CHARACTERISTICS OF VOCATIONALLY DECIDED AND UNDECIDED COLLEGE FRESHMEN: WILLINGNESS TO ACCEPT LIMITATIONS AND DIFFERENCES ON THE TAYLOR MANIFEST ANXIETY SCALE

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CHAPTER I

INTRODUCTION

The guidelines for counseling vocationally undecided college freshmen have not been clearly defined. Hewer (1963), writing on the meaning of theories of vocational choice for the vocational counselor, stated that it may be inappropriate to build a theory of vocational choice because of the lack of information about cultural-economic influences and the nature of inter-relationships between the psychological, social, and economic determinants which may have independent effects on an individual's vocational choice.

Frequently faulty assumptions are used in encouraging students to make their vocational decisions early in their educational career, i.e., from junior high school students to freshmen in college. According to Nelson (1962), five assumptions should be avoided.

> (1) We need to avoid assuming that the point in time when the counselor is able to discuss objectives is appropriate for the counselee to make a long-term decision.
> (2) We need to avoid assuming (a) that information possessed by the individual is adequate for him to choose a given occupation, and (b) that information possessed by the individual is adequate for him to eliminate thousands of other possible occupations.
> (3) We need to avoid assuming that an early vocational decision is necessarily good.
> (4) We need to avoid assuming that maintaining a vocational objective is necessarily good.
> (5) We need to avoid assuming by inference that an occupation alone serves the life goals of the individual; we need to promote the idea that the combination of intelligently spent leisure plus a carefully chosen vocation can aid a well-adjusted, striving individual in the realization of reasonable life goals (Nelson, 1962, pp. 25-26).

Our culture places an undue amount of pressure on students to know their vocational plans. This is particularly true when applied to high school seniors and college freshmen. The latter have not had sufficient college experience to have adequate knowledge about their limitations and assets to commit themselves to a vocational choice (Berger, 1967). According to Miller (1960) and Ginzberg (1966), at least the first two years of college should serve as years for testing one's aptitudes and interests with the reality check of various courses and fields of study.

Even though the provision for vocational counseling has been made available to college students, the results of this process have been questioned and studied by several researchers. Gonyea (1963) compared 74 vocationally counseled freshmen with matched pairs of 74 uncounseled freshmen for their appropriateness in selecting a vocation, e.g., aptitude and interest agreement. He found no favorable long term effects, i.e., 4 to 6 years later, for the counseled compared to the uncounseled in selecting an appropriate vocation.

Kohout and Rothney (1964) found no differences between counseled and uncounseled students in their consistency of vocational interest over a fifteen year period. They observed vocational choices to vary with the individual's development, and as conditions in his environment changed.

Berdie (1954) compared vocationally and educationally counseled students with uncounseled students by examining their accuracy in appraising their vocational interests as measured by the Strong Vocational Interest Blank (SVIB); college achievement, with the criterion being grades; college aptitude, as measured by the American Council Examination (ACE); and personality characteristics, as tested by the

Minnesota Multiphasic Personality Inventory (MMPI). One of Berdie's findings was that college men who were counseled improved in their accuracy of judging their college achievement and vocational interests. No improvement was found for the college women who were counseled. The counseled and uncounseled groups did not differ in their accuracy in appraising their aptitude and personality characteristics.

Two university counseling centers have reported vocational counseling to be one of their major counseling functions. Over half of the problem case load at the University of Missouri Testing and Counseling Service, seen between 1959 and 1963, was classified as vocational problems with lack of information about one's self as the cause dimension (Callis, 1965). At Pennsylvania State University, the counselor's regular case load has been reported to be comprised of many vocationally undecided students (Wall, Osipow, and Ashby, 1967).

In order to work effectively with the vocational concerns of students, the writer believes that continued identification of the variables affecting their vocational decision should be investigated to render them more satisfactory counseling during their college years. The present study is directed toward this goal.

CHAPTER II

REVIEW OF THE LITERATURE

THE VOCATIONALLY DECIDED AND UNDECIDED COLLEGE STUDENT

From a survey of the literature there appears to be little direct research information comparing the characteristics of the vocationally decided and undecided college student. In reviewing the studied characteristics of vocationally decided and undecided college students, one observes that the basis for a differential perception for these two groups has not been entirely evident. For example, variables such as aptitude and grade point average, considered to be highly relevant to college students, have not discriminated significantly between the vocationally decided and undecided college student. The studies of Williamson (1937), Abel (1966), Ashby, Wall, and Osipow (1966) found no significant differences in academic performance when comparing these two student groups during the freshmen year in college. With Ashby, Wall, and Osipow (1966) using the Scholastic Aptitude Test (SAT), Baird (1967) and Sharf (1967) independently using the American College Testing Battery (ACT) composite score, and Lyon (1959) using the College Entrance Examination Board scholastic aptitude test (CEEB), no significant differences were found between these two groups on these tests of academic aptitude. In Baird's study, 13,695 vocationally undecided were compared to 45,923 vocationally decided college bound students who took the ACT on national test dates between November, 1965 and September, 1966.

Similar results have been found for other variables as well. Nelson and Nelson (1940) reported that on the Thurstone attitude scales, i.e., Liberalism and Attitudes toward the Church, students without a vocational choice had mean scores which approximated the median scores for all students tested. Lyon (1959), Ashby, Wall, and Osipow (1966) and Bohn (1968) found no differences between students with and without a vocational choice, with regard to socio-economic background. In addition, Munday (1967) and Ashby, Wall, and Osipow (1966) did not find any differentiation between vocationally undecided students and other students on the Strong Vocational Interest Blank.

Although these studies indicate no significant differences between the vocationally undecided and vocationally decided college student, the literature does present some differences between the two groups. Baird (1967) reported that the vocationally undecided were inclined more toward the goal of intellectual development and chose less frequently the goal of vocational or professional training than the vocationally decided freshmen. This conclusion was based on his ten selection possibilities for "Goals in Attending College."

Kahoe (1966), in a study of 133 male, university freshmen, assessed Herzberg and Hamlin's motivation and hygiene constructs in relation to vocational indecision, unrealistic vocational preferences, and realistic vocational preferences. Herzberg and Hamlin's motivation and hygiene constructs suggested that in a vocational context the motivation oriented person seeks opportunities to be creative, develop new ideas, and engage in challenging work; too, he plans and develops things or procedures. However, the hygiene oriented person seeks opportunities for high income, easy working conditions, and tends to avoid novel or

challenging situations. Using Hamlin and Nemo's Choice-Motivator Scale, the unrealistic and realistic preference groups were found to be more "motivation oriented" than the group with no vocational preferences.

In investigating the variable "willingness to take a risk," Ziller (1957) found 9 vocationally undecided sophomores were less willing to take risks than 105 vocationally decided sophomores from the University of Delaware Army ROTC program. The instrument used in this study was designed to measure "the ability to sustain a loss in a decision making situation under conditions of uncertainty and risk (Ziller, 1957, p. 62)."

Cordrey (1965) studied the characteristics of 70 curricularly committed and 70 curricularly uncommitted, college, male freshmen who were between the ages of 17-21 and who were matched scholastically according to the School and College Ability Test. Biographies, interests, and personality characteristics were obtained from a questionnaire, the California Psychological Inventory, and the Strong Vocational Interest Blank for men. The results suggest that curricularly uncommitted when compared with curricularly committed freshmen were more often observed: to evade tension producing situations, "to be deliberate in thought and action," to be impulsive, opportunistic, and pleasure seeking in decision making; to have an impatience with indecision, to be "dependent" and "lacking in self confidence;" to have "undifferentiated interest patterns," and to be "passive in their interpersonal relations." No differences were found between the two groups when compared on parental influence, prior work experience, high school academic performance, prior vocational and educational guidance, and knowledge of the occupations. In accordance with the dependency

variable finding in this study, Ashby, Wall, and Osipow (1966) found a higher dependence rating on the Bernreuter Personality Inventory favoring the undecided students over the decided students.

Another study discovering similar personality differences was conducted by Watley (1965). He sought to determine how expected factors of academic ability, interests, and personality characteristics would affect the degree of confidence related to remaining in a selected major field of study. Upon entering (prior to class attendance) the Institute of Technology at the University of Minnesota in the Fall of 1961, each freshmen was asked to indicate on a questionnaire his degree of confidence about remaining in his chosen field. Of the four possible choices, the 547 male freshmen responses resulted in 84 "very confident," 229 "quite confident," 168 "somewhat confident," and 66 "not at all confident."

No differences were found between the groups on the Institute of Technology Mathematics Test, the Minnesota Scholastic Aptitude Test, and on the Strong Vocational Interest Blank (SVIB results were available for only 37% of the sample). When the "very confident" group was compared to the "not at all confident" group on the Minnesota Multiphasic Personality Inventory, the latter group obtained a significantly higher means on the F, D, Pa, Pt, and Si scales. Watley suggested the MMPI results indicated the "not at all confident" group, when compared to the "very confident" group, could be characterized by oversensitivity, compulsive behavior, and a tendency to withdraw in social contacts.

