric *S*s is highly significant.

The first prediction as a whole may be said to be fairly well borne out by the results, and the construct validity of the PIL is thus reasonably well supported.

2. *Ratings by others.* (*a*) In a procedure which replicated that

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[6]V. E. Frankl, personal communication, June 5, 1967.

TABLE 2. RESULTS OF THE PURPOSE IN LIFE TEST (PIL) IN SUM OF RATINGS FOR 20 ITEMS, BY DIAGNOSTIC GROUPS, INCLUDING COMPARISONS BETWEEN GROUPS[a]

	"Normal" subjects				Psychiatric patients					
	N1	N2	N3	N4	P4	P5	P2	P1	P3	P6
N	230	142	417	16	11	41	13	225	38	18
M	118.90	114.27	108.45	106.40	108.00	96.66	95.31	93.31	85.37	80.50
SD	11.31	15.28	13.98	14.49	17.71	16.12	18.36	21.67	19.41	17.50

	N1–N2	N2–N3	N3–N4	N4–P4	P4–P5	P5–P2	P2–P1	P1–P3	P3–P6
t diff. Ms	3.13**	3.99****	.56	.32	2.62***	.24	.39	2.29*	.94

	"Normal" subjects (N1–N4)	Psychiatric patients (P4–P6)
N	805	346
M	112.42	92.60
SD	14.07	21.34
t diff. Ms	15.98****	
F diff. variances	2.20**	

	All groups
N	1151
M	106.47
SD	18.94

Group combinations:	N1, N2	N3, N4	P4, P5, P2	P1, P3, P6
N	372	433	65	281
M	117.13	108.37	98.31	91.41
SD	13.18	14.03	17.37	21.49

	(N1, N2)–(N3, N4)	(N3, N4)–(P4, P5, P2)	(P4, P5, P2)–(P1, P3, P6)
t diff. Ms	9.13****	4.46****	2.74**

* Difference significant at $P < .05$
** Difference significant at $P < .01$
*** Difference significant at $P < .02$
**** Difference significant at $P < .001$
[a]For description of groups see Table 1.

of the earlier study, the therapists of the outpatients in group P1 filled out a PIL (after the second therapy session when the dynamics were fairly well known but before personality was influenced much by therapy) in the way they thought the patient *should* have filled it out in order to be truthful. The correlation between therapists' ratings and patient's PIL scores was .38 (N = 50). In the first study the correpsonding correlation was .27 (N = 37).

(*b*) The correlation between the ratings by the participating ministers of their parishioners (Group N2) on the Ministers' Rating Scale and the parishioners' PIL scores was .47 (N = 120). These results are in line with the level of criterion validity which can usually be obtained from a single measure of a complex trait.

3. *MMPI*. The correlations between the PIL and the MMPI scales for the 50 outpatients from Group P1 revealed only two relationships which were significant at the 1% level of confidence: Psychasthenia, − .44, and Depression, − .44. In a similar sample of 50 outpatients reported in the earlier study, however, only Depression and the K-Scale showed significant relationships with the PIL. Thus only Depression has maintained a consistent relationship.

When the D scores of 93 *S*s from Group N3 were combined with those of the 50 *S*s from Group P1 above, the *r* with their PIL scores was − .65 (N = 143), showing a considerable effect of adding the full range of scores from "normal" to psychiatric *S*s. It may thus be concluded that what the PIL measures is not directly identifiable with any conventional mental syndrome, except perhaps depression.

4. *Srole Anomie Scale*. The correlation between the PIL and the Srole in 249 *S*s of Group N3 was .48 for 94 males and .32 for 155 females. For a sub-sample of 145 freshmen (55 males and 90 females) from the same population the relationship was .34. Thus the moderate correlation predicted was obtained, suggesting that, while the concepts of existential vacuum and anomie overlap, they are not the same.

Beyond the outcomes for which predictions had been made the following results were obtained.

5. *Reliability*. The split-half (odd-even)correlation of the PIL results from 120 *S*s from Group N2 yielded a coefficient of .85, corrected by the Spearman-Brown formula to .92.

6. *Sex differences*. The PIL mean for all male *S*s was 108.68. SD ± 18.10 (N = 602); for all females it was 104.10, SD ± 19.66

(N = 543). The difference between means is 4.58; $t = 4.08$, $P < .001$. The significantly higher male scores are in reverse of the findings of the earlier study, which, however, were not significant although consistent. It is probable that the present higher mean scores for men are due to Group N1, successful persons, consisting mostly of men, 214 out of 230 *S*s.

7. *Socio-economic variables.* A correlation of only .13 between the PIL and educational level of 122 *S*s in Group N2 supports the findings of the previous study as well as those of Nyholm (10). The relationship of the PIL to income level was also obtained from *S*s in Group N2, with a resultant correlation of only .18 (N = 115). This would certainly imply on the one hand that purposeful, meaningful lives are not limited to those persons with educational opportunity or good income, and on the other, that either education or income alone do not assure the attainment of meaning in life. However, the fact that Group N4, indigent hospitalized *S*s, had the lowest scoring level of all "normal" groups, as predicted, supports the reasonable expectation of some relationship between the PIL and socio-economic status. The study would have most probably yielded higher correlations for Group N2, if its *S*s, active Protestant parishioners, had not been presumably a relatively homogeneous sample.

SUMMARY

Results with the Purpose-in-Life Test (PIL), having previously been tried out on 225 *S*s, are now reported from a slightly revised form with 1151 *S*s. The PIL was found to discriminate between "normal" and psychiatric groups with high significance. It also discriminated between the four "normal" groups, ranging from highly successful to indigent persons. Among the 6 psychiatric groups, the schizophrenics scored unexpectedly high, but otherwise the scores approximated closely the predicted descending order, ranging from neurotics through alcoholics to the other psychotics. PIL scores correlated with therapists, ratings .38 (N = 50) and with ministers' ratings of their parishoners, .47 (N = 120). What the PIL measures is not directly identifiable with anomie or any MMPI scale except perhaps Depression. The instrument is supported as a reliable and valid measure of Frankl's conception of meaning and purpose in life, and the results favor the correctness of his formulations in logotherapy.

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