

IDENTIFICATION OF CHARACTERISTICS, ASSOCIATED
WITH DISCREPANCY BETWEEN SELF-ESTIMATED
AND MEASURED INTERESTS

By

MARY JANE DENTON

Bachelor of Arts
Friends University
Wichita, Kansas
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Master of Science in Education
Southern Illinois University
Carbondale, Illinois
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Thesis Approved:

Harry K. Roberts

Thesis Adviser

John L. Futh

Edwin E. Vineyard

Wm P. Ewens

Julia R. McHale

Dean of the Graduate School

570214

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CHAPTER I

THE NATURE OF THE PROBLEM

Introduction

Student interests are essential considerations in the determining of vocational goals along with other characteristics such as aptitudes and personality characteristics. Ralph Berdie has demonstrated that interests play a more significant part in vocational choice determination among high school seniors going to college than do aptitudes. (2, p.277)

Definition of Terms

Interests referred to in this study represent two classifications: (1) self-expressed or self-estimated interests and (2) measured interests. Super (40, p. 376) has defined expressed interests as preferences expressed by the individual or professions of specific interests. Expressed interests may be indicated by a response to a question, whereas measured or inventoried interests refer to estimates

of interests based on responses to a large number of questions concerning likes and dislikes, or concerning the order of preference for groups of activities (4, p. 219). An example of an instrument which measures interests is the Kuder Preference Record (KPR). Another instrument frequently used to measure interests is the Strong Vocational Interest Blank (SVIB).

In a number of instances students' self-estimated interests and measured interests such as those derived from the KPR and the SVIB interest inventories have been in agreement. However, in individual instances significant discrepancies have been found between self-estimated and measured interests. It is not presently possible to predict which individuals will present a pattern of self-estimated interests which is divergent from their measured interests.

Various studies have been performed which tend to emphasize the use of self-expressed interests while others have indicated more credence in the use of inventoried or measured interests. Those stressing the importance of self-estimated interests include the investigations of Dyer (14), McArthur and Stevens (28).

Dyer (14, p. 288), in 1939, showed that among

college students vocational preferences which had been constant over a period of years were related to subsequent occupational choice. Similar findings were reported by McArthur and Stevens (28, pp. 184-189) in 1955. They found that vocational preferences among students at Harvard and Stanford had considerable predictive value for adult occupations. However, these studies were restricted in the sample populations used; Dyer's study involved only preferences which were constant over a long period of years, omitting all cases in which change of preference had taken place (14, p. 281), while McArthur and Stevens studied only the expressions of preference of late adolescents and young adults of superior intellectual educational and socio-economic status (28, p. 184).

Super (36, p. 376), on the other hand, found among a more normal distribution of students that measured or inventoried interests were more related to the occupation eventually entered than the expressed interests. An exception to this was found among the group of students who represented the upper socio-economic class. Their self-estimated interests were found to be more significantly related with the occupation eventually entered than their measured

interests. According to Super (35, p. 221) measured interests tended to be more stable, while self-expressed interests were more frequently changed. Yet, when self-expressed interests were consistent over a period of years, which they tend to become during middle adolescence, they too, were found to have some "bearing on the occupation entered, and on stability in the occupation eventually entered."

Statement of the Problem

The purpose of this study is to determine the degree of relationship which exists between self-estimated and measured interests of Oklahoma State University entering freshmen and to identify characteristics which might identify individuals whose self-estimated and measured interests are discrepant.

The specific characteristics which will be evaluated in terms of their relationship with discrepancy between self-estimated and measured interests are: (1) scholastic aptitude, (2) ability to read, (3) concept of self, (4) acceptance of self, (5) ideal self, (6) discrepancy between the self-concept and the ideal self, (7) size of high school graduating class, (8) familiarity with the Kuder Preference Record (the instrument used in this

study to measure interests), (9) the amount of counseling a student has experienced, and (10) socio-economic level.

Several investigations have been made toward establishing the amount of agreement occurring between self-estimated traits, including interests, abilities, values and personality characteristics. Such studies have perhaps been given impetus by the influence of such theorists as Rogers and Snygg and Combs (20), and others who advocate a theory of counseling which incorporates into its purpose the goal of increased self-awareness of the client. The results of studies related to self-awareness indicated that people's self-estimates of their own characteristics were related to a moderate degree with the measured characteristics, but there was not a one to one relationship, and there were marked individual differences.

The intent of this study is to first determine the relationship between self-estimated and measured interests on the Kuder Preference Record among the 1963 entering class of freshmen at Oklahoma State University, and secondly to identify those characteristics which are associated with discrepancy between self-

estimated and measured interests. The problem is more specifically stated in the following hypotheses.

(1) There is no significant relationship at the 1% level of confidence between the self-estimated interests and measured interests.

(2a) There is no significant relationship at the 5% level of confidence between general scholastic aptitude, as measured by the composite American College Testing Program (ACT), and discrepancy between self-estimated and measured interests.

(2b) There is no significant relationship at the 5% level of confidence between scholastic aptitude in English, as measured by the ACT, and discrepancy between self-estimated and measured interests.

(2c) There is no significant relationship at the 5% level of confidence between scholastic aptitude in mathematics, as measured by the ACT, and discrepancy between self-estimated and measured interests.

(2d) There is no significant relationship at the 5% level of confidence between scholastic aptitude in the natural sciences, as measured by the ACT and discrepancy between self-estimated and measured interests.

(2e) There is no significant relationship at the 5% level of confidence between scholastic aptitude in the social sciences, as measured by the ACT, and discrepancy

between self-estimated and measured interests.

(3) There is no significant relationship at the 5% level of confidence between one's ability to read and discrepancy between self-estimated and measured interests.

(4a) There is no significant relationship at the 5% level of confidence between self-concept, as measured by Bill's Index of Adjustment and Values (IAV), and discrepancy between self-estimated and measured interests.

(4b) There is no significant relationship at the 5% level of confidence between self acceptance, as measured by Bill's IAV and discrepancy between self-estimated and measured interests.

(4c) There is no significant relationship at the 5% level of confidence between ideal self, as measured by Bill's IAV and discrepancy between self-estimated and measured interests.

(4d) There is no significant relationship at the 5% level of confidence between discrepancy between ideal self and self-concept, as measured by Bill's IAV, and discrepancy between self-estimated and measured interests.

(5) There is no significant relationship at the 5% level of confidence between the size of high school graduating class and discrepancy between self-estimated and measured interests.

(6) There is no significant relationship at the 5% level of confidence between familiarity with the Kuder Preference Record and discrepancy between self-estimated and measured interests.

(7) There is no significant relationship at the 5% level of confidence between the number of counseling sessions experienced and discrepancy between self-estimated and measured interests.

(8) There is no significant relationship at the 5% level of confidence between the students' fathers' occupational level and discrepancy between self-estimated and measured interests.

(9) There is no significant difference in discrepancy between self-estimated and measured interests between the group with high ACT composite scores and the group with low ACT composite scores.

(10) There is no significant difference in discrepancy between self-estimated and measured interests between the group with high Nelson Denney Reading test scores and the group with low reading scores.

(11) There is no significant difference in discrepancy between self-estimated and measured interests between the group with high Bill's IAV self-concept scores and the group with low self-concept scores.

(12) There is no significant difference in discrepancy between self-estimated and measured interests between the group with high Bill's IAV ideal self scores and the group with low ideal self scores.

(13) There is no significant difference in discrepancy between self-estimated and measured interests between the group with high discrepancy between Bill's self-concept and ideal self scores and the group with low discrepancy between self-concept and ideal self scores.

(14) There is no significant difference in discrepancy between self-estimated and measured interests between the group with a large high school graduating class and the group with a small high school graduating class.

(15) There is no significant difference in discrepancy between self-estimated and measured interests between the group who was able to recall

their previous Kuder scores and the group who was unfamiliar with the Kuder Preference Record.

(16) There is no significant difference in discrepancy between self-estimated and measured interests between the group whose fathers held high status positions and the group whose fathers held low status positions.

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature is presented according to the following hypothesized relationships between: (1) self-estimated and measured interests, (2) scholastic aptitude and discrepancy between self-estimated and measured interests (discrepancy) (3) reading ability and discrepancy, (4) concept of self and discrepancy, (5) high school class size and discrepancy, (6) familiarity with the Kuder and discrepancy, (7) counseling experience and discrepancy, and (8) socio-economic level and discrepancy.

Also included is detailed information regarding the Kuder Preference Record and the American College Testing Program, which is followed by a summary of the literature review.

Self-Estimated and Measured Interests

As was previously mentioned a number of investigations have been made toward assessing self-awareness of one's abilities, values, personality traits,

and interests. However, only those studies which were directly related to the specific area of "interests" were reported here.

Investigations such as those made by Goldfarb indicated that "self-awareness" (defined in terms of one's performance on objective tests) did not represent a unitary phenomenon. Instead, it was found that self-awareness was unique to the area in which it was being measured; i.e. persons who were accurate in estimating their performance on aptitude tests were not necessarily accurate in their estimation of scores on interest tests or temperament inventories.

Self-estimated interests have been demonstrated to have a moderately high relationship with measured interests (41, p. 221). In a study of the Strong Vocational Interest Blank scores of 1,000 men who went to the University of Minnesota Testing Bureau, Darley (12) found contingency coefficients ranging from .35 to .57 between claimed vocational choices and interest score patterns.

In a similar study Berdie (3, p. 48) used both the SVIB and Kuder as criterion instruments on a sample population of 500 male counselees at the University of Minnesota Student Counseling Bureau. The subjects,

most of whom had completed less than two years of college, ranged in age from fourteen to thirty-seven, with a mean age of twenty-one years. Their self-estimated interests were obtained by administering a rating form of the graphic rating type upon which they rated nine occupational areas. Their estimates were indicated by checking the most appropriate statement from the following list: (1) My interests are very much unlike interests of people in this area, (2) My interests are somewhat dissimilar, (3) There is no marked similarity or dissimilarity between my interests and the interests of others, (4) My interests are somewhat similar, (5) My interests strongly resemble the interests of people in this area. The occupational areas included the biological sciences, artistic creation and appreciation, physical sciences, technical occupations, social service, musical occupations, business detail, selling, and verbal or literary occupations (3, p. 48). The relationship between self-estimated and measured interests was .43 between the SVIB and the self-ratings, and was .52 between the Kuder and self-ratings. These relationships were expressed in terms of median contingency coefficients. The range of contingency coefficients between the SVIB

and the self-ratings was from .27 to .61, and between the Kuder and the self-estimates from .30 to .61.