Two other studies have pointed to differences between vocationally decided and undecided college students. Miller (1956) found 60 undecided, male college students to emphasize security, i.e., certainty of

continuous employment, in their vocational values more frequently than 60 vocationally decided students. His measuring instrument consisted of 96 paired comparisons for four groups of values, namely: security, career satisfaction, prestige, and social rewards. Subjects were asked to select the item in each given pair which seemed more important in choosing an occupation.

In studying vocational indecision in male college freshmen at Stanford University, Lyon (1959) used the SVIB, MMPI, Welsh's Anxiety Scale and the Anxiety Index for the MMPI, four of Gough's non-clinical scales for the MMPI, rating scales, and checklists for career motivation and experiential variables. His findings disclosed that the 82 vocationally decided freshmen demonstrated a greater knowledge of their fathers' occupations and a stronger identification with their fathers than the 87 vocationally undecided freshmen. Interest patterns were observed to be significantly less "aesthetic-expressive" for the decided when compared with the undecided. Significant findings favoring the decided group were found on the Pt scale of the MMPI, on Gough's Re scale, and on the anxiety measures.

THEORIES OF VOCATIONAL CHOICE

In an effort to develop a theoretical framework for the present study, the writer's review of the literature has revealed that there are no formal theories of vocational indecision. However, there are theories of vocational choice. These theories have been examined to provide theoretical constructs to serve as a guide in examining the characteristics of vocationally decided and undecided college freshmen.

Within the context of many theories of vocational choice, some

acknowledgment has been awarded to the relationship between the individual's self-concept and his vocational choice. The self-concept, in this vocational sense, refers to "an individual's evaluation of himself" (O'Hara and Tiedeman, 1959). A brief review of some of the major theories will illustrate this relationship.

Carter (1940) has taken the position that the individual develops a set of vocational attitudes to cope effectively with given environmental conditions. The individual's development is guided within the limits of such realities as his needs, abilities, family, and social groups. Eventually he identifies with some valued group who influences his vocational activities. He will continue in these activities as long as there are not any significant obstacles or disparities between his abilities and the vocational requirements. Should a disparity exist, then he must redirect himself to another occupational reference group. Finally, he identifies with his developed pattern of vocational interests which serve as a basis for future vocational planning and decision-making.

Bordin (1943) has espoused some hypotheses of vocational choice in conjunction with inventoried interests. He hypothesized that when a person fills out an interest inventory, his responses reflect a picture of himself in relation to occupational stereotypes. From this postulate, a person's interests could vary according to his knowledge of the occupational stereotypes and to the degree he accepts the occupational stereotypes as representative of himself. Interests, here, are considered to be secondary and personality primary. Thus, the individual's inventoried interests will change only if his self-concept changes or he acquires new knowledge about the occupational stereotypes.

Psychoanalytic theory has been proposed by Segal (1961) as a basis to understand vocational choice. According to this viewpoint, the individual's vocational choice is a direct expression of his personality development in relation to environmental conditions. For Segal:

> Psychoanalytic concepts such as identification, the development of defense mechanisms and the theory of sublimation, can be used to gain insight into the personality characteristics of individuals who make a specific vocational choice.
>
> Before such concepts are applied in this manner, careful evaluation of informational sources about the vocations to be studied is essential in order that an awareness of the behavioral demands of the practitioners be established. In addition to published occupational information, such sources as the general cultural stereotype as defined by an instrument such as the Strong Vocational Interest Blank and other sociological and psychological research relevant to the specific occupations need to be consulted. Such a review gives, as a starting point, a view of the personality needs that a particular occupation can gratify (p. 202).

Roe (1962) applies Maslow's concept of basic needs, which are arranged in an "hierarchy of prepotency," to her theory of vocational choice. Accordingly, she has stated:

> In our society there is no single situation which is potentially so capable of giving some satisfaction at all levels of basic needs as is the occupation (p. 31) . . .
>
> Occupations as a source of need satisfaction are of extreme importance in our culture. It may be that occupations have become so important in our culture just because so many needs are so well satisfied by them. Whether the relation is causal or not, and if so which is cause and which is effect, does not particularly matter. It is probably a sort of feedback arrangement anyway. What is important is that this relationship exists and is an essential aspect of the value of the occupation to the individual (p. 33).

As this theory implies, the appropriate vocational choice is potentially possible to the degree that the individual makes an accurate assessment of his pressing needs to be satisfied, and then accurately selects the complimentary occupation to satisfy those needs.

Holland's (1963) theory of vocational choice proposes a number of personality orientations to life. These personality orientations include six models: realistic, intellectual, social, conventional, enterprising and artistic. An individual's behavior does not represent any one of these models in a "pure state." Rather, a person is characterized by combinations of all these models with his behavior reflecting one or two life style models more strongly than the others, thus representing his particular life orientation as a person. After estimating his life style, i.e., arriving at the resemblance of the person's results on the Vocational Preference Inventory or SVIB and the life style models, then his vocational choice can be predicted consistent with his personality orientation. For example, the intellectual type would include anthropologists, astronomers, biologists, chemists, mathematicians, and scientific research workers.

Several theories directly include, with greater emphasis than the theories presented so far, developmental variables which are considered to be associated with vocational choice. Two examples, here, are the theories of Ginzberg and Super. Ginzberg, Ginsburg, Axelrod, and Herma (1951) have delineated four major elements in the "Ginzberg theory of vocational choice." The four elements are the following:

> 1. ...occupational choice is a developmental process: it is not a single decision, but a series of decisions made over a period of years.
> 2. ...the process is largely irreversible, ... Time cannot be relived; basic education and other exposures can only be experienced once.
> 3. ...the process of occupational choice ends in a compromise. Throughout the years...the individual has been trying to learn enough about his interests, capacities, and values and about the opportunities and limitations in the real world, to make an occupational choice...
> 4. ...the process of occupational decision-making could be analyzed in terms of three periods - fantasy, tentative and realistic choices. In the fantasy period the

youngster thinks about an occupation in terms of his wish to be an adult.

The tentative period is characterized by the individual's recognition of the problem of deciding on a future occupation.

During the realistic period, ... the individual recognizes that he must work out a compromise between what he wants and the opportunities which are available to him (Ginzberg et al., 1951, pp. 185 - 186).

Super's (1953) theory of vocational choice places a definite emphasis on both self concept and developmental theoretical structure. That both constructs are primary in this theory will become evident as this discussion proceeds. Super has stated his theory in a series of ten propositions:

1. People differ in their abilities, interests, and personalities.
2. They are qualified, by virtue of these characteristics, each for a number of occupations.
3. Each of these occupations requires a characteristic pattern of abilities, interests, and personality traits, with tolerances wide enough, however, to allow both some variety of individuals in each occupation.
4. Vocational preferences and competencies, the situations in which people live and work, and hence their self concepts, change with time and experience, making choice and adjustment a continuous process.
5. This process may be summed up in a series of life stages characterized as those of growth, exploration, establishment, maintenance, and decline, and these stages may in turn be subdivided into (a) the fantasy, tentative, and realistic phases of the exploratory stage, and (b) the trial and stable phases of the establishment stage.
6. The nature of the career pattern (that is, the occupational level attained and the sequence, frequency, and duration of trial and stable jobs) is determined by the individual's parental socio-economic level, mental ability, and personality characteristics, and by the opportunities to which he is exposed.
7. Development through the life stages can be guided, partly by facilitating the process of maturation of abilities and interests and partly by aiding in reality testing and in the development of the self concept.
8. The process of vocational development is essentially that of developing and implementing a self concept: it is a compromise process in which the self concept is a product of the interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles, and evaluations of the extent to which the results of role playing meet with the approval of superiors and fellows.

> 9. The process of compromise between individual and social factors, between self concept and reality, is one of role playing, whether the role is played in fantasy, in the counseling interview or in real life activities such as school classes, clubs, part-time work, and entry jobs.
>
> 10. Work satisfactions and life satisfactions depend upon the extent to which the individual finds adequate outlets for his abilities, interests, personality traits, and values; they depend upon his establishment in a type of work, a work situation, and a way of life in which he can play the kind of role which his growth and exploratory experiences have led him to consider congenial and appropriate (pp. 189-190).

Super (1963) has consolidated what he and some of his associates have described as some of the elements in the "self concept theory of vocational development." He has reported three processes by which the self concept has an influence on vocational development, namely: the formation, translation, and the implementation of the self concept.

