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An Experimental Investigation of the Relationship between the Mmpi and the Survey of Interpersonal Values

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AN EXPERIMENTAL INVESTIGATION OF THE
RELATIONSHIP BETWEEN THE MMPI AND THE
SURVEY OF INTER-PERSONAL VALUES

by

(Miss) Kamal Lathi

A Thesis Submitted to the Faculty of the Graduate School
of Loyola University in Partial Fulfillment of the
Requirements for the Degree of
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CHAPTER I

INTRODUCTION

The effort of psychology to achieve and to maintain status among other natural sciences has led to hostility toward the least dependance on the discipline of philosophy from which it emerged less than a hundred years ago. Any apparent effort from philosophy to suggest aspects of study not adhering to rigid scientific methodology has been, until recently, rejected. Today, the wave of experimental enthusiasm in psychology is not at its ebb, but it seems to rise higher because of the added incorporation of philosophical interest to it.

Psychology in various areas shows this upsurge of philosophical issues; and especially in the areas of therapy, personality and character. M. Brewster Smith (16) suggests the admission of explicit values as goals of therapy, the identification of these in personality theory and recognition of their relevancy in social context like schools, prisons etc. P.E. Lichenstein (11) suggests that a sound value structure is necessary for the continued development of sciences, the fact and value become interrelated in psychology. The willingness to attack the problem of moral responsibility in mental illness exemplifies the alertness of psychologist to such philosophical issues which could not be even whispered ten years ago. The concern for the unique individual as seen in the works of Gordon Allport (1955) and Carl Rogers (1937) show men whose interest lies in the person rather than

in any particular methodology or theory; and self-activity, self-evaluation become serious topics for psychological study. Similarly freedom, spirituality, responsibility, subjective values, interpersonal communication and the very meaning of life seem newly opened to study by the cooperative approach of psychology and philosophy (15).

Thus it is seen that mental health or integrity and normal functioning of the individual depend on a well knit value system of the individual. A test that measures values can, therefore, be a very valuable instrument in assessing an individual's personality.

The application of psychological methods in the development and standardization of personnel tests constitutes one of the contributions of industrial psychology. Modern business and industrial organizations are increasingly making use of personnel tests for various purposes, like selection of new employees, placement of employees, transfer, promotion and even employee counseling. Tests are used probably more for selection and placement than for the other purposes, because of the current trend which believes that the testing program enables us to place the applicant in that job for which he appears to be most suited.

Personality tests are used as a common selective device in an employment situation. The variety of tests used for selection in industry also seems to incorporate interest test and values tests.

Until now, there was one major instrument that measured values, the Allport Vernon value scale, which measures values in six different areas such as theoretical, political, religious, social, aesthetic and economical.

Recently introduced is a new value test called "The Survey of Interpersonal Values" (SIV) of Leonard V. Gordon. It seems promising and useful in applications such as selection, appraisal, vocational guidance, counseling and class room demonstration. Its brevity permits convenient administration during a short period and therefore it can be easily included in a industrial selection battery. The preliminary edition of this test was published in August 1960.

The approach used by the SIV in measuring the individual's values is to determine what he considers to be important. It is designed to measure certain critical values involving the individual's relationship to others. These values are considered important in the individual's personal, social, marital and occupational adjustment. The six values measured are support, conformity, recognition, independence, benevolence and leadership.

Forced choice format is employed in the SIV. The instrument consists of thirty sets of three statements or triads. For each triad, the respondent indicates one statement as representing what is most important to him and one statement as representing what is least important to him.

The purpose of this study is to investigate the correlation between the different scales of the well known personality test the (MMPI) Minnesota Multiphasic Personality Inventory and the value test the SIV described above.

The Minnesota Multiphasic Personality Inventory (MMPI) is a psychometric instrument designed to provide in a single test, scores on the important phases of personality. The point of view determining the importance of a

trait in this test is that of the clinical or personnel worker, who wishes to assay those traits that are commonly characteristic of disabling psychological abnormality. The instrument consists of 550 statements covering a wide range of subject matter, from the physical condition to the morale and the social attitudes of the individual being tested.

The author of the SIV recommends that the SIV results should be interpreted in conjunction with other test, biographical and interview information available for the individual. It is therefore thought that the investigation of the correlation between different scales of the SIV and the MMPI would broaden the knowledge of or add to the details of personality picture as revealed by the MMPI. It would also help to show, if there are any personality factors that covary with certain values to accompany certain types of personality. This would add to the already existing numerous means to cast personality into various broad categories or types.

CHAPTER II

REVIEW OF THE LITERATURE

As the SIV is a recently new test, there is not a pile of research on this instrument as there is on the MMPI. Apparently, there has been no study, attempting to correlate the MMPI and the SIV specifically. There have been several studies in which either a personality test or a need test was correlated with the SIV.

Glen Snelbecker (1963) investigated the correlation between needs as measured by (EPPS) Edwards Personal Preference Schedule and values as measured by the SIV. His data are based on 261 Cornell University College Students. The results show that the moderately high relations between support and succorance, $+ .53$; independence and autonomy, $+ .49$; and leadership and dominance, $+ .58$ are entirely logical, since these pairs of scales purport to measure similar characteristics.