On both interest inventories, self-ratings of interest in the biological sciences were least related to the test scores. The next poorest agreement was found in the physical sciences area. Self-ratings in the sales area tended to be moderately related to the scores obtained from both interest inventories. The patterns of interest in "business office" on the SVIB tended to be accompanied by similar self-ratings, whereas the Kuder computational scores were only slightly related to the self-ratings in business detail. The Kuder clerical scores were more related to clerical self-ratings than were Kuder computational scores. In only two areas were the Strong scores more closely related to self-ratings than were the Kuder scores. In five areas the Kuder was more closely related to the self-ratings than the SVIB (3, p. 47).

Rose (34, p. 257) gave the Kuder Preference Record to sixty unselected veterans referred for vocational advisement. The veterans were given nine cards. On each of the cards were seventeen occupations which were selected from Kuder's manual as characteristic of a given area. The subjects ranked the nine areas

according to their preferences for the occupation. The coefficient of contingency obtained was .61. The rank-order correlation coefficients for each of the sixty cases ranged from $-.05$ to $.99$, with a median rho of $.64$.

Kopp and Tussing (25, p. 339) studied the relationship between scores on the Kuder Preference Record and responses to a questionnaire used for appraising vocational interests. For each student, the nine scores on the Kuder were ranked in order from one to nine. These rankings were then correlated with the order in which the occupations were ranked by the students. Correlations between the self-estimated and measured interest rankings were $.59$ among the 115 tenth grade boys and $.50$ among the 117 tenth grade girls.

O'Hara and Tiedeman in a study of high school students in Boston, Massachusetts, found a correlation of $.69$ between self-estimated and the Kuder inventoried interests among ninth grade students and a $.83$ correlation between self-estimated and measured interests among the twelfth grade students.

Scholastic Aptitude and Discrepancy Between
Self-Estimated and Measured Interests

A study done by Crosby and Winsor indicated some possible relationship between scholastic aptitude and ability to estimate one's own interests. They administered the Kuder Preference Record to college sophomores and compared the results with their estimates of their Kuder profile. In an attempt to determine the effect of intelligence upon the ability to estimate interests a group of ninety students were administered the American Council Scholastic Aptitude Test (SCAT). The students were divided into groups representing the highest 20% and lowest 20% in scholastic aptitude. Rank difference correlations were then obtained between scholastic aptitude and the students' ranking according to total errors made in estimating their interests. An average rho of .42 was obtained (11, p. 412).

Reading Ability and Discrepancy Between
Self-Estimated and Measured Interests

Studies have been conducted to determine the readability of the Kuder Preference Record, but no

evidence was located which dealt with reading ability as a factor affecting discrepancy between self-estimated and measured interests.

Pierce-Jones' evaluation of the readability of the Kuder which was conducted in 1954, indicated that the Kuder's readability was at a "fairly difficult" level requiring eighth grade reading ability (31, p. 81).

Self-Concept and Discrepancy Between Self- Estimated and Measured Interests

Rogers and Snygg and Combs (20, p. 65) posited a theory which placed the individual's self concept at the core of his personality organization, which was believed to predispose his perception of things. It followed from this thesis that behavior problems were believed to arise when the individual felt that his self-concept was threatened by other perceptions he could not immediately reconcile with his self-concept, and therefore could not integrate into his personality structure. For example, an indecision concerning a vocational choice could be affected by incompatibility between one's self-concept and other self-related concepts, such as his ideal self or his concept of the ordinary person. In such instances it is conceivable that

counseling might consist of reconciling or bringing together into congruence the divergent concepts with subsequent modification of either the concept of self or the ideal-self concept (20).

Super has suggested that "in choosing an occupation, one is in effect, choosing a means of implementing a self-concept;" that in counseling a person about a problem of vocational choice or adjustment one does both personal and vocational counseling (38 p. 196). A vocational counselor, according to Super uses occupational information, but also helps the client consider (1) what sort of person he is, (2) how he feels about the sort of person he is, (3) what sort of person he would like to be, and (4) what are his values and interests (38 p. 195).

Other theorists in the field of counseling and guidance such as Bordin (7), Wrenn (44), Burgess (8), and Blocher (6) have also presented the self-concept as a primary consideration. Blocher reported a study which indicated that an individual claimed high interest in occupations for which he held a stereotype that closely approximated the vocational self-concept he had, or would like to have (6, p. 318).

Concept of self was defined by Goldfarb (18, p. 234)

as the accuracy of a person's ideas about himself.

Concept of self as it is measured by the Bill's Index of Adjustment and Values, was shown to be related to adjustment and expressions of emotionality. Substantiating this claim were studies conducted by Bills (4), Roberts (33), Hickman (20), and Smith (35).

Smith's study (35, p. 111) of self-concept, as it was measured by instruments designed by Edwards, Cattell, and Murray, found that the various facets of self-concept were positively correlated with one another. Those aspects of self-concept which were found positively inter-related were (1) discrepancy between self-concept and ideal self, (2) discrepancy between self-concept and social self, (3) discrepancy between social self and ideal self, (4) instability of self-concept, (5) instability of ideal self-concept, and (6) instability of social self-concept.

No studies specifically relating self-concept with ability to estimate one's own interests were found in the literature, but there were studies relating measures of adjustment with self-awareness of interest. Goldfarb's study (8, p. 236) indicated that no significant relationship existed between self-awareness of interests and scores on the Guilford-Zimmerman Temperament Scale

or the Minnesota Multiphasic Personality Inventory. The Kuder Preference Record was used as a criterion measure for self-awareness of interests.

Cohen's investigations indicated the existence of a curvilinear relationship between aspiration level and self-acceptance. In this study Rorschach ratings and the Rotter Aspiration Board tests were used as criterion measures for self-acceptance. It was indicated that goal-level setting within a level of aspiration framework was not related to feelings of adequacy. But, a curvilinear relationship was found to exist between goal-level setting and self acceptance. Both very high goal-level setting and very low goal-level setting appeared to be related to self-rejection in that those who appeared more self-accepting tended to set lower positive goals (9, p. 85).

High School Class Size and Discrepancy Between Self-Estimated and Measured Interests

No studies were found in the literature which had related size of high school graduating class to discrepancy between self-estimated and measured interests.

Familiarity with the Kuder and Discrepancy Between
Self-Estimated and Measured Interests

Discrepancy between self-estimated and measured interests was discussed by DiMichael in his study of "The Professed and Measured Interests of Vocational Rehabilitation Counselors" (13). The reported results indicated that foreknowledge of one's Kuder interest profile had a slight effect upon one's estimate five months later, which apparently had influenced the estimates in the direction of the measured interests, as they were previously interpreted. An r of .56 between self-estimated and measured interests in the group which had no previous experience with the Kuder was obtained, as compared with an r of .61 for those who had taken the Kuder five months before and had access to the results.

Counseling Experience and Discrepancy Between
Self-Estimated and Measured Interests

It has been hypothesized that counseling experience will increase one's self-awareness and thus will positively affect one's ability to estimate his own interests. Johnson's study (21) done in 1949, with a sample

population of one hundred white, male, voluntary clients at the Counseling Service in New Haven, Connecticut, found at the 5% level of confidence that there was a gain in accuracy of self-knowledge of interests following one month of counseling. This improved self-awareness was indicated to have occurred in estimating intelligence, personality and interests. The self-awareness was found to be sustained to a high degree during a thirty-day follow-up period. The Kuder Preference Record was used as the criterion instrument for the awareness of interests. Vargas (42) also reported having found a positive relationship between judged success of therapy and "self awareness" during therapy.

Socio-economic Level and Discrepancy Between Self-Estimated and Measured Interests

Socio-economic status was hypothesized as being a factor influencing one's background experience, and hence his ability to accurately estimate his own interests. This seemed somewhat supported by McArthur's finding (28) that among the upper-middle and upper class groups self-expressed interests were more accurate predictors of occupations eventually chosen than the Strong Vocational Interest test scores.

Dr. J. A. Kahl (23) similarly found that family status as well as intelligence were useful predictors of education and occupational ambitions at the extreme levels, but were not found predictive among the lower-middle class group even though parental pressures seemed important to this group.

A less direct but implicated influence of socio-economic status was suggested in a study of parental identification by Lessing (26). Lessing reported having found a significant relationship between measured interest scores of mothers and their daughters, ages eighteen to twenty-four.

Berdie reported a close relationship between the occupations of business men and skilled tradesmen and the expressed as well as measured interests of their sons. He offered two explanations: (1) the fathers' occupation and the sons' vocational interests were influenced by similar factors, or (2) the cultural level and socio-economic status of the home which determined the children's exposure to experience was influenced by the fathers' occupational level (2).

Erlandson's study of high school boys in Minnesota revealed a definite relationship between the fathers' occupations and their sons' primary interest patterns

on the Strong Vocational Interest Blank. A chi square of 70.44 was found which was significant at the .001 level of confidence (16).

Similar findings were reported by Strong and Forester(40) who indicated a positive, though not substantially high relationship between inventoried interests of sons and their fathers, with correlations of about .30 reported.

It was Jordaan's (22) observation among college level students that regardless of what was designated as the parents' occupation the offspring constituted a more able, more select, and more mobile group than was generally found at the levels from which they originated and were supposed to "represent". This was found to be especially so among students in the middle and lower class categories.

The above findings regarding social class lend support to theories which present interests as extremely complex phenomena, and suggest that their evaluation involves more than assessing the activities of an occupation or ability to perform the occupational tasks. But, personal values and the values of those with whom one comes into contact are believed to be influential in the shaping of vocational interests (40) In this respect the socio-economic level of the family

is believed to be influential in the development of interests.