In the formation of the self concept, exploration seems to be the initial and continuous phase which begins with the infant examining his fingers and toes and proceeds to an older age when the person realizes he can no longer perform at the same pace on his job as he did at a younger age, and accordingly adapts his work methods to his perceived physical and psychological changes. This exploration phase serves as a means for the developing person to explore himself as well as his environment. A second phase in self concept formation is self differentiation. In this phase the baby learns what is me and what is not me. This is my hand and this is mother's hand. This process continues with the self increasingly discovering what it is like through comparisons with others. Accompanying self-differentiation is a process of identification in which an older significant other provides experiences and relationships and occupational goals. Role playing follows or is a part of the identification process. In role playing, the younger person

emulates significant others whom he admires. A natural outgrowth of the identification and role playing is reality testing which gives the person experiences that tend to reinforce or modify his self concept. The outcomes of reality testing influence the translation of the developing self concept into an occupational role. For example, "Since I was good at high school chemistry, maybe I can become a chemist."

The second element in this self concept theory of vocational development considers the "translation of the self concept into vocational terms" which has been hypothesized from daily observations and developmental psychology rather than being inferred from any systematic collection of data. Super postulated the following:

> 1. Identification with an adult sometimes seems to lead to a desire to play his occupational role; this global vocational self concept, assumed as a whole, may be just as totally discarded when subjected to reality testing.
> 2. Experience in a role in which one is cast, perhaps more or less through chance, may lead to the discovery of a vocational translation of one's self concepts which is as congenial as it is unexpected.
> 3. Awareness of the fact that one has attributes which are said to be important in a certain field of work may lead one to look into that occupation; and investigation may lead to confirmation of the idea that the role expectations of that occupation are such that one would do well in it and enjoy it (Super, 1963, p. 13).

The third element, according to Super, is the implementation of the self concept which is affected by the outcome of the processes of self concept development described in the first and second elements. In implementing his self concept, the individual may begin formal training beyond high school, complete his education, and/or enter the world of work. The degree of positive or negative value attached to this implementation is based upon two factors: 1. the person's reflection upon his developing self as an object, and 2. the person's self conception while being involved in the process of continuous reality testing

through his current vocational experience.

In this brief review of some of the major theories of vocational choice, the self concept construct has been considered in the theoretical structure of each theory. Carter pointed to the individual's development of vocational attitudes. Bordin talked of vocational choice in relation to the individual's acceptance of occupational stereotypes as being representative of himself. For Segal, occupational choice was viewed as a direct expression of the individual's personality development. Roe looked at the individual's assessment of his need hierarchy, based on Maslow's "hierarchy of prepotent need" to choose a satisfying vocation. Holland's theory proposed a relationship between personality orientations to life and vocational choice.

Two theories incorporated developmental constructs which are considered to be associated with vocational choice. Ginzberg and his associates described three periods of vocational development consisting of the fantasy period, the tentative period, and the realistic period. In this theory, the developmental process involved a compromise between the individual's self concept and reality.

Super's theory emphasized both the developmental and self concept constructs in greater depth than any of the theories reported. His developmental stages are characterized by growth, exploration, establishment, maintenance, and decline. In the self concept theory of vocational development, a combination of both constructs, Super has consolidated the thinking on what he and his associates have theorized as the formation, translation and implementation of the self concept.

FACTORS AFFECTING VOCATIONAL CHOICE

Although various theories of vocational choice have utilized the self concept postulate, its theoretical nature and substance have been elusive to measurement. Some of the issues and problems in the assessment and definition of self concept have been presented by Field, Kehas, and Tiedeman (1963):

> The first issue surrounds the data and their observation. Is the self-report equivalent to the self-concept? The relationship of these two constructs lies at the basis of an old and unresolved problem: what is the place of introspection in scientific investigation? ... A second issue concerns the inferences made from these observed data, e.g., the meaning of the arrangement of conceptions of self as obtained in a Q-Sort...
>
> There are at least two questions inherent in this second issue: (1) What is the relationship of the comparison of self sorts (what are you like) with ideal sorts (what do you want to be like) to the nature of goals and motivation? (2) Do discrepancies in the sorts describing how a person thinks significant others might like him to be, logically reflect all the contingencies needed for adequate understanding of the premises of a person's self-system viewed as self as process?
>
> A third issue involved in defining self-concept as the system of self evolving from the experiencing of self as process has to do with both (1) the degree to which a person is, or may become, aware of the process, and (2) the treatment of what psychoanalytic conceptions have called unconscious motivation. Specifically, the relationship in question involves the processes of self-conceptualizing and consciousness or awareness (p. 769).

In view of these difficulties, several researchers have continued to examine some of the variables involved in the process of self evaluation to determine on what grounds college students select their vocation. Two related variables appear to be present in the following studies, namely: continued efforts to assess what affects vocational choice based on self evaluation, and the nature of the student's attitude toward his abilities.

One study, by Galinsky and Fast (1966), has identified various clinical characteristics in "identity problems" which manifest themselves

in the lack of a vocational choice. A general characteristic observed in their study of college clients who were encountering "identity problems," was that they never felt quite capable to do anything, like some important trait was missing, or they felt something was lacking in their personal traits. Three varying kinds and levels of student identity problems were reported. First, there was the view held that one's vocational choice had little or no possibility of being gratifying. In the second level, there was the conscious or unconscious thought that a specific vocational choice, hopefully, would enable the student to assume characteristics considered to be inherent in the persons working in that field. The third, and more difficult level, was the student who held feelings of unworthiness and self doubt. This latter student was found frequently to have so many interests and continual shifts in interests that to make a vocational choice, at the time, was difficult.

In determining some of the psychological components in teaching, Englander (1960) reported several variables in his study which appear to be associated with vocational choice. As a result of preliminary interviews with college women, he proposed four areas of variables affecting their vocational choice:

> 1. The importance of the individual's perception of certain personal characteristics became manifested in terms of feelings of personal adequacy or inadequacy to meet the requirements as perceived for particular occupations.
> 2. The subjects...frequently denoted an interest in particular occupations because of opportunities to satisfy certain desires. These desires are representative of the goals and values of the individual.
> 3. The subjects...related their vocational plans to their perceptions of the attitudes and plans of their respective families and friends.
> 4. Two particular occupational specifications were repeatedly mentioned by the subjects in the preliminary interviews. These were (a) the opportunity to accomplish something and to gain recognition and, (b) the opportunity to work with people (pp. 258-259).

In the main study of 126 college women, Englander concluded that his research, using the Q-Sort technique, did support the discrimination between 62 Elementary majors from 33 non-education majors as an avenue "of maintaining and enhancing the phenomenal self" (p. 262). Non-education majors perceived elementary teaching as quite different from their own self images of themselves.

Anderson and Olsen (1965) have presented findings using the Q-Sort technique and Flanagan Aptitude Classification Test (FACT) to assess the relationship between "congruence of self and ideal self and vocational choice." The subjects consisted of 51 male and 45 female high school seniors who were potential four year college and terminal junior college students. Although the evidence was inconclusive in supporting the hypothesis of ..."a positive relationship between the congruence of self and ideal-self and the ability to make realistic choices of occupational goals" (p. 172), a greater number of students chose vocations above their aptitude level, based on their FACT results, than the number who chose vocations below their aptitude level.

Another study, using the Q-Sort technique, by Morrison (1962) obtained tentative support for Super's self-concept implementation theory of vocational choice. His subjects consisted of 44 nursing and 43 teacher trainees demonstrated a significantly greater similarity between their self perceptions and perceptions of chosen occupational roles than between their self perceptions and perceptions of unchosen occupational roles. Using the combined sample, Morrison explored the possibility of determining the degree of occupational identification, with the Q-Sort technique, in relation to the time period of the vocational decision, i.e., vocation chosen before high school compared to

chosen during or following high school. Although the degree of congruency between self perceptions and perceptions of chosen occupations was not significantly different according to the times of decision, the results indicated a trend favoring the earlier time of decision. In addition, he found a significant relationship between a stronger degree of commitment and a higher degree of self perceptions in congruence with perceptions of chosen occupations.

Korman (1966) investigated the variable of self esteem as a basis of affecting vocational choice. According to Korman's hypothesis, the extent to which the person's perceived needs are predictive of his vocational choice is moderated by his self esteem. This means persons high in self esteem have self perceptions which are highly predictive of their vocational choice. Poor predictions, based on self perceptions, is the case for persons low in self esteem. From this general hypothesis, Korman made 14 specific hypotheses which were supported. His subjects were junior and senior males in business administration at two large western state universities. The measuring instruments included a questionnaire to determine occupational choice, the Ghiselli Self-Description Inventory to assess self esteem, the Bass Orientation Inventory to assess "interaction orientation," and the Crites Vocation Reaction Survey to measure "need for job freedom."

