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AN ANALYSIS OF THE RELATIONSHIP BETWEEN THE SELF CONCEPT
AND ACADEMIC PERFORMANCE OF HIGH AND LOW PERFORMERS IN
A COLLEGIATE SCHOOL OF BUSINESS

by

Steven Leon Dowdle

A Dissertation Submitted to the Faculty of the
DEPARTMENT OF COUNSELING AND GUIDANCE
In Partial Fulfillment of the Requirements
For the Degree of
DOCTOR OF EDUCATION
In the Graduate College
THE UNIVERSITY OF ARIZONA

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ABSTRACT

In this study, it was assumed that self perception is a determinant of behavior and, more specifically, that poor academic performance is largely a consequence of faulty perceptions of the self. The purpose of this study was, therefore, to verify, in a collegiate setting, the relationship between self concept and academic performance in order to develop policy and procedure dealing with the poor performance phenomenon.

Full-time freshmen students at the University of Arizona College of Business and Public Administration constituted the population from which a sample of 50 was selected to examine the relationship between the self concept and academic performance. The students were classified as high performers (HP) or low performers (LP) based on a discrepancy range of the difference between actual and predicted grade point average.

It was hypothesized that low performers would have a significantly lower (less positive) self concept score than would high performers.

The instrument selected to measure self concept was the Tennessee Self-Concept Scale. Mean scores for each of 19 subscales were provided for each group. A t test for differences between independent means yielded statistically
significant differences for the true-false ratio and the personality integration scale.

The HP group had higher scores on the other subscales than did the LP group; however, the differences were not statistically significant.

It was concluded that the LP group did not have a lower self concept than did the HP group. The hypothesis was not supported by the results of the study.

Despite reports in the literature which confirm a relationship between self concept and academic achievement the results of this study do not support their conclusions. This study and others cited form the basis for a minority opinion that self concept and academic achievement may not be related.

Recommendations for future research included a follow-up of this study to examine effects of academic success or failure on the self concept over time, a study of the differences in the self concept of students by curricula, and a replication of this study with a larger sample.
CHAPTER I

INTRODUCTION

The poor academic performances of students in colleges and universities is a vital concern of the adviser, the teacher, the parents, and the student. It is an aspect of the educational process that is universal in scope and continuous in nature. The time expended by all involved in seeking solutions is extensive and, for the most part, unproductive.

Motto (1959, p. 247) suggests the direction which any effort designed to assist the low performer must take, "Low performers will continue to do poorly until they gain some comprehension of the forces operative within them which have resulted in suppressed intellectual potential."

The fundamental assumption of this study is that those forces operative within an individual find their nucleus in the self concept. The evidence indicates that the self concept influences behavior in a significant and inclusive manner and is, therefore, a crucial variable in the study of academic performance.

At the Educational Development Center in Berea, Ohio, college failures from hundreds of colleges in the United States have undergone educational rehabilitation.
This research supports the assumptions on which this study is based. Pitcher and Blaushild (1970, p. 212) state:

Humans can only see their tasks, demands and responsibilities through the way they see themselves; one view is not separate from the other. So if a changed attitude and response to environment is necessary, it must begin with the individual's concept of himself. Otherwise, his defeat and failure will tend to be repeated as an expression of the conditioning experiences of his self concept. When there is permanent academic improvement, it is usually because this inner change within the student took place.

Statement of the Problem and Significance of the Study

The poor academic performance of students with ability to succeed in college is a source of frustration and despair for them as well as for those persons concerned with their development. The reasons offered in explanation of this academic phenomenon include lack of motivation and interest, poor study skills, inappropriate choice of major, and/or test anxiety. The solutions proposed usually involve giving attention to one or more of these "causes" in a counseling setting. It will be assumed that these may be symptomatic of a more complex determinant lying at the root of unsatisfactory performance—a poor self concept. The responsibility for dealing with the problem of poor performance in a large university must be assumed by the administrative and instructional staff of the individual college. The most common approach of college personnel in response to a student's poor performance is the
implementation of probation and disqualification procedures. There is a need to attack the problem more constructively by developing a program to assist students in realizing their potential, in improving their academic standing, and in achieving the educational objectives they have set for themselves.

It is the purpose of this study to provide information about the relationship between self concept and academic performance for two groups of freshmen in a collegiate school of business in order to give direction to the development of policy and procedure which would assist the poor performer.

Hypothesis

It will be the hypothesis of this study that the self concept and academic performance are positively related. Specifically, it will be hypothesized that the results of this study will support the contention that low performers will have a significantly lower (less positive) self concept score as measured by the Tennessee Self-Concept Scale (Fitts, 1965) than will high performers.

For statistical purposes, the following null hypothesis will be examined: there are no significant differences in the self-concept scores of low performers as compared with high performers.
Research Procedures

The subjects for this study will be selected from among full-time freshmen students enrolled in the College of Business and Public Administration at The University of Arizona during the 1975-1976 academic year. American College Test score data will be used to compute predicted college grade point averages (GPA) on those students. High and low performance groups will be identified using a discrepancy range between predicted and actual grade point average. The Tennessee Self-Concept Scale (TSCS) (Fitts, 1965) will be used in this study because of its reputation as a reliable, well-validated, and adequately standardized scale. The scale consists of five general categories of perception of the self that recognize the multifaceted nature of the self concept.

The two performance groups will be compared on 19 subscales of the TSCS using analysis of variance to determine statistical significance for the differences between mean scores.

The following assumptions will provide parameters for the structure of the research design:

1. The academic performance is accurately represented by the college GPA.
2. The predicted GPA is an accurate measure of the ability level of the student.
3. The self concept can be accurately measured by the TSCS.

4. The differences in student characteristics by curricula warrant an examination of the self concept-academic performance relationship within the homogeneous context of a particular curriculum in order to minimize the impact of those differences.

Limitations to be identified include:

1. The sample will not be randomly selected.
2. Some poor performers were not enrolled during the spring semester and, therefore, will not be included in the sample.

