A STUDY OF SELF-IDEAL DISCREPANCY SCORES AND ANXIETY IN A COLLEGE AND CLINICAL POPULATION

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# A STUDY OF SELF-IDEAL DISCREPANCY SCORES AND ANXIETY IN A COLLEGE AND CLINICAL POPULATION

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#### CHAPTER I

#### INTRODUCTION

Perhaps of all the factors which are related to human beings and of all the studies which are being dealt with by social scientists, the outstanding phenomenon which plays a most vital part in human reactions is the human being's perceptions of his self in relation to the environment. A human being's overt behavioral reactions are generally considered to be the product of psychosocial perceptions constantly being made by that individual. Interest in self-perceptions of the human organism has grown in recent years. These perceptions, when used as a tool or variable in psychological research, can be an invaluable factor in relating and studying various beliefs and ideas concerning human behavior; hence, it would seem feasible that a study concerned with self-perceptions would be very useful in adding to research being done in this area.

Another area of research and one which has been attacked in countless ways is the psychological phenomemon of anxiety. In recent years anxiety and its relationship to and upon other factors have been undertaken as a study or as a portion of a study by many researchers. Results of this research have been quite conflicting; therefore, with the

above considerations in mind it would seem that a study concerned with self-perceptions and anxiety could be quite profitable.

#### Theoretical Background

During the first forty years of the twentieth century, constructs concerning the self did not receive much attention from the behaviorist and functionalist psychologies which were dominating the American scene. Hilgard (9, p. 375) explained, "the introspectionists were unable to handle the self, and of course such a 'mentalistic' construct as the self-concept was anathema to behaviorists."

During recent years there has been a marked interest in self-theories. This can be traced to a number of reasons. In Freud's later writings, he assigned more value to ego development and functioning; the neo-Freudians stressed the importance of the self picture and the ego-ideal. Another factor was that the American psychologists began to entertain psychoanalytical ideas, particularly of the neo-Freudian variety. This interest did not necessarily go along with the trend in general experimental psychology which existed at the time; however, there has been a sort of fusion taking place: General psychological theories of cognition and motivation have come into contact with the psychoanalytical or psychodynamic theories originating in the clinic. In dealing with the various theories of personality, which have been put

forth within the last two decades, all have assigned importance to a phenomenal and/or nonphenomenal self-concept with cognitive and motivational attributes (17, p. 2).

Along with the increase in studies of self-perception there has also been an increase in the number of instruments which have been constructed for exploring this phenomenon. As time passed and as many of the instruments were tested, it began to appear that the most useful constructs which resulted from these scales were the measurement of the concept of the self and the measurement of the concept of the ideal self. Rogers (13, p. 136) defines self concept as "an organized configuration of perceptions of the self which are admissible to awareness." This particular definition will be utilized in this research. The self-concept is believed to be composed of the perceptions of one's characteristics and abilities; the percepts and concepts of the self in relation to others and to the environment. The concept of the ideal self can be considered "the kind or type of individual a person would like to be in his present psychosocial environment" (17, p. 41).

In the past few years, when one studies self-concept scores and ideal self scores, it has been thought that the amount of difference between these two scores would be an indication of the amount of adjustment or maladjustment which existed with the individual. Rogers states:

As long as the self-Gestalt is firmly organized, and no contradictory material is even dimly perceived, then positive self-feelings may exist; the self may be seen as worthy and acceptable, and conscious tension is minimal. Behavior is consistent with the organized hypotheses and concepts of the self-structure. Although the individual whose self-concept is incongruent with reality may be vulnerable, the extent to which he dimly perceives these incongruences and discrepancies is a measure of his internal tension, and determines the amount of defensive behavior (13, pp. 191-192).

The exploration of the dynamics of this statement will be examined experimentally in this study.

Before going on with this segment of approach, the factor of anxiety should be briefly discussed. Anxiety is considered to be an emotional response to a situation that seems to have no immediate acceptable solution. believed to be experienced by all individuals at different times in varying degrees. Individuals often are faced with this situation when attempting to make an adequate adjustment to the real world. In this study anxiety will be defined as "an individual's fearladen over-reaction to an adjustment situation" (8, p. 64). Because anxiety is so prevalent, it is important to gain some understanding of the related determinants which exist in this human characteristic; hence, it should be of value to investigate the relationship which should exist between the discrepancy scores on a self-rating instrument and anxiety as measured by a constructed anxiety scale.

Halpern (5, p. 449) suggested the possibility that "in areas where a person is discontent about his own behavior, disorganizing anxiety may be aroused and distortive defenses may be mobilized."

La Fon (11, p. 10) postulated that

self-acceptance should correlate negatively with anxiety, hostility, and criticality toward self and environment, defensive behavior, and indecisiveness, and should correlate positively with internalization of values, realistic perception, emotional stability and maturity, and capacity for social relationships, and the capacities to integrate the self-concept and handle the complexity of relationships with others.

To measure self-acceptance he used Brownfain's "stability of self-concept" and "negative self-concept." La Fon assumed that certain Rorschach measures revealed respectively the adjustment characteristics itemized above. Two extreme groups of subjects differing in stability of self-concept were drawn from a pool of 146 female undergraduates. Rorschach scoring items, 22 t tests were in the predicted direction, three of them reaching the .05 level or better. From the 60 subjects, two extreme groups of 20 each were drawn, differing with respect to "negative self-concept." 20 out of 28 Rorschach comparisons, differences were in the predicted direction with seven t tests reading the .05 level or better. Not all of the tests of significance were independent of one another; however, one may conclude that there is some trend in these data "toward a correlation between

phenomenal self-esteem and Rorschach scores purporting to measure adjustment."