Eric Gunderson (1963) correlated needs as measured by Schutz's (Firo-B) Fundamental Interpersonal Relations Orientation Behavior and values as measured by the SIV, on a sample of 71 civilian scientists. The Firo-B provides an indication of the behavior that the individual wishes to express toward others (e), and how he wants others to behave toward him (w) on each of three dimensions, inclusion, control and affection. Results indicate that inclusion (e) wanting to initiate interactions with people, and inclusion (w) wanting others to be included by others, correlate $- .50$ and

-.32 respectively with independence; control (e) wanting to control people correlates -.60 with leadership; and affection (e) wanting to act close and personal toward people and affection (w) wanting others to act close and personal respectively correlate -.41 and -.25 with independence. Control (w) wanting to be controlled by others has neither a logical nor significant correlation with any of the values measured by SIV.

The attempt to correlate SIV, with the traits measured by Gordon Personal Inventory and Gordon Personal Profile by Leonard V. Gordon (1960) show significant correlations at the 1% level between cautiousness and conformity, .28. Original thinking and Leadership, .39; Responsibility and Conformity, .32; Emotional stability and Recognition, -.23; Sociability and Recognition, .24; and Sociability and Independence, -.30. The trait tendencies found to be associated with each value, were as follows:

VALUE	Trait Tendency
SUPPORT	Non-reflective, lacking vigor, dependent, unreliable
CONFORMITY	Careful, responsible
RECOGNITION	Anxious, sociable
INDEPENDENCE	Non-sociable
BENEVOLENCE	Tolerant and understanding
LEADERSHIP	An original thinker, energetic, self-assured and assertive.

The Allport-Vernon-Lindzey study of values, a pioneer instrument in the measurement of human values, has six scales between scales of the SIV and the study of values, based on a data from 89 college students show the following pattern. The relationship found appears to be quite reasonable.

The theoretical man described as empirical, rational, critical and intellectualist is seen to be high on independence and leadership; the economic man is high on recognition; the social man, high on benevolence, the aesthetic man described as an individualist is high on independence, and influence is high on leadership and the religious man is high on conformity and benevolence.

There have been other studies of SIV on different kinds of populations to show what difference there is in the values held by the two populations. Some of these are interesting and are reported below:

Gordon L.V. and Mensh I.V. (1962) measured the change in values held by medical students as they progress from first thru fourth year of schooling, at the University of California Medical School. Their results show a tendency for medical school students to increasingly value independence and recognition and to decreasingly value conformity during training and beyond. They also conducted a longitudinal study of value changes in Medical School by retesting the first and third year classes with the SIV exactly one year after original testing. As was found in the cross sectional study mentioned above, the greater changes occur from the first to the second year. The first year group drops significantly in benevolence and conformity and increases in independence. None of the changes from the third to the fourth year is significant.

A similar study was performed by Alma Beaver (1963) at the Knapp College of nursing at Santa Barbara, when a comparison of applicants for nurses training and a combined group of second and third year nursing students, a

sample of 50 cases each, was made, a statistically significant difference was found in independence and benevolence and on recognition.

Another study was performed by Barbara Woodard (1963) to determine whether value changes in benevolence noted for medical students would also occur for nursing students. The SIV was administered to random samples of 50 freshman nursing students and 50 seniors for comparison purpose, random sample of 50 cases each of freshman and senior education students were also tested. Differences between freshman and senior students are similar to those found for medical students; but the same was not found with education students.

Similar differences were found when SIV was administered to students in the four classes of University of Texas School of Nursing by Dorothy Blume (1963). Significant differences between means of four classes were found in benevolence, conformity and independence.

Irla Lee Zimmerman (1963) obtained very high support scores for 6 patients undergoing group therapy. These are interpreted as reflecting "therapy orientation".

There have also been a few studies across cultures.

Indian teacher trainees were compared with American teacher trainees by S.B. Kakkar (1963). He found similar sex differences for the values between male and female teachers of the two nationalities. Men of both nationalities scored significantly higher on recognition.

A Japanese translation of the SIV was used by Mr. Akio Kikuchi (1963)

to investigate sex differences in values between male and female liberal arts students at universities in Japan and to compare these groups with the American normative samples. Significant differences occur on the support and leadership scales, and these differences are in the same direction as those typically found between American male and female samples. The findings show Japanese male and female students are more similar to one another than are American students of the two sexes. There was absence of significant differences between the values of two sexes on recognition and leadership, when the Japanese college students were given a test retest at a one week interval.

Andre Morali Daninos compared the values of a sample of French company grade army officers stationed in France with those of a comparable sample of American officers stationed in the USA. For the French, he used a French translation of the SIV. Their results show French officers to be significantly higher on support and independence and significantly lower on conformity and leadership. He also compared job applicants in Paris with those in Pittsburg; mean differences between the two groups were similar to those found for army officers.

The MMPI has had vast research and many studies dealing with the development of several sub-scales or special scales.