No studies were found which dealt with socio-economic level as a factor discriminating between the individuals whose self-estimated interests were reported as similar to or discrepant from their measured interests.

The Kuder Preference Record

The reliability and the validity of the Kuder are indicated by the following studies.

Stability of the Kuder was indicated by a test-retest reliability study (3) which yielded correlations of .72 to .89 on all scales. The study was conducted among young adults after a lapse of fifteen months. The correlations of Kuder and SVIB results as reported by Stanley ranged from .28 (literary-author) to .73 (scientific-chemist).

The norms for the Kuder included 2667 men, classified according to forty-four occupational groups, and 1429 women classified in twenty-nine occupational groups. The number in any one group were generally small, however, ranging from sixteen to 185. The pattern of interests tended to differ according to expectation. For example, (1) Accountants were significantly high at the 1% level of confidence in computational, literary and clerical interests.

(2) Actors scored high in artistic, literary, musical and social service interests. (3) Aviators were significantly high in mechanical and scientific interests and low in musical (3).

The American College Testing Program

The reliability and validity of the American College Testing Program are indicated as follows.

The reliability of the ACT as measured by the Spearman-Brown odd-even technique was reported in the ACT Manual (1) as follows: English .84, mathematics .85, social studies .86, natural sciences .84, and composite .94.

The ACT was constructed to measure the degree to which students have developed the generalized skills and abilities needed for success in college. The best evidence pertaining to the validity of the ACT was provided by longitudinal studies of the qualifying tests used in the National Merit Scholarship Program (NMSQT), since the ACT and the NMSQT were constructed from common item pools at comparable difficulty levels and were presented in similar formats. Therefore the predictive validity of the ACT was indicated by the correlation between grade point averages and the NMSQT. The correlations were as follows according to a study conducted at the University of Illinois, Chicago

Branch. A sample population of 346 students was used: (1)

Grade Point Average Correlated With National
Merit Scholarship Qualifying Test

English	.43
Mathematics	.43
Social Studies	.43
Natural Science	.33
Composite	.49

Summary of Literature Review

The literature reviewed is summarized in the following paragraphs.

(1) A moderately high relationship was found to exist between self-estimated and measured interests among high school and college students.

(2) Insufficient study was made toward determining the relationship between scholastic aptitude and discrepancy between self-estimated and measured interests. One report made by Crosby and Winsor (11) using a small sample of eighteen students found a .42 correlation between SCAT scores and discrepancy between self-estimated and measured interests.

(3) No information regarding a relationship between self-estimated and measured interests and reading ability or high school class size was found in the literature.

(4) No studies were found in the literature which presented a relationship between self-concept with discrepancy, though self-concept was found to be of theoretical importance in vocational choice. A related study conducted by Cohen (9) suggested that low goal-level setting was more prevalent among the relatively more self-accepting individuals.

(5) Knowledge of one's previous performance on the Kuder Preference Record was reported as influencing future self-estimates in the direction of the measured interests according to Di Michael's study (13).

(6) Counseling experience was shown to have increased one's ability to estimate his own interests (21).

(7) No information was found which explored the problem of the relationship between socio-economic status and discrepancy between self-estimated and measured interests per se. Studies were found, however, which indicated that some relationship existed between vocational choice and socio-economic class.

(8) Studies regarding the Kuder Preference Record indicated that it was an adequate instrument for indicating an individual's interest preferences.

(9) The ACT was reported as a valid and reliable instrument for measuring scholastic aptitude for predicting academic performance.

CHAPTER III

DESIGN AND METHODOLOGY

The design and methodology of the study is presented in this chapter according to the following headings: (1) Description of the Subjects, (2) Instruments Used, and (3) Procedure.

Description of Subjects

Four hundred sixty entering freshmen at Oklahoma State University were selected as subjects. The subjects, who ranged in age from seventeen to twenty-one, were attending the July and August, 1963, orientation sessions at Oklahoma State University. From this group of 460 students, only 364, (215 males and 149 females), remained as subjects after those with invalid Kuder test results and those with incomplete or improperly handled questionnaires were omitted.

Instruments Used

An Interest Survey was formulated for use in obtaining the students' estimated interests. It included

a list of the ten interest areas and related occupations which are presented on the reverse side of the Kuder Preference Record profile sheet. (See appendix A.)

An Information Questionnaire was also designed for obtaining the following information: (1) father's occupation, (2) size of high school graduating class, (3) counseling sessions held with a counselor, psychologist, or psychiatrist, and (4) familiarity with the Kuder Preference Record. (See Appendix B) Additional information asked for on the questionnaire was not used in the study.

(1) Occupation of the father was used in this study as a single index for estimating social status. Table I presents McGuire and White's "Occupations: Levels and Kinds" which was used for classifying the occupations the students listed. This scale was taken from McGuire and White's "The Measurement of Social Status," which is a modification of the index of social characteristics developed by Warner, Meeker, and Eells (43). The complete McGuire and White social status index is presented in Appendix C. Father's occupational level was chosen for use in this study because it has been found to be the best single measure of social class (19).

OCCUPATIONS: LEVELS AND KINDS

Rate	Professionals	Proprietors	Businessmen	White Collar	Blue Collar	Service	Farm People
1.	Lawyer, judge physician, eng- ineer, professor school supt. etal	Large busines- ses valued at \$100,000 or more depending on community	Top executives, President, etal of corporations, banks, pub. utilities	CPA; editor of newspaper, maga- zine; executive secy. of status organization			Gentleman farmer or land owners who do not super- vise directly their property
2.	High School teacher, libra- rians, and others with 4- yr. degree	Business valued at \$50,000 to \$100,000	Asst., office, and dept.manager or supervisors; some mfg.agents	Accountant; in- surance, real estate, stock salesmen; editor- ial writers			Land operators who supervise properties and have an active urban life
3.	Grade school teacher, reg- istered nurse, minister with out 4-yr degree	Business or equity valued from \$10,000 to \$50,000	Managers of small branches or buyers and salesmen of known mchdse	Bank clerks, auto salesmen, postal clerks, RR or Tel. agent or suprvsr	Small contra- ctor who works or supervises his jobs.		Farm owners with "hired help"; oper- ators of leased property who supervise
4.		Business or equity valued from \$5,000 to \$10,000	(Stenographer, bookeeper; ticket agent, sales people in dept. stores, et al)		Foreman; master carpenter, elec- trician, et al; RR engineer	Police capt. tailor, RR. cond. watchmaker	Small landwoner; operators of rented property hiring "hands"
5.		Business or equity valued from \$2,000 to \$5,000	(Dime store clerks, grocery clerks; tele- phone and beauty oper., et al.)		Apprentice to skilled trades repairmen; med. skilled workers	Policemen; barbers; prac.nurse brakemen	Tenants on good farms; foremen; owners of farms who "hire out"
6.		Business or equity valued at less than \$2,000		(Semi-skilled factory and production workers; assis- tants to skilled trade; ware- housemen, watchmen)		Taxi and trk. drivers; waitress, gas stn. attnt	Sharecroppers; established farm laborers; subs'ce farmers
7.	Reputed Lawbreakers"			(Heavy labor; odd-job men; mine or mill hands, unskilled workers.)		Domestic hlp. busboy, scrub- women, janitor help.	Migrant workers "squatters and nesters"

(2) High school class size was requested on the questionnaire. The assumption underlying its use was that the educational environment of the student differed with the size of the high school attended, in terms of the number of teachers the students had, specialization of the teachers, school facilities available, variety of courses offered, and size of peer group or groups.

(3) The number of consultations with a counselor, psychologist or psychiatrist was asked for as a direct question on the questionnaire. The subjects were to respond by writing in the number of sessions.

(4) Familiarity with the Kuder was also assessed on the questionnaire. The subjects were to respond by answering yes or no to the following statements. (1) I have taken the Kuder Preference Record before today, (2) I had the results of the Kuder interpreted to me, and (3) I remember the results of the Kuder. These responses were ranked 1, 2, and 3, respectively.

Kuder Preference Record

The Kuder Preference Record was used in this study as the inventory for obtaining measured interests, and served as a criterion measure against which the self-estimated interests were to be compared. Its reliability and validity are referred to in the Review of the Literature, Chapter II of this study. The Kuder has increasingly become standardized and validated for

use in vocational guidance (39), and was chosen for use in this study because it assessed a kind of broad generalized interest in activities which were incorporated into various occupations. Its ease in administration and low cost were factors also favoring its use.

American College Testing Program

The American College Testing Program (ACT) was chosen to be used as a measure of scholastic aptitude, which according to the ACT Manual (1) was composed of items that had demonstrated predictability of future academic success, using the freshman grade point average as a criterion. Essentially the ACT is a composite measure of scholastic abilities and achievement combined, as are most scholastic aptitude tests. Its reliability and validity are discussed in the Literature Review, Chapter II of this study.

Nelson Denney Reading Test

The Nelson Denney Reading Test was used to indicate the students' reading ability. The validity of this test was considered to be inherent in its construction as a reading test which includes reading comprehension, reading speed, and vocabulary. A split-half reliability coefficient of .92 was reported for the Nelson Denney Reading tests and has been found to be

highly correlated with scholastic achievement (27).

Bill's Index of Adjustment and Values

The Bill's Index of Adjustment and Values (Bill's IAV) was selected to be used in measuring the freshmen's (1) concept of self (SC), (2) acceptance of self (SA), (3) ideal self (IS), and (4) discrepancy between ideal self and self-concept (IS-SC). The Bill's IAV questionnaire is presented in Appendix D. Its reliability among college students, using the split-half and test retest techniques is indicated in Table II.

TABLE II

RELIABILITY OF BILL'S IAV

	N	Split Half	N	6 wks. Test Retest	N	16 wks. Test Retest
Self-Concept	100	.53	160	.90	300 141	.86 .59
Self Acceptance	237 100	.91 .82	175	.83	93 300	.79 .68
Ideal Self	100	.77	160	.92	141 300	.60 .58
Discrepancy Between Self-Concept and Ideal Self	237 100	.88 .87		.87	93 300	.69 .52

The reliability coefficients of the Bill's IAV satisfied the criterion of .50 as a minimum correlation for evaluating group performance. T. L. Kelley (24) in Lindquist's book, Educational Measurement, justified the use of .50 as a minimal correlation in the evaluation of group performance because it fulfills the requirement: that for a test to be useful "it must permit discrimination of a difference as small as .26 times the standard deviation of the group, with the chances being five to one of being correct."