Hanlon, Hofstaetter, and O'Conner (6) studied the correlation between self-ideal congruence and total adjustment. It was found that the congruence between the self-concept and the ideal self-concept can be used as a measure of adjustment with a considerable degree of confidence.

#### Related Studies

There has been, within recent years, an enormous amount of research done concerning self-concept or anxiety. The following studies present the results of some of these studies.

Tamkin (16) found that schizophrenic subjects had significantly lower self-acceptance scores on the <u>Scott-Duke</u>

<u>Ouestionnaire</u> than did non-patient subjects.

Scott (15) as part of her study of anxiety in children, examined self-concepts by evaluating human drawings of the children. She concluded that possible trends between the two factors did exist; however, it was not strong enough to infer any real existing relationship.

Hauser (7) found by using a multiple correlation approach that there was a significantly higher correlation between the level of self-concept and various combinations of rigidity, security, and anxiety than between stability of self-concept and these same combinations of variables.

Miller and Worchel (12) related [Self-Ideal] discrepancies in the Self-Activity Inventory to changes in accuracy of performance on the McKinny Reporting Test under continued self-esteem-threatening stress. Each subject performed first at his own rate for eight minutes on the McKinny Test. Then he worked for sixteen minutes, during which time he was interrupted every thirty seconds to be told he was failing to meet a standard. This stress period was divided into eight-minute sections of supposedly mounting stress. Finally, subjects worked for eight minutes without stress. On the basis of discrepancy scores, subjects were divided into three groups, showing respectively high, medium, and low discrepancies. In the second of the two successive stress periods, subjects with medium discrepancies showed significantly less performance decrement (as compared to the prestress period) than did subjects with high or low discrepancies. Also, in the poststress period, the subjects with medium discrepancies come closer to their prestress performance level than did either of the other two groups.

Hillson and Worchel (10) studied groups of normal, neurotic, and schizophrenic subjects who were "fairly well equated' on sex, age, and educational level, and were comparable, to an unspecified degree, with respect to socioeconomic class. They used the <u>Self-Activity Inventory</u>. They found that neurotic subjects rated themselves significantly more unfavorable than did normal or schizophrenic subjects

while the latter two groups made closely similar selfscores. A self-ideal discrepancy score gave the same group findings as did the self-score.

In another study involving sixth-grade children in their classrooms, Zelen (18) applied the Bonney Sociometric Technique and two measures of self-acceptance. He obtained small but significant correlations between each measure of self-acceptance and sociometric acceptance by peers.

Fidler (4), in a study, found significant correlations between self-esteem and self-satisfaction and between each of the tested self-concept reports and Taylor <u>Anxiety Scale</u> scores.

Cowen, Heilizer, Axelrod, and Alexander (3) found Taylor Anxiety Scale scores to be associated with self-acceptance and self-ideal discrepancy scores on Bill's Index of Adjustment and Values.

Block and Thomas (2) reported that large self-ideal discrepancies were associated with maladjustment on MMPI scales. Significant differences were found in the Hs, D, Pd, Ps, and Sc scales. Self-ideal congruence correlated positively with their Eqo-Control scale and with Little and Fisher's Denial and Admission Scales both derived from the MMPI. Also, Berger (1) found that self-acceptance in college students, as measured by his self-acceptance scale, also correlated negatively with certain clinical scales on the MMPI.

Sarbin and Rosenberg (14) found that normal volunteer student subjects and student subjects who had been diagnosed as neurotic and recommended for therapy showed significant differences in self-acceptance and in a <u>Self-Criticality Index</u> derived from Gough's <u>Adjustive Check List</u>. The neurotic subjects were less self-accepting and more self-critical.

#### Statement of Problem

This study will be concerned with the relationship of self-ideal discrepancy scores and anxiety in a college and clinical population. To measure this relationship the Bill's <u>Index of Adjustment and Values</u> and the Catell <u>IPAT</u> will be used.

The college subjects will be divided into high and low anxiety groups based on their scores and the clinical subjects will be divided into high and low anxiety groups based on their scores.

#### Hypothesis

Concerning this study, the following hypotheses will be investigated:

(1) The low anxiety subjects will have a significantly lower discrepancy score than the high anxiety subjects in both the college and clinical group.

- (2) The mean discrepancy score will be significantly lower in the college group than in the clinical group.
- (3) The mean anxiety score will be significantly lower in the college group than in the clinical group.

#### CHAPTER BIBLIOGRAPHY

- 1. Berger, E. M., "Relationship Among Acceptance of Self, Acceptance of Others, and MMPI Scores," <u>Journal of Consulting Psychology</u>, II (1955), 279-284.
- 2. Block, J. and Thomas, H., "Is Satisfaction With Self--Satisfaction," <u>Journal of Consulting Psychology</u>, XIX (1955), 449-452.
- 3. Cowen, E. L., Heilizer, F., Axelrod, H. S., Alexander, S., "The Correlates of Manifest Anxiety in Perceptual Reactivity, Rigidity, and Self-Concept," <u>Journal of Consulting Psychology</u>, XXI (1957), 405-411.
- 4. Fiedler, F. E., Dodge, Joan S., Jones, R. E. and Hutchins, E. B., "Interrelations Among Measures of Personality Adjustment in Non-Clinical Populations,"