A scale for alcoholism, on the basis of a group of 72 alcoholics hospitalized in a state institution after a court commitment was developed by Holmes (1953). He compared their item replies with the frequencies of response of the Minnesota normative group and found 59 items significantly

separating the groups.

Gough and Peterson (1952) published work on development of this scale. A role taking theory of psychopathy was applied to the practical problem of the identification of a measurement of predispositional factors in crime and delinquency. They selected a priori items that suited their conception of difficulties in role taking behavior and then evaluated each of the potential items against frequencies of response from criminal, delinquent and control subjects. This assessment device was capable of differentiating significantly between delinquents and controls in both original and cross-validation samples.

Navaran (1954) developed three closely related scales by a judgemental method, strength of dependency, denial of dependency and frustration of dependency. In direct or manifest dependency, he used both consensus of judges who rated suitability of the items for measuring these characteristics and an internal consistency analysis of the items for final inclusion in the scale. He reports findings on 50 normals and neuropsychiatric cases, indicating that these scales were sensitive to the differences in these groupings of adjustment. Reliability was reported as .91 for 100 patients in derivation sample.

Using the method of internal consistency; and starting with items selected a priori on the basis of their content, Gough (1957) derived a scale for impulsivity. He found moderate correlations between impulsivity in both ratings and peer nominations on impulsivity. Some of the items in the full scale contain items from California psychological inventory.

Originally a scale of 58 items was selected by three or more judges working in the area of personnel selection and testing, on representing insight into a potential employee's inner motivation and work attitude. Tydylska and Mengel (1953) found only 37 items that distinguished at the .01 level of confidence between a group of 60 male white poor work attitude air force personnel and a group of satisfactory work attitude, equaled in terms of intelligence, age, occupation and marital status. This scale correctly identified 85% of "poor work attitude" cases. It was also found that an unusually large number of poor work attitude individuals expressed concern over their bodily function and believed that they were not in good health.

Barron (1953) originally developed the Es scale for purpose of predicting response to therapy and upon inspection of item content and its personality and intelligence test correlates, it was interpreted as being essentially a measure of ego-strength. Several cross-validations led to the conclusion that a significant determinant of personality change in psychotherapy is strength of the ego before therapy. Among characteristics which are collectively referred to as ego-strength are physiological stability, good health, strong sense of reality, feeling of personal adequacy and vitality, permissive morality, lack of ethnic prejudice, emotional outgoingness, spontaneity and intelligence. In general, it seems to be measuring constructive forces in the personality. Thus it may serve as a predictor in any situation in which an estimate of personal adaptability and resourcefulness is called for.

The problem of the degree to which aggression or overt hostility is

expressed was dealt with by Schultz (1954). He obtained ratings from the therapists of clinic patients in a veteran's administration setting and a university center. These ratings covered the frequency of expression of overt hostility, the adequacy of methods of control, the direction of expression, the duration of the hostile impulses and the frequency of expression of overt hostility. His most stable ratings, were those obtained on the dimension of expression of overt hostility. He strengthened the dependability of these ratings by combining ratings on the direction of expression with the ratings of frequency of expression. Using this composite rating for extreme subjects from the veteran's administration setting, he carried out an item analysis and derived the overt hostility scale. Internal consistency based upon Kuder Richardson formula 21 was found to be .44, by crossvalidation, on 52 subjects from university counseling center.

Taylor's (1953) manifest anxiety scale has stimulated a great deal of interest among clinicians though it was not intended as a practical clinical measure. The method that Taylor used was that 5 judges were asked to select items indicative of manifest anxiety from a subset of about 200 MMPI items previously screened by Taylor. The resulting scale of 65 items was reduced to 50 by an internal consistency analysis. Many of these items are related to somatic symptoms or physical manifestations such as diarrhea, insomnia, restlessness, nausea or vomiting from which anxiety is only inferred. The scale was developed for and has been used exclusively as a device for experimental subjects without regard to the relationship of the scores to more common clinical definitions. The assumption underlying the scale is

that psychiatric patients will tend to exhibit more manifest anxiety symptoms than do normal individuals. The difference indicates some relationship between anxiety scale score and clinical observation of manifest anxiety.

An investigation with the aim to study the generality of certainty and its relations to manifest anxiety was conducted by Wolff(1955). Two types certainty, subjective and behavioral and manifest were under investigation. Subjective certainty refers to degree of conviction experienced consciously by a given subject. Behavioral certainty refers to amount of information requested by subjects before making choices. The subjects used were normal young adult females of university level. The scale was developed from a pool of 74 items selected on a priori basis. Internal consistency analysis was used to reduce the number of items to 34. A correlation of $-.79$ was found with Taylor's anxiety score. Wolff uses this scale as an index of general subjectivity certainty.

All factor analytic studies had identified at least two main sources of variance running through the basic clinical scales on the MMPI. In his own work, Welsh (1954) pointed out that the first major source of variance was identified as factor A, having high loadings from scales 7 (pt) and 8 (so) and high but negative loadings from the K scale. This source of variance appears to be personal discomfort or distress. He describes it as anxiety or general emotional upset. The A scale was devised to measure this source of personality variance.