Korman conducted a second study in conjunction with this one to ascertain whether his results could be explained more succinctly than his general hypothesis had suggested. His alternative was to consider the possibility of students high versus students low in self esteem viewing occupations differently. He used three independent samples, consisting of 37 male, business administration students from a far

western university; 32 male and 7 female lower division students from a far western university; and 26 male upper division students from a Mid-Atlantic university. The subjects were asked to rate the importance of several needs to self and the probability that their vocational choice would satisfy those needs. The results supported, in all three samples, the hypothesis: "for highly important needs, the probability that the chosen occupation would satisfy these needs would be greater for those with high self esteem than for those with low self esteem (p. 483)."

In a third study, Korman (1967) investigated the moderating function of self esteem in the relationship between self perceived abilities and vocational choice. His subjects consisted of 70 male and 56 female lower division students from a large private eastern university. A separate analysis was made for each sex. He hypothesized that persons with high self esteem were more likely to perceive themselves as having high abilities in the required high ability areas for their chosen occupation than persons with a low self esteem. Also, low ability areas in their chosen occupation would be perceived by both low and high self esteemed persons as high ability areas. Using the Ghiselli Self-Description Inventory and the Ability Assessment Questionnaire, both hypotheses were supported. Thus, in this study, high self esteem persons tended to choose vocations in which they thought they would be competent. Persons with low self esteem exhibited a tendency to choose the reverse.

Summary

A review of the literature has revealed both statistical similarities and differences when comparing the characteristics of vocationally

decided and undecided college students. Similarities have been found in academic performance, scholastic aptitude, socio-economic background, and in the general results of the Strong Vocational Interest Blank. Differences have been found in intellectual vs. vocational goals, motivational vs. hygienic orientations, utility for risk, personality characteristics, paternal identification, and in broad interest patterns.

Several theories of vocational choice recognize the need for the individual to engage in self evaluation. This recognition has incorporated the individual's development of vocational attitudes, acceptance of his representative occupational stereotypes, expression of his personality orientation to life, and developmental stages of his self concept.

Although the theoretical nature and substance of the individual's self conception has been elusive to measurement, research workers have continued to study some of the variables which they believed to be involved in the process of self evaluation and related to making a vocational choice. Factors found to affect vocational choice included identity problems, attitudes toward one's abilities, self esteem, and self perceptions as measured by the Q-Sort technique.

Statement of the Problem

The intent of this study was to determine whether a difference between vocationally decided and vocationally undecided college freshmen could be accounted for in terms of their attitudes toward academic achievement. Generally, no differences have been found for the academic variables, i.e., performance and aptitude, for these two groups. The

areas which the literature suggests for differences to exist between the two groups are in non-academic variables, e.g., intellectual vs. vocational goals (Baird, 1967); motivational and hygienic orientations (Kahoe, 1966); and personality characteristics (Cordrey, 1965; Watley, 1965; and Lyon, 1959). Since differences have been indicated in non-academic areas, it was believed that "attitudes toward academic achievement" which has been reported as a factor affecting vocational choice (Galinsky and Fast, 1966; Englander, 1960; Anderson and Olsen, 1965; and Korman, 1967) would be an appropriate variable for investigation. In addition, vocational choice theories have suggested the direction to formulate testable hypotheses concerning the individual's self evaluation of his abilities (Carter, 1940; Ginzberg et al., 1951; and Super, 1953).

It was further hypothesized that favorable and unfavorable attitudes toward academic achievement would be reflected in anxiety differences as measured by the Taylor Manifest Anxiety Scale (TMAS) for both the vocationally decided and undecided. According to Pflaum (1964) who administered the TMAS to 54 male and female college sophomores: "In both males and females the most frequently given anxiety responses touched upon feelings of inadequacy or inferiority in academic or social situations, and frustration at delay or postponement of bio-social gratifications (p. 720)." Also, Weitzner, Stallone, and Smith (1967) in administering the TMAS, the Cattell 16 PF, the Edwards Personal Preference Schedule and the self concept discrepancy scale to 96 male college students concluded the following: "The low MAS subject can be described as one who, in comparison to the high MAS subject, has more understanding of a situation, more self-confidence, a higher self-

evaluation, was more emotionally stable, more sophisticated, and less confused and tense in a new situation (p. 167)."

After examining these outcomes for the academic and non-academic variables, the theories of vocational choice, the achievement attitudes affecting vocational choice, and the findings on the Taylor Manifest Anxiety Scale, the writer utilized these results to serve as the bases for investigating the characteristics of vocationally decided and undecided freshmen. Consequently, three hypotheses were proposed for the study.

NULL HYPOTHESES

(1) Vocationally decided college freshmen will not show a difference when compared with vocationally undecided college freshmen in their willingness to accept limitations as measured by E. M. Berger's Scale. (Discussion of Berger's scale is found in the next chapter.)

(2) There will not be a difference in anxiety, as measured by the TMAS, between the vocationally undecided college freshmen who are more willing to accept their limitations and the vocationally undecided freshmen who are less willing to accept their limitations.

(3) There will not be a difference in anxiety, as measured by the TMAS, between the vocationally decided college freshmen who are more willing to accept their limitations and the vocationally decided freshmen who are less willing to accept their limitations.

CHAPTER III

METHOD

Sample: A random sample consisting of 151 Oklahoma State University freshmen, 17 to 19 years of age, who had an ACT composite score falling in the upper 66 per cent participated in this study. The Student Profile Section of ACT revealed that, of the 151 freshmen volunteers at the time of admission to the University, there were 31 vocationally decided males, 30 vocationally undecided males, 48 vocationally decided females, and 42 vocationally undecided females.

Instruments: The ACT Battery consists of four tests concerning the areas of: English, mathematics, social studies, and natural sciences. This battery was developed to measure the individual's "ability" to perform as a college student. Problem solving skills are more frequently emphasized in the test items than mere recall of detailed subject matter. Based on the scores from the four tests above, the ACT composite score is obtained and converted into percentiles.

The Student Profile Section of the ACT Battery, a self-report, questionnaire type, provides coded vocational choices from 93 fields with two possible alternative responses: (a) writing in any unlisted field, or (b) indicating a response of "undecided" with a code "00." College freshmen who chose this latter alternative were considered to be vocationally undecided freshmen.

It appears unlikely that, at the time of admission, those who were

rated vocationally undecided had a strong vocational choice which they did not report. However, it should be observed that those freshmen who indicated a vocational choice may have been undecided or may have reported only a tentative choice. Because of this observation, the investigator included a question of his own in the self-report section of the ACT Profile to determine whether the student's vocational choice was: (a) definite, (b) tentative, or (c) undecided. (See Appendix A)

Berger's construction of a Scale for the Willingness to Accept Limitations (WALS) was reported in the Journal of Counseling Psychology in 1961. According to him, "limitations refer to ordinary limitations that go with being human; making mistakes, not always being among the best; having to work harder or struggle to do well when the level of difficulty or the standards of what is good achievement change (Berger, 1963, p. 176)." When a person has not learned to accept his human limitations, they appear to be perceived as undesirable.

This scale is composed of 16 items in which a low scorer theoretically tends to set extremely high standards of achievement, deny high commitment in his efforts to achieve, to believe that a high level of achievement should be acquired with little effort, and to be unwilling to take a chance on being wrong, dissappointed, or having poor performance. A high scorer on this scale tends to have more accepting attitudes for these types of limitations.

To measure anxiety in the college freshmen, the TMAS scores were used as indicators of this variable. The Taylor Manifest Anxiety Scale is the product of 50 items which five clinical psychologists considered to be admissions of anxiety on the Minnesota Multiphasic Personality Inventory. In the present study, the investigator used the revised form

of this scale in which a coefficient of stability of .88 was reported for 179 introductory psychology students at Northwestern University College (Taylor, 1953). A Pearson product-moment correlation of .85 between the old and new version of the scale was found with the new scale being administered to 59 introductory psychology students three weeks after they took the older version of the scale (Taylor, 1953). Normative data point out that the 50th percentile falls at about 13 on the scale.

Procedure: A listing of ACT scores for OSU freshmen in the academic year 1967-68 was obtained from the OSU Bureau of Tests and Measurements. From this listing, vocationally decided and vocationally undecided male and female freshmen with an ACT composite score in the upper 66 per cent were randomly selected, i.e., using a table of random numbers, for the sample. The vocational decision of the students was determined by self-reports in the Student Profile Section of the ACT Battery.

A pilot testing of six subjects was conducted during the first week of April, 1968, to determine the clarity of the test instructions and the time needed for its administration. The test for the pilot and main study consisted of two parts: (a) the appropriate portion of the Student Profile Section of the ACT Battery, and (b) 104 items including 16 items from the WALS and 38 items from the L, F, and K scales of the MMPI interspersed at random throughout the TMAS. (see Appendix A)

The actual data for the main study were gathered for one month during April and May, 1968. Letters seeking volunteers were sent to approximately 400 freshmen. (letter in Appendix B) Each of these freshmen received a letter, requesting their participation, and two

cards. One card was self-addressed to the investigator acknowledging the student's willingness to participate and at what time and place. From the 400 requests made, 203 freshmen replied favorably with 151 freshmen actually arriving to participate in the study.