  <u>Journal of Abnormal and Social Psychology</u>, LVI (1958), 345-351.
- 5. Halpern, H. M., "Empathy, Similarity, and Self-Satisfaction," <u>Journal of Consulting Psychology</u>, XIX (1955), 449-452.
- 6. Hanlon, T. E., Hofstaetter, P. and O'Conner, J., "Congruence of Self and Ideal Self in Relation to Personality Adjustment," <u>Journal of Consulting Psychology</u>, XVIII (1954), 215-218.
- 7. Hauser, F. S., "The Relationship of Self-Concept to Security, Anxiety, and Rigidity," unpublished doctoral dissertation, Department of Psychology, University of Rochester, Rochester, New York, 1953.
- 8. Hepner, H. W., <u>Psychology Applied to Life and Work</u>, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1957.
- 9. Hilgard, E. R., "Human Motives and the Concept of the Self," American Psychologist, IV (1949), 374-382.
- 10. Hillson, J. S. and Worchel, P., "Self-Concept and Defensive Behavior in the Maladjusted," <u>Journal of Consulting Psychology</u>, XXI (1957), 83-88.

- 11. La Fon, F. E., "Behavior on the Rorschach Test and a Measure of Self-Acceptance," <u>Psychological Monograph</u>, LXVIII (10), (1954), No. 381.
- 12. Miller, K. S. and Worchel, P., "The Effects of Need--Achievement and Self-Ideal Discrepancy on Performance Under Stress," <u>Journal of Personality</u>, XXV (1956), 176-190.
- 13. Rogers, C. R., <u>Client-Centered Therapy</u>, Boston, Houghton Mifflin, 1951.
- 14. Sarbin, T. R. and Rosenberg, B. G., "Contribution to Role-Taking: IV, A Method for Obtaining a Qualitative Estimate of the Self," <u>Journal of Social Psychology</u>, XLII (1955), 71-81.
- 15. Scott, M., "Anxiety in Children and Its Relationship to Intelligence, Self-Concept, and Ordinal Birth Position," unpublished master's thesis, Department of Education and Psychology, North Texas State University, Denton, Texas, 1961.
- 16. Tomkin, A. S., "Selective Recall in Schizophrenia and Its Relation to Ego Strength," <u>Journal of Abnormal and Social Psychology</u>, LV (1957), 345-349.
- 17. Wylie, Ruth C., The Self-Concept, Lincoln University of Nebraska Press, 1961.
- 18. Zelen, S. L., "Acceptance and Acceptability; An Examination of Social Reciprocity," <u>Journal of Consulting Psychology</u>, XVIII (1954), 316.

#### CHAPTER II

#### PROCEDURE

Seventy-two subjects participated in this study.

Thirty-six subjects were available from the clinical setting at the Wichita Falls State Hospital. A similar number was selected at random from junior, senior, and graduate students in the School of Education at North Texas State University.

One factor which was considered in this study was the ages of the subjects in the groups. The ages of the college group were matched with the ages of the clinical subjects.

#### Materials

The subjects in both the college and clinical groups were administered two tests. These tests were the Cattell <a href="IPAT">IPAT Anxiety Scale</a> and Bill's <a href="Index of Adjustment">Index of Adjustment</a> and <a href="Values">Values</a>.

The Cattell <u>IPAT Scale</u> is based on extensive research (7, 8, 9, 10, 11) and is probably the most effective brief questionnaire instrument available. It is used for supplementing clinical diagnosis and giving an objective measure for research purposes. The validity of each of the forty items has been established by the fact that it correlates significantly, and most highly, out of over 2,000 questionnaire response items tried out, with the primary factor

which it is now intended to represent. Subjects taking the <a href="IPAT Anxiety Scale">IPAT Anxiety Scale</a> are directed to answer forty questions by checking one choice out of three which are listed as to how that particular question applies to the subject.

The <u>Bill's Index of Adjustment and Values</u> is based upon the theory that behavior is consistent with a behaver's perceptions about himself in relation to the world in which he lives. Extended discussions of this perceptual theory can be studied in the following (4, 12, 13). It was in this context that the <u>Index of Adjustment and Values</u> was developed (2, 3, 5, 6).

To arrive at the <u>IAV</u> traits, a sample of 124 words was taken from Allport's list of 17,953 traits (1). In selecting this sample, an effort was made to choose those items which seem to occur frequently in client-centered interviews (12) and which seem to present clearcut examples of self-concept definitions. The list of 124 traits was given to 44 subjects and they were asked to make three ratings for each of the traits. These three ratings asked a subject to tell his perception of himself, how he felt about it, and what he would like to be. Three weeks later these same 44 subjects made the same ratings for the 124 traits. The results of the two administrations were then compared to determine the variability of the items from the first to second administration. Words were eliminated which showed a greater average variation than the average variation of the subjects on all

of the items. This process resulted in the retention of 49 words which were included in the revised form. On each of these 49 words the subject rates himself numerically from 1 to 5 as to how the word applies to him. He also rates himself in the same manner in another column as to how he would like the word to apply to him. Thus, one gets a numerical score dealing with the person's image of himself in relation to these words and, also, how he would like to be in relation to these words.

#### Method

All of the tests administered to the college group were given by the investigator. These tests were administered during regular classroom periods and the subjects were given no information except to follow the standard directions of the tests.