Summary

The poor academic performance of many college students of adequate ability is a tragic waste of human resources. This study will seek to analyze one crucial variable which may diffusively impact academic performance—the self concept. The important role of the self concept in determining behavior will be substantiated by a review of the literature. The differences in student characteristics by curricula will be discussed as a basis for conducting the research within the context of a collegiate school of business. It is hypothesized that poor performers will have a less positive self concept score as measured by the TSCS than will high performers.
CHAPTER II

REVIEW OF THE LITERATURE

The Self Concept

The self and the self concept as topics of focus by behavioral scientists are a twentieth century concern. William James, in his seminal text, Principles of Psychology, published in 1890, introduces the concept of self which, over the years, has developed into a central construct for the understanding of human beings and their behavior. Today, the self concept is the subject of a vast amount of theory and research. Gordon and Gergen (1968) reported that theorists and researchers in psychology and sociology had generated over 2,000 publications concerning the self. They note that the concept has been examined from a variety of perspectives. "The self has figured prominently in theory and research on social control, economic behavior, social deviance, personal aspirations, psychological development, interpersonal attraction, social influence, psychopathology and psychotherapy, to name but a few" (Gordon and Gergen, 1968, p. 1). The theorists who have made significant contributions to the study of the self concept include, in addition to James, Cooley (1902), Mead (1938), Lecky
James (1890) suggests that self develops to become the sum total of "I," the knower or experiencer, and "me," the self that is known or experienced.

Cooley (1902, p. 136) defines the self as "that which is designated in common speech by the pronouns of the first person singular, 'I,' 'me,' 'my,' 'mine,' and 'myself.'" He introduced the concept of the "looking-glass self," which refers to an individual perceiving himself in the way that others perceive him. Fitts (1971, p. 12) summarizes the three basic elements of Cooley's self idea: "the imagination of one's appearance to the other person; the imaginations of the other person's appraisal of that appearance; and some kind of self-value feeling such as pride or shame."

Mead (1938) notes that the self concept arises in social interaction as an outgrowth of the individual's concern about how others react to him. In order to anticipate others' reactions so that he can behave accordingly, the individual learns to perceive the world as they do.

Lecky (1968) identifies the self concept as the nucleus of the personality. The self concept plays a key role in determining what concepts are acceptable for assimilation into the overall personality organization. The organization of the personality is considered to be dynamic.
as it involves a continuous assimilation of new ideas and rejection or modification of old ideas.

Rogers (1951, p. 136) states that the self concept or self structure may be thought of as an organized configuration or perceptions of the self which are admissible to awareness. The self concept is composed of such elements as the perceptions of one's characteristics and abilities; the percepts and concepts of the self in relation to others and as associated with experiences and objects; and goals and ideals which are perceived as having positive or negative valence. He suggests that the self concept includes only those characteristics of the individual of which he is aware and over which he believes he exercises control. There is a basic need to maintain and enhance the self.

Sullivan (1953) views self from the social interaction perspective. He differs from Cooley and Mead in that he emphasizes the interaction of the child with significant others, particularly the mother figure, rather than with society at large. Sullivan (1953, p. 165) identifies the self system as "an organization of educative experience called into being by the necessity to avoid or to minimize incidents of anxiety." He suggests that the child internalizes those values and prohibitions that facilitate the achievement of satisfaction in ways that are approved by significant others. A major function of his self system is the need to avoid unpleasant effects.
Allport (1955) prefers to use the term proprium to self. The proprium consists of those aspects of the individual which he regards as of central importance and which contribute to a sense of inward unity.

Combs and Snygg (1959, p. 112) define the self concept as "those parts of the phenomenal self which the individual has differentiated as definite and fairly stable characteristics of himself." Thus, like Lecky, they view the self concept as the nucleus of a broader organization of personality.

The characteristics that many theorists have attributed to self theory include the following:

1. Self theory is phenomenological in nature and based upon the general principle that man reacts to his phenomenal world in terms of the way he perceives this world.

2. The most salient feature of each person's phenomenal world is his own self—the self as seen, perceived, and experienced by him. The perceived self is the self concept.

3. The self concept is learned by each person through his lifetime of experiences with himself, with other people, and with the realities of the external world.

4. The self concept is the frame of reference through which the individual interacts with his world; and
it is, therefore, a powerful influence in human behavior.

Kinch (1963, p. 481) provides a concise definition of the theory of self concept: "The individual's conception of himself emerges from social interaction and, in turn, guides or influences the behavior of that individual."

**The Self Concept and Academic Achievement**

Several theorists maintain that the self concept plays a significant role in the educational process (Allport, 1943; Erickson, 1950; Havighurst, 1948; Rogers, 1951). The contention is that when an individual is accepted, approved, respected, and liked for what he is, he will have an opportunity to acquire an attitude of self acceptance and self regard.

Leviton (1975, p. 25) reviewed over 15 studies concerned with the relationship between self concept and academic achievement in the public school setting and concluded, "A review of the research indicates a consistent, moderate correlation between self concept and academic achievement."

Purkey (1967, p. 1) states that "there is considerable evidence that academic failure is, in large measure, the consequence of faulty perceptions of the self." He concludes that "it would seem difficult to
overestimate the pervasive impact of the self on human accomplishment" (p. 3).

The following studies are presented in support of the assumption that there is a relationship between self concept and academic performance and that any programs in a university setting designed to assist the low performer must take this facet of the problem into account.

Bailey (1971), in a study that controlled for ability, identifies a group of 50 undergraduate students as low performers and a group of 50 undergraduate students as high performers in a state university setting. The results support the following hypotheses:

1. High performers will be more highly motivated and more realistic in their self perceptions than will low performers of similar ability.

2. High performers were predicted to have higher self estimates of their college ability, higher desired levels of college ability, smaller discrepancies between their self estimates of college ability and desired levels of college ability, and smaller discrepancies between their self estimates of college ability and actual measures of college ability than would low performing students.

All hypotheses were verified at a high confidence level. The results strongly suggest that a student's self
perception of his academic ability plays a crucial role in his academic performance.

Alvord and Glass (1974) conducted research to explore the relationships between academic achievement in science and self concept. The sample included 3,162 students in grades four, seven, and twelve. Significant positive correlations between the scholastic dimension of self concept and study performance in science were found to exist at all three grade levels.

Borislow (1965, p. 35) surveyed 197 college freshmen students to determine the importance of self evaluation as a non-intellective factor in scholastic achievement. He concluded that, subsequent to their scholastic performance, students who underachieve have a poorer conception of themselves as students than do achievers regardless of initial intention to strive for scholastic achievement as a goal.

Stevens (1956) reports that in a study of the relationship between college students' academic achievement and self concept, he found successful students showed better self insight, a greater degree of self acceptance, and salience of personality traits than did students on academic probation. The sample consisted of 101 sophomores--52 on the honor roll and 49 on probation.

Kubiniec (1970) conducted a study of the relationship between self perceptions and academic success involving 468 freshmen at a large state university. The results
support the predictive value of self theory which maintains that an individual's behavior is affected by his perceptions of himself and of his environment. The researcher concluded that academic success in college can be predicted by measures of global perceptions of one's self and one's environment.

