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COLLEGE LEVEL CAREER COUNSELING

by

Ain Roost

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Psychology

UTAH STATE UNIVERSITY
Logan, Utah

1972

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ABSTRACT

College Level Career Counseling

by

Ain Roost, Master of Science

Utah State University

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Department: Psychology

This study was designed to examine and evaluate vocational decision-making and counseling at Utah State University and to provide a basis for further research. A written questionnaire was given to a random sample of 500 college students on the Utah State University campus.

It was found that over 15% of freshmen could not express a vocational choice, and of those who could, their commitment to it was weaker than the other classes. Immediate family, friends and college professors were the most influential people in making a career choice, with the influence of college counselors being almost negligible. Other than influential people, personal interests, previous work experience and a desire to contribute to society were the strongest influences in making a career decision. Two thirds of the students surveyed were not able to list the counseling service as a source of help in career decision-making, and when the counseling service was used, its helpfulness was rated low compared to most other sources of help. There does not seem to be as much shifting of majors and career

choices as one might expect; three quarters of the students surveyed had changed their major only once, or not at all. Over two thirds of the students did not have definite plans to seek career counseling, (most of them) because they felt they didn't need it or felt it wouldn't be helpful.

The following recommendations were made:

1. In the extension of career counseling services, an emphasis should be placed in reaching freshmen.
2. In labelling the services offered, the term "career counseling" should be used instead of "vocational counseling", to avoid the mistaken connotations often attached to the word "vocational".
3. The current methods of informing the students of the career counseling services available to them should be reevaluated and changed to more effectively publicize these services.
4. The present career counseling services need to be further developed using information from the literature and survey that has been reported.

(73 pages)

INTRODUCTION

There is considerable anecdotal evidence that our vocational guidance services have been inadequate to meet the needs of our college students, particularly freshmen. Many freshmen entering Utah State University have apparently not made a vocational choice. When questioned, many can indicate interests and even speculate an area of vocational endeavor, but this often appears to be a reaction to the strong social pressure to "know" what they are going to do with their lives now that they are in college. Consequently, many of their verbalized decisions are based on extremely limited and probably minimally valid sources of career information. As an example, our College of Natural Resources loses approximately one-fourth of their freshmen by the end of the first quarter and another fourth by the end of the first year. Some of these leave the field when they discover foresters and wildlife managers do not spend the majority of their time in the remote out-of-doors. Others quit when they encounter technical prerequisite courses such as chemistry or physics. Large amounts of human time and energy are wasted through trial and error vocational selection. Frequent job changes made while looking for an appropriate vocational slot in life cause a large expense to employer and employee alike. Doyle (1965) found that 25% of his sample of male college graduates had one or more exploratory jobs before finding stability, while 5% after 5 or 10 years

still had not found occupational stability. One of the 70% who convert their initial jobs into permanent ones a large percentage might also be considered as casualties. Too frequently they convert their initial jobs into permanent ones merely as a result of the high cost of taking exploratory steps after initial employment. Graduates are usually married and often have families for whom to care and while working full time, it is difficult to find the time or opportunity to explore alternative vocations. High risk is involved in leaving the security of a "bird in the hand", particularly with the economic pressures of a family. These factors reemphasize the great importance of having the best possible preparation for the initial job placement.

Purpose of the Study

In order to more objectively evaluate the present status of vocational decision-making and counseling at a local level, a survey of a representative sample of Utah State University students will be conducted. In addition, a more extensive review of the literature than usual will be completed in order to provide a comprehensive picture of vocational counseling, both in general and on the college level which will also provide a basis for further research.

Objectives

1. To estimate what percentage of students can express a vocational choice.

2. To evaluate the degree of commitment to a vocational choice of those students who are able to express a choice.
3. To estimate how many times students change their choice of a major while they are in college.
4. To estimate how often students change their vocational choice while they are in college.
5. To determine what resources are commonly used by students in making a vocational choice.
6. To evaluate the knowledge that students have the resources that are available to them in making a vocational choice.
7. To estimate what percentage of students have definite plans to seek vocational counseling.
8. To evaluate the relationships that exist, if any, between or among any of the previously mentioned factors.

REVIEW OF LITERATURE

There were three main approaches to viewing vocational choice prior to the first one that could justify the title of a theory. The first of these, as outlined by Hopson and Hayes (1968) was the Accident Hypothesis. It is based largely on insight; a person will one day suddenly decide to enter a certain occupation and Presto! his vocational choice is made. However, this approach ignores all the factors that have previously entered into and influenced his decision, and we are left viewing only the tip of the iceberg.