The tests administered to the subjects of the clinical group were given by a staff psychologist at the Wichita Falls State Hospital for the purpose of rapport. The subjects were administered the Index of Adjustment and Values and the IPAT Anxiety Scale as part of the usual battery of tests used in group testing of patients for screening purposes. The subjects were not aware that they were participating in a research project.

#### Statistical Treatment

Due to the design of this project, each subject's performance will yield two scores. These scores will be classified as an anxiety test score and the IAV discrepancy score.

Both the college group and the clinical group were divided into high and low anxiety groups. This was done by putting the individuals whose anxiety scores were in the upper 50 per cent into the high anxiety group, and putting the individuals whose anxiety scores were in the lower 50 per cent into the low anxiety group. Thus, there were 18 subjects in the high anxiety college group and 18 subjects in the low anxiety college group and 18 subjects in the high anxiety clinical group and 18 subjects in the high anxiety clinical group and 18 subjects in the low anxiety clinical group. A mean anxiety score and a discrepancy score were determined for each of the groups.

The hypothesis that a high anxiety group will have a higher discrepancy score was tested by setting the level of significance at .05, applying a two-way analysis of variance and applying a t test.

The third hypothesis, which deals with the mean anxiety scores of the college and clinical groups, was tested by applying a <u>t</u> test.

The level of significance for all three hypotheses was set at .05.

#### CHAPTER BIBLIOGRAPHY

- Allport, G. W. and Odbert, H. S., "Trait-Names: A Psychological Study," <u>Psychological Monographs</u>, 1936, No. 211.
- 2. Bills, R. E., "Rorschach Characteristics of Persons Scoring High and Low in Acceptance of Self," <u>Journal of Consulting Psychology</u>, XVII (1953), 36-38.
- 3. Bills, R. E., "A Validation of Changes in Scores on the <u>Index of Adjustment and Values</u> As Measures of Changes in Emotionality," <u>Journal of Consulting Psychology</u>, XVII (1953), 135-138.
- 4. Bills, R. E., "A Comparison of Scores on the <u>Index of Adjustment and Values</u> with Behavior on Level of Aspiration Tasks," <u>Journal of Consulting Psychology</u>, XVII (1953), 206-212.
  - 5. Bills, R. E., About People and Teaching, Bulletin of the Bureau of School Service, College of Education, University of Kentucky, Lexington, XXVIII, No. 2, December, 1955.
  - 6. Bills, R. E., Vance, E. L. and McLean, O. S., "An Index of Adjustment and Values," <u>Journal of Consulting Psychology</u>, XV (1951), 257-261.
  - 7. Cattell, R. B., <u>Psychiatric Screening of Flying Personnel</u>
    --A Study of 1,000 Air Force Students in Basic Pilot
    Training, U.S.A.F. School of Aviation Medical Project
    Report, No. 21-0202-007, Report 9, 1955.
  - 8. Cattell, R. B., "The Chief Invariant Psychological and Psychophysiological Unities Found by P-Technique,"

    Journal of Clinical Psychology, XI (1955), 319-343.
  - 9. Cattell, R. B., "Validation and Intensification of the Sixteen Personality Factor Questionnaire," <u>Journal of Clinical Psychology</u>, XII (1956), 205-214.
  - 10. Cattell, R. B., "Second-Order Personality Factors in the Questionnaire Realm," <u>Journal of Consulting Psychology</u>, XX (1956), 411-418.

11. Cattell, R. B., "The Conceptual and Test Distinction of Neuroticism and Anxiety," <u>Journal of Clinical Psychology</u>, XIII (1957), 123-141.

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- 12. Rogers, C. R., <u>Client-Centered Therapy</u>, Boston, Houghton Mifflin, 1951.
- 13. Snygg, D. and Combs, A. W., <u>Individual Behavior</u>, New York, Harper, 1949.

#### CHAPTER III

#### ANALYSIS OF RESULTS

Three hypotheses were presented in the first chapter.

These hypotheses were taken one at a time and the results of each were presented. A two-way analysis of variance and the test (1) were utilized to test the interaction of the cells and the level of significance.

Table I presents the mean anxiety and the mean discrepancy scores for the four groups.

TABLE I

MEAN ANXIETY AND DISCREPANCY SCORES FOR ALL GROUPS

Groups	Low Anxiety Groups Anxiety Score	High Anxiety Groups Anxiety Score	Total Mean Anxiety
College	14.28	35.44	24.36
Clinical	19.95	43.89	31.92
Groups	Discrepancy	D <b>iscrepancy</b>	Total
	Score	Score	Mean Discrepancy
College	34.61	51.5	42.88
Clinical	41.94	63.28	52.61

An analysis of Table I reveals that the mean anxiety and discrepancy scores of the college group are lower than the mean anxiety and discrepancy scores of the clinical group. These differences will be tested for significance and discussed later in this chapter.

The first hypothesis was as follows:

1. The low anxiety subjects will have a significantly lower discrepancy score than the high anxiety subjects in both the college and clinical groups.

Table II presents the analysis of variance for the anxiety groups and their discrepancy scores.

TABLE II

ANALYSIS OF VARIANCE FOR ANXIETY GROUPS
AND THEIR DISCREPANCY SCORES

Source	Sum of Squares	d/f	Variance	F	Ė	P
Rows (Anx.)	6,690	1	6,690	40.6	5.79	.01
Columns (Dis.)	1,702	1	1,702	10.3	1.96	angles forma
Within	11,205	68	164.78		desired delivers	erical dende
Total	19,672	70	Advant reports	design deliver	Mariner Anyon	unio mua

It is immediately apparent that the difference between the high and low anxiety groups and their discrepancy scores is highly significant; therefore, the hypothesis that high anxiety subjects would have significantly greater perceived discrepancies between the self and ideal-self than do the low anxiety subjects is confirmed at better than the .01 level of confidence. The data in Table II also show a very high F score which indicates a high degree of interaction within the cells.