Roth (1959) designed a study to test the proposition that there would be significant differences in the self perceptions of those who improved and those who did not improve and dropped out of a college reading improvement program. The sample was composed of 54 freshmen at a large state university. The researcher concluded that "those who achieve, as well as those who do not, do so as a result of the needs of their own self system" (Roth, 1959, p. 281). "The data clearly indicated that, not only is self concept related to achievement, but that, in terms of their conception of self, individuals have a definite investment to perform as they do" (p. 281).

Combs (1964) examined the proposition that academically capable underachievers would differ significantly from achievers in the way they view themselves. The sample consisted of 25 underachieving and 25 overachieving high school seniors. Control for ability was attempted by determining that all 50 students had measured IQ scores greater than 115. The results of the study indicated that the low performers saw themselves as less adequate and less
acceptable to others. They saw both their peers and adults as less acceptable, and showed an inefficient and less effective approach to solving problems. They also showed less freedom and adequacy in expressing emotions.

Fretz and Engle (1973) investigated the effects of academic test results on both specific and global aspects of self concept. University students in introductory and advanced psychology classes were given specific self-report measures before and after feedback of examination results. They found that effects of feedback on self concept are evident primarily among less experienced students in the introductory course.

While there exists a significant amount of research which supports the existence of a relationship between self concept and academic achievement, this relationship cannot be assumed true for each educational situation. Jervis (1959, p. 372) examined this relationship among a group of 791 freshmen students entering a state university and concluded that "there was no significant relationship between self-concept scores and grades."

Peters (1968) compared the self-concept scores as measured by the Tennessee Self-Concept Scale of a group of 28 underachieving and 28 overachieving eleventh graders. She concluded that self concept was not significantly related to overachievement or underachievement.
Hall (1972), in a study of 468 college freshmen, examined a number of personality variables including self concept and its relationship to academic achievement. He found that there was no significant relationship between self concept and academic achievement.

Lund (1972) reports, in a study of 427 engineering students designed to determine if academic achievement could be predicted by self-concept scores, that there was no significant relationship between the two.

LeMay (1969) also reached a similar conclusion in a study of high, middle, and low performers. He examined the relationship between self concept and grade point average for a group of 411 college students at a state university and found that no direct relationship existed.

Abbott and Haney (1972) investigated the relationship between self concept and quiz performance in an introductory psychology course. They concluded that a person's self concept as measured by the Interpersonal Checklist was only marginally related to performance.

The Self Concept and Curricula

Research conducted to examine student characteristics by curricula reveals that students from one academic area differ significantly from those in other areas.

Hoyt (1968, pp. 21-22) states that, "Preliminary research shows that, in complex institutions, freshmen in
education, business administration, and engineering sciences typically differ significantly from the freshman class as a whole."

Feldman and Newcomb (1970, p. 170) conclude, after an examination of 40 years of research on student development, that students enrolled in major fields commonly available tend to differ in the following variables: patterns of values, political-economic attitudes, religious conservatism, career orientations, intellectual ability, intellectual dispositions, authoritarianism, psychological well being, and certain personality characteristics.

For example, they found that the major fields in which students place the highest emphasis on aesthetic values are humanities, general education, and social science; while students in natural science, engineering, and business place the lowest emphasis on aesthetic value (Feldman and Newcomb, 1970, p. 155). Business students consistently rank high on economic and political values and low on theoretical and religious values. Students in engineering, education, nursing, business administration, and agriculture place greater importance on vocational training and career preparation than do students in the liberal arts (Feldman and Newcomb, 1970, p. 159). In terms of intellectual orientation, Feldman and Newcomb's analysis indicates that students in engineering, physical science, mathematics, pre-law, English, and
languages are consistently high in general intellectual ability. Students in biology, pharmacy, and applied medical fields fall predominantly into the medium or low thirds, while students in business, education, home economics, and agriculture fall predominantly in the low category (Feldman and Newcomb, 1970, p. 165).

Students in education and engineering are higher in authoritarianism than students in other fields. Students in business and natural sciences range from medium to high. Feldman and Newcomb (1970, p. 131) report that students in natural sciences and business administration rank in the high third, those in social sciences in the medium third, and those in humanities in the low third of psychological well being. Business administration students are also reported consistently to rank high in dominance and confidence. Majors in various social science fields tend to rank high or medium, whereas students in fields of the natural sciences and humanities are medium or low (Feldman and Newcomb, 1970, p. 169). With respect to sociability, students in business administration score in the high third in four out of five cases (Feldman and Newcomb, 1970, p. 169).

Badgett (1968) examined the relationship between self concept and academic and personality variables for a group of 723 freshmen males at a major land grand university. He reports, "a significant interaction occurred at the .05
level of confidence between self concept and curriculum choice" (Badgett, 1968, p. 57). He found that there was interaction of SAT scores with self-concept scores as measured by a self-rating scale by curricular area. The students enrolled in the college of liberal arts, sciences, and architecture had high self-concept scores and high mean SAT scores. Students in business administration, engineering, and veterinary medicine had low self-concept scores and high SAT scores (Badgett, 1968, p. 54).

Abe and Holland (1965), in an effort to provide a more complete account of the typical American college student and the variation among students from college to college, surveyed 12,432 college freshmen in 31 institutions. Their findings indicate that business students rate themselves high in business and clerical competencies and high on practical mindedness. They rate themselves low on intellectual self confidence, originality, and scholarship (Abe and Holland, 1965, p. 16). They concluded that students may be distinguished by college and by curriculum based on a "great range of student characteristics, interests, values, self conceptions, competencies, achievements, range of experience, and family resources" (Abe and Holland, 1965, p. 50).
Summary of Review of the Literature

In this section, the literature was reviewed with respect to three relevant areas pertaining to this study. The first brought focus on the importance of the self concept as a determinant of behavior. Seventy-six years of study support the conclusion that the self concept provides the frame of reference through which the individual interacts with his world and profoundly influences his behavior.

The role of the self concept in the academic environment was also examined. The evidence presented substantiated the hypothesis that academic performance is significantly influenced by perceptions of the self. However, enough evidence exists to prevent one from making the assumption that a relationship between self concept and academic achievement will be strongly evident in every setting. It is, therefore, incumbent upon the researcher to perform his own investigation in order to establish that self perception is the variable of primary influence in determining academic performance.

The uniqueness of student characteristics by curriculum was next examined. The results of research in this area indicated clearly that there are significant differences in a number of variables including intelligence, values, and personality characteristics of students when compared by curricula. Specifically, there is evidence
which illustrated differences in student self concept by curriculum.

This review of literature provides a basic design for the study by substantiating the influence of the self concept on academic performance.
CHAPTER III

RESEARCH PROCEDURES

This chapter describes the procedures used in the collection and analysis of the data. The areas included are selection procedure, data collection, instrument, data analysis, and limitations. The design of this research was a posttest only with three components which are identified as selection of population, administration of measurement instrument, and analysis of results. The total population constituted the sample.