Toward establishing the validity of Bill's IAV, the Butler and Haigh Self-Ideal Ordinary Person, and the Worchel Self Activity Inventory, a factor analytic study of these three instruments was conducted by Strong in 1962 (13). The results of the study indicated that the perceived self was the only variable which was measured by all three of the tests. The concept of ideal self was found to be quite complex in that, what a person would like to be, seemed much more than just a unitary concept and meant different things on the different instruments. In all three measures, however, the ideal self appeared to represent a composite of what the individual would like to be and how he viewed the "perfect" individual in our society.

In another study concerning the Bill's IAV, Cowen (10) found that the discrepancy between self-concept and ideal self was a measure of tension or conflict, i.e. was a measure of personal adjustment.

Robert's study (33) of the Bill's IAV indicated that the self-ratings yielded were valid as indices of emotionality when a rejection or discrepancy was indicated on the same personality trait. Reaction time in "free association" was used as the measure of emotionality in Robert's study.

Procedure

Students selected for subjects were attending the final Oklahoma State University freshmen orientation sessions scheduled on July 22, 23, 24, 25, 29, 30, 31, and August 1, 2, 5, and 6. The subjects were administered the Interest Survey and Information Questionnaire as their initial exercise before beginning their routinely scheduled testing. The students were informed that the information asked for on the survey and questionnaire forms was to be used for purposes of research only and that it would be kept confidential. On the Interest Survey the students were instructed to rank their preferences of interests from one to ten, after they completed the

questionnaire. An attempt was made to control for possible faking of the self-estimated interests by providing a column for the students to express their ideal interest choices as well. To check for their understanding of the directions a + and - denotation was solicited for the best liked and least liked interest area. When the + and - did not coincide with the first and last rankings of one and ten it was assumed that the student didn't understand the directions and their names were dropped from the usable sample.

After the questionnaire and survey were administered the students then took the Kuder Preference Record, followed by the Nelson Denney Reading test, the Bill's IAV, the ACT test and finally the Cooperative algebra and trigonometry achievement tests. The latter achievement tests were administered for the University records and were not related to this study. All tests were administered according to standard procedure. The importance of the tests was stressed to the students in attempt to discourage faking and malingering. The standardized tests were scored by the Bureau of Tests and Measurements at Oklahoma State University. The results were posted in the students' cumulative folder. The test results for this study were then procured from the students' folders which were filed in the Division

of Student Affairs office. An exception to this procedure was made for handling the Bill's IAV. It was hand scored by the writer and kept out of the cumulative folder.

The scoring procedure for the Bill's Index of Adjustment and Values involved totaling columns I, II, and III, which represented self-concept, acceptance of self, and ideal self scores, respectively. The difference between column I and column II was then calculated to determine the discrepancy score between ideal self and self-concept.

Once the test data and information on the subjects was collected it was sorted and tabulated. Subjects whose test results or data sheets were found incomplete or invalid were dropped from the list of usable subjects.

Then the Kuder percentile scores for each subject were ranked from one to ten from the highest to the lowest score, so that they could be compared with the students' ranked self-estimates. The difference between the self-estimated ranked interests and the ranked Kuder scores was calculated and summed to yield a total discrepancy score.

A Pearson correlation technique (17) was then applied to evaluate the relationship between the self-estimated and measured interests on each of the Kuder interest scales. Separate correlations were obtained for the male group and for the female group, as well as for both groups

combined. Correlations were also obtained to determine the degree of relationship which existed between the summed discrepancy scores between self-estimated and measured interests and (1) scholastic aptitude, as indicated by the ACT composite score and the ACT sub-test scores, (2) reading ability as indicated by the Nelson Denney total score, (3) self-concept, self acceptance, ideal self, discrepancy between ideal self and self-concept as indicated by Bill's IAV, (4) size of high school class, (5) familiarity with the Kuder, (6) consultations had with a psychiatrist, psychologist, or counselor, and (7) occupational level of the father.

Following the application of the Pearson correlation analysis, t-tests were administered to determine if a significant difference in discrepancy between self-estimated and measured interests existed between the high and low groups in (1) scholastic aptitude, (2) reading ability, (3) self-concept, ideal self, self-acceptance, and discrepancy between ideal self and self-concept, (4) familiarity with the Kuder, (5) high school class size, and (6) occupational level of the father.

CHAPTER IV

RESULTS

The results of the study are presented according to the following divisions (1) Mean Characteristics of the Subjects, Correlations Between (2) Self-Estimated and Measured Interests, (3) Scholastic Aptitude and Discrepancy Between Self-Estimated and Measured Interests, (4) Ability to Read and Discrepancy Between Self-Estimated and Measured Interests, (5) Concepts of Self and Discrepancy Between Self-Estimated and Measured Interests, (6) High School Class Size and Discrepancy Between Self-Estimated and Measured Interests, (7) Familiarity With the Kuder and Discrepancy Between Self-Estimated and Measured Interests, (8) Counseling Experience and Discrepancy Between Self-Estimated and Measured Interests, and (9) Fathers' Occupational Level and Discrepancy Between Self-Estimated and Measured Interests.

Results of the t-tests follow under the sub-titles:

(10) Scholastic Aptitude and Discrepancy, (11) Reading Ability and Discrepancy, (12) Concepts of Self and Discrepancy, (13) High School Class Size and Discrepancy, (14) Familiarity With the Kuder, and Discrepancy, and (15)

Occupational Level and Discrepancy.

MEAN CHARACTERISTICS OF THE SUBJECTS

Table III presents the mean scores of the subjects contrasted with the national norms in the various characteristics. The subjects were found to yield typical scores, according to the national average, in scholastic aptitude, reading ability, and self-concept. The mean socio-economic level indicated by their fathers' occupational level was 3.20 which is a middle, middle social status classification. (See Appendix E for breakdown into occupational levels.)

Self-Estimated and Measured Interests

The Pearson correlations found between self-estimated and measured interests among the sample population of 364 Oklahoma State University freshmen were between: .48 and .72 for the male and female groups combined, between an r of .48 and .67 for the male group and between .49 and .70 for the female group. An overall correlation coefficient between self-estimated and measured interests in the ten interest areas combined for the male and females was .58. The correlations between self-estimated and measured interests according to the given occupational categories are shown in Table IV.

TABLE III

MEANS AND STANDARD DEVIATIONS OF O.S.U. FRESHMEN
CHARACTERISTICS COMPARED WITH NATIONAL NORMS

Characteristics	Mean Scores O.S.U. Students	Mean Scores National Norms	Stand. Dev. O.S.U. Students
Composite ACT	20.00	20.00	6.07
ACT English	19.00	19.00	4.84
ACT Mathematics	20.00	21.00	6.51
ACT Natural Science	20.00	21.00	5.73
ACT Social Science	21.00	21.00	5.51
Nelson Denney Reading	76.00	78.00	24.00
Bill's IAV SC	183.00	188.00	23.00
Bill's IAV SA	172.00	178.00	23.00
Bill's IAV IS	220.00	219.00	19.00
Bill's IAV IS-SC	44.00	44.00	16.00
Familiarity with the Kuder	1.20		1.30
Counseling Exper.	.52		.31
Size H. S. Class	238.00		218.00
Fathers' Occu. Level	3.20		1.40
Total Discrepancy	19		7.00

TABLE IV
 RELATIONSHIPS BETWEEN SELF-ESTIMATED
 AND MEASURED INTERESTS

Interest Area	Male (N=215)	Female (N=149)	Both
Outdoor	.58	.59	.60
Mechanical	.62	.49	.52
Computational	.55	.63	.59
Scientific	.62	.70	.72
Persuasive	.58	.59	.59
Artistic	.59	.63	.62
Literary	.58	.61	.59
Musical	.67	.67	.67
Social Service	.48	.45	.50
Clerical	.51	.59	.51
All Scales	.56	.61	.58

Note: All the above correlations are positive
 and are significant at the .01 level
 of confidence.

The correlation coefficients between self-estimated and measured interests for both the male and female groups combined on each of the ten scales were as follows: Outdoor .60, Mechanical .52, Computational .59, Scientific .72, Persuasive .59, Artistic .62, Literary .59, Musical .67, Social Service .50, and Clerical .51. For the male group alone, the correlations were: Outdoor .58, Mechanical .62, Computational .55, Scientific .62, Persuasive .58, Artistic .59, Literary .58, Musical .67, Social Service .48, Clerical .51, and for all ten scales combined .56. Among the female group the correlations were Outdoor .59, Mechanical .49, Computational .63, Scientific .70, Persuasive .59, Artistic .63, Literary .61, Musical .67, Social Service .45, Clerical .59, and for all ten scales combined .61.

The obtained correlations were found significant at the 1% level of confidence and thus refute the null hypothesis which stated that there is no significant relationship at the 1% level of confidence between self-estimated and measured interests. These findings verify the results of previous studies which indicated a moderate to high agreement between self-estimated and measured interests. The highest degree of association found between self-estimated and measured interests was

in the scientific interest area, with an r of .72 yielded. The least amount of association between the self-estimated and measured interests was in the social service interest area, with an r of .50 yielded. The females' self-estimates showed a slightly higher association with the measured interests than the males', with overall correlations of .61 for the female group and .56 for the male group. The difference between these correlations of the male and female groups was not found significant, however.

Table V presents the correlations between discrepancy between self-estimated and measured interests and the foregoing hypothesized characteristics.

Scholastic Aptitude and Discrepancy Between Self-Estimated and Measured Interests

Hypothesis (2a) stated that there is no significant relationship at the 5% level of confidence between general scholastic aptitude as measured by the composite ACT score and discrepancy between self-estimated and measured interests. The correlation coefficients found between the ACT composite scores and discrepancy was $-.06$ for both the males and females combined, was $-.07$ for the female group and $-.06$ for the male group when analyzed separately. The null hypothesis was therefore

TABLE V

CORRELATIONS BETWEEN CHARACTERISTICS AND DISCREPANCY
BETWEEN SELF-ESTIMATED AND MEASURED INTERESTS

Characteristics	Male	Female	Both
Composite ACT	-.06	-.07	-.06
ACT English	-.07	.00	-.06
ACT Mathematics	-.25**	-.01	-.12*
ACT Natural Sci.	-.08	.00	-.04
ACT Social Sci.	-.08	-.12	-.10
Nelson Denney Reading	-.11	-.03	-.10
Bills IAV SC	.04	-.09	-.03
Bill's IAV SA	-.08	-.08	-.09
Bill's IAV IS	-.08	-.14*	-.12*
Bill's IAV IS-SC	.05	.04	.05
Familiarity with Kuder	-.05	-.20**	-.12*
Counseling Exp.	.00	.03	.01
Size H. S. Class	.01	.02	.01
Fathers' Occu. Level	-.03	-.04	-.03

*indicates significance at the 5% level.
**indicates significance at the 1% level.

supported since no significant relationship was found.

(2b) stated that there is no significant relationship at the 5% level of confidence between scholastic aptitude in English as measured by the ACT and discrepancy between self-estimated and measured interests. Correlation coefficients yielded between the ACT English scores and discrepancy were $-.06$ for both groups combined, $-.07$ for the male group and $.00$ for the female group. Since no significant relationships were found the null hypothesis was not refuted.

(2c) stated that there is no significant relationship at the 5% level of confidence between scholastic aptitude in mathematics as measured by the ACT and discrepancy between self-estimated and measured interests. Correlations yielded between the ACT mathematics scores and discrepancy were $-.12$ for both groups combined, $-.25$ for the male group and $-.01$ for the female group. The r of $-.25$ was significant at the 1% level of confidence and the $-.12$ was significant at the 5% level. Therefore, the null hypothesis was refuted when referring to the male population and when both the male and female groups were considered together.

(2d) stated that there is no significant relationship at the 5% level of confidence between scholastic aptitude in the natural sciences as measured by the ACT and discrepancy between self-estimated and measured interests. The correlation coefficients found between the ACT natural sciences scores and discrepancy were $-.04$ for both groups combined, $-.08$ for the males, and $.00$ for the females. Since no significant relationship was found the null hypothesis was supported by these findings.

(2e) stated that there is no significant relationship at the 5% level of confidence between scholastic aptitude in the social sciences as measured by the ACT and discrepancy between self-estimated and measured interests. The correlation coefficients yielded were $-.10$ for both groups combined, $-.08$ for the male group and $-.12$ for the female group. Since no significant relationships were obtained the null hypothesis was not refuted.

Ability to Read and Discrepancy Between Self-Estimated and Measured Interests

Null hypothesis (3) stated that there is no significant relationship at the 5% level of confidence between self-concept as measured by Bill's IAV and discrepancy between self-estimated and measured interests.

An obtained r of $-.03$ for both the males and females combined, an r of $.04$ for the male group and $-.09$ for the female group were supportive of the null hypothesis.

(4b) stated that there is no significant relationship at the 5% level of confidence between self acceptance as measured by Bill's IAV and discrepancy between self-estimated and measured interests. An obtained r of $-.09$ for both the men and women, an r of $-.08$ for the men and an r of $-.08$ for the women were not found significant at the 5% level, and thus supported the null hypothesis.

(4c) stated that there is no significant positive relationship at the 5% level of confidence between ideal self as measured by Bill's IAV and discrepancy between self-estimated and measured interests. The correlations found for both the male and female group were $-.12$, for the male group a $-.08$, and for the female group a $-.14$. The $-.12$ and $-.14$ correlations were significant at the 5% level, indicating a consistent though low order relationship between discrepancy and one's ideal self-concept. Therefore, the null hypothesis was refuted when the female group was considered separately, and when both the male and female groups were combined.

(4d) stated that there is no significant positive relationship at the 5% level of confidence between discrepancy between ideal self and self-concept as measured by Bill's IAV and discrepancy between self-estimated and measured interests. The obtained correlations of .05 for both groups combined, .05 for the males and .04 for the females were not significant at the 5% level, and therefore were supportive of the null hypothesis.

High School Class Size and Discrepancy Between Self-Estimated and Measured Interests

(5) stated that there is no significant negative relationship at the 5% level of confidence between the size of high school graduating class and the discrepancy between self-estimated and measured interests. The correlation coefficients yielded were .01 for the male and female group combined, and for the male group a .01, and a .02 for the female group. Since these correlations were not significant at the 5% level they were supportive of the null hypothesis.

Familiarity With the Kuder and Discrepancy Between Self-Estimated and Measured Interests

Null hypothesis (6) stated that there is no significant relationship at the 5% level of confidence between

familiarity with the Kuder Preference Record and discrepancy between self-estimated and measured interests. The correlations obtained were $-.12$ for both the males and females, $-.20$ for the male group, and $-.05$ for the female group. The $-.20$ and $-.12$ correlations were significant at the 5% level, and so refuted the null hypothesis when the female group was considered separately and when both the males and females were considered together. Hence, a consistent, though low order relationship was found to exist between familiarity with the Kuder and discrepancy between self-estimated and measured interests.

Counseling Experience and Discrepancy Between Self-Estimated and Measured Interests

Null hypothesis (7) stated that there is no significant relationship at the 5% level of confidence between the number of counseling sessions and discrepancy between self-estimated and measured interests. The correlations obtained of $.01$ for both the male and female groups combined, $.00$ for the male group, and $.03$ for the female group were not significant at the 5% level and therefore lent support to the null hypothesis.

Father's Occupational Level And Discrepancy Between
Self-Estimated and Measured Interests

Null hypothesis (8) stated that there is no significant relationship at the 5% level of confidence between the students' fathers' occupational level and the discrepancy between self-estimated and measured interests . A Pearsonian r of $-.03$ for the male and female group was yielded, and r 's of $-.03$ for the males and $.04$ for the females were found, all of which were not significant at the 5% level. Thus, the null hypothesis was supported.

To study further the possible influence of the hypothesized characteristics upon discrepancy when present in an extreme state, relative to the group as a whole, a series of t -tests were administered. Standard deviations were used as cut-off points in separating the groups into extremely high and extremely low groups according to the following characteristics: (1) scholastic aptitude, (2) reading ability, (3) self-concept, (4) ideal self, (5) discrepancy between ideal self and self-concept, (6) high school class size, (7) familiarity with the Kuder, and (8) fathers' occu-

pational level. The t-tests were applied for determining if there was a significant difference between means of the high and low groups in discrepancy between self-estimated and measured interests. The mean discrepancy scores of the high and low groupings are presented in Tables VI, VII, VIII, IX, X, XI, XII, and XIII. The obtained t's are presented in Table XIV.

The results of the t-tests, according to the stated hypotheses are as follows:

Scholastic Aptitude and Discrepancy

Null hypothesis (10) stated there is no significant difference in discrepancy between self-estimated and measured interests between the group with high ACT composite scores and the group with low ACT composite scores. The t's yielded lent support to the null hypothesis in nine out of the ten interest areas and when all the interest areas were combined. A significant difference was found, however, between the group with high scholastic aptitude and the group with low scholastic aptitude in discrepancy between self-estimated scientific interests and measured scientific interests.

TABLE VI

MEAN DISCREPANCY BY INTEREST AREA FOR SUBJECTS WHO SCORED
HIGH AND LOW IN SCHOLASTIC APTITUDE

Scholastic Aptitude Group	Mean Disc. Outdoor	Mean Disc. Mechanical	Mean Disc. Computational	Mean Disc. Scientific	Mean Disc. Persuasive	Mean Disc. Artistic	Mean Disc. Literary	Mean Disc. Musical	Mean Disc. Social Serv.	Mean Disc. Clerical
High	2.21	2.96	1.70	1.17	1.87	2.26	1.84	1.57	2.22	1.48
Low	1.70	2.33	1.93	2.00	2.07	2.13	1.70	1.43	1.57	2.07

(N of group I with high scholastic aptitude = 23.) N of group II with low scholastic aptitude = 30.)

TABLE VII

MEAN DISCREPANCY BY INTEREST AREA FOR SUBJECTS WHO SCORED
HIGH AND LOW IN SELF-CONCEPT

All's AV Scores	Mean Disc. Outdoor	Mean Disc. Mechanical	Mean Disc. Computational	Mean Disc. Scientific	Mean Disc. Persuasive	Mean Disc. Artistic	Mean Disc. Literary	Mean Disc. Musical	Mean Disc. Social Serv.	Mean Disc. Clerical
High	1.83	2.00	1.57	1.76	1.57	1.66	2.10	1.62	1.76	2.07
Low	2.39	2.24	1.90	2.02	2.12	1.95	1.63	1.85	1.98	2.37

(N of group I with high self-concept scores = 42. N of group II with low self-concept scores = 41.)

TABLE VIII

MEAN DISCREPANCY BY INTEREST AREA FOR SUBJECTS WHO SCORED
HIGH AND LOW IN IDEAL SELF

Bill's [AV Scores [S	Mean Disc. Out-	Mean Disc. Mecha-	Mean Disc. Compu-	Mean Disc. Scien-	Mean Disc. Persua-	Mean Disc. Artis-	Mean Disc. Lite-	Mean Disc. Musical	Mean Disc. Soc. Serv.	Mean Disc. Cleri-
High	1.73	2.08	2.00	2.15	1.96	1.96	2.65	1.50	1.54	1.58
Low	2.41	2.61	1.76	1.80	1.98	1.98	2.00	1.98	2.07	2.27

(N of group I with high ideal self scores = 26. N of group II with low ideal self scores = 41.)