The second source of variance that he identified in the basic scales of the MMPI as factor R. The first three scales 1,2 and 3 all show moderate

loadings on factor R, with scale 9 having a moderate but negative loading. This source of variance appeared to relate to a dependence upon mechanisms of denial and rationalization and to a lack of effective self-insight.

The confirmation of Welsh's work is reported by Kassemán, Couch and Slater (1959). They intercorrelated the scores from a list of 32 scales of the MMPI, including the A and R scales for a sample of 160 Harvard freshmen. In their rotation to simple structure, they found that the A scale had third largest loading and by far the purest pattern of loadings in the first factor. Similarly, the R scale had its highest loadings on the second factor. They interpreted the R scale as introversion.

By means of A and R scale combinations, Welsh has shown that groups can be formed with considerable homogeneity in code and profile pattern.

The third factor scale, Welsh labeled as lack of control. He developed the control scale using the cluster-analytic approach. The cases he used were selected for their specific score patterns, in forming extreme groups on this dimension and carried out an item analysis as he did for A and R scales.

The fourth factor scale of Welsh, was established in a series of steps from the scales most typically reflecting psychoticism, that is scales 4,6 and 8. From factor loadings, item content and other preliminary findings on this scale, this dimension was labeled psychoticism. This P scale appears to be a promising index of contact with reality.

From the studies cited above, it can be seen that most studies are descriptive in nature, because the SIV is a relatively new test. Almost all the studies utilize the technique of comparison, the product moment correlation using raw scores; while a few of these studies utilize the group means to compare either the two populations or the two tests.

The present study intends to compare two tests administered to the same population, to investigate what relationship exists, if any, between the personality traits of an individual and his values. The only study that is similar to the present one is that of L.V. Gordon (1960) who used a sample of 144 college students and compared their values as measured by SIV with the Gordon Personal Profile.

CHAPTER III

PROCEEDURE IN SECURING AND ANALYZING THE DATA

The data for this study are gathered from the MMPI and the SIV, two tests administered to 75 job applicants at the Goodwill Industries of Chicago and Cook County Inc. during the last two years.

SUBJECTS - The group comprises 75 job applicants at the Goodwill Industries of Chicago and Cook County Inc. during the last two years. In this group there are 45 males and 30 females. The average age for the group is 31.98 years and the range is from 17 to 58 years. The average years of education for 69 subjects is 12.68 years. The record for 6 subjects of years of education is not available, but these six subjects had been given the Gates Basic Reading test and their reading level is at least of 6.8 grade level. The group comprises both white and negro subjects.

The primary function of Goodwill Industries is that of a sheltered workshop for the rehabilitation of the handicapped, either physical or mental; and as such, very often the job applicants are severley handicapped. Care is taken to eliminate such applicants from the experimental group.

TESTING - Each subject in the group is administered both the SIV and the MMPI at the time of applying for a job.

The SIV measures six values which are support, conformity, recognition, independence, benevolence and leadership. The definitions of the six scales are as follows:

- SUPPORT** - Being treated with understanding, receiving encouragement from other people, being treated with kindness and consideration.
- CONFORMITY** - Doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist.
- RECOGNITION** - Being looked up to and admired, being considered important, attracting favorable notice, achieving recognition.
- INDEPENDENCE** - Having the right to do whatever one wants to do, being free to make one's own decisions, being able to do things in one's own way.
- BENEVOLENCE** - Doing things for other people, sharing with others, helping the unfortunate, being generous.
- LEADERSHIP** - Being in charge of other people, having authority over others, being in a position of leadership or power.

The MMPI is a test in which the subject is asked to sort all the statements into 3 categories, true, false and cannot say. The responses are counted in such a manner as to yield scores on four validity scales, the question score (?), the lie score (F) and the K score (K) and on nine clinical scales. Personality characteristic can be assessed on the basis of nine clinical scales, originally developed. These scales are hypochondriasis, depression, hysteria, psychopathic personality, masculinity, femininity, paranoia, psychasthenia, schizophrenia and hypomania. There are many other special scales that have been developed. Although the scales are named according to the abnormal manifestation of the symptomatic complex, they

have all been shown to have meaning within the normal range.

The definition of the clinical scales is as follows:

HYPOCHONDRIASIS	(Hs) is a measure of amount of abnormal concern about bodily functions.
DEPRESSION	(D) measures the depth of the clinically recognized symptom depression. It indicates poor morale of the emotional type with a feeling of uselessness and inability to assume normal optimism with regard to future.
HYSTERIA	(Hy) measures the degree to which the subject is like patients who have developed conversion type hysteria symptoms.
PSYCHOPATHIC DEVIATE	(Pd) measures the similarity of the subject to a group of persons whose main difficulty lies in their absence of deep emotional response, their inability to profit from experience and their disregard of social mores.
MASCULINITY FEMINITY INTEREST SCALE	(MF) measures the tendency toward masculinity or femininity of interest pattern.
PARANOIA	(Pa) this scale was derived by contrasting normal person with a group of clinic patients who were characterized by suspiciousness, oversensitivity and delusions of persecution, with or without expansive egotism.
PSYCHASTHENIA	(Pt) measures the similarity of the subject to psychiatric patients who are troubled by phobias or compulsive behavior.
SCHIZOPHRENIA	(Sc) measures the similarity of the subject's responses to those patients who are characterized by bizarre and unusual thoughts or behavior.
HYPOMANIA	(Ma) measures the personality factor characteristic of persons with marked overproductivity in thought and action.
SOCIAL I.E.	(Si) aims to measure the tendency to withdraw from social contacts with others.