Selection Procedure

The subjects for this study were full-time freshmen students enrolled for the first time in the College of Business and Public Administration at The University of Arizona during the fall semester of the 1975-1976 academic year. Those selected for inclusion in the population studied had completed the American College Test. A copy of the ACT Assessment Student Profile Report for each student was on file in the dean's office. The population which met the criteria described totaled 248 students. A predicted college grade point average was calculated for each of the 248 students using the GPA Expectancies in College Overall Table from the ACT Standard Research Service Report and the
Overall GPA Predictions for Business and Public Administration data as reported on each student profile report. The ACT Predicted BPA college GPA is based on the pattern and level of the four subscores of the ACT Assessment and four areas of the self-reported high school grades. Prediction data are obtained from the previous year's class for each college. Prediction will be fairly accurate if there is no significant change in the nature of students admitted the following year and if the students apply themselves as diligently and effectively as the typical student in BPA.

High and low performance groups were identified using a discrepancy range of plus or minus one-third of a standard deviation of the college GPA as the method of classification \((\bar{X} = 2.40, SD = .66)\). High performers were defined as those students whose actual GPA was \(\geq .22\) or more above their predicted GPA. Low performers were defined as those students whose actual GPA was \(\leq .22\) or more below their predicted GPA. This range was selected to increase the likelihood that the students were classified on the basis of real differences rather than chance variations.

The results of this selection procedure yielded 122 students classified as high performers and 65 classified as low performers. Sixty-one students had no discrepancy between predicted and actual GPA and were not included in the sample.
In order to strengthen the generalizability from the study sample to the population, a comparison sample of 55 subjects was randomly selected from the population of all BPA freshmen. This sample was compared as to sex, age, ACT score, GPA, and location of high school with the study sample.

**Data Collection**

The 187 subjects identified by the selection process were mailed a post card briefly explaining the purpose of the study and inviting them to participate in one of two testing periods scheduled to minimize conflicts with student class hours. Twenty-three of the 65 low performers and 27 of the 122 high performers contacted responded by completing the Tennessee Self-Concept Scale.

The nature and purpose of the study were explained in detail to all respondents. All were made aware that their participation in the research project was strictly voluntary and that they would not be identified in any manner as individuals in the written report of the study. Participants were also made aware that the results of the study would be made available to them upon request for their personal review and examination. All 50 respondents chose to participate in the study.
The Instrument

Self concept is recognized as a multifaceted subject which poses problems of measurement because it cannot be described along a single continuum or by a single score or label. The Tennessee Self-Concept Scale (TSCS) (Fitts, 1965) has been selected as the instrument to be used in this study because of its reputation as a reliable, well-validated, and adequately standardized scale. It measures self concept across many sub-areas, providing both an overall self-esteem score and a complex self-concept profile. The scale consists of 100 items which fall into one of five general categories—physical self, moral-ethical self, personal self, family self, and social self. Each of these areas is, in turn, divided into statements of self identity, self acceptance, and behavior. Ten of the items are drawn from the L-Scale of the Minnesota Multiphasic Personality Inventory (MMPI) (Fitts, 1965, p. 2). These items constitute a Self-Criticism Scale designed to measure overt defensiveness. Ninety items were selected from other self-concept scales, while others were derived from self descriptions written by patients and non-patients.

The subject is asked to respond to each of the 100 items on a five-point scale ranging from completely true to completely false.

The TSCS is available in two forms, the Counseling Form and the Clinical and Research Form (C&R). The C&R Form
is the more complex in terms of scoring analysis and interpretation and provides scores for 29 different variables. The C&R Form will be used in this study because it provides a more comprehensive data profile on each student.

The TSCS is self-administering for either individuals or groups and can be used with a wide range of subjects who possess at least a sixth-grade reading level.

The original norms were developed from a broad sample of 626 people. The sample included people from various parts of the country, age ranges from 12 to 68, equal numbers of both sexes, black and white subjects, and representatives of all socioeconomic levels whose formal education ranged from sixth grade completion through the Doctor of Philosophy degree (Fitts, 1965, p. 13). The author points out that the normative group was biased in its over representation of college students and younger people in the 12-to-30 age range which makes it particularly appropriate for the sample to be used in this study.

Reliability coefficients for the TSCS were obtained by test-retest procedure with 60 college students over a two-week period. Reliability coefficients obtained for the various scores ranged from .61 to .92. Fitts (1965, p. 15) has reported that additional evidence of reliability reflected in "... the remarkable similarity of profile
patterns found through repeated measures of the same individuals over long periods of time."

The validity of the TSCS has been substantiated through the assessment of content validity, concurrent validity, predictive validity, and construct validity. Assumptions regarding content validity have been based on the requirement that only those items in the TSCS which had the unanimous agreement by judges that they were assigned to the correct category were retained. The criteria used by the judges were their assessment that the categories used were logical, meaningful, and communicable (Fitts, 1965).

Concurrent validity has been supported by a number of studies reporting correlations of TSCS variables with scores obtained on other personality measures such as the MMPI and the Edwards Personal Preference Scale. Christian (1969) correlated five indices of physical fitness with nine TSCS measures of self concept and found that three measures of physical fitness were significantly and positively correlated with the TSCS score for Physical-Self.

The predictive validity of the TSCS is supported by Seeman (1966) who found that well integrated persons, as assessed by the Personality Integration (PI) Score, would function more efficiently in areas of intellectual and academic performance. College students who were found to be high in PI had higher GPA than random, normal comparison
groups despite the fact that there were no differences in basic intellectual ability.

Construct validity is supported by Fitts (1971, p. 47), "There is some accumulating evidence that, for groups of people, significant relationships exist between self-concept measures obtained through self-report devices (like the TSCS) and those obtained by other methods." A study by Bealmer et al. (1965) correlated responses on the "Who Am I" test, which is an unstructured device allowing the subject to describe himself completely in his own words, with the TSCS Total P Score. A strong, positive relationship was found between the TSCS Total P Score and a clear, positive sense of identity represented in the responses on the "Who Am I" test.

Vacchiano and Strauss (1968) reported a factor analysis of the TSCS. The analysis was based on the 100 scale items rather than on the subscales representing various combinations of items. Twenty-two factors, which accounted for 66 per cent of the total variance of the test, were extracted, and, of these factors, 22 were interpretable. College students constituted the sample in this study in which Vacchiano and Strauss interpreted their findings as supporting the construct validity of the TSCS.