TABLE IX

MEAN DISCREPANCY BY INTEREST AREA FOR SUBJECTS WHO SCORED
HIGH AND LOW IN IDEAL SELF MINUS SELF-CONCEPT

Bill's [AV Scores [S-SC	Mean Disc. Out-	Mean Disc. Mecha-	Mean Disc. Compu-	Mean Disc. Scien-	Mean Disc. Persua-	Mean Disc. Artis-	Mean Disc. Lite-	Mean Disc. Musical	Mean Disc. Soc. Serv.	Mean Disc. Cleri-
High	1.69	1.85	2.02	1.44	1.83	1.77	1.65	1.65	1.69	1.90
Low	1.53	2.20	1.56	1.26	1.70	1.81	2.07	1.49	1.46	2.35

(N of group I with high discrepancy between self-concept and ideal self = 61. N of group II with low discrepancy between self-concept and ideal self = 28.)

Reading Ability and Discrepancy

Null hypothesis (11) stated that there is no significant difference in discrepancy between self-estimated and measured interest between the group with high Nelson Denney Reading scores and the group with low reading scores. Since no significant difference in discrepancy between self-estimated and measured interest was found in the groups with high reading ability and the low reading group, the null hypothesis was supported.

Concepts of Self and Discrepancy

Hypothesis (12) stated there is no significant difference in discrepancy between self-estimated and measured interests between the group with high Bill's IAV self-concept scores and the group with low self-concept scores. Since no significant t was obtained the null hypothesis remained supported.

(13) stated there is no significant difference in discrepancy between self-estimated and measured interests between the group with high Bill's IAV ideal self scores and the group with low ideal self scores. The null hypothesis was supported by the findings since no significant t was found.

TABLE X

MEAN DISCREPANCY BY INTEREST AREA FOR SUBJECTS
WHO ATTENDED LARGE AND SMALL HIGH SCHOOLS

Size	Mean S. Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.
Class	Out- door	Mecha- nical	Compu- tational	Scien- tific	Persua- sive	Artis- tic	Lite- rary	Musi- cal	Soc. Serv.	Cleri- cal	
Large	2.57	2.00	2.04	1.57	1.87	2.23	1.45	1.87	2.02	2.42	
Small	2.08	2.27	1.81	1.35	1.88	1.96	1.73	1.58	1.54	2.04	

(N of group I from large high schools = 53. N of group II from small high schools = 26.)

TABLE XI

MEAN DISCREPANCY BY INTEREST AREA FOR SUBJECTS WHO RECALLED PREVIOUS
KUDER SCORES AND THOSE WHO WERE UNFAMILIAR WITH THE KUDER

Famil. with Kuder	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.	Mean Disc.
	Out- door	Mecha- nical	Compu- tational	Scien- tific	Persua- sive	Artis- tic	Lite- rary	Musi- cal	Soc. Serv.	Cleri- cal	
High	1.88	2.16	2.03	1.39	1.81	1.82	1.85	1.50	1.90	2.09	
Low	1.94	2.35	1.97	1.75	2.18	1.89	2.03	1.82	1.86	2.47	

(N of group I who recalled previous Kuder scores = 119. N of group II who were unfamiliar with the Kuder = 175.)

TABLE XII

MEAN DISCREPANCY BY INTEREST AREA FOR SUBJECTS WHO SCORED
HIGH AND LOW ACCORDING TO FATHERS' OCCUPATIONAL LEVEL

Fathers' Occu. Level	Mean Disc. Out-door	Mean Disc. Mechanical	Mean Disc. Computational	Mean Disc. Scientific	Mean Disc. Persuasive	Mean Disc. Artistic	Mean Disc. Literary	Mean Disc. Musical	Mean Disc. Soc. Serv.	Mean Disc. Clerical
High	2.34	1.82	1.96	1.14	1.55	1.62	1.61	1.63	1.59	2.47
Low	1.64	1.70	1.79	1.34	1.84	1.79	1.99	1.66	1.91	2.09

(N of group I with fathers of high status occupations = 56. N of group II with fathers of low status occupations = 67.)

(14) stated there is no significant difference in discrepancy between self-estimated and measured interests between the group with high discrepancy between Bill's IAV self-concept and ideal self scores and the group with low discrepancy between self-concept and ideal self scores. The null hypothesis was substantiated by the findings since no significant t was obtained.

High School Class Size and Discrepancy

(15) stated there is no significant difference in discrepancy between self-estimated and measured interests between the group with a large high school graduating class and the group with a small high school graduating class. The null hypothesis was substantiated since the obtained t 's were not significant at the 5% level of confidence.

Familiarity With the Kuder and Discrepancy

(16) stated there is no significant difference in discrepancy between self-estimated and measured interests between the group who was able to recall previous Kuder scores and the group which was unfamiliar with the Kuder Preference Record. The null hypothesis was refuted, in that the difference in dis-

crepancy between the two groups for all ten interest areas combined was found significant. The specific interest areas in which high and low familiarity with the Kuder significantly discriminated between discrepancy scores were the persuasive, musical, clerical, and scientific areas.

Occupational Level and Discrepancy

(17) stated there is no significant difference in discrepancy between self-estimated and measured interests between the group whose fathers held high status positions and the group whose fathers held low status positions. The null hypothesis was substantiated in nine of the ten interest areas and in all the areas combined. The outdoor interest area was the exception. A significant difference in discrepancy between self-estimated outdoor interests and measured interests in outdoor activities was found to exist between the students whose fathers held high social status positions and those who held low status jobs.

TABLE XIII

t's OBTAINED BETWEEN DISCREPANCY SCORES OF HIGH
AND LOW GROUPS OF CHARACTERISTICS

Areas of Interest (degrees of freedom)	ACT Comp.	Self Concept	Ideal Self	IS-SC	Size H.S. Class	Famil. Kuder	Fath. Occu. Level
	51	81	65	106	77	-292	121
Outdoor	1.28	-1.44	-1.47	.52	.99	-.32	-1.96**
Mechanical	.99	-.63	-1.08	-1.02	-.59	-.81	-.36
Computational	-.55	-.98	.67	1.21	-.54	.35	-.54
Scientific	-1.77*	-.75	.72	.59	.56	-1.87*	.76
Persuasive	-.48	-1.59	.71	.40	-.05	-1.97**	.98
Artistic	.26	-.78	-.03	-.11	.67	-.32	.54
Literary	-.71	1.10	1.37	-1.20	-.77	-.88	1.19
Musical	.32	-.67	-1.23	.54	.81	-1.71*	.11
Soc. Serv.	1.35	-.65	-1.44	.73	1.35	.17	.93
Clerical	-1.53	-.63	-1.65	-1.27	-.89	1.78**	.72
All 10 Interest Areas	-.08	-1.11	.99	.27	.39	-2.32**	.42

** indicates significance at the .01 level.

* indicates significance at the .05 level.

CHAPTER V.

DISCUSSION

This chapter presents a discussion of the results and some limitations of the study.

Discussion of Results

The results indicated a moderate relationship between self-estimated and measured interests among the 1963 class of Oklahoma State University freshmen. The over-all relationship of .58, with correlations ranging from .50 to .72 were found between the subjects' self-estimated and measured interests.

These results were similar to the correlations reported in previous studies such as those of Kopp and Tussing (25), who found median correlations of .50 and .59 among tenth grade girls and boys, respectively. A correlation of .55 between self-estimated and measured interests was obtained among Rehabilitation Counselors, according to Di Michael's report (13). A median rho of .54 between self-estimated and measured interests was reported by Crosby and Winsor (11), etc.

This study likewise found that most of the subjects were fairly accurate in their estimates of their own interest areas. No significant difference was found between the male and female's ability to rank their own interests. There were individuals whose self-estimated and measured interests were divergent, however. Several hypotheses were stated from which it was expected that some characteristics would be found as having some degree of relationship with ability or inability to estimate one's own interests.

The characteristics hypothesized in this study as having some relevancy to discrepancy, but which yielded results which were not significant at the 5% level included the following: (1) scholastic aptitude in English, (2) scholastic aptitude in natural science, (3) scholastic aptitude in social science, (4) reading ability, (5) self-concept, (6) self-acceptance, (7) discrepancy between self-concept and ideal self, (8) size of high school graduating class, and (9) number of consultations with a psychiatrist, psychologist or counselor.

Some significant, though low order relationships were found between the following characteristics and discrepancy between self-estimated and measured interests

as revealed by the Pearson Product Moment Correlations. The t-tests also revealed some significant findings which are included in the following discussion.

(1) A negative r of $-.25$ among the male population between discrepancy and mathematical scholastic aptitude suggested that to some extent the higher a freshmen's scholastic aptitude in mathematics, the lower discrepancy there is between his self-estimated and measured interests. An hypothesized interpretation of this finding was that a more objective, rational choice of occupational interests was more likely to occur when rational and/or methodical or numerical abilities were present in an individual which may be indicated by a high scholastic aptitude in mathematics on the ACT test.

(2) A significant, though low order correlation of $.20$ was found between discrepancy and familiarity with the Kuder Preference Record, suggesting that previous test interpretation had a significant, though low degree of influence on an individual's self-perception in the reporting of his own interest; i.e. the more recall a person has of his previous Kuder scores, the less discrepancy will be found between his future self-estimated interests and the results of the Kuder when taken a second time. Recall of previous Kuder scores was found to be significant, in terms of discrepancy, specifically in the

scientific, persuasive, musical, and clerical areas of interest.

(3) Some discrimination in discrepancy between self-estimated interest in outdoor activities and measured interest in outdoor activities was found between the students with fathers of low status employment and those whose fathers held high status employment. It could be hypothesized, then, in light of these findings that whether or not the students' fathers were employed in low status positions, which usually entailed physical labor and outdoor activity, was an influential factor in determining the realism of their children's choices of outdoor occupational areas.

(4) Discrepancy in self-estimated interests in science and measured scientific interests varied significantly at the 1% level, between the group with high general scholastic aptitude and the group with low general scholastic aptitude. This result suggested that individuals with high scholastic aptitudes were better able to rationally and realistically indicate an interest in science which could be supported by the Kuder test results. Perhaps, an individual who knowledgeably chose science as an area of interest represented the more scholastically oriented and able person, whereas the less able scholastically, may have had less awareness of the scientific field and may have thus expressed inaccurate assessments

of their interest in that area.