The second approach was the Impulse Hypothesis. According to this hypothesis, a person decides to become a butcher or a surgeon (the similar motives are disturbing) because he is a sadistic person and can thus satisfy his sadistic urges. This, however accounts for only one of the numerous determining factors in the making of a career decision and appears rather simple-minded.

The third approach is the Talent-Matching Approach, which matches a person's talents and interests to a particular job and its requirements. This approach is typified in practice by Strong (1955) and his work in the field of vocational interest measurement. It is basically an atheoretical approach and thus many important factors are overlooked, such as the needs and satisfactions of an individual as well as his self-concept. It does not tell us the why or the how of occupational choice; it just gives us the estimated probability of "success" at a given occupation.

Basic Theoretical Approaches

The first serious attempt at a comprehensive theory of vocational development was produced by Ginzberg (1951). He outlined a number of clearly defined stages of physical, intellectual, social and emotional growth, which can be summarized in four basic elements:

1. Occupational choice is a developmental process which typically takes place over a period of some ten years.
2. The process is largely irreversible. Changes can be produced in the individual as a result of experience which cannot be reversed.
3. The process of occupational choice ends in a compromise between interests, capacities, values and opportunities.
4. There are three periods of occupational choice: fantasy choice, tentative choice and realistic choice.

Some limitations of this theory are pointed out by Super (1953).

It was not built adequately on previous work, and choice is defined as preference, rather than as entry or some other implementation of choice. Thus the meaning of choice varies at various age levels. Also, there is a false distinction made between choice and adjustment. And finally, the compromise process mentioned in the theory is not studied or described.

Super (1953) goes on to formulate his own theory of vocational development, which can be stated in a series of 10 propositions as follows:

1. People differ in their abilities, interests and personalities.
2. They are each qualified, by virtue of these characteristics, for a certain 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 occupations for each individual and 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, although fairly stable, change with times 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. These stages in return may be divided into the fantasy, tentative and realistic phases of the exploratory stage, and the trial and stable phases of the establishment stage.
6. The nature of the career pattern (occupational level attained, the sequence, frequency and duration of trial and stable jobs) is determined by the individual's parental socioeconomic level, mental ability, personality characteristics and 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 result of the interaction of inherited aptitudes, neural and endocrine makeup 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 satisfaction 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.

Ten years later Super (1963) organized the processes by which the self-concept affects vocational development into a systematic Self-Concept Theory of Vocational Development. This can be summarized as follows:

1. Self-Concept Formation. Exploration is the first phase of this process, and begins in infancy. Self-differentiation is the second phase, during which a person compares himself with others and sees that in many ways he is different. Identification goes on more or less simultaneously with differentiation and involves comparing oneself to others and discovering the similarities. Role playing accompanies or follows identification. In this case the person emulates those with whom he identifies. Finally, reality testing is basically an extension of role playing and aids in strengthening or modifying self-concepts that can be translated into occupational roles.
2. Translation of Self-Concepts into Occupational Terms. This translation can occur in several ways. Identification with an adult can sometimes lead to the desire to play his occupational role. Experience in a role that may be cast through chance may lead to the discovery that the translation of the self-concept may be quite congenial. Also, awareness of one's having attributes considered important in a certain field, may lead to investigation and subsequent choice of that field.

3. Implementation of the Self-Concepts. This involves converting the self-concept into an occupational reality.

A model for the translation of self-concepts into vocational terms was provided by Starishevsky and Matlin (1963). They view vocational choice as an expression of self-concepts formulated and reformulated through the life stages. Two terms were introduced, "psychtalk" and "occtalk". The first of these is the person's differentiation of himself and others, in terms of the statements he is willing to make (e.g., John is active). Occtalk involves statements made about the self or others concerning occupations or their equivalents and can constitute an occupational self-concept.

Statements in occtalk are translatable into psychtalk and every statement in the occupational self-concept is at least partly a translation of the self-concept. Along with this a number of metadimensions are employed to characterize the person's self-concept, such as: complexity, congruence, structuring, realism and stability.

In addition to Ginzberg (1951) and Super (1953) several others have also suggested that vocational decision making evolves through a series of stages. Tiedman (1961) states that the process of vocational development is a series of decisions which an individual makes, each of which may be divided into two periods or aspects: the period of anticipation and the period of implementation and adjustment. The period of anticipation is subsequently divided into four stages: exploration, crystallization, choice and specification. The period of implementation and adjustment is also divided into stