

**CORRELATES OF THE PURPOSE IN LIFE TEST WITH
SHOSTROM'S PERSONAL ORIENTATION INVENTORY
AND WITH OTIS-LENNON I.Q. SCORES AND
GRADE POINT AVERAGES OF HIGH SCHOOL STUDENTS**

BY

ELINOR MARIA MARTIN

5

CORRELATES OF THE PURPOSE IN LIFE TEST WITH SHOSTROM'S
PERSONAL ORIENTATION INVENTORY AND WITH OTIS-LENNON I.Q.
SCORES AND GRADE POINT AVERAGES OF HIGH SCHOOL STUDENTS

A Research Paper
Presented to
the Graduate Council of
Austin Peay State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in Psychology


by
Elinor Maria Martin
December 1974

To the Graduate Council:

I am submitting herewith a Research Paper written by Elinor Maria Martin entitled "Correlates of the Purpose in Life Test with Shostrom's Personal Orientation Inventory and with Otis-Lennon I.Q. Scores and Grade Point Averages of High School Students." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts in Psychology.


Major Professor

Accepted for the Council:


Dean of the Graduate School

ACKNOWLEDGEMENTS

The author wishes to express sincere appreciation to Dr. John D. Martin, Professor of Psychology, Austin Peay State University, for his suggestions and guidance during the course of the study. Appreciation is also extended to Dr. Garland Blair, Professor of Psychology, and to Dr. Elizabeth Stokes, Professor of Psychology, for their cooperation in the completion of the study.

Grateful acknowledgement is expressed to Mr. K. L. Barton, Headmaster of The Clarksville Academy, for granting permission to conduct the study in his school.

The author wishes to extend special appreciation and love to the members of the Junior and Senior classes of The Clarksville Academy for their cooperation and for being a tremendous group of young people.

TABLE OF CONTENTS

	PAGE
LIST OF TABLES.....	v
CHAPTER	
I. INTRODUCTION.....	1
II. METHOD.....	6
The Sample.....	6
Description of the Instruments.....	6
Administration and Scoring.....	9
III. RESULTS.....	11
IV. DISCUSSION.....	12
V. SUMMARY.....	15
REFERENCES.....	16

LIST OF TABLES

TABLE	PAGE
I. Correlations between tests.....	12

Chapter I

Introduction To The Problem

Viktor E. Frankl, M.D., Ph.D., head of the Department of Neurology of the Poliklinik Hospital of the University of Vienna, originated a system of existential therapy called "Logotherapy" (Greek "logos" meaning treatment through finding meaning in life).

According to Frankl (1955, 1958, 1959, 1967, 1968) the primary motive in man is "the will to meaning." Frankl believes that man seeks primarily to find meaning and purpose in human existence.

When one fails to find a meaning and purpose which gives his life a sense of unique identity he experiences "existential vacuum." Such emptiness leads to the emotional response of "existential frustration." In the neurotic individual such a response may lead to "noogenic neurosis," a breakdown created by a compounding of neurotic symptoms with failure to find meaning in life.

"Existential vacuum" is not in itself an abnormality but is rather a human condition which Frankl considers the result of the machine age and attendant loss of individual initiative. He estimates that more than half of the general population is affected in some degree by "existential vacuum."

Crumbaugh and Maholick in 1964 derived an attitude

inventory based on Frankl's existential concepts. They called their instrument the "Purpose in Life" Test (PIL). The PIL purports to measure the degree of "meaning" or "purpose" in an individual's life. The investigators defined "purpose in life" as the "ontological significance of life from the viewpoint of the experiencing individual."

The test consists of twenty Likert-type items. The subject who takes the PIL answers each statement by encircling a number from one to seven. Low numbers are intended to indicate low sense of purpose and high numbers a high sense of purpose.

In the first published research on the PIL Crumbaugh and Maholick (1964) concluded that:

- (a) the relationship between the scale and a questionnaire designed by Frankl to describe the factors involved in his concepts was high; (Pearson Product-Moment = .68)
- (b) the relationship of the scale to an established measure of traditionally conceived psychopathology, the MMPI, was low (PIL and the K-validity scale = .39; and the D-depression scale = -.30) and
- (c) the scale significantly distinguished patient from nonpatient populations, showing a predicted progressive drop in scores to match the level of pathology assumed by the nature of the group.