Vincent (1968) was interested in determining whether some selected subtests from various scales, all with similar labels, were measuring the same dimension of self
concept. She analyzed self acceptance, selecting the Self-Acceptance subtest from the California Psychological Inventory, security from the Security-Insecurity Inventory, Self Satisfaction and Personal Self from the TSCS, and Confident Adequacy from Cattell's Sixteen Personality Factor Questionnaire (16PF). Significant, positive correlations were obtained between all of the measures, with the exception of two of the measures from the California Psychological Inventory. A total sample of 109 college students was used in this study.

Crites (1965, p. 331) concluded in his review of the TSCS that "... the initial data on the Scales's psychometric attributes indicate that it 'measures up' by traditional criteria rather well." He did, however, raise the question of whether or not any instrument of this type (which does not allow the examinee to use his own words in describing himself) provides a true phenomenological picture of that person's self concept. He concludes his review of the TSCS with the challenge that "it is incumbent upon the author to demonstrate that his scale is 'simpler for the subject, more widely applicable, better standardized, etc.' than other similar measuring devices" (Crites, 1965, p. 331).

Robinson and Shaver (1973) place the TSCS at the top of their list of instruments designed to measure the self concept.
Suinn's (1970) comments are relative to this study. He states, "... the TSCS ranks among the better measures combining group discrimination with self-concept information" (Suinn, 1970, p. 368).

Data Analysis

The answer sheets were sent to Counselor Recordings and Tests, Nashville, Tennessee for machine scoring. The tests were scored by subgroups with means and standard deviations provided. The data were returned in the form of punched IBM cards for each individual, containing the raw scores obtained on all of the variables measured by each scale. The IBM cards were divided into the two groups (high and low performers) and programmed for analysis of variance. This program provided raw score means for each of the two groups on 19 of the variables measured by the TSCS. F-Ratio and Probability (P) data for each variable were computed identifying those variables on which the differences between the mean raw scores for each of the two groups could be regarded as either meeting or failing to meet the .05 level of significance.

The formula used was the t test for the difference between independent means:

\[ t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}} \]  

The null hypothesis was that there will be no differences in the mean scores between the two groups on any scale. It will be rejected if the probability of its occurrence by chance is sufficiently low, defined for purposes of this study as $P = .05$.

Limitations

The students represented in this study were full-time freshmen registered in the University of Arizona College of Business and Public Administration during the fall semester of the 1975-1976 academic year whose ACT Assessment data were on file in the dean's office and who were registered for the spring, 1975-1976, semester. It is recognized that a selection bias may be a factor in that some students who performed poorly during the fall semester did not return for the spring semester. A selection bias may also be a factor in that those freshmen responding to the researcher's request to participate did so for reasons of their own. It is, therefore, not possible to generalize to all BPA freshmen but rather only to the specific individuals participating in the study.

Summary

The selection of the sample involved computing predicted college grade point averages for 248 full-time freshmen students in the College of Business and Public Administration at The University of Arizona. High and low
performance groups were identified by using a discrepancy range between predicted and actual college grade point average. All students classified by performance groups were given the opportunity to participate in the study. Twenty-three of the 65 low performers and 27 of the 122 high performers responded by participating.

The Tennessee Self-Concept Scale was selected as an appropriate measure of self concept because of its wide acceptance as a reliable scale. The data for each group included individual scores on each of 19 subscales with mean scores and standard deviations provided by group by subscale. An analysis of variance was used to determine on which of the subscales there was significance at the .05 level.

Among the assumptions delineated in this chapter, the differences in student characteristics by curricular area, are particularly relevant to this study. A selection bias was identified as a limitation.
CHAPTER IV

RESULTS

This chapter presents the results of the study. The sections included are analysis of results by subscale, discussion, and summary of results.

The study was designed to determine the extent to which self concept and academic achievement are related. A group of low performers, LP (N = 23), and a group of high performers, HP (N = 27), were compared on 19 variables of the Tennessee Self-Concept Scale. The null hypothesis was stated as: there are no significant differences in the self concept scores of low performers as compared with high performers.

Analysis of the data consisted of an analysis of variance. A comparison of mean scores between the two groups on the 19 variables was conducted by a t test for the difference between independent means.

Analysis of Results by Subscale

The scales used in this study include: Total Positive, Self Criticism, Total Conflict, True-False Ratio, Positive Identity, Positive Self Satisfaction, Positive Behavior, Positive Physical Self, Positive Moral-Ethical Self, Positive Personal Self, Positive Family Self, Positive
Social Self, Defensive Positive, General Maladjustment, Psychosis, Personality Disorder, Neurosis, Personality Integration, and Number of Deviant Signs. In order to facilitate interpretation of the data, the scores of the individuals on each of these scales have been averaged by group and are presented in Table 1. In addition to the mean scores for each scale for the HP and LP groups, the standard deviation indicating the average of individual deviation from the mean is also listed. The norm group mean is included for each scale to provide a perspective for purposes of comparing the high and low performance groups. The results of the t test to determine statistical significance between the independent means of the two performance groups are indicated in the column labeled Significance. In the interpretation of the scores presented in Table 1, it must be remembered that the higher the score the more positive the aspect of the self concept being measured.

The data for each scale as presented in Table 1 will be reviewed in the following discussion.