Testing began at 8:00 p.m. in designated residence hall cafeterias. On the day of testing, each volunteer received a telephone call, or "reminder" which was placed in his mail box that morning. Arrangements were made for office space to accommodate individual subjects who found the prearranged testing periods inconvenient. In the administration of the profile section and scales, each student received an envelope containing a test booklet, an answer sheet, and a pencil with an eraser. All materials were returned in the envelope to the investigator as each person finished. The test administration time was approximately 30 minutes.

Analysis of Data: The results of the administration of the profile section and scales were analyzed according to sex, vocational decision upon admission to the University, vocational decision and reported degree of commitment at the time of the study, WALS scores, and TMAS scores. Since females have shown a greater "willingness to disclose themselves to others" than males (Pflaum, 1964) and frequently play different roles in their vocational development than males (Super, 1957), a separate analysis was made for each sex.

In testing the hypothesis of no differences on the WALS scores between the vocationally decided and vocationally undecided for both male and female subjects, the Mann-Whitney U Test was selected because of the level of measurement achieved in the data (Siegel, 1956). All levels of significance were reported in this study. The Mann-Whitney U

Test was made for the following comparisons: (a) the vocationally decided with the undecided whose decisions were reported at the time of admission to the University, (b) the vocationally decided with the undecided whose decisions were reported at the time of testing, i.e., all who were not "tentatively decided" at the time of the study, (c) the vocationally decided at admission and testing with the vocationally undecided at admission and testing, and (d) the tentatively decided at testing time who were vocationally decided at admission time with the vocationally undecided at admission time.

When testing the hypotheses of no differences separately for the vocationally decided and vocationally undecided with regard to differences in TMAS scores for high (top 1/3) and low (bottom 1/3) scorers on the WALS, the Mann-Whitney U test was used (Siegel, 1956). This test was used to analyze the TMAS scores for the high and low WALS scorers who were (a) vocationally decided at testing time, (b) vocationally undecided at the time of testing, (c) vocationally decided at admission time to the University, (d) vocationally undecided at admission time, and (e) tentatively decided at testing time.

CHAPTER IV

RESULTS

DESCRIPTION OF DATA

From 151 male and female OSU freshmen subjects, based upon the Student Profile Section of the ACT Battery for the fall admission of 1967, there were 31 vocationally decided males, 30 vocationally undecided males, 48 vocationally decided females, and 42 vocationally undecided females. In Table I, the reported vocational decision for the decided and undecided freshmen males at admission time is presented in conjunction with their vocational decision at the time of testing in the spring of 1968.

TABLE I

VOCATIONAL DECISION

MALES

Admission Time	Testing Time			
	Definitely Decided	Tentatively Decided	Undecided	Total
Decided	15	14	2	31
Undecided	5	15	10	30
Total	20	29	12	

Of the 31 vocationally decided males at admission time, there were 15 definitely decided, 14 tentatively decided and 2 undecided at testing time. For the 30 vocationally undecided males at admission time, there were 5 definitely decided, 15 tentatively decided, and 10 undecided at testing time. At testing time, there were 20 definitely decided and 12 undecided males, with 15 who were decided and 10 who were undecided since admission time.

For the female freshmen consisting of 48 vocationally decided at admission time, there were 21 definitely decided, 24 tentatively decided and 3 undecided at testing time (see Table II).

TABLE II

VOCATIONAL DECISION

FEMALES

Admission Time	Testing Time			
	Definitely Decided	Tentatively Decided	Undecided	Total
Decided	21	24	3	48
Undecided	11	24	7	42
Total	32	48	10	

The 42 vocationally undecided freshmen females, at admission time, comprised 11 definitely decided, 24 tentatively decided and 7 undecided at testing time. There were 32 definitely decided and 10 undecided at testing time, with 21 who were decided and 7 who were undecided since admission time.

TESTS OF SIGNIFICANCE

Four Mann-Whitney U tests were made on the Scale for the Willingness to Accept Limitation (WALS) scores for each sex comparing: (a) the decided with the undecided at admission time, (b) the definitely decided with the undecided at testing, (c) the decided with the undecided, at admission, who were tentatively decided at testing, and (d) between those who were decided and undecided, at both admission and testing time. (WALS scores may be found in Appendix C.) The significance levels are reported for all of the results in Table III.

TABLE III

MANN-WHITNEY U

SIGNIFICANT LEVELS

WALS SCORES

Vocational Decision	Male				Female			
	N	U	Z	P	N	U	Z	P
Decision at Admission								
Decided	31	417.5	.69	.49	48	935	.595	.55
Undecided	30				42			
Decision at Testing								
Definitely decided	20	87	1.298	.19	32	115	1.341	.18
Undecided	12				10			
Tentatively Decided at Testing								
Decided at Admission	14	92	---	>.20[a]	24	248.5	.823	.41
Undecided at Admission	15				24			

TABLE III (continued)

Vocational Decision	Male N	Male U	Male Z	Male P	Female N	Female U	Female Z	Female P
Decision at Admission (Adm.) and Testing (Tstg.)								
Decided (Adm.): Definitely Decided (Tstg.)	15	54	---	>.20[a]	21	33.5	2.148	.03
Undecided (Adm.): Undecided (Tstg.)	10				7			

[a]Owens, 1962, p. 351.

For both male and female subjects, no differences were found according to the WALS scores between those who were reported vocationally decided and undecided at admission time. The significance levels associated with the H_o distribution of WALS scores were P = .49 for the males and P = .55 for the females.

The vocationally decided and undecided at testing, for both sexes, indicated no differences (Males: P = .19; Females: P = .18) according to their WALS scores. However, the direction of the data suggests: (1) definitely decided males are more willing to accept their limitations than undecided males (P = .097), and (2) definitely decided females are less willing to accept their limitations than undecided females (P = .089).

Subjects who were tentatively decided at testing time were compared according to their decision or indecision at admission time. No differences were found on the WALS scores for males (P = >.20) or females (P = .41).

When comparing the decided (adm.) - definitely decided (tstg.) with the undecided (adm.) - undecided (tstg.), a result contrary to the males was found for the female subjects. No difference was found for the males ($P = \geq .20$). However, for the females, a significant difference was found ($P = .03$). Females who were undecided at both reporting periods were more willing to accept their limitations than those who were decided at both reporting periods.

In testing the two null hypotheses of no differences on the TMAS scores for the high (top 1/3) and low (bottom 1/3) scorers on the WALS, the vocationally decided and undecided at testing were analyzed independently. (TMAS scores may be found in Appendix C.) The Mann-Whitney U was used in this analysis, with significance levels being reported for all of these results in Table IV. A separate analysis was made for each sex.

TABLE IV

MANN-WHITNEY U SIGNIFICANCE LEVELS

TMAS SCORES

WALS Scorers	Male			Female			
	N	U	P	N	U	Z	P
Decided at Admission							
Bottom 1/3 WALS Scorers	13	13.5	.002[a]	18	88.5	2.835	.002
Top 1/3 WALS Scorers	10			21			

TABLE IV (continued)

WALS Scorers	Male N	Male U	Male P	Female N	Female U	Female Z	Female P
Undecided at Admission							
Bottom 1/3 WALS Scorers	13	30.5	.05[a]	18	52.5		.02[a]
Top 1/3 WALS Scorers	10			15			
Decided at Testing							
Bottom 1/3 WALS Scorers	7	7.0	.026[b]	9	3.0		.002[a]
Top 1/3 WALS Scorers	7			9			
Undecided at Testing							
Bottom 1/3 WALS Scorers	4	4.0	.342[b]	3	5.0		.380[b]
Top 1/3 WALS Scorers	4			6			
Tentatively Decided at Testing							
Bottom 1/3 WALS Scorers	9	7.5	.002[a]	23	149.0	1.976	.02
Top 1/3 WALS Scorers	10			20			

[a]Siegel, 1956, Table K (Appendix)
[b]Siegel, 1956, Table J (Appendix)

For both males and females, bottom 1/3 WALS scorers differed significantly from top 1/3 WALS scorers on the TMAS scores for the decided

at admission, the undecided at admission, the decided at testing, and the tentatively decided at testing. In all of these groups, the bottom 1/3 WALS scorers were more anxious, as measured by the TMAS, than the top 1/3 WALS scorers. However, the undecided at testing, for both sexes, did not differ significantly on their TMAS scores when the bottom 1/3 WALS scorers were compared with the top 1/3 WALS scorers.

In summary, the definitely decided did not differ significantly from the undecided at testing, for both males and females, on the Scale for Willingness to Accept Limitations (WALS). However, the data suggested a different direction for each sex with significant support found in the female results. Significant differences were not found on the TMAS, between high and low WALS scorers of the vocationally undecided at testing for both sexes. Finally, the high and low WALS scorers, for both male and female, who were definitely decided at testing differed significantly on their TMAS scores.