The authors of the PIL maintained the educational level and age factors were not related to scores on the PIL. Nyholm (1965) replicated the study done by Crumbaugh and Maholick. Nyholm believed that the college educated individual was apt to be "more goal oriented, more achieving,

more highly motivated and better endowed with ability." Such people, he felt, should be more inclined to determine and to find a "meaning in life." He also included the possibility that age might be related to scores on the PIL and might be interrelated with educational level. He therefore matched his patient and nonpatient population for age and education.

The results of Nyholm's study confirmed the principal hypothesis of Crumbaugh and Maholick. The PIL did differentiate a patient sample from a nonpatient sample and scores on the PIL were essentially unrelated to age and educational level.

In the same study Nyholm reports that contrary to the Crumbaugh-Maholick contention the PIL was correlated significantly with the depression and social introversion scales of the MMPI (PIL and D scale = $-.42$ and the Si scale = $-.45$). He also found that PIL scores correlated with the self-acceptance, sense of well-being, achievement via conformance and psychological mindedness scales of the California Personality Inventory (Self-acceptance, $r = .40$; Sense of well-being, $r = .52$; Achievement via conformance, $r = .63$; Psychological mindedness, $r = .47$).

A summary of results of correlational studies using the PIL and other instruments was published by Crumbaugh and Maholick in 1969. In addition to correlations already cited Crumbaugh and Maholick (1964) found no significant

relationship between any of the six scales of the Allport-Vernon-Lindzey Scale of Values and the PIL. Crumbaugh (1968) found a significant correlation between the PIL and the Srole Anomie Scale (Pearson Product-Moment = $-.34$).

In a joint study of Frankl's will to meaning in a group of Dominican Sisters in training, Crumbaugh, Lozes and Schrader (1968) found no significant relationships between the Buhler Life Goals Inventory and the PIL. However the following significant relationships to the PIL were found:

Gordon Personal Profile: Responsibility, $r = .39$;
 Emotional Stability, $r = .43$;
 Cattell 16-Personality Factor Test: Emotional
 Stability, $r = .41$;
 Expedient vs. Conscientious, $r = .37$;
 Confident vs. Insecure, $r = -.44$;
 Group-dependent vs. Self-sufficient, $r = -.34$;
 Tranquil vs. Tense, $r = -.38$;
 Shy vs. Venturesome, $r = .34$;
 Trusting vs. Suspicious, $r = -.35$

Since 1964 sixteen completed dissertations, theses and other studies have employed the Purpose in Life Test. From these, nine correlational relationships have been reported. Crumbaugh (1969) states that no consistent relationships between PIL scores and the variables of sex, age, education and intelligence have been recorded.

The published studies using the PIL have drawn subjects from the adult population. However the manual of instructions states that the test may be used by "adult and adolescent subjects of about fourth grade level or higher."

The manual also lists among situations in which this scale has proved useful "individual counseling of students and vocational guidance."

The present study was designed:

- (1) to determine the degree of correlation between the PIL and the Time Competency (Tc) scale and the PIL and Inner-directed (I) scale of Shostrom's Personal Orientation Inventory (POI);
- (2) to determine the degree of correlation between the PIL and the Otis-Lennon Intelligence Quotients of high school students;
- (3) to determine the degree of correlation between the PIL and the Grade Point Average (GPA) of the same high school students; and
- (4) to add to the research previously conducted on the usefulness of the Purpose of Life Test.

Chapter II

Method

The Sample

The sample employed in the present was composed of high school Juniors and Seniors currently enrolled at The Clarksville Academy, Clarksville, Tennessee. The sample consisted of a total of 24 subjects, randomly selected, of whom 12 were females and 12 males.

Description of the Instruments

The Purpose in Life Test was developed to measure the strength and meaning which gives one's life a sense of identity. The score is the simple sum of the numerical values circled for the twenty choice items. PIL raw scores from 92 through 112 are in the indecisive range; scores above 112 indicate the presence of a definite purpose and meaning in life; scores below 92 indicate the lack of clear meaning and purpose. There is no time limit on the test. Most subjects complete the scale in ten to fifteen minutes.

The Time Competency (Tc) and Inner-directed or Self-support (I) scales of Shostrom's Personal Orientation Inventory (POI) were selected as criteria for one part of the study. The research wished to determine the degrees of correlation between these scales and the Purpose in Life Test.

The POI is a group test consisting of 150 two choice

items which yield a profile of 12 scale categories of self-actualization. It was designed by Shostrom (1966) to measure self-actualization or positive mental health.