(5) An r of $-.14$ among the female group indicated a low degree, but yet a significant relationship between ideal self scores and discrepancy between self-estimated and measured interests. To some extent, then, it was suggested that females, more so than males are influenced by an idealized concept of themselves in their ability to most realistically estimate their own intrinsic interests. A negative r of $-.14$ suggested that the higher the ideal a freshman girl had for herself the less discrepancy would be found between her self-expressed occupational interests and her interests as they were assessed by the Kuder. This finding may hold some implications for the counseling of a certain few females for whom the integration of self-concept with ideal self, or the raising of the self-concept, per se, might beneficially preempt the realization of a suitable vocational plan.

Limitations

Limitations of the study which should be considered in interpreting the results include the following: (1) The results indicated by the study were obtained from a sample population of college freshmen of a given institution, at a given period of time, and therefore should not be generalized populations which are dissimilar. The existence

of characteristics such as social class, scholastic aptitude, interests and concepts of self, etc. may be more homogeneous in this selected population than they would be in a more normally distributed group. Therefore, the findings herein indicated may be inaccurate estimates for a population wherein more divergency might exist. (2) Limitations were inherent in the instruments used to assess the characteristics of socio-economic status, scholastic aptitude, interests, and concepts of self. Characteristics such as self-concept, for example were difficult to evaluate objectively. An attempt was made to choose indices of measurement for use in this study which were among the most valid and reliable of instruments available.

CHAPTER VI

SUMMARY AND CONCLUSIONS

A summary of the procedure and results of the study are presented in this chapter with the conclusions following.

Summary

The purpose of the study was (1) to determine the relationship between self-estimated and measured interests and (2) to identify characteristics which were associated with discrepancy between self-estimated and measured interests.

Three hundred sixty-four freshmen entering Oklahoma State University in 1963 (including 215 males and 149 females) were given a questionnaire upon which they were to rank from one to ten the following areas of interest: outdoor, mechanical, scientific, persuasive, computational, artistic, literary, musical, social service, and clerical. The related occupational areas were presented also on the Interest Survey. After the students ranked their interests on the Interest Survey and provided the

information requested on the Information Questionnaire they were administered the Kuder Preference Record, the results of which were also ranked from one to ten. Subsequent tests were administered including the Nelson Denney Reading test, Bill's Index of Adjustment and Values, and the American College Testing Program.

Once the test results and information regarding the students was collected and tabulated a t-test was used to compare the ACT scores of the subjects and the entire freshman class. No significant difference was found between the two groups. Correlations between self-estimated and measured interests were then determined. A Pearson r of .58 was yielded for both the male and female groups combined, with r 's of .56 obtained for the male group and .61 obtained for the female group. Discrepancies between the rankings of each of the subject's self-estimated and measured interests were then summed and correlated with the following characteristics: (1) general scholastic aptitude, (2) scholastic aptitude in English, (3) scholastic aptitude in mathematics, (4) scholastic aptitude in the natural sciences, (5) scholastic aptitude in the social sciences, (6) reading ability, (7) self-concept, (8) ideal self, (9) self acceptance, (10) discrepancy between self-concept and ideal self, (11) familiarity with the Kuder, (12) size of high school graduating class, (13) number

of counseling sessions, and (14) father's occupational level.

From the above listing of correlated data the following were found to be significant according to Garrett's table of significant correlations (17).

(1) An r of $-.25$ among the males and a $-.12$ for both males and females were found between mathematical scholastical aptitude and discrepancy between self-estimated and measured interests. Hence, it was suggested that, to a limited degree, the higher the scholastic aptitude in mathematics the lower the discrepancy expected among the males. (2) An r of $-.20$ among the females and an r of $-.12$ for both the males and females were found between familiarity with the Kuder and discrepancy between self-estimated and measured interests. This finding suggested that the more recall a female had of the Kuder the less discrepancy expected between her self-estimated interests and subsequent Kuder scores. (3) An r of $-.14$ among the females and an r of $-.12$, among both the males and females combined, were obtained between ideal self-concept and discrepancy between self-estimated and measured interests. This suggested that the higher a female's ideal self-concept, the less discrepancy expected between her self-estimated and measured interests.

An analysis using the t-test was made. The subjects were divided into high and low group groups (with the middle group omitted) according to the various hypothesized characteristics. Standard deviations were used as the high and low cut-off points. The males and females were combined in the high and low groups. The results indicated the following significant differences between groups.

(1) A significant difference in discrepancy between self-estimated interests in the scientific field and measured scientific interests was found between the group of students with high general scholastic aptitude and the group with low general scholastic aptitude. (2) A significant difference in discrepancy between self-estimated interests in outdoor activities and measured outdoor interests was found between the group whose fathers were employed in high status positions and the group whose fathers were employed in low status positions. (3) A significant difference in discrepancy between self-estimated and measured interests in all ten interest areas combined was found between the group of subjects who recalled their previous Kuder scores and the students who were unfamiliar with the Kuder Preference Record. Particular significance was noted in the subjects' recall of their previous Kuder scores

in the scientific, persuasive, musical and clerical areas.

Limitations of the study which should be considered in interpreting the results are as follows: First, a selected sample population was used which consisted of a group of freshmen students at a particular institution in a given year. Therefore, generalizations derived from the obtained results should be made with caution and discrimination. Second, the instruments used to measure characteristics of concepts of self, socio-economic status, scholastic aptitude, and interests were subject to some limitation in refinement and precision. Future research may elicit more improved indices for measuring the personal characteristics herein studied.

Conclusions

It was concluded from these findings that the 1963 class of entering freshmen at Oklahoma State University generally demonstrated a moderately high agreement between their self-estimated and measured interests. Those characteristics found to be related to discrepancy between self-estimated and measured interests included: (1) scholastic aptitude in mathematics among the males, and males and females combined, (2) ideal self among the females, and males and females combined, (3) previous interest test experience among the females, and the males

and females combined, (4) fathers' occupational level among the males and females combined only when outdoor activities were being considered, and (5) general scholastic aptitude among both males and females only when scientific areas of interest were being considered.

None of these characteristics were found to have a high enough relationship with discrepancy to offer a substantial degree of predictive value. However, those characteristics which were significantly related to discrepancy might warrant further investigation toward establishing a composite criterion for predicting and understanding further the phenomena of discrepancy between self-estimated and measured interests.

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APPENDIX A

Interest Survey

Read each of the following paragraphs. Now, in the left hand column rank your interests from 1 through 10 according to what you feel your interests actually are. Place a 1 beside the interest area that actually suits you best; place a 2 beside the interest which represents your second best interest, and so on to your last choice which you will mark 10. You may refer to the descriptive paragraphs again as you need to. When you are finished go back through the list and put a (+) to the left of those you feel extremely interested in and a (-) beside those you strongly dislike.

_____ OUTDOOR interest means that you prefer work that _____ keeps you outside most of the time and usually deals with animals and growing things. Forest rangers, naturalists, and farmers are among those high in outdoor interests.

_____ MECHANICAL interest means you like to work with _____ numbers and tools. Jobs in this area include automobile repairmen, watchmakers, drill press operators, and engineers.

_____ COMPUTATIONAL interest means you like to work _____ with numbers. A high score in this area suggests that you might like such jobs as bookkeeper, accountant, or bank teller.

_____ SCIENTIFIC interest means that you like to dis-_____ cover new facts and solve problems. Doctors, chemists, nurses, engineers, radio repairmen, watchmakers, drill press operators, and engineers.

_____ PERSUASIVE interest means that you like to meet _____ and deal with people and to promote projects or things to sell. Most actors, politicians, radio announcers, ministers, salesmen and store clerks have high persuasive interests.

_____ ARTISTIC interest means you like to do creative _____ work with your hands. It is usually work that has eye appeal involving attractive design, color and materials. Painters, sculptors, architects, dress designers, hairdressers and interior decorators all do "artistic" work.

Interest Survey (Continued)

_____ LITERARY interest shows that you like to read _____
and write. Literary jobs include novelist,
historian, teacher, actor, news reporter,
editor, drama critic, and book reviewer.

_____ MUSICAL interest shows you like going to con- _____
certs playing instruments, singing, or reading
about music and musicians.

_____ SOCIAL SERVICE interest indicates a preference _____
for helping people. Nurses, Boy or Girl Scout
leaders, vocational counselors, tutors, minis-
ters, personnel workers, social workers, and
hospital attendants spend much of their time
helping other people.

_____ CLERICAL interest means you like office work _____
that requires precision and accuracy, file
clerk, sales clerk, secretary, statistician,
and traffic manager fall in this area.

Now, to the right of each column rank from 1 through 10
the interest you would ideally like to possess. Place
a 1 to the right of the interest you would like to possess
most. Place a 2 to the right of the interest you would
next like to have, and so on with number 10 designating
the interest you would least like to have.

APPENDIX B

Information Questionnaire

Note: This information is needed for research purposes only and will not be included as part of your record.

Name _____ Sex (circle one) Male Female

Choice of Major _____

Church Preference _____

Father's Job _____ (such as brick layer, electrician, teacher, etc. If father is deceased, state father's job at time he was deceased.)

If he is a farmer or a rancher, estimate the number of acres he owns. _____.

Is father living? (circle one) Yes No

In school my father completed the (circle one) 3rd grade, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, High School, 1 year college, 2 years, 3 years, graduated from college, attended graduate school.

Circle a Response and Fill in the Blanks

I have consulted with a counselor or psychologist or psychiatrist at some time. Yes No
Number of visitations _____.

I have taken the Kuder Preference Record before today. Yes No
Don't Know

I had the results of the Kuder interpreted to me. Yes No

I remember the results of the Kuder. Yes No

I have taken tests like the other tests I am taking today Yes No
(circle one) Many Times Several Times None

I spent most of my life in a town of approximately _____ population.

The approximate size of my high school graduating class was _____.