The second hypothesis was:

2. The mean discrepancy scores will be significantly lower in the college group than in the clinical group.

Table III shows the level of significance between the mean discrepancy scores of the college and clinical groups.

TABLE III

LEVEL OF SIGNIFICANCE BETWEEN THE MEAN
DISCREPANCY SCORES OF THE COLLEGE
AND CLINICAL GROUPS

Group	И	М	<u> </u>	P
College	36	42.88		
Clinical	36	52.61	1.96	below 5%

An analysis of Table III shows that the second hypothesis was not supported by the findings of this study. The F ratio of 10.3 shown in Table II indicates that a significant interaction does exist; although it misses the .05 level of significance by .03 of a point when a <u>t</u> test is applied. Therefore, the hypothesis that the college group will have a significantly lower discrepancy score than the clinical group cannot be accepted since it did not reach the .05 level of significance. However, the results missed being

significant by only .03 of a point, and they do indicate a trend in the hypothesized direction.

The third hypothesis stated was:

3. The mean anxiety score will be significantly lower in the college group than in the clinical group.

Table IV presents the level of significance between the mean anxiety scores of the college and clinical group.

TABLE IV

LEVEL OF SIGNIFICANCE BETWEEN THE MEAN
ANXIETY SCORES OF THE COLLEGE AND
CLINICAL GROUP

Group	И	М	<u>t_</u>	P
College	36	24.36		
Clinical	36	31.92	2.26	.05

The results as stated in Table IV show that the hypothesis is supported by the findings in this particular study, inasmuch as the <u>t</u> score was significant at the .05 level.

The <u>t</u> in this particular case was 2.26 and the <u>t</u> at the .05 level was 1.99; therefore, the hypothesis which states that the mean anxiety score of the college group will be significantly lower than the clinical group is accepted.

#### Discussion of Data

The results presented in this chapter definitely indicate that the amount of perceived discrepancy between the

self and ideal-self would be a factor to consider when evaluating indicators of anxiety.

The first stated hypothesis was found to be highly significant in this study. Thus, high anxiety within an individual does seem to be involved with the perceived discrepancy of an individual's self and ideal-self concept. This is consistent with the general findings of other researchers one have investigated this particular segment of psychology.

In the second hypothesis, the results failed to confirm the proposal; however, it missed being significant by only a very small margin. Although the hypothesis could not be accepted, an easily recognizable trend is evident.

The observed lack of significance, although mild, could probably be explained by many things. Perhaps one reason the results were not significant at the .05 level is that, in the clinical group, various defense mechanisms of long standing may have been used by the subjects which could decrease or distort the perceived discrepancy. Also, another factor to consider is the test which was utilized. Although the Bill's Index of Adjustment and Values has been used in a clinical situation, its use has been somewhat limited as have similar tests of this type; therefore, it would seem possible that the lack of significance in discrepancy scores between a college and clinical group could be due to inadequacies and deficiencies of the test.

The third hypothesis was confirmed. Thus, anxiety was found to be significantly higher in the clinical group than in the college group. This is not surprising since the clinical group as a whole probably suffered some sort of ego disintegration immediately prior to their admission into the clinical setting. Also, the anxiety level is probably increased due to the lack of understanding concerning their present environmental situation. The results were, however, in the proposed direction and they are accepted.

#### CHAPTER BIBLIOGRAPHY

1. Edwards, Allen L., <u>Statistical Methods for the Behavioral Sciences</u>, New York, Rinehart and Company, Inc., 1954.

#### CHAPTER IV

#### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary of the Study

The purpose of this study was to determine the relationship that exists between anxiety, self and ideal-self discrepancy scores. The Cattell <u>IPAT Anxiety Scale</u> was used as measurement of anxiety. The Bill's <u>Index of Adjustment and Values</u> was used to measure the discrepancy between self and ideal-self concept.

The investigation consisted of two groups; each contained thirty-six subjects. One group was a college group which consisted of psychology and education students of junior, senior, or graduate standing. The other group consisted of patients at the Wichita Falls State Hospital. Each of the two groups was divided into high and low anxiety groups. This was done by assigning the students who scored in the upper 50 per cent of anxiety scores into the high anxiety group and the lower 50 per cent anxiety score into the low anxiety group. Each individual discrepancy score was then matched with the subject's anxiety score, and mean anxiety and discrepancy scores for each group were obtained.

The statistical analysis consisted of a two-way analysis of variance and the <u>t</u> test was applied to the means to test

the significance. The level of significance was set at .05. Two of the three original hypotheses were confirmed in this manner.

It was found that there was a high level of significant difference in the discrepancy scores of the high anxiety groups when compared to the low anxiety groups. It was significant at better than the .01 level of confidence. Thus, in this particular study it can be said that the perceived discrepancy between self and ideal-self concept would be a factor to consider as an indicator of anxiety and the hypothesis is confirmed.

In investigating the second hypothesis it was found that there was not a significant difference in the mean discrepancy scores of the college group as compared to the clinical group. There was a very definite trend; however, in the proposed direction. It missed being significant at the .05 level by only three hundredths of a point.