Shostrom (1966) states that "when a quick estimate is desired of the examinee's level of self-actualization, the Time Competency (Tc) and Inner-directed (I) scales only may be scored." Damm (1969) in a study using high school students concluded that "an overall measure of the POI can probably be best obtained by using the raw score of the I scale or by combining the raw scores of the I and Tc scales."

The Tc and I scales have been used in research in clinical studies (Fox, 1965; Shostrom and Knapp, 1966; Fox, Knapp and Michael, 1968); in studies on counselors (McClain, 1970) and dormitory assistants (Graff and Bradshaw, 1970); in studies of underachievement (Leib and Snyder, 1968; LeMay, 1969).

Research using the POI scales and populations of special interests include studies using teachers (Flanders, 1969), clergymen (Webster and Stewart, 1969), nurses (Illardi and May, 1968), adolescents (Damm, 1970; Weber, 1970; Gerber, 1964), delinquents (Shostrom, 1966) and alcoholics (Weir, 1965).

A number of studies have been undertaken to examine the relationship of POI variables to other personality constructs and scales. Correlations with the MMPI scales are based on two samples, a beginning therapy group and an

advanced therapy group (Shostrom and Knapp, 1966). While the correlations of the POI scales against certain of the MMPI scales are generally consistent in direction and significant, the researchers concluded that the two instruments did not measure exactly the same aspects of mental health.

In a study by Knapp (1965) the personality construct of "neuroticism" from the Eysenck Personality Inventory (EPI) was related to the self-actualization construct of the POI. "High" neurotic and "low" neurotic groups were selected from undergraduate college students and mean scores were obtained for each group on each of the POI scales. All mean differences were significant at or beyond the .05 level.

Dandes (1966), in studying the relationship of psychological health to teacher effectiveness, found correlations between POI scales and the Minnesota Teacher Attitude Inventory (MTAI). He reported a multiple correlation of .54, which was significant at the .01 level.

Relationships of the POI scales to dimensions measured by the Sixteen Personality Factor Questionnaire (16PF) were reported by Meredith (1967) based on a sample of 159 college students. Correlations significant at the .01 level were found between the Inner-directed scale of the POI and five scales of the 16 PF.

In a follow up study LeMay (1969) investigated the relationship between the I scale of the POI and the Grade Point Average (GPA) of college freshmen. He obtained

significantly different results when students were divided into low, average, and high groups based on scores earned on the Scholastic Aptitude Test (SAT). The correlations for both low and high groups were not significant. However, for the middle-ability groups the results were significant (males, $-.25$, $p = .05$; females = $-.30$, $p = .01$).

Shostrom (1964) described the characteristics of the self-actualizing person as measured by the Self-support (I) scale:

He is, to an extent, other directed in that he is sensitive to people's approval, affection and good will, but is far less dependent on others than the other-directed person. Although the source of his actions are more inner-directed, he is free and not a rebel... He has discovered a mode of living which gives him confidence in himself.

and by the Time Competency (Tc) scale:

(He) appears to live in the here and now more fully, and is able to tie the past and the future to the present in meaningful continuity. He is less burdened by guilts, regrets and resentments from the past...and his aspirations are tied meaningfully to present working goals.

The I and Tc scales of the POI were chosen as criteria in the present study because this writer felt that these characteristics of the self-actualizing person could also be the characteristics of the person who has a definite purpose in life. The subjects for the present study were drawn from a high school population because this age group has not been tapped in published research projects using the PIL.

PIL scores were also correlated with the Otis-Lennon Intelligence Quotients of the subjects. This group intelligence test is used as a screening device for admission to the high school used in the present study.

The relationship between the PIL and the Grade Point Average (GPA) of the subjects was also established. The GPA of the subject was based on all grades earned during the scholastic year of 1973-74. Letter grades were converted and averaged on a 12-point quality scale. Cumulative GPA's were not used since some subjects had attended the school for only one year.

Administration and Scoring

The Purpose in Life Test and the Personal Orientation Inventory were administered in groups by the researcher. Each instrument was scored according to the manual of directions. Grade Point Averages and Intelligent Quotient scores were obtained from the school guidance office. All names and corresponding scores were coded in order to maintain anonymity.

Chapter III

Results

The Pearson Product-Moment technique was employed to compute the correlational coefficients. In the statistical analysis of data, raw scores were used for each instrument. Table I summarizes the correlations for all measures.

Table I
Correlations Between The Purpose in Life Test and Criteria
Instruments

Tests	r
1. Shostrom's POI, Tc scale	.71 **
2. Shostrom's POI, I scale	.69 **
3. Otis-Lennon I.Q. scores	.55 **
4. Grade Point Average (GPA)	.42 *

** Significant beyond the .01 level.

* Significant beyond the .05 level.