In addition to these ten regular scales of the MMPI, each subject's MMPI is scored on 21 special scales, described below. The special scales used are:

Attitude Toward Others (Ao)	This 20 item scale was made by Gibson (1955)
Attitude Toward Self (As)	Is also a 20 item scale, developed by Gibson (1955)
Alcoholism (Am)	Is a scale of 59 items developed by Holmes (1953)
Delinquency (De)	A short 12 item scale developed by Gough and Peterson (1952)
Dependency (Dy)	A 57 item scale by Navran (1954)
Need For Affection (Hy2)	A 12 item scale by Harris and Lingoos (1955)
Leadership (Lp)	A 50 item scale by Gough (1957)
Impulsivity (Lm)	A 21 item scale by Gough (1957)
Work Attitude (Wa)	A 37 item scale by Tydalska and Mengel (1953)
Ego Strength (Es)	A 68 item scale by Barron (1953)
Overt Hostility (Hv)	A 14 item scale by Schultz (1955)
Altruism (Mf3)	A 9 item scale by Pepper and Strong (1958)
Authority Problems (Pd2)	A 11 item scale by Harris and Lingoos (1955)
Iowa Manifest Anxiety (At)	A 50 item scale by Taylor (1953)
Social Responsibility (Re-r) Revised	A 20 item scale by Gough, McClosky and Meehl (1952)
Self Sufficiency (Sf)	A 34 item scale by Wolff (1955)
Hostility Control (Hc)	A 34 item scale by Welsh (1955)

First Factor (A)	A 39 item scale by Walsh (1954)
Second Factor (R)	A 40 item scale by Welsh (1954)
Third Factor (C)	A 40 item scale by Welsh (1954)
Fourth Factor (P)	A 38 item scale by Welsh (1954)

The raw scores of the SIV for each subject and raw scores of the MMPI (uncorrected for K) are used for comparison by the Pearson Product Moment Correlation technique. The six scales of the SIV are each correlated with the ten regular scales of the MMPI and the 21 special scales mentioned above.

The MMPI has four validity scales. Subjects whose MMPI is seen to be not valid are also excluded from the experimental group. Any subject that has a score on the lie scale of 10 or more and a score of 16 or more on the F scale is eliminated from the experimental group as suggested by Hathaway S.R. and Meehl P.E. (1961).

CHAPTER IV

AN ANALYSIS OF THE FINDINGS

Table I below shows the means and standard deviations for the group of 75 subjects for the six scales of the SIV. Recognition has the least variance and Leadership has the largest variance.

TABLE I
MEANS AND STANDARD DEVIATIONS
FOR THE 6 SCALES OF THE SIV

	MEAN	STANDARD DEVIATION
Support	13.28	4.26
Conformity	19.82	5.92
Recognition	9.04	3.72
Independence	14.05	6.02
Benevolence	19.92	6.00
Leadership	13.72	6.84

Table 2 on the next page shows the means and standard deviations of the regular scales of the MMPI, for the group of 75 subjects. As seen from the table, Paranoia has the smallest variance and Social-Introversion has the largest variance.

TABLE 2
MEANS AND STANDARD DEVIATIONS
FOR THE REGULAR SCALES OF THE MMPI

SCALE	MEAN	STANDARD DEVIATION
K Scale	15.84	5.07
Hs Hypochondriasis	4.50	4.59
D Depression	20.38	6.22
Hy Hysteria	20.90	4.99
Pd Psychopathic Deviate	16.62	4.40
Pa Paranoia	9.50	3.11
Pt Psychasthenia	10.65	7.54
Sc Schizophrenia	10.20	7.77
Ma Hypomania	15.81	4.61
Si Social Introversion	25.50	8.64

Table 3 on the next page shows the means and standard deviations for the group of the 21 special scales of the MMPI used in this study. It can be seen that Hv - Overt Hostility has the least variance whereas Attitude Towards Others Ao has the largest variance of all the special scales.