The results of the statistical analysis yielded significance at the .05 level on two of the 19 subscales—True-False Ratio and Personality Integration. The HP group scores on the other scales are higher than the LP group scores, but the differences are not statistically significant.
Table 1. Performance Group Comparison of TSCS Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>High Performers</th>
<th>Norm Group</th>
<th>Low Performers</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Total Positive</td>
<td>356.4</td>
<td>31.2</td>
<td>345.5</td>
<td>349.3</td>
</tr>
<tr>
<td>Self Criticism</td>
<td>35.7</td>
<td>4.9</td>
<td>35.5</td>
<td>36.8</td>
</tr>
<tr>
<td>Total Conflict</td>
<td>28.1</td>
<td>6.8</td>
<td>30.1</td>
<td>30.6</td>
</tr>
<tr>
<td>True-False Ratio</td>
<td>101.6</td>
<td>15.1</td>
<td>103.0</td>
<td>112.7</td>
</tr>
<tr>
<td>Positive-Identity</td>
<td>129.7</td>
<td>8.7</td>
<td>127.1</td>
<td>129.3</td>
</tr>
<tr>
<td>Positive-Self Satisfaction</td>
<td>112.2</td>
<td>14.4</td>
<td>103.6</td>
<td>109.0</td>
</tr>
<tr>
<td>Positive-Behavior</td>
<td>114.4</td>
<td>12.1</td>
<td>115.0</td>
<td>111.0</td>
</tr>
<tr>
<td>Positive-Physical Self</td>
<td>71.5</td>
<td>7.1</td>
<td>71.7</td>
<td>72.3</td>
</tr>
<tr>
<td>Positive-Moral, Ethical Self</td>
<td>72.0</td>
<td>6.5</td>
<td>70.3</td>
<td>68.0</td>
</tr>
<tr>
<td>Positive-Personal Self</td>
<td>69.8</td>
<td>6.9</td>
<td>64.5</td>
<td>66.9</td>
</tr>
<tr>
<td>Positive-Family Self</td>
<td>72.6</td>
<td>8.9</td>
<td>70.8</td>
<td>71.8</td>
</tr>
<tr>
<td>Positive-Social Self</td>
<td>70.5</td>
<td>8.7</td>
<td>68.1</td>
<td>70.3</td>
</tr>
<tr>
<td>Defensive Positive</td>
<td>58.1</td>
<td>11.6</td>
<td>54.4</td>
<td>57.0</td>
</tr>
<tr>
<td>General Maladjustment</td>
<td>100.7</td>
<td>7.9</td>
<td>98.8</td>
<td>97.3</td>
</tr>
<tr>
<td>Psychosis</td>
<td>48.3</td>
<td>5.0</td>
<td>46.1</td>
<td>47.0</td>
</tr>
<tr>
<td>Personality Disorder</td>
<td>78.6</td>
<td>11.6</td>
<td>76.3</td>
<td>71.3</td>
</tr>
<tr>
<td>Neurosis</td>
<td>88.1</td>
<td>10.1</td>
<td>84.3</td>
<td>87.1</td>
</tr>
<tr>
<td>Personality Integration</td>
<td>11.7</td>
<td>4.1</td>
<td>10.4</td>
<td>9.5</td>
</tr>
<tr>
<td>Number of Deviant Signs</td>
<td>7.2</td>
<td>7.0</td>
<td>4.3</td>
<td>8.2</td>
</tr>
</tbody>
</table>
The total P (total positive score) is, according to the author of the scale, the most important single score. It reflects the overall level of self esteem. Persons with high scores tend to like themselves, to feel that they are persons of value and worth, to have confidence in themselves, and to act accordingly. People with low scores are doubtful about their own worth, see themselves as undesirable, often feel anxious, depressed, and unhappy, and have little faith or confidence in themselves. The high performer group had higher scores than the low performer group; however, the difference in mean scores was not significant. Both group scores were higher than the mean raw score for the norm group.

The self-criticism score indicates the degree of openness and capacity for self criticism. High scores generally indicate a normal capacity for self criticism, while low scores indicate defensiveness. The high performer group mean was slightly lower than that of the low performer group, but the difference was not significant. Both group scores were slightly above the mean raw score for the norm group.

The total conflict scores measure the extent to which the individual has confusion, contradiction, and general conflict in self perception. The higher the score, the more extreme the conflict; the lower the score, the less extreme the conflict. The higher performer group had a
lower score than the low performer group. The difference in mean scores was not significant. Both group scores were lower than the mean raw score for the norm group.

On the True-False Ratio, the high performer group had a lower score than the low performer group. The difference in mean scores was significant at the .05 level of significance. The difference can be interpreted as an indication that the self concept of the low performers has been formulated through an inability to eliminate or reject what they are not. The high performers, on the other hand, have been able to achieve a definition of self based on an ability to reject what they are not. The True-False Ratio is a measure of a response set or response bias, an indication of whether the subject's approach to the task involves any strong tendency to agree or disagree regardless of item content. Fitts (1965) states that the actual meaning of T/F can be approached in three ways: (1) it can be considered solely as a measure of response set and interpreted in terms of the findings about the meaning of deviant response sets; (2) it can be treated purely as a task approach or behavioral measure which has meaning only in terms of empirical validity; (3) it can be considered from the framework of self theory. From this approach, high T/F scores indicate the individual is achieving self definition or self description by focusing on what he is and is relatively unable to accomplish the same thing by
eliminating or rejecting what he is not. Low T/F scores would mean the exact opposite, and scores in the middle ranges would indicate that the subject achieves self definition by a more balanced employment of both tendencies--affirming what is self and eliminating what is not self (Fitts, 1965, p. 4).

The positive identity score refers to the "What Am I" items on the scale. Here the person is describing his basic identity—what he is as he sees himself. The difference between the mean scores of the groups was not significant. Both groups' scores were higher than the norm group scores.

The self satisfaction scores come from those items with which the individual describes how he feels about the self he perceives. In general, this score reflects the level of self satisfaction or self acceptance. A person may have very high scores on identity and the next score, behavior, yet still score low on self satisfaction because of very high standards and expectations for himself. Or, on the contrary, he may have a low opinion of himself as indicated by the identity and behavior scores, yet still have a high self satisfaction score. These subscores are best interpreted in comparison with each other and with the total positive score. While the high performer group had a higher score than the low performer group, the difference
in mean scores was not significant. Both group scores were higher than the norm group scores for this variable.

The behavior score comes from those items on the test that indicate "this is what I do," or "this is the way I act." This score measures the individual's perception of his own behavior or the way he functions. The high performer group had a higher score than the low performer group; however, the difference was not significant. Both groups' scores were lower than the norm group score.

In the physical self score, the individual is presenting his view of his body, his state of health, his physical appearance, skills, and sexuality. The low performer group score was slightly higher than that of the high performer group. The difference in scores was not significant.

The moral-ethical self score describes the self from a moral-ethical frame of reference--moral worth, relationship to God, feelings of being a "good" or "bad" person, and satisfaction with one's religion or lack of it. The high performer group score was higher than the low performer group score, but the difference was not significant. The high performer group score was higher than the norm group score, while the low performer group score was lower.

The personal-self score reflects the person's sense of personal worth, his feeling of adequacy as a person, and
his evaluation of his personality apart from his body or his relationship to others. The high performer group score was higher than the low performer group score. The difference was not significant. Both groups' scores were higher than the norm group score.

The family-self score reflects one's feelings of adequacy, worth, and value as a family member. It refers to the individual's perception of self in reference to his closest and most intimate circle of associates. The high performer group had a higher score than the low performer group; however, the difference was not significant. Both groups' scores were higher than the norm group score.

The social-self score is another "self, as perceived relation to others" category, but pertains to "others" in a more general way. It reflects the person's sense of adequacy and worth in his social interaction with other people in general. While the high performer group's score was higher than the low performer group's score, the difference in the scores was not significant. Both groups' scores were higher than the norm group score.