CHAPTER V

DISCUSSION

The appropriate groups for testing the three hypotheses in null form were those who reported their vocational decision, i.e., the definitely decided, and the undecided, at the time the scales were administered in the spring of 1968. All other reported group observations were considered to be related information about the subjects in this study.

According to the first null hypothesis, at testing time vocationally decided college freshmen will not differ significantly when compared with vocationally undecided college freshmen in their willingness to accept limitations. Although this hypothesis was supported for both males and females, a direction in the data was suggested for each sex. The suggestion is noteworthy relative to the findings for the vocationally decided and undecided recorded at admission time, and the outcomes between those who were decided and undecided at both admission and testing time.

The direction of the data, at testing, suggested that definitely decided males were more willing to accept their limitations than undecided males. In addition, a difference was suggested between these two groups based upon substantially less associated probability of occurring under the null hypothesis than for the WALS scores between those recorded as decided and undecided at admission time. Also, the data between the decided and undecided at both admission and testing

suggest a difference in this direction, although not at a desired level of significance.

At testing time, data for vocationally decided females suggested them to be less willing to accept their limitations than undecided females. Also, a difference between these two groups was suggested based upon substantially less associated probability of occurring under the null hypothesis than for the WALS scores between those recorded as decided and undecided at admission time. In addition, significant support for a difference in the suggested direction was provided in the findings between vocationally decided and undecided females, who reported similar decisions at both reporting periods.

One tentative interpretation for the suggested dissimilarity in the male and female findings might be explained by the perceived value placed on academic ability. Male subjects, whether they are decided or undecided, must eventually translate their academic abilities into occupational terms to "earn a living," if for no other reason. The undecided male might set standards too high for himself in relation to his abilities. Consequently, he might feel that he would not be among the best in this or that field and might hesitate, temporarily, in making a vocational choice. The decided male might accept his abilities to a greater degree, resulting in setting more realistic goals for what he could and could not attain in his chosen vocation, based upon his perceptions of abilities at the current time.

It was hypothesized by the writer that the coeds tested generally viewed married women as not having to work outside the home to "earn a living;" instead, the coeds would choose to work to satisfy other needs. Therefore, the vocationally undecided females did not value

their academic abilities in the same way as the decided. For vocationally decided females, academic ability was highly valued and a question was raised about meeting the requirements of their chosen vocations. These females might be receiving pressures to excel from peers, parents, relatives or other significant others. As a result, high standards to achieve have been set without accepting their perceived abilities at the current time. However, the undecided females appeared to have goals directed toward marriage and/or not to depend on their academic abilities to become translated into employable skills in competition with others. Consequently, there was a smaller perceived discrepancy between academic achievement and standards of achievement for the undecided.

The second null hypothesis proposed: the vocationally undecided will not differ significantly in anxiety, as measured by the TMAS, between those who are more willing to accept their limitations and those who are less willing to accept their limitations. Although the hypothesis was supported for both sexes who were undecided at testing, it is wondered if an increase in N, for both sexes, would have changed significantly the associated probability in this finding. This question seems warranted relative to the larger sample sizes and significant results for the other related observations.

As expected in the third hypothesis of the study, both males and females who were vocationally decided at testing differed significantly on their TMAS scores when those who were more willing to accept their limitations were compared with those who were less willing to accept their limitations. Those who accepted their abilities, as measured by the WALS, were less anxious, as measured by the TMAS, than those who

did not accept the limitations in their abilities. All of the related observations, i.e., for both sexes who were decided at admission, undecided at admission, and tentatively decided at testing, agreed significantly with this finding.

At this point in the discussion, several considerations should be presented in critically evaluating this study. First, of 400 subjects, i.e., 200 males and 200 females, randomly selected, 151 volunteers actually participated in the study. It is not known whether any significant variation would have been introduced by the results from the 249 non-participating students. Secondly, an increase in N would have been desirable to increase the power of the Mann-Whitney U in rejecting the three null hypotheses in the study. Finally, Berger's Scale for Willingness to Accept Limitations was constructed from student verbalizations.

> An attempt was made to use statements that were actually made by students who fit the description of underachievement. The reasoning was that the attitudes were acceptable to these students and would probably be acceptable to other students who have similar attitudes. Thus there would be less likelihood that respondents would be influenced by a wish to make socially desirable responses rather than responses that reflect their actual attitudes (Berger, 1961, p. 143).

Although no reliability was reported for the scale, Berger has made some beginning efforts toward obtaining evidence of construct validity, using Horney's concept of "idealized image" and Wenkart's ideas on self acceptance for the attitudes of the academic underachiever (Berger, 1961).

It was hypothesized that if Berger's Scale did reflect the students' attitudes toward achievement, differences between high and low scores on the WALS would be indicated in the TMAS scores (Pflaum, 1964). This hypothesis was supported significantly by most of the relevant

observations in the study.

This study should be viewed as exploratory since the theories of vocational choice did not provide an adequate basis to formulate testable hypotheses. In addition, the validity and reliability of the Scale for the Willingness to Accept Limitations were not sufficiently known. However, it was hypothesized that the students' verbalizations reflected in the scale acknowledged their attitudes toward college achievement. The findings must remain tentative, since they are linked to this hypothesis.

Although the vocationally decided, compared with the undecided at the time of test administration, did not differ significantly on the Scale for Willingness to Accept Limitations for each sex, the suggested differences and direction of the data relative to the related observations are worthy of further study. They are: (a) males who were decided or undecided since admission time supported the suggested direction of the data for the decided in comparison with the undecided at testing, finding vocationally decided males more willing to accept limitations in their abilities than vocationally undecided males; (b) females who were decided or undecided since admission time supported the suggested direction of data for the decided in comparison with the undecided at testing, finding vocationally undecided females to be significantly different from vocationally decided females in the direction of the undecided being more willing to accept limitations in their abilities.

The high and low WALS did not differ significantly on the TMAS scores for both male and female undecided at testing. In this case, it was hypothesized that an increase in sample sizes would indicate low

WALS scorers with significantly higher TMAS scores than high WALS scorers.

The findings in this study were the most conclusive for the high and low WALS scorers of the vocationally decided at testing. Both males and females with less willingness to accept limitations in their abilities were significantly different in the direction of being more anxious, as measured by the TMAS, than those who were more willing to accept limitations in their abilities.

The findings indicated some directions for further research. First, it would be appropriate to establish reliability, e.g., measures of internal consistency, and continue to gain evidence of construct validity for the Scale for Willingness to Accept Limitations. Second, the present study should be replicated at a university with an increase in sample sizes for each sex. Third, a longitudinal study of vocationally decided and undecided college students would provide a better perspective of their characteristics. Observations during and beyond the freshmen year would give information about the effects of shifts in "attitudes toward abilities" on vocational planning. Fourth, the WALS should be investigated further to determine its usefulness as one indicator of effectiveness in counseling students with vocational concerns. Fifth, it is wondered if vocationally, undecided, college males' grade point averages would improve significantly, when compared to the vocationally decided, once the undecided made a decision related to a favorable shift in attitudes toward achievement. Finally, the WALS may provide information regarding attitudes toward achievement related to the consistency between vocational choice and Holland's personality types.

CHAPTER VI

SUMMARY

The Scale for Willingness to Accept Limitations, the Taylor Manifest Anxiety Scale, and the vocational choice portion of the Student Profile Section of the ACT Battery were administered to 61 freshmen males and 90 freshmen females at Oklahoma State University during the latter part of the spring semester of 1968. In addition, the investigator included a question of his own in the self-report section of the ACT Profile to determine whether the student's vocational choice was (a) definite, (b) tentative, or (c) undecided. All subjects were in the upper 66 percent of the ACT composite scores.

At the time of admission to the University, the 61 males were comprised of 31 vocationally decided and 30 vocationally undecided. Of the 90 females, there were 48 vocationally decided and 42 vocationally undecided. Testing time revealed: (a) for 31 admission time decided males, there were 15 definitely decided, 14 tentatively decided and 2 undecided, (b) for 30 admission time undecided males, there were 5 definitely decided, 15 tentatively decided and 10 undecided, (c) for 48 admission time decided females, there were 21 definitely decided, 24 tentatively decided and 3 undecided, (d) for 42 admission time undecided there were 11 definitely decided, 24 tentatively decided, and 7 undecided.

Three null hypotheses were proposed for this study. First,

vocationally decided college freshmen will not show a difference when compared with vocationally undecided college freshmen in their willingness to accept limitations as measured by Berger's Scale. Second, there will not be a difference in anxiety, as measured by the TMAS, between the vocationally undecided college freshmen who are more willing to accept their limitations and the vocationally undecided freshmen who are less willing to accept their limitations. Third, there will not be a difference in anxiety, as measured by the TMAS, between the vocationally decided college freshmen who are more willing to accept their limitations and the vocationally decided freshmen who are less willing to accept their limitations. A separate analysis was made for each sex.