Chapter IV

Discussion

Correlation coefficients significant beyond the .01 level were obtained between the Purpose in Life Test and the Time Competency scale and Inner-directed scale of Shostrom's Personal Orientation Inventory. There would appear to be, then, a positive relationship between certain attributes of a self-actualizing person and the lifestyle of the person who scores high on the PIL. However, one cannot, on the basis of this research, rule out the possibility that self-actualization and strong purpose in life are not directly related but are related secondarily through separate relationships with other variables.

Nyholm (1965) questions whether the PIL measures "purpose in life" at all, or whether instead the instrument is really assessing the individual's motivational level. Although he concludes that the difference may be one of semantics, the concept of motivation may lend itself more readily to experimental evaluation than the theoretical concept of "existential frustration." The present writer feels that motivation may be a key variable in this study. All subjects were from families of upper middle-class socio-economic level or better. Subjects were students at an independent school in a definite college-prep program. Classes in this program are limited in number of students

to twenty and there is much individualized instruction. In addition, subjects were aware of the cost to the family of attending the school. All of these factors would seem to help keep the students at a highly motivated level and as Nyholm found in his studies, such motivated individuals maintain a higher sense of well-being, have more self-acceptance and are more achievement oriented.

Positive correlations between the PIL and Intelligence Quotients and Grade Point Averages were also obtained, significant beyond the .01 level and the .05 level respectively. The present writer is tempted to assume that intelligence is the linking variable in these results. However, in continuing the study, a correlation of .76, significant beyond the .01 level, was found between I.Q. and GPA. Why, then, were not the correlational coefficients obtained between the PIL and I.Q. and the PIL and GPA more nearly the same?

Leib and Snyder (1967, 1968, 1969) found conflicting results in studying the correlation between self-actualization, as measured by the POI, and GPA. In their first study, increases in GPA were found to correlate with increases in self-actualization. In a follow up study no relationship between achievement and self-actualization was obtained. In an attempt to clarify this conflict, Leib and Snyder (1968) found that self-actualization and achievement are not directly related, but are related

through separate relationships with other variables.

LeMay (1969) concluded that one such variable was aptitude. Damm (1970) found creativity to be a linking variable between intelligence and self-actualization.

Is, then, the relationship between Purpose in Life and Intelligence a direct one? Or are Purpose in Life and Intelligence also secondarily related through such variables as motivation, aptitude and creativity. Further research is needed before any conclusions may be drawn.

The purposes of the present study as originally stated have been met. The degree of correlation between the PIL and the Tc scale and the I scale of the POI were obtained. Significant correlations between the PIL and I.Q. scores and Grade Point Averages were found.

The results of the present study are not as important to the present researcher as the questions raised by the study. A primary goal of our educational systems should be the achievement of the highest level of psychological well-being in our students. Awareness of the roles of intelligence, motivation, creativity and aptitude are essential to teachers, counselors and administrators if schools are to help students find a purpose in life and become self-actualizing adults.

Chapter V

Summary

The present study was designed to determine the degree of correlation between Crumbaugh and Maholick's Purpose in Life Test and the Time Competency and Inner-directed scales of Shostrom's Personal Orientation Inventory. The study was also designed to determine the correlation between the PIL and Otis-Lennon I.Q. scores and Grade Point Averages of high school students.

The selection of the criterion instrument, the POI, was based on its reliability and validity, its extensive use in educational and counseling settings and its similarity to the PIL in terms of attributes measured.

The correlational coefficients obtained in the study ranged from .42 to .71. Correlations between the PIL and the Tc scale, the I scale and I.Q. scores were significant beyond the .01 level; between the PIL and GPA, significant beyond the .05 level.

The question is raised whether the Purpose in Life Test and the scales of Shostrom's Personal Orientation Inventory are related directly or are linked through another common variable.