The third hypothesis was accepted as being significant and, thus, was confirmed. It stated that there would be a significant difference in the level of anxiety between the college group and the clinical group. This was significant at better than the .05 level.

#### Conclusions

This study agrees, in general, with other investigations in this area. It has been found that discrepancy scores can

be considered an indicator of anxiety. This was found to exist at better than the .01 level of confidence. Consequently, it would seem that perceived discrepancies between self and ideal-self could be quite disintegrating to the whole individual. These discrepancies could reduce the functioning of the organism in all phases of behavior.

It should also be noted that this type of approach, using discrepancy and anxiety scores would be beneficial in evaluating the progress being made in various types of clinical and counseling situations. This approach could be utilized in analyzing the adjustment or maladjustment of college students suffering from academic problems and/or personal problems.

The second hypothesis which dealt with the mean discrepancy scores of the college and clinical group did not yield significant results. There was a very definite trend in the proposed direction; however, it did not reach the .05 level. This trend would indicate that the measure of maladjustment would be indicated by the perceived discrepancy which exists within the individual. It should also be noted that the lack of significant difference in the discrepancy scores could be due to the personality defenses which have been employed for so long by the clinical patients so as to distort or reduce the discrepancies which exist within the individual.

The third hypothesis which stated that the mean anxiety scores of the college group will be significantly lower than the mean anxiety of the clinical group was accepted. This, of course, would go along with the existing theories involved with personality dynamics and neurosis. The level of anxiety can be considered an indicator into the amount of disintegration of the ego which has taken place within the individual Ego disintegration is considered to be one of the primary reasons for an individual to seek clinical assistance.

#### Recommendations

Since the results of this study have shown that the level of anxiety and discrepancy scores between the self and ideal-self are related positively, it is deemed feasible that elaborations of this study should be coordinated with other behavioral traits or characteristics. The study of discrepancy scores and their relationship to other behavioral phenomena should invite much research.

Perhaps with greater interest in this area of psychology it will be possible to develop better tools for measuring these phenomena. Hence, some of the inadequacies which presently exist in the various pencil and paper tests will diminish.

Another factor to consider is that of the number of subjects in the groups. With variables and conditions permitting, perhaps a more complex design using a larger population should be contemplated.

APPENDIX

## RAW SCORE TABLE

# College Group

## Clinical Group

An <b>xi</b> ety Scores	Discrepancy Scores	Anxiety Scores	Discrepancy Scores
16	16	16	31
25	58	22	34
26	49	18	45
35	35	20	31
40	61	9	31
ii	39	26	35
39	50	15	47
40	47	25	59
58	73	23	39
25	43	30	50
9	3	18	32
8	31	29	55
5	38	14	50
13	49	28	47
22	48	17	44
24	36	17	42
8	6	22	47
44	72	11	36
18	40	60	72
23	42	47	60
11	44	33	59
30	50	36	74
40	66	52	77
21	70	37	62
8	36	41	71
42	38	52	79
20	42	49	61
13	41	33	48
10	21	57	80
39	41	44	60
19	8	33	49
22	49	49	66
23	61	34	47
31	50	38	53
45	66	49	58
31	31	46	63

#### 32

# TPAT SELF ANALYSIS FORM

AME	•		TODAY'S DATE						
.~VIL	First	Middle	Last						
EX		AGE	OTHER FACTS						
	(Write M or F)	(Nearest Year)	(Address, Occupation, etc., as instructed)						
,	experience at	t one time or anothe	forty questions, dealing with difficulties that most people er. It will help a lot in self-understanding if you check nd truthfully, to describe any problems you may have.						
	actually put	in the form of a ser	aples just below, for practice. As you see, each inquiry is entence. By putting a cross, X, in one of the three boxes plies to you. Make your marks now.						
1.	I enjoy walki	ng	Yes Occasionally No						
	A middle box as possible.	x is provided for whe	en you cannot definitely say Yes or No. But use it as little						
2.	I would rathe	er spend an evening	_						
	(A) talking t	o people, (B) at a	movie						
			in A and B choices like this. B is always on the right. "or "Uncertain" box only if you cannot possibly decide						
	Now:								
		e you have put your of this page.	r name, and whatever else the examiner asks, in the place						
		es over an item but y confidential.	give some answer to every single one. Your answers will						
	moment (		g. Answer each immediately, the way you want to at this usually). You may have answered questions like this beau feel now.						
	through w		o do otherwise. As soon as the examiner signals or tells gin.						