The defensive positive scale (DP) is a more subtle measure of defensiveness than the self-criticism score. The DP score has significance at both extremes. A high DP score indicates a positive self description stemming from defensive distortion. A significantly low DP score means that a person is lacking in the usual defenses for
maintaining even minimal self esteem. The high performer group had a higher score than the low performer group; however, the difference was not significant. Both groups had higher scores than the norm group.

The general maladjustment scale (GM) serves as a general index of adjustment-maladjustment. The scale is composed of 24 items which differentiate psychiatric patients from non-patients but do not differentiate one patient group from another. The high performer score was higher than the low performer score, but the difference was not significant. The high performer group score was higher than the norm group score, while the low performer group score was lower than the norm group score.

The psychosis scale is based on 23 items which best differentiate psychotic patients from other groups. While the high performer group score was higher than the low performer group score, the difference was not significant. Both groups' scores were higher than the norm group score.

The personality-disorder scale pertains to people with basic personality defects and weaknesses in contrast to psychotic states or the various neurotic reactions. The high performer group's score was higher than the low performer group's score; however, the difference was not significant. The low performer group's score was lower than the norm group score. The high performer group's score was slightly higher than the norm group's score.
The neurosis scale is composed of 27 items designed to identify neurotic patients. High scores mean similarity to the group from which the scale was derived—in this case neurotic patients. The high performer group's score was higher than the low performer group's score; however, the difference was not significant. Both groups had scores higher than the norm group score for this variable.

The personality-integration scale consists of 25 items that differentiate the PI group from other groups. The high performer group had scores significantly higher than the low performer group on the personality integration scale. This difference may be interpreted as indicative of a greater degree of self esteem. The higher score by the HP group also means that they have less conflict in their concept of themselves. A higher score on this sub-scale is usually accompanied by a higher score than the norm group score on the total positive scale and a lower than norm group score on the total conflict scale. The results presented in Table 1 confirm this pattern in this sample. The higher performer group's score was higher than the norm group's score, while the low performer group's score was lower.

The number of deviant signs score is the scale's best index of psychological disturbance. Disturbed persons often obtain extreme scores on either end of the continuum. The low performer group's score was higher than that of the
high performer group; but the difference was not significant. Both groups had higher scores than the norm group.

The HP and LP groups were also compared on a number of demographic variables. At the time the TSCS was administered, the participants were asked to indicate on their score sheet their sex, and, and location of high school attended. The ACT composite score and first semester grade point average were obtained from the student's record folder in the dean's office. The predicted grade point average was computed using ACT conversion tables as previously described in the research methods section. The data were compiled by group and are presented visually in Table 2 in order to increase the effectiveness of comparison.

The data as presented indicate that the distribution of males and females was 70 per cent-30 per cent in the low performer group and 63 per cent-27 per cent in the high performer group. The mean age was 18.60 for the low performers and 18.59 for the high performers. The high performers had a higher mean ACT composite score (21.70) than the low performers (18.78). Similarly, the high performers' first semester GPA was higher (2.79) than the low performers' (1.60). When compared on the basis of location of high school attended, both groups had the same number of Tucson area high school graduates (8). The high performer group had four more out-of-state high school graduates than did the low performer group. The mean
Table 2. An Analysis of Selected Variables by Performance Study Group Sample and Comparison Sample

<table>
<thead>
<tr>
<th></th>
<th>Sex</th>
<th>Age (Mean)</th>
<th>ACT (Mean)</th>
<th>CGPA (Mean)</th>
<th>High School</th>
<th>Pred. GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td></td>
<td></td>
<td>Tuc.</td>
<td>Az.</td>
</tr>
<tr>
<td>LP Group</td>
<td>16</td>
<td>7</td>
<td>18.60</td>
<td>18.78</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>70%</td>
<td>30%</td>
<td>18.59</td>
<td>21.70</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>63%</td>
<td>27%</td>
<td>18.60</td>
<td>20.36</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>Total Study</td>
<td>33</td>
<td>17</td>
<td>19.20</td>
<td>20.60</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Sample N=50</td>
<td>60%</td>
<td>34%</td>
<td>18.60</td>
<td>20.36</td>
<td>42%</td>
<td>27%</td>
</tr>
<tr>
<td>Total Compar.</td>
<td>42</td>
<td>13</td>
<td>19.20</td>
<td>20.60</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Sample N=55</td>
<td>76%</td>
<td>24%</td>
<td>18.60</td>
<td>20.36</td>
<td>42%</td>
<td>27%</td>
</tr>
</tbody>
</table>
predicted GPA for the two groups indicated a difference in that the high performers had a 2.3 predicted first semester average and the low performers a 2.1 predicted GPA.

In order to provide a basis for strengthening the generalizability of the conclusions of this study to the total population of all BPA freshmen, a comparison sample was randomly selected from the total population of BPA freshmen. The data elements obtained from each individual student's record folder in the dean's office included sex, age, ACT composite score, first semester grade point average, and location of high school attended.

An analysis of the data gathered from this process is presented in Table 2 which provides a means of comparing the study sample defined as HP and LP groups with the comparison sample.

The data indicate that there were more females in the study sample (34 per cent) than in the comparison sample (24 per cent). The comparison group had more males (76 per cent) than had the study group (66 per cent).

A comparison by mean age indicates that the comparison sample is slightly older (19.20) than the study sample (18.60). The mean ACT composite scores are similar--20.36 for the study sample and 20.60 for the comparison sample. The first semester GPAs were also similar--2.34 for the study sample and 2.38 for the comparison sample.
The ACT score and GPA comparisons emphasize the similarity in terms of general ability and thereby indicate the representativeness of the study sample.

The location of high school attended variable follows the same pattern in both samples. Tucson area high school graduates are in the majority. More out-of-state high schools are represented in the comparison sample—21 per cent—compared to 12 per cent in the study sample. The analysis of all five of these variables seems to indicate that the two samples are similar, thereby allowing the researcher to generalize to the BPA freshmen class with more confidence.

**Discussion**

The difference between the mean scores of the HP and LP groups on 17 of 19 subscales was not found to be statistically significant. While the difference between scores on the T/F and the PI subscales were found to be statistically significant, the evidence is inconclusive in support of the hypothesis.

The difference between the T/F and the PI subscales and the higher HP scores on these subscales provide a basis for recommending that a replication of the study be conducted with a larger sample. Sample size is one of the limitations of the study.
The HP and LP group scores on the subscales were higher than the norm groups scores, indicating a greater degree of similarity between the groups than might be expected. The LP scores were higher than the norm group scores, which supports the conclusion of the statistical analysis—the two groups are not significantly different. Therefore, it must be concluded that a low self concept is not the important variable influencing academic performance for the LP group.

The similarity of the LP and HP groups was also evident in a comparison of the demographic data presented in Table 2. The demographic data for the study sample and the comparison sample indicate that the study sample was representative of the population of BPA freshmen.