TABLE 3
 MEANS AND STANDARD DEVIATIONS FOR
 THE SPECIAL SCALES OF THE MMPI

SCALE	MEAN	STANDARD DEVIATION
Ao	16.52	10.45
As	15.38	5.41
Am	27.96	8.33
De	3.73	3.09
Dy	19.38	9.62
Hy2	7.02	2.56
Lp	33.38	7.34
Im	6.08	3.49
Wa	8.50	5.06
Es	45.32	6.27
Hv	4.29	1.39
Mf3	5.78	1.96
Pd2	3.92	1.76
At	13.69	8.64
Re-r	16.02	2.85
Sf	22.92	6.36
A	10.45	8.14
R	17.20	4.83
O	15.05	4.21
P	10.34	3.72
He	6.74	3.62

TABLE 4

INTER-CORRELATIONS BETWEEN THE SIV AND
THE REGULAR SCALES OF THE MMPI

	MMPI SCALES									
	K	Ha	D	Hy	Fd	Pa	Pt	Sc	Ma	Si
S	.195	.170	.169	.208	.002	<u>.394</u>	.133	.160	.032	.045
O	.103	.014	.176	.088	<u>-.490</u>	-.015	-.130	<u>-.241</u>	-.127	.118
R	.135	.174	<u>.276</u>	.051	.150	.074	.171	.210	.154	.133
I	.068	.055	.150	.036	.147	.221	.087	.146	-.109	.218
B	.073	-.039	-.072	.066	.014	<u>.245</u>	-.037	-.053	.141	<u>-.267</u>
L	.173	<u>.250</u>	<u>-.245</u>	-.154	.127	-.013	.050	.096	<u>.295</u>	<u>-.245</u>

Underlined by one line, significant at .01 Level

Underlined by two lines, significant at .05 Level

Table 4 shows that the K-scale has no significant correlation with any of the scales on the SIV.

Hs (Hypochondriasis) has a correlation of .250 with the leadership scale of the SIV; significant at the .05 level. This could be understood as the leader being somewhat concerned with his health, because the role of leadership does make some demand on the individual's health.

Depression correlated .276 with recognition. This is not quite what one would expect, but probably depression acts as a driving force for one to do what is required for recognition.

Depression has a negative correlation $-.245$ with leadership. This is quite logical and expected. A person feeling depressed and useless with no optimism for the future could never act the role of a leader.

The Hy scale of the MMPI has no significant correlations with any of the SIV scales.

The Pd scale has an entirely logical negative correlation with conformity scale. Psychopathic deviates are described as those who indulge in forbidden behavior and still have no guilt pangs about it. Naturally those who score high on the psychopathic deviate score should be expected to score low on the conformity scale.

The Pa scale has significant correlations of .394 with the support scale. The Pa scale was developed by contrasting normal persons with a group of clinic patients who were characterized by suspiciousness, oversensitivity and delusions of persecution. It seems quite natural that such people should

need more encouragement and support which the S scale of the SIV purports to measure.

The Pd scale also has significant correlation of .245 with benevolence, which is described as doing things for others, sharing with others, helping the unfortunate and being generous. All these seem to be the only responding behaviors from the individual high on the Pa scale, who has delusions of persecution.

The Pt scale has no significant correlations with any of the SIV scales.

The Sc scale has a negative correlation of $-.241$ with conformity on the SIV. This is also quite in the expected direction; the schizophrenic's contact with reality is decreasing and accordingly his behavior is socially incorrect or not conforming to social norms.

The Ma scale of the MMPI has a significant positive correlation of .295 with the leadership scale. This is also in the expected direction and entirely logical. L scale cannot have a negative correlation with depression and a negative correlation with hypomania which is characteristic of persons with marked overproductivity in thought and action. The positive correlation is thus in the expected direction. A leader has to be outgoing, and possess characteristics of accelerated thought and action.

The Si scale has significant negative correlation of $-.267$ with benevolence. This is also in the expected direction, a benevolent person cannot be withdrawn from people, for then he cannot help and share with others and thus be called benevolent.

The Si again has an expected negative correlation with leadership scale of $-.245$. A leader has to be outgoing and social; a person with a tendency to withdraw is hard to imagine in the leadership role.

Among the intercorrelations of the regular scales of the MMPI and the six scales of the SIV, all the correlations that reach the level of significance are in the expected direction except the positive correlations between Pa (Paranoia) and benevolence (B). The relationship is not entirely impossible, but it is a little bewildering or it could be that paranoia is too broad and admits of other relationship on this demension.

Table 5 on page 30 shows the correlations between the 21 special scales of the MMPI and the six scales of the SIV.

The scales Ao, As, Am, Dy, Hy2, Wa, Hy, Pd2, At, and Sf, have no significant correlation with any of the SIV scales. Factor A also has no correlation with any of the SIV scales. Only the scales that have any significant correlation have been mentioned below.

The scale De has significant negative correlation with conformity. This is confusing because one would expect a conformist to depend on the accepted rules of society.

Similarly leadership has negative correlation with independence. This is surprising because a leader is always imagined as being independent, self-starter and opposite of dependent. The group is usually looked upon as dependent on the leader.

Im (Impulsivity) has a negative correlation of $-.304$ with conformity. This is in the expected direction, as conformist would never be impulsive, and always think and act according to the accepted paths of behavior.

Es (Ego Strength) has a positive correlation with leadership as expected. Es is described as the scale that shows strong constructive forces of character and this is a prerequisite for leadership.