STOP HERE-WAIT FOR SIGNAL

33	3		A	
1.	I find that my interests, in people and amusements, tend to change fairly rapidly	True	In between	False
2.	If people think poorly of me I can still go on quite serenely in my own mind	True	In between	False
3.	I like to wait till I am sure that what I am saying is correct, before I put forward an argument	Yes	In between	No
4.	I am inclined to let my actions get swayed by feelings of jealousy	Some- times	Seldom	Never
5.	If I had my life to live over again I would: (A) plan very differently, (B) want it the same	Â	In between	В
6.	I admire my parents in all important matters	Yes	In between	No
7.	I find it hard to "take 'no' for an answer", even when I know what I ask is impossible	True	In between	False
8.	I doubt the honesty of people who are more friendly than I would naturally expect them to be	True	In between	False
9.	In demanding and enforcing obedience my parents (or guardians) were: (A) always very reasonable, (B) often unreasonable	Â	In between	В
10.	I need my friends more than they seem to need me	Rarely	Sometimes	Often
11.	I feel sure that I could "pull myself together" to deal with an emergency	Always	Often	Seldom
12.	As a child I was afraid of the dark	Often	Sometimes	Never
13.	People sometimes tell me that I show my excitement in voice and manner too obviously	Yes	Uncertain	No
14.	If people take advantage of my friendliness I: (A) soon forget and forgive, (B) resent it and hold it against them	Â	In between	В
15.	I find myself upset rather than helped by the kind of personal criticism that many people make	Often	Occasionally	Never
16.	Often I get angry with people too quickly	True	In between	False
17.	I feel restless as if I want something but do not know what	Very rarely	Sometimes	Often
18.	I sometimes doubt whether people I am talking to are really interested in what I am saying	True	In between	False
19.	I have always been free from any vague feelings of ill-health, such as obscure pains, digestive upsets, awareness of heart action, etc	True	Uncert <b>a</b> in	False
20.	In discussion with some people, I get so annoyed that I can hardly trust myself to speak	Some- times	Rarely	Never
	CONTINUE ON NEXT PAGE			A Score

			D		in the
L.	Through getting tense I use up more energy than most people in getting things done	True	Uncertain	False	Coru
2.	I make a point of not being absent-minded or forgetful of details	True	Uncertain	False	**********
3.	However difficult and unpleasant the obstacles, I always stick to my original intentions	Yes	In between	No	Q <sub>3</sub> (-
1.	I tend to get over-excited and "rattled" in upsetting situations	Yes	In between	No	
<b>5.</b>	I occasionally have vivid dreams that disturb my sleep	Yes	In between	No	
3.	I always have enough energy when faced with difficulties	Yes	In between	No	C(-
7.	I sometimes feel compelled to count things for no particular purpose	True	Uncertain	False	
8.	Most people are a little queer mentally, though they do not like to admit it	True	Uncertain	False	
9.	If I make an awkward social mistake I can soon forget it	Yes	In between	No	L
0.	I feel grouchy and just do not want to see people: (A) occasionally, (B) rather often	Â	In between	В	
1.	I am brought almost to tears by having things go wrong	Never	Very rarely	Some- times	
2.	In the midst of social groups I am nevertheless sometimes over- come by feelings of loneliness and worthlessness	Yes	In between	No	
3.	I wake in the night and, through worry, have some difficulty in sleeping again	Often	Sometimes	Never	O
4.	My spirits generally stay high no matter how many troubles I meet	Yes	In between	No	
5.	I sometimes get feelings of guilt or remorse over quite small matters	Yes	In between	No	
6.	My nerves get on edge so that certain sounds, e.g., a screechy hinge, are unbearable and give me the shivers	Often	Sometimes	Never	
7.	If something badly upsets me I generally calm down again quite quickly	True	Uncertain	False	
8.	I tend to tremble or perspire when I think of a difficult task ahead	Yes	In between	No	Q
9.	I usually fall asleep quickly, in a few minutes, when I go to bed	Yes	In between	No	
lO.	I sometimes get in a state of tension or turmoil as I think over my recent concerns and interests	True	Uneertain	False	
	STOP HERE. BE SURE YOU HAVE ANSWERED EVERY QUESTION			R Score	

34

	(A)	STEN SCORE (from Table 2)	Standard Score Stens (Total)	01	•	<b>60</b>		••	LO.	4	m	7	-
B Score (Overt, manifest, s	, O, Q_4 Overt-Covert Ratio	, O, Q.											
re (Cover	Q <sub>3</sub> (-), C(-), L	Q <sub>3</sub> (-), C(-), L	Qualitative Observations:		Diagnostic Summary:								
Raw Scores:		Stens:	Standard Score Deciles (Total)	10	(.er	nsts of be	re preferre	deciles a	uly when	o pəsn Vl	normal	muloo sid	<b>-</b>

#### Self Instructions For IVA

There is a need for each of us to know more about ourselves, but seldom do we have an opportunity to look at ourselves as we are or as we would like to be. On the following page is a list of terms that to a certain degree describes people. Take each term separately and apply it to yourself by completing the following sentence.

I AM A (AN) PERSON.

The first word on the list is academic, so you would substitute this term in the above sentence. It would read--I am an academic person.

Then decide HOW MUCH OF THE TIME this statement is like you, i.e., is typical or characteristic of you as an individual, and rate yourself on a scale from one to five to the following key.

- 1. Seldom, is this like me.
- 2. Occasionally, this is like me.
- 3. About half the time, this is like me.
- A good deal of the time, this is like me.
- Most of the time, this is like me.

Select the number beside the phrase that tells how much of the time the statement is like you and insert it in Column I on the next page.

Then go to Column II; using the same term, complete the following sentence.

I WOULD LIKE TO BE A (AN) PERSON.

Then decide HOW MUCH OF THE TIME you would like this trait to be characteristic of you and rate yourself on the following five point scale.

- 1. Seldom, would I like this to be me.
- 2. Occasionally, I would like this to be me.
- 3. About half the time, I would like this to be me.
  4. A good deal of the time, I would like this to be me.
- Most of the time, I would like this to be me.

You will select the number beside the phrase that tells how much of the time you would like to be this kind of a person and insert the number in Column II.

Start with the word ACCEPTABLE and fill in Column I and II before going on to the next word. There is no time limit. Be honest with yourself so that the description will be a true measure of how you look at yourself.