**Summary of Results**

The hypothesis that students who were classified as high performers would have a more positive self concept than students classified as low performers was not substantiated. Two of the Tennessee Self-Concept Scale subscales (True/False Ratio and Personality Integration) did indicate significant differences between the two groups. The HP group had higher scores than the LP group on the other subscales, but the difference was not statistically significant.

The demographic data as presented in Table 2 indicate that the two performance groups are similar in
their composition and that no significant difference between the groups which would distort the measures of self concept seem to exist.

An analysis of the study sample and the comparison group as presented in Table 2 indicates similarity to such an extent as to warrant generalizing the results from sample to population.
CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS,
AND RECOMMENDATIONS

Summary

The individual who fails to achieve academically is one who deserves more attention in terms of his rehabilitation than is usually given by most institutions of higher learning. In many cases, the individual is referred by the academic adviser to the student counseling center for career advisement, study skills improvement, or discussion of personal problems. This approach is often a fragmented one, lacking a focus on the problem of poor performance.

The purpose of this study was to examine the relationship between the self concept and academic achievement. Self concept was isolated for study because of its potentially significant influence upon performance. Other variables, such as poor study skills, lack of motivation and interest, test anxiety, and choice of major, which impact academic achievement were assumed to be less influential and symptomatic rather than causal.

It was the hypothesis of this study that the low performer group would have significantly lower (less positive) scores on the subscales of the Tennessee Self-Concept Scale than would the high performer group.
The review of literature produced three major conclusions: (1) self-concept theory has drawn the attention of the psychologist for the past 76 years, the results of which have been a wealth of information supporting the conclusion that an individual's conception of himself provides the frame of reference through which he interacts with his environment; (2) the concept that self concept is learned by each individual through his social interactions is of importance in this study; (3) if the self concept of an individual is learned, then it is subject to modification by the interjection of new social and educative experiences.

The relationship between self concept and academic achievement has been substantiated. The evidence indicates that there is a moderate correlation between the two and, specifically, that poor academic performance is, in large part, a consequence of faulty perceptions of the self. Enough evidence exists, however, to prevent a generalization of this conclusion to all academic settings. Specific references cited describe research projects which failed to substantiate the hypothesis that self concept was related to academic achievement. It is, therefore, important that each researcher examine this relationship within the uniqueness of a particular setting.

The question of whether or not students differ in personality characteristics by curricular area was researched. The literature clearly indicates that students
differ on many variables, including personality characteristics. Evidence also exists to suggest that there are differences in the self concept of students by curricular area. The differences in student characteristics by curricular area suggest that a study of the relationship between self concept and academic achievement should take place within a specific curricular area in order to eliminate the impact of confounding variables.

Research procedures included identifying full-time freshmen students in the College of Business and Public Administration at The University of Arizona who were enrolled during the fall semester of 1975-1976 and whose American College Test results were on file with the dean's office. A predicted college grade point average was computed for each of 248 students. High (N=122) and low (N=65) performance groups were identified based on a discrepancy range between their predicted and actual first semester GPA. The total sample (187 students) was invited to participate by completing the Tennessee Self-Concept Scale (TSCS). The respondents included 50 students—23 low performers and 27 high performers.

The data were analyzed by analysis of variance. A comparison of mean scores between the two groups on 19 variables of the TSCS was made by a t test for the difference between independent means. Statistically significant
differences in mean scores existed for the True/False Ratio and the Personality Integration Scales.

If considered from the framework of self theory, the results on the True/False Ratio indicate that the low performer is achieving self description by focusing on what he is and is relatively unable to accomplish the same thing by eliminating or rejecting what he is not. The inability of the low performer to affirm what he is and reject what he is not differentiates him from the high performer whose scores indicate that he is able to accomplish this process.

The differences between the high and low performers were also statistically significant for the Personality Integration Scale. The higher score of the high performers indicates a greater degree of psychological adjustment. The trend of the scores on the other 17 variables, including the total positive score, which is the single most important score, was in the direction of supporting the hypothesis. The difference in group mean scores, however, was not statistically significant.

Data were also presented comparing the two performance groups on a number of demographic variables. The groups were similar on the basis of sex distribution, age, location of high school attended, and predicted GPA. Actual GPA and ACT scores were appreciably higher for the high performer group.
In order to strengthen the generalizability of the findings to the population of BPA freshmen, a comparison sample was randomly selected from the population of full-time BPA freshmen who were registered during the fall semester of 1975-1976. This process substantiated that, while the performance groups were not randomly selected, they are, in fact, comparable to the population as a whole.

In view of the fact that the results of this study were not conclusively supportive of the hypothesis, the null hypothesis was upheld.

**Conclusions**

The conclusions of this study are: (1) the lack of a significant difference between the HP and LP groups on 17 of the 19 subscales of the TSCS indicates that a poor self concept was not the major variable influencing the academic performance of the low performers; (2) the significant differences between the HP and LP groups on the T/F Ratio and PI Scale which supported the hypothesis warrant a replication of the study with a larger sample; (3) a program designed to assist low performers should include components which would consider all of the major variables affecting academic performance. These were identified in the literature as poor study skills, lack of motivation and interest, test anxiety, and choice of major.
Implications

Despite a significant amount of research to the contrary this study did not confirm the importance of self concept as a factor in discriminating high performers from low performers. This study must therefore be added to those of Jervis (1959), Peters (1968), Hall (1972), Lund (1972), LeMay (1969), and Abbott and Haney (1972) which collectively form a minority opinion that self concept and academic achievement may not be related.

Those who assume that self concept is related to academic achievement should exercise caution in the development of programs and policy to assist the poor performer.

Research of poor performance which assumes self concept as a factor should study this relationship in a specific curriculum or course of study rather than generalizing findings from one academic field to another.

The allocation of the resources of the counselor, adviser, and administrator to develop policy and procedure directed at the problem of poor performance is a necessary prerequisite to its solution.

Recommendations

The following recommendations are offered to provide direction for future research:

1. A follow-up of this study should be made in order to examine the effects of academic success or
failure on the self concept over time. This investigation could provide information on the degree of interaction between academic performance and self concept.

2. A study of the differences in the self concept of students by curriculum is suggested by the findings of this investigation. Information from such a study would be of value to the counselor and adviser as they assist students in the selection of a major field of study.

3. A replication of this study with a larger sample could substantiate the direction of the results of this study and thereby strengthen the generalizability of the findings.

The complexity of the poor performance problem mandates that research be continued to provide an information base from which more effective programs could be designed if colleges and universities are to meet the challenge presented by students who consistently perform below their level of ability.
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