Mf3 (Altruism) has positive correlation with support. This is quite natural as people who are altruistic, know what support, encouragement and kindness means as they themselves seek it.

Re-r (Social Responsibility) has a negative correlation of $-.310$ with recognition.

The second factor of the MMPI - R which stands for introversion has a significant negative correlation with the leadership scale. This is significant at .01 level and is in the expected direction.

The third factor C is labeled by Welsh as lack of control. This has significant correlation of $.245$ with recognition and a negative correlation of $-.409$ with Benevolence.

The fourth factor P, is an index of contact with reality. This scale has a significant negative correlation of $-.251$ with conformity and a significant positive correlation of $.267$ with recognition.

The scale Hc (Hostiliby Control) has a positive correlation of $.249$ with recognition, as would be expected.

Among all the special scales of the MMPI, 5 correlations are significant, at .01 level and 6 at .05 level. Of these only two are in the unexpected direction. This could be due to the nature of the experimental group. As applying for a job is a realistic situation, most of the values as revealed by the applicant are really representatives of his personality, but often times there is on the applicant's part a desire to put the best foot forward and this is putting on or imposing false or pretended value structure which really do not belong to the individual's character pattern.

TABLE 5

INTER-CORRELATIONS BETWEEN THE SPECIAL SCALES OF
THE MMPI AND THE SIX SCALES OF THE SIV

	S	C	R	I	B	L
Ao	.025	.060	-.065	.034	.176	-.220
As	-.132	.054	.180	-.086	.217	.044
Am	-.134	-.100	.026	.076	-.011	.058
De	-.022	<u>-.315</u>	.074	.082	-.173	.115
Dy	.147	-.101	.225	.049	-.147	-.125
Hy2	.138	.119	-.034	-.048	.009	-.180
Lp	-.059	.058	-.165	<u>-.295</u>	.181	.123
Im	-.001	<u>-.304</u>	-.075	.081	.046	.117
Wa	.071	-.119	.132	.155	.034	-.096
Es	-.110	-.145	-.057	-.042	-.073	<u>.338</u>
Hv	-.015	-.017	-.035	-.088	.056	.029
Mf3	<u>.263</u>	-.047	.048	0	.052	-.126
Pd2	-.160	-.036	-.084	.139	-.115	.153
At	.006	-.136	.082	.144	.013	-.130
Re-r	-.004	.193	<u>-.310</u>	-.056	.104	-.056
Sf	-.096	.047	-.228	-.139	.215	.099
A	-.085	-.159	.083	.180	-.081	-.054
R	.142	.211	.029	.175	-.150	<u>-.358</u>
C	.017	.063	<u>.245</u>	.230	<u>-.409</u>	.021
P	.077	<u>-.251</u>	<u>.267</u>	.155	-.104	-.013
Hc	.178	-.185	<u>.249</u>	.046	-.003	-.111

Underlined by one line, significant at .01 level

Underlined by two lines, significant at .05 level

CHAPTER V

SUMMARY AND CONCLUSION

Two tests the SIV and the MMPI were administered to 75 job applicants at Goodwill Industries of Chicago and Cook County Incorporated. An attempt was made to correlate the six scales of the SIV with the regular scales of the MMPI and the 21 special scales of the MMPI with a hope that the value test and the personality test might reveal some strong tendencies of values that go with certain personality traits. The technique of Pearson Product Moment Correlation was used.

The results show 8 correlations significant at .01 level and the 14 correlations significant at .05 level, out of the total of 186 correlations. Out of the regular 10 scales of the MMPI with the six scales of the SIV there are 10 significant correlations. Out of the 21 special scales of the MMPI, there are only 12 significant correlations. This may be because some of the special scales are still quite recent and need further research validation.

The patterns expected were not found for all the 6 values measured by the SIV. Leadership has 6 significant correlations, and conformity and recognition each have 5 significant correlations with the MMPI scales as shown below:

Leadership - Positive correlation with hypochondriasis, hypomania, ego strength.

Negative correlation with depression, social introversion and introversion.

Conformity - Negative correlation with psychopathic deviate, schizophrenia, dependency, impulsivity and contact with reality.

Recognition - Positive correlation with depression, hostility control, lack of control, contact with reality, and negative correlation with social responsibility.

Benevolence - Positive correlation with paranoia, negative correlation with social introversion and lack of control.

The results are not quite up to expectations and a cross-validation of such a study on another sample is recommended to confirm the findings reported in this study.