A difference between the definitely decided and undecided at testing, for both males and females, was not found according to the Scale for Willingness to Accept Limitations at a desirable level of significance. However, the data suggested a different direction for each sex with significant support provided for the females. For the males, the direction of the data when comparing: (1) definitely decided with undecided at testing, and (2) decided with the undecided at both admission and testing time, suggested the vocationally decided to be more willing to accept their limitations than the vocationally undecided. When making both sets of comparisons for the females, the data suggested the vocationally undecided to be more willing to accept their limitations than the vocationally decided. The decided compared with the undecided at both admission and testing time were significantly different for the females.

In the second hypothesis, significant differences on the TMAS were not found between high and low WALS scorers of the vocationally

undecided at testing for both sexes. It was hypothesized that an increase in the N, for both sexes, would have significantly changed these results. This hypothesis seems warranted relative to the larger sample sizes and the significant results for the other related observations. As expected, the third null hypothesis was rejected for both sexes.

This study was considered to be exploratory with the findings remaining tentative. Several implications were proposed for further research.

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APPENDIXES

APPENDIX A

No. _____

INSTRUCTIONS

PLEASE PRINT

Name _____ _____ _____
LAST FIRST MIDDLE

Date of Birth _____ Age _____ Sex _____
M or F

Date _____

All of the enclosed materials in the attached booklet have the same number as the one written in the upper right hand corner of this page. Therefore, it will not be necessary for you to write your name again on any of the other materials.

Do not write on the attached booklet in any way. Your answers to the statements in the booklet are to be recorded only on the separate Answer Sheet.

There are no time limits.

Read all the directions carefully and proceed from one section to the next until you have finished. Upon completion, please return all materials to me before leaving.

Thank you for your participation.

John E. Meacham

Major Field/Vocational Choice

Educational Fields
- 01 counseling and guidance
- 02 education administration
- 03 elementary education
- 04 physical education
- 05 secondary education
- 06 special education
- 07 education, other specialties

Social Science and Religious Fields
- 08 history
- 09 home economics
- 10 library and archival science
- 11 psychology
- 12 social work
- 13 sociology
- 14 theology and religion
- 15 social science-area studies
- 16 social science-American civilization
- 17 social science-American studies

Business, Political, and Persuasive Fields
- 18 accounting
- 19 advertising
- 20 business administration (4 yrs.)
- 21 business and commerce (2 yrs.)
- 22 data processing
- 23 economics
- 24 finance
- 25 industrial relations
- 26 law
- 27 merchandising and sales
- 28 military
- 29 political science, government, or public administration
- 30 foreign services
- 31 international relations
- 32 public relations
- 33 secretarial science

Scientific Fields
- 34 anatomy
- 35 anthropology
- 36 archaeology
- 37 astronomy
- 38 biology or genetics
- 39 botany
- 40 chemistry
- 41 geography
- 42 geology or geophysics
- 43 mathematics or statistics
- 44 meterology
- 45 oceanography
- 46 physics
- 47 physiology
- 48 zoology or entomology

Agriculture and Forestry
- 49 agriculture
- 50 fish and game management
- 51 forestry
- 52 soil conservation

Health Fields
- 53 dental hygiene
- 54 dentistry
- 55 dietetics
- 56 medicine
- 57 medical technology
- 58 mortuary science
- 59 nursing
- 60 occupational therapy
- 61 optometry
- 62 osteopathy
- 63 pharmacy
- 64 physical therapy
- 65 veterinary medicine
- 66 X-ray technology

Arts and Humanities
- 67 arts and sculpture
- 68 architecture
- 69 creative writing
- 70 drama and theater
- 71 English and English lit.
- 72 foreign language and lit.
- 73 journalism
- 74 music
- 75 philosophy
- 76 radio-TV-communications
- 77 speech
- 78 general educ. or liberal arts (2 yrs.)
- 79 other arts & humanities

Engineering
- 80 aeronautical
- 81 agricultural

82 architectural
83 automotive
84 chemical or nuclear
85 civil
86 electrical or electronic
87 industrial
88 mechanical
89 other engineering

Trade, Industrial, and Technical
90 aviation
91 construction
92 drafting
93 electricity & electronics
94 industrial arts
95 metal and machine
96 mechanical
97 other trade
98 My field is not included in the above
99 housewife
00 undecided

PART I

1) From the list on the left page, find your probable major field. Mark the appropriate code number on your Answer Sheet. Indicate only one field. If you are undecided, mark "00" on your answer sheet and go on to the next question. If the code which you mark is "07," "79," "89," or "98," write in your major field in the appropriate space provided on the Answer Sheet for question #1.

2) From the list on the left page, find the best description of your future vocation, and mark its code on your Answer Sheet. Again, if you are undecided about your future vocation, mark "00" on your Answer Sheet. If your future vocation is not included in these fields, mark "98" on your Answer Sheet; or if you anticipate your future vocation to be exclusively that of housewife, mark "99" on your Answer Sheet. If the code which you mark is "07," "79," "89," or "98," write in your vocational choice in the appropriate space provided on the Answer Sheet for question #2.

3) My vocational choice is: a) definite, b) tentative, or c) undecided.

PART II

Do not write or mark on this booklet in any way. Your answers to the statements in this inventory are to be recorded only on the separate Answer Sheet.

The statements in this booklet represent experiences, ways of doing things, or beliefs or preferences that are true of some people but are

not true of others. Read each statement and decide whether or not it is true with respect to yourself. If it is true or mostly true, circle the letter T on the Answer Sheet in the row numbered the same as the statement you are answering. If the statement is not usually true or is not true at all, circle the letter F in the numbered row. Answer the statements as carefully and honestly as you can. There are no correct or wrong answers. We are interested in the way you work and in the things you believe. Sometimes it may be difficult to make a decision, but please answer every item either true or false without skipping any.

REMEMBER: Circle the letter T if the statement is true or mostly true; circle the letter F is the statement is false or mostly false. Be sure the letter you circle is in the row numbered the same as the item you are answering. Respond to each item as you come to it; be sure to circle one and only one letter for each item. Here is an example:

I would like to be an artist. T F

If you would like to be an artist, that is, if the statement is true or mostly true as far as you are concerned, you would circle the letter T. If the statement is false, you would circle the letter F.

If you have any questions, please ask them now.

DO NOT MARK ON THIS BOOKLET

1. Once in a while I think of things too bad to talk about.
2. It's important for me to do well in everything I choose to do.
3. After a person makes a decision about what he wants to do in life, he should always stick to it rather than change his mind several times.
4. I find it hard to keep my mind on a task or job.
5. I blush as often as others.
6. I do not always tell the truth.
7. People often disappoint me.
8. I get angry sometimes.
9. I am easily embarrassed.
10. It makes me nervous to have to wait.
11. I sweat very easily even on cool days.
12. I frequently notice my hand shakes when I try to do something.
13. It's hard for me to feel that my mistakes are ever acceptable.
14. I have often felt that I faced so many difficulties I could not overcome them.
15. Sometimes when I am not feeling well I am cross.
16. If one is careful enough, it's possible to avoid making mistakes.
17. I should be more capable than I am.
18. I cannot keep my mind on one thing.

19. When in a group of people I have trouble thinking of the right things to talk about.

20. If I could get into a movie without paying and be sure I was not seen I would probably do it.

21. Often by bowels don't move for several days at a time.

22. I often find myself worrying about something.

23. I do not have as many fears as my friends.

24. At times I think I am no good at all.

25. I like to know some important people because it makes me feel important.

26. I do not tire quickly.

27. At times I have been worried beyond reason about something that really did not matter.

28. I do not like everyone I know.

29. I am more self-conscious than most people.

30. I am a very nervous person.

31. I am not afraid to handle money.

32. My family does not like the work I have chosen (or the work I intend to choose for my life work).

33. I would rather not go into a field unless I were likely to be among the best in it.

34. I gossip a little at times.

35. Sometimes at elections I vote for men about whom I know very little.

36. I am the kind of person who takes things hard.

37. My feelings are hurt easier than most people.

38. I worry over money and business.

39. My parents and family find more fault with me than they should.

40. I often dream about things I don't like to tell other people.

41. I am liked by most people who know me.

42. I have reason for feeling jealous of one or more members of my family.

43. Once in a while I laugh at a dirty joke.

44. At times I lose sleep over worry.

45. At times I feel like swearing.

46. Sometimes I become so excited that I find it hard to get to sleep.

47. No one cares much what happens to you.

48. I do not read every editorial in the newspaper every day.

49. When I am worried about something coming out well, I tend to work all the harder on it.

50. I feel anxious about something or someone almost all of the time.

51. Once in a while I put off until tomorrow what I ought to do today.

52. Most anytime I would rather sit and daydream than to do anything else.

53. Life is often a strain for me.

54. I have diarrhea ("the runs") once a month or more.

55. I never had to work hard to get grades in high school and so I never really worked hard to get even better grades.

56. At times I am so restless that I cannot sit in a chair for very long.

57. My table manners are not quite as good at home as when I am out in company.

58. Criticism or scolding hurts me terribly.

59. I am often sick to my stomach.

60. I am very confident of myself.

61. I usually expect to succeed in things I do.

62. I cry easily.

63. I am often afraid that I am going to blush.

64. I have nightmares every few nights.

65. I have done the best I could to get good grades.

66. If I don't have success early in some things I'm trying to do, I tend to give up.

67. I don't like to face a difficulty or make an important decision.

68. Anyone with average college intelligence can get good grades in any course by working hard.

69. I certainly feel useless at times.

70. It does not bother me particularly to see animals suffer.

71. I have a great deal of stomach trouble.

72. When embarrassed I often break out in a sweat which is very annoying.

73. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of thing.