REFERENCES

- Crumbaugh, J.C. and Maholick, L.T. An experimental study in existentialism; The psychometric approach to Frankl's noogenic neurosis. Journal of Clinical Psychology, 1964, 20 (2), 200-207.
- Crumbaugh, J.C. Cross-validation of Purpose-in-Life Test based on Frankl's concepts. Journal of Individual Psychology, 1969, 24, 74-81.
- Crumbaugh, J.C., Lozes, Sister M. Raphael, and Shrader, Raymond. Frankl's will to meaning in a religious order. Delivered at annual convention of American Psychological Association in San Francisco, Sept., 1968. Available in duplicated form from first author, Psychometric Affiliates, Munster, Indiana.
- Crumbaugh, J.C. and Maholick, L.T. Manual of Instructions for The Purpose-in-Life Test. Munster, Indiana; Psychometric Affiliates, 1969.
- Crumbaugh, J.C. Frankl's logotherapy: A new orientation in counseling. Journal of Religion and Health, 1971, 10, 378-386.
- Damm, V.J. Overall measures of self-actualization derived from the Personal Orientation Inventory. Educational and Psychological Measurement, 1969, 29, 977-981.
- Damm, V.J. Creativity and intelligence: Research implications for equal emphasis in high school.

- Exceptional Children, 1970, 36, 565-570.
- Damm, V.J. Overall measures of self-actualization derived from the Personal Orientation Inventory: A replication and refinement study. Educational and Psychological Measurement, 1972, 32, 485-489.
- Dandes, H.M. Psychological health and teaching effectiveness. Journal of Teacher Education, 1966, 17, 301-306.
- Flanders, J.N. A humanistic approach to inservice education. Test results; Personal Orientation Inventory. Project Upper Cumberland, Title III ESEA, Overton County Board of Education Report, Livingston, Tennessee, 1969.
- Fox, J., On the clinical use of the Personal Orientation Inventory (POI). Unpublished manuscript, 1965.
(Results reported in the POI manual).
- Fox, J., Knapp, R.R., and Michael, W.B. Assessment of self-actualization of psychiatric patients: Validity of the Personal Orientation Inventory, Educational and Psychological Measurement, 1968, 28, 565-569.
- Frankl, V.E. The doctor and the soul: An introduction to logotherapy. New York: Alfred A. Knopf, 1955
(Translated by Richard and Clara Winston.) Second edition, 1965.
- Frankl, V.E. The will to meaning. Journal of Pastoral Care, 1958, 12, 82-88.
- Frankl, V.E. From death-camp to existentialism. Boston:

Beacon Press, 1959 (Translated by Ilse Tasch.) Re-
vised and re-issued as Man's search for meaning:
An introduction to logotherapy, 1962.

Frankl, V.E. Logotherapy and existential analysis: A
review. American Journal of Psychotherapy, 1966,
20, 252-260.

Frankl, V.E. Psychotherapy and existentialism. New York:
Washington Square Press, 1967.

Frankl, V.E. The will to meaning: Principles and appli-
cation of logotherapy. New York: The World
Publishing Co., 1969.

Gerber, Barbara W. A study of relationships between
psychological health and creativity. Unpublished
doctoral dissertation, Syracuse University, 1964.

McClain, E.W. Personal growth for teachers in training
through self-study. Journal of Teacher Education,
1970, 21, 373-377.

Meredith, G.M. Temperament and self-actualization.
EITS Research and Developments, 1967, 1.

Nyholm, S.E. A replication of a psychometric approach to
existentialism. Unpublished Master's Thesis,
University of Portland, 1966.

Raanan, Susan L. Test Review. Journal of Counseling
Psychology, 1973, 20, 477-478.

Shostrom, E.L. and Knapp, R.R. The relationship of a
measure of self-actualization (POI) to a measure of

pathology (MMPI) and to therapeutic growth.

American Journal of Psychotherapy, 1966, 20, 193-202.

Shostrom, E.L. Manual for the Personal Orientation Inventory. San Diego, Calif.: Educational and Industrial Testing Service, 1966.

Shostrom, E.L. Comment on a test review: The Personal Orientation Inventory. Journal of Counseling Psychology, 1973, 20, 479-481.

Silverstein, A.B. and Fisher, G. Internal consistency of POI scales. Psychological Reports, 1973, 32, 33-34.

Stewart, R.A.C. Academic performance and components of self-actualization. Perceptual and Motor Skills, 1968, 26, 918.

Tosi, D.J. and Hoffman, Susan. A factor analysis of the Personal Orientation Inventory. Journal of Humanistic Psychology, 1972, 12, 86-92.

Weber, Madeleine Sophie. A study of the relationship between ability grouping and personality traits of high school girls. Unpublished doctoral dissertation, Loyola University, 1970.

Webster, A.C. and Stewart, R.A.C. Psychological attitudes and beliefs of ministers. Anvil Quarterly, 1969, 1, 11-16.

Weir, W.R. The use of a measure of self-actualization in the treatment of alcoholics and their spouses in an

out-patient agency. Unpublished Master's Thesis,
University of North Dakota, 1965.