BIBLIOGRAPHY

- Allport, Gordon *Becoming: Basic considerations for a psychology of Personality*. New Haven Yale, 1955.
- Barron, F. "An Ego-strength scale which predicts response to psychotherapy" *Journal of Consult. Psych.* 1953, 17, 327-333.
- Beaver, Alma 1963 from "Research Briefs on Survey of Interpersonal Values" by L.V. Gordon. May 1963.
- Blume, Dorothy M. "Interpersonal Values of Nursing Students in one University Program" M.S. Thesis University of Texas 1963.
- Daninos, Andre Morali "Research Briefs on SIV" by Gordon, L.V. May 1963.
- Fleishman, E.A. & Peters, Dr. "Interpersonal Values, Leadership, Attitude and Management Success" *Personnel Psych.* 1962, 15, 2, 127-143.
- Gordon, L.V. *SRA Manual for Survey of Interpersonal Values Preliminary Edition August 1960.*
- Gordon, L.V. "Research Briefs on Survey of Interpersonal Values". Manual supplement revised, May 1963.
- Gordon, L.V. & Mensh, I.V. "Values of Medical Students at Different Levels" *Journal of Educational Psych.* 1962, 53, 48, -51.
- Gough, H.G. (1957) From "An MMPI Handbook" by Dahlstrom and Welsh. Minnesota Press 1962.
- Gough and Peterson *The Identification and Measurement of Predispositional Factors in Crime and Delinquency*. *Journal of Consult. Psych.* 1952, 16, 207-212.
- Gough, H.G. McRdosky and P.E. Meehl "A Personality Scale for Social Responsibility" *Journal of Abn. and Social Psych.* 1952, 47, 73-80.
- Gunderson, Eric 1963 *Research Briefs on SIV.*, by Gordon, L.V. May 1963
- Hathaway, S.R. and McKinley, J.A. "MMPI Manual Revised 1951" The Psychological Corporation.
- Hathaway, S.R. and Meehl, P.E. "An Atlas for the Clinical use of the MMPI" University of Minnesota Press 1961 Page 10 and 11.
- Hedberg, R. "More in Forced Choice Test Fakability" *Journal of Applied Psych.* 1962, 66, 2, 125-127.

- Holms, W.O. "The Development of an Empirical MMPI Scale for Alcoholism"
Unpublished Manuscript 1953.
- Kakkar, S.B. 1963 from "Research Brief on SIV" by Gordon, L.V. May 1963.
- Kassenbaum, G.G., Couch, A.S. and Slater, P.E. "The Factional Dimensions of
the MMPI" Journal of Consult. Psych. 1959, 23, 226-236.
- Kikuchi, Akio 1963 Research Briefs on SIV by Gordon, L.V. May 1963.
- Knapp, R.R. "Personality correlates of delinquency rate in a navy sample"
Journal of Applied Psych. 1963 47,1, 68-71.
- Lichenstein, P.E. "Perspectives of Psychology; Interrelations of Fact and
Values in Science" Psychological Record 11, 181-186.
- Navran, L. "A Rationally Derived MMPI Scale to Measure Dependence" Journal
of Consult. Psych. 1954 18, 92.
- Rogers, Carl "The Place of the Person in the New World of the Behavioral
Sciences" Personnel and Guidance Journal 37, 422-452.
- Schultz, S.D. "A differentiation of several forms of hostility by scales
empirically constructed from significant items on the MMPI"
Dissertation Abstract, 1955, 17, 717-20.
- Skinner, K.K. and Long, R.C. "A method for the secretarial observations and
analysis of group interaction" American Psychologist, 1962, 17, 339.
- Smith, M. Brewster "Mental Health" reconsidered a special case of the
problems of values in psychology. American Psychologist 16, 299-306.
- Snelbecker, Glen 1963 form "Research Briefs on SIV" by Gordon, L.V. May 1963.
- Taylor, J.A. "A Personality scale of Manifest Anxiety" Journal of Abnormal
and Social Psych. 1953, 48, 285-290.
- Tydylska, Mary and Mengel, R. "A Scale for Measuring Work Attitude for the
MMPI" Journal of Applied Psych. 1953 37, 474-477.
- Wolff, W.M. "Certainty, Generality and Relation to Manifest Anxiety" Journal
of Abnormal Social Psych. 1955, 50, 59-64.
- Woodard, Barbara "An Investigation of Some Interpersonal Values of Freshman
and Senior Nursing Students at the Texas Women's University". M.A.
thesis Texas Women's University August 1962 from "Research Briefs on SIV"
May 1963.
- Zimmerman, Irla Lee "Research Brief on the SIV" May 1963.

REFERENCES

- Crow, E.L., Frances A. Davis, Maxfield, Margaret W. Statistics Manual - Dover Publications Inc. New York Pg. 240-241.
- Dahlstrom, W.G. and Welsh, G.S. "An MMPI Handbook, A Guide to Use in Clinical Practice and Research " University of Minnesota Press 1962.
- Hathaway, S.R. and McKinley, J.A. "MMPI Manual Revised, 1951" The Psychological Corporation.
- Gordon, L.V. Ph.D. "SRA Manual for Survey of Interpersonal Values" Preliminary Edition August 1960.
- Gordon, L.V. "Research Briefs on Survey of Interpersonal Values" Manual Supplement Revised, May 1963.
- McNemar, O. "Psychological Statistics" John Wiley and Sons 1960.

APPROVAL SHEET

The thesis submitted by Kamal Lathi has been read and approved by three members of the Department of Psychology.

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content, form, and mechanical accuracy.

The thesis is therefore accepted in partial fulfillment of the requirements for the Degree of Master of Arts.

February 12, 1965
Date

Edmund P. Marx
Signature of Adviser