APPENDIX C

Bill's Index of Adjustment and Values

	I	II	III			
1. acceptable	_____	_____	_____	25. meddlesome	_____	_____
2. accurate	_____	_____	_____	26. merry	_____	_____
3. alert	_____	_____	_____	27. mature	_____	_____
4. ambitious	_____	_____	_____	28. nervous	_____	_____
5. annoying	_____	_____	_____	29. normal	_____	_____
6. busy	_____	_____	_____	30. optimistic	_____	_____
7. calm	_____	_____	_____	31. poised	_____	_____
8. charming	_____	_____	_____	32. purposeful	_____	_____
9. clever	_____	_____	_____	33. reasonable	_____	_____
10. competent	_____	_____	_____	34. reckless	_____	_____
11. confident	_____	_____	_____	35. responsible	_____	_____
12. considerate	_____	_____	_____	36. sarcastic	_____	_____
13. cruel	_____	_____	_____	37. sincere	_____	_____
14. democratic	_____	_____	_____	38. stable	_____	_____
15. dependable	_____	_____	_____	39. studious	_____	_____
16. economical	_____	_____	_____	40. successful	_____	_____
17. efficient	_____	_____	_____	41. stubborn	_____	_____
18. fearful	_____	_____	_____	42. tactful	_____	_____
19. friendly	_____	_____	_____	43. teachable	_____	_____
20. fashionable	_____	_____	_____	44. useful	_____	_____
21. helpful	_____	_____	_____	45. worthy	_____	_____
22. intellectual	_____	_____	_____	46. broad-minded	_____	_____
23. kind	_____	_____	_____	47. businesslike	_____	_____
24. logical	_____	_____	_____	48. competitive	_____	_____
				49. fault-finding	_____	_____

APPENDIX D

THE MEASUREMENT OF SOCIAL STATUS

By Carson McGuire and George D. White

The index of social characteristics, or ISC, has been developed by Warner and his co-workers at Chicago. Modifications of the original index have been tested at Texas. The total index score usually depends upon ratings for four components: namely, (a) dwelling area, (b) house type, (c) occupation and (d) source of income. The first two components have to do with where and with whom a person or family chooses to live in the residential areas of a city or a town. The last two have to do with socio-economic status which is translated into social class participation and reputation. The index seems to supply a good estimate of social class position of an individual or family when the estimate can be checked by interviewing or by Warner's method of evaluated participation.

In Texas, a good deal of work has been done with the standard ISC in a large city, Centex, and in a smaller community, Textown. The standard index of status characteristics can be employed where time is taken to interview and rate the residential areas and to assess the range of dwelling units. Table I shows the standard form of the index. Some modifications of the original Warner ISC have been made as a consequence of research experience.

TABLE I

INDEX OF STATUS CHARACTERISTICS--STANDARD FORM

A. . . Dwelling Area. . .	Rate 1 to 7 on DA scale	Weight x2
H. . . House Type.	Rate 1 to 7 on HT scale	Weight x3
C. . . Occupation	Rate 1 to 7 on CC scale	Weight x4
D. . . Source of Income	Rate 1 to 7 on SI scale	Weight x3

Weights in a status index always add up to 12. Total index scores range from 12 to 84 when the components are summed. Estimates of status in terms of social class level are made by consulting Table IV.

A modified index of social status, or ISS, is useful when it is not possible to obtain ratings for dwellings area and house type. The index has been employed in studies where people come from a number of communities. Where checks have been made the ISS shows a fairly high correspondence to the ISC and status placements usually are corroborated by interview data. Table II shows the components and the weights employed. The new item is a rating of the education attained by the individual or by the "status parent" of the family to be classified.

TABLE II

INDEX OF SOCIAL STATUS -- SHORT FORM

O . . Occupation . .	Rate 1 to 7 on OC scale	Weight	x5
S . . Source of Income "	1 to 7 on SI scale	Weight	x4
E . . Education . .	" 1 to 7 on ED scale	Weight	x3

The weights sum to 12 and the total index scores can range from 12 (high) to 84 (low) when the component scores are summed. Estimates of status in terms of social class participation and reputation are made by consulting the standard conversion table, shown as Table IV in the present report.

An index of value orientations, or IVO, has been constructed to estimate variations in life styles of individuals or the "status parent" of a family. A person's way of life--his orientation to the world about him, his behavior, his aspirations, his appreciative and moral standards--does not necessarily correspond to his social status. From original proposals made by McGuire and Martin B. Loeb, a suitable index has been developed and tested at Texas. Like other indices, the IVO is an independent empirical construct which approximates certain essential aspects of the reality being studied.

Life styles, in any community, usually can be identified from interview data because informants talk about symbol figures who represent ways of living. A set of symbol figures from a reference group which is said to share value-attitudes or value-orientations in common. The super-ordinate value orientations, ascribed to the upper class, exert latent control for they often are hidden and only brought into play when necessary. The dominant value-attitudes are the prescribed ones since they are held by the most powerful element in the majority of communities, the upper-middle class. Alternative value orientations are modifications of the dominant ones which are given lower

level approval at the "common man level," that is, among some lower-middle and many upper-lower people. Variant life styles are characteristic of ethnic groups or religious sects, where adherence to a tradition brings toleration rather than punishment. Deviant value orientations generally are disapproved or prohibited (as delinquent or criminal) and adherence in the lower-lower element brings non-acceptance and the impositions of sanctions. Since there is a relationship between status and value orientations, social class terms often are employed to classify life styles but possible discrepancies should be kept in mind. A mobile person--one who changes status upward or downward--always has to learn new value orientations and accomplish a shift in life style.

The index of value orientations, or IVO, depends upon ratings for (i) education, (ii) religious affiliation, (iii) occupation, and (iv) source of income. The first two components assess probable differences in beliefs, attitudes, and values which guide behavior. The last two have to do with the socioeconomic base which make a life style possible. Table III sets forth the components to be rated along with appropriate weights. The total index score can be employed to estimate probable life style of a subject in terms of symbols of his value orientations, or it can be used to predict possible future life style if aspirations are known.

TABLE III
INDEX OF VALUE ORIENTATIONS

E . .	Education	Rate 1 to 7 on ED scale	Weight	x4
R . .	Religious			
	Affiliation	" 1 to 7 on RA scale	Weight	x1
O . .	Occupation	" 1 to 7 on OC scale	Weight	x4
S . .	Source of In-			
	come	" 1 to 7 on SI scale	Weight	x3

The index can be employed to estimate a past, a present, or an aspired life style if components are rated approximately. To be comparable to other indices, the weights add to 12 and the total index values can vary from (high) 12 to (low) 84. Life styles can be inferred by entering the contingency table shown as Table IV. Some persons prefer to employ class-typed terms; others, to avoid status terms, can employ life style concepts.

Weights of components in all the indices have been adjusted so that a common conversion table can be employed.

It should be remembered that the predictions of class status or of life style made by using the table are only approximations, probably correct 80 or 90 per cent of the time. To test the correspondence of the construct with reality, a research person can have persons or families placed by Hollingshead's "prestige judge" or Warner's "evaluated participation" procedures. Table IV is a modification of the original conversion table developed by Warner and his associates. Index scores can be converted into letters to denote relative status level, into social class terms, or into descriptions of probable life style.

TABLE IV
GENERAL CONVERSION TABLE FOR STATUS INDICES

Index Score	Relative Status Level	Social Class Prediction	Break Points & Intervals of Indeterminancy	Life Style*	Intervals Employed in Correlation
12	A+	(UC)			16 plus
13-17	A	Upper-	12-22	Super-	17-21
18-22	A-	Class		ordinate	
23-27	B+	(UM)			22-26
28-32	B	Upper-	25-33	Dominant	27-31
33-37	B-	Middle		UM	32-36
38-41	C+	(LM)			37-41
42-46	C	Lower-	38-50	Dominant	42-46
47-51	C-	Middle		LM	47-51
52-56	D+	(UL)			52-56
57-61	D	Upper-	54-62	Alternate	57-61
62-66	D-	Lower			62-66
67-71	E+	(LL)			67-71
72-75	E	Lower-	67-84	Deviant	72-76
76-84	E-	Lower			77 Minus

*Insufficient research has been done in life styles, or in class-typed value orientations to give precise break-points for conversion of total index scores to classificatory terms. The break-points indicated for approximations of social status, however, may be employed for the symbol persons of the reference groups to which life styles are ascribed appear at different status levels.

APPENDIX E

STUDENTS' SOCIO-ECONOMIC CLASSIFICATION ACCORDING
TO FATHERS' OCCUPATIONAL LEVELS

Social Status Classification	Occupational Level	Number of Cases
Upper	1	51
Upper Middle	2	51
Middle Middle	3	119
Lower Middle	4	76
Upper Lower	5	45
Middle Lower	6	17
Lower Lower	7	5
Total		364

The above table indicates the tabulation of the subjects' classifications of social status according to the seven occupational areas in McGuire White's table of "Occupations: Levels and Kinds," which was presented on page 31. The mean social status classification for the subjects was 3.20.

VITA

Mary Jane Denton

Candidate for the Degree of
Doctor of Education

Thesis: IDENTIFICATION OF CHARACTERISTICS ASSOCIATED WITH
DISCREPANCY BETWEEN SELF-ESTIMATED AND MEASURED
INTERESTS

Major Field: Student Personnel and Guidance

Biographical:

Personal Data: Born in Williamsburg, Kansas,
December 26, 1935, the daughter of Densil R.
and Dessie L. Denton.

Education: Received the Bachelor of Arts degree from
Friends University, Wichita, Kansas, with a
major in English in June, 1957; received the
Master of Science in Education degree from
Southern Illinois University, Carbondale,
Illinois, with a major in College Student
Personnel in June, 1959; and completed require-
ments for the Doctor of Education degree at
Oklahoma State University in August, 1964.

Professional Experience: Employed as a Resident Fellow
from 1957 to 1958 and as a Counselor from 1958
to 1959 at Southern Illinois University, Carbondale,
Illinois; as a Residence Hall Director at Kansas
State University, Manhattan, Kansas from 1959 to
1960; as a Counselor at the Wichita Sedgwick
County Mental Health Clinic, Wichita, Kansas from
March, 1961 to September, 1962; as a Graduate
Assistant at Oklahoma State University, Stillwater,
Oklahoma, from 1962 to 1963; and as an Instructor
at Oklahoma State University from 1963 to 1964.

Professional Organizations: American College Personnel
Association, American Personnel and Guidance
Association.