49:

fault-finding

logical

#### BIBLIOGRAPHY

#### Books

- Edwards, Allen L., Statistical Methods for the Behavioral Sciences, New York, Rinehart and Company, Inc., 1954.
- Hepner, H. W., <u>Psychology Applied to Life and Work</u>, Englewood Cliffs, New Jersey, <u>Prentice-Hall</u>, Inc., 1957.
- Rogers, C. R., <u>Client-Centered</u> <u>Therapy</u>, Boston, Houghton Mifflin, 1951.
- Snygg, D. and Combs, A. W., <u>Individual Behavior</u>, New York, Harper, 1949.
- Wylie, Ruth C., The Self-Concept, Lincoln University of Nebraska Press, 1961.

#### Journal Articles

- Allport, G. W. and Odbert, H. S., "Trait-Names: A Psychological Study," <u>Psychological Monographs</u>, 1936, No. 211.
- Berger, E. M., "Relationship Among Acceptance of Self, Acceptance of Others, and MMPI Scores," <u>Journal of Consulting Psychology</u>, II (1955), 279-284.
- Bills, R. E., "Rorschach Characteristics of Persons Scoring High and Low in Acceptance of Self," <u>Journal of Consulting Psychology</u>, XVII (1953), 36-38.
- Bills, R. E., "A Validation of Changes in Scores on the Index of Adjustment and Values As Measures of Changes in Emotionality," <u>Journal of Consulting Psychology</u>, XVII (1953), 135-138.
- Bills, R. E., Vance, E. L. and McLean, O. S., "An Index of Adjustment and Values," <u>Journal of Consulting Psychology</u>, XVI (1951), 257-261.
- Block, J. and Thomas, H., "Is Satisfaction with Self--Satisfaction," <u>Journal of Consulting Psychology</u>, XIX (1955), 449-452.

- Cattell, R. B., "The Chief Invariant Psychological and Psychophysiological Unities Found by P-Technique," <u>Journal of Clinical Psychology</u>, XI (1955), 319-343.
- Cattell, R. B., "Validation and Intensification of the Sixteen Personality Factor Questionnaire," <u>Journal of</u> <u>Clinical Psychology</u>, XII (1956), 205-214.
- Cattell, R. B., "Second-Order Personality Factors in the Questionnaire Realm," <u>Journal of Consulting Psychology</u>, XX (1956), 411-418.
- Cattell, R. B., "The Conceptual and Test Distinction of Neuroticism and Anxiety," <u>Journal of Clinical Psychology</u>, XIII (1957), 123-141.
- Cowen, E. L., Heilizer, F., Axelrod, H. S., and Alexander, S., "The Correlates of Manifest Anxiety in Perceptual Reactivity, Rigidity, and Self-Concept," <u>Journal of</u> Consulting Psychology, XXI (1957), 405-411.
- Fiedler, F. E., Dodge, Joan S., Jones, R. E., and Hutchins, E. B., "Interrelations Among Measures of Personality Adjustment in Non-Clinical Populations," <u>Journal of Abnormal and Social Psychology</u>, LVI (1958), 345-351.
- Halpern, H. M., "Empathy, Similarity, and Self-Satisfaction,"

  Journal of Consulting Psychology, XIX (1955), 449-452.
- Hanlon, T. E., Hofstaetter, P., and O'Conner, J., "Congruence of Self and Ideal Self in Relation to Personality Adjustment," <u>Journal of Consulting Psychology</u>, XVIII (1954), 215-218.
- Hilgard, E. R., "Human Motives and the Concept of the Self,"

  American Psychologist, IV (1949), 374-382.
- Hillson, J. S. and Worchel, P., "Self-Concept and Defensive Behavior in the Maladjusted," <u>Journal of Consulting</u> <u>Psychology</u>, XXI (1957), 83-88.
- La Fon, F. E., "Behavior on the Rorschach Test and a Measure of Self-Acceptance," <u>Psychological Monograph</u>, LXVIII (10) (1954), No. 381.
- Miller, K. S. and Worchel, P., "The Effects of Need-Achievement and Self-Ideal Discrepancy on Performance under Stress," <u>Journal of Personality</u>, XXV (1956), 176-190.

- Sarbin, T. R. and Rosenberg, B. G., "Contribution to Role-Taking: IV, A Method for Obtaining a Qualitative Estimate of the Self," <u>Journal of Social Psychology</u> XLII (1955), 71-81.
- Tomkin, A. S., "Selective Recall in Schizophrenia and Its Relation to Ego Strength," <u>Journal of Abnormal and Social Psychology</u>, LV (1957), 345-349.
- Zelen, S. L., "Acceptance and Acceptability: An Examination of Social Reciprocity," <u>Journal of Consulting Psychology</u>, XVIII (1954), 316.

#### Reports

- Bills, R. E., <u>About People and Teaching</u>, Bulletin of the Bureau of School Service, College of Education, University of Kentucky, Lexington, 28, No. 2, December, 1955.
- Study of 1,000 Air Force Students in Basic Pilot
  Training, U.S.A.F. School of Aviation Medical Project
  Report, No. 21-0202-007, Report 9, 1955.

#### Unpublished Materials

- Hauser, F. S., "The Relationship of Self-Concept to Security, Anxiety, and Rigidity," unpublished doctoral dissertation, Department of Psychology, University of Rochester, Rochester, New York, 1953.
  - Scott, M., "Anxiety in Children and Its Relationship to Intelligence, Self-Concept, and Ordinal Birth Position," unpublished master's thesis, Department of Education and Psychology, North Texas State University, Denton, Texas, 1961.