74. I have very few headaches.

75. I am happy most of the time.

76. I'm pleased for other people to know what my grades are in school considering how little I have studied.

77. My hands and feet are usually warm enough.

78. I would rather win than lose a game.

79. I am not at all confident of myself.

80. I feel hungry almost all the time.

81. I have very few quarrels with members of my family.

82. I do not often notice my heart pounding and I am seldom short of breath.

83. At times my thoughts have raced ahead faster than I could speak them.

84. I am usually calm and not easily upset.

85. It's important for me to know definitely my chances of success in things that I am serious about before I try to do them.

86. I am about as nervous as other people.

87. I work under a great deal of strain.

88. If the odds seemed against me in a college course, I would rather try my best, and take a chance on doing poorly than not try at all.

89. Often I can't understand why I have been so cross and grouchy.

90. There are many things I would like to be able to do, but don't try because I'm afraid I wouldn't do well.

91. At times I feel that I am going to crack up.

92. At times I am full of energy.

93. I wish I could be as happy as others.

94. I often think "I wish I were a child again."

95. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.

96. I have been afraid of things or people that I knew could not hurt me.

97. I worry quite a bit over possible troubles.

98. I have had periods in which I carried on activities without knowing later what I had been doing.

99. I find it hard to set aside a task that I have undertaken, even for a short time.

100. It may be that I am afraid to try my best in school, for fear I wouldn't reach up to what I'd hope for myself.

101. My sleep is restless and disturbed.

102. I can easily make other people afraid of me, and sometimes do for the fun of it.

103. I practically never blush.

104. I am never happier than when alone.

APPENDIX B

Dear

You are being asked to participate in a study which involves 400 freshmen men and women students at Oklahoma State University. The outcome of this study should give the university personnel a better understanding of the needs and interests of our university men and women. The information gathered in this study will be summarized in a doctoral dissertation. All of the students' responses will remain anonymous in the study.

In an effort to get a valid representation of the needs and interests of freshmen men and women your participation is necessary. The testing will take approximately one-half to three-quarters of an hour to complete. Knowing that daily schedules are often filled with activity, several testing times and places have been arranged.

Enclosed are two cards for noting dates, times, and places. Please check the date, time, and place which is most convenient for you. One card should be kept as a reminder. The other self-addressed card should be returned through the campus mail.

If you have any questions regarding the study, please do not hesitate to contact me by leaving your name, telephone number, and/or your address with Mrs. Meacham or her secretary at university extension 495. I will call you upon receiving your message.

Thank you for your cooperation.

Sincerely,

John E. Meacham

John E. Meacham

APPENDIX C

WALS AND TMAS SCORES ACCORDING TO THE DECISION AT TESTING TIME FOR OSU FRESHMEN MALES WHO WERE DECIDED AT ADMISSION TIME

Testing Time	N	WALS Scores	TMAS Scores
Definitely Decided	15		
1		8	17
2		7	13
3		5	23
4		6	32
5		11	4
6		14	12
7		8	16
8		9	6
9		8	2
10		7	14
11		6	17
12		11	7
13		9	11
14		11	7
15		8	29
Tentatively Decided	14		
1		9	19
2		7	17
3		9	7
4		9	16
5		3	15
6		8	19
7		12	3
8		9	7
9		12	16
10		10	8
11		9	18
12		11	8
13		11	9
14		9	27

Testing Time	N	WALS Scores	TMAS Scores
Undecided	2		
1		10	12
2		5	38

WALS AND TMAS SCORES ACCORDING TO THE DECISION AT TESTING TIME FOR OSU FRESHMEN MALES WHO WERE UNDECIDED AT ADMISSION TIME

Testing Time	N	WALS Scores	TMAS Scores
Definitely Decided	5		
1		5	13
2		11	9
3		10	42
4		12	5
5		7	19
Tentatively Decided	15		
1		12	1
2		13	5
3		9	29
4		13	22
5		9	20
6		5	25
7		8	14
8		10	11
9		9	2
10		6	16
11		10	10
12		6	24
13		2	24
14		8	27
15		9	10
Undecided	10		
1		7	15
2		7	7
3		7	27
4		6	19

Testing Time	N	WALS Scores	TMAS Scores
Undecided	10		
5		7	27
6		8	27
7		6	28
8		6	14
9		13	7
10		10	21

WALS AND TMAS SCORES ACCORDING TO THE DECISION AT TESTING TIME FOR OSU FRESHMEN FEMALES WHO WERE DECIDED AT ADMISSION TIME

Testing Time	N	WALS Scores	TMAS Scores
Definitely Decided	21		
1		10	9
2		10	23
3		12	10
4		10	16
5		9	31
6		10	11
7		15	14
8		9	26
9		9	30
10		10	10
11		3	30
12		9	6
13		10	13
14		6	30
15		7	32
16		11	9
17		9	14
18		6	12
19		11	13
20		5	20
21		5	30
Tentatively Decided	24		
1		4	24
2		8	33

Testing	N	WALS Scores	TMAS Scores
Tentatively Decided	24		
3		9	23
4		10	5
5		9	13
6		7	23
7		8	23
8		7	10
9		7	29
10		9	20
11		11	21
12		8	17
13		12	19
14		5	12
15		9	14
16		11	8
17		12	10
18		12	27
19		7	18
20		12	4
21		12	11
22		8	5
23		11	22
24		11	21
Undecided	3		
1		4	15
2		5	25
3		12	20

WALS AND TMAS SCORES ACCORDING TO THE DECISION AT TESTING TIME FOR OSU FRESHMEN FEMALES WHO WERE UNDECIDED AT ADMISSION TIME

Testing Time	N	WALS Scores	TMAS Scores
Definitely Decided	11		
1		11	15
2		10	12
3		11	9
4		6	22

Testing Time	N	WALS Scores	TMAS Scores
Definitely Decided	11		
5		11	10
6		6	23
7		7	19
8		8	28
9		11	7
10		10	13
11		12	10
Tentatively Decided	24		
1		8	8
2		8	12
3		11	23
4		8	25
5		6	34
6		8	29
7		4	15
8		10	18
9		14	10
10		7	21
11		10	22
12		5	26
13		8	19
14		11	9
15		10	23
16		8	16
17		11	20
18		10	10
19		5	17
20		6	26
21		10	7
22		9	17
23		12	18
24		8	23
Undecided	7		
1		4	23
2		12	14
3		12	25
4		13	8
5		14	15
6		12	18
7		10	9

VITA

John Ernest Meacham

Candidate for the Degree of

Doctor of Education

Thesis: CHARACTERISTICS OF VOCATIONALLY DECIDED AND UNDECIDED COLLEGE FRESHMEN: WILLINGNESS TO ACCEPT LIMITATIONS AND DIFFERENCES ON THE TAYLOR MANIFEST ANXIETY SCALE

Major Field: Educational Psychology

Biographical:

Personal Data: Born in Pittsfield, Massachusetts, October 20, 1939, the son of Duane and Marion Meacham; married to Heather M. Muir, August 15, 1964; one child, Laurie Ann, born on January 21, 1969.

Education: Graduated from Westfield High School, Westfield Massachusetts, in 1957; received the Bachelor of Science degree from Springfield College, Springfield, Massachusetts, in 1961, with a major in Psychology; received a Master of Education degree in Guidance and Psychological Services from Springfield College in 1963; completed requirements for the Doctor of Education degree in May, 1970, at Oklahoma State University.

Professional Experience: Attendant, Northampton State Hospital, Northampton, Massachusetts, Summer, 1959; Recreation Group Leader, The Children's Village, Dobbs Ferry, New York, 1961-62; Guidance Counselor, New York State Division for Youth, Masonville, New York, 1963-65; Counseling Psychologist, State University of New York at Alfred, 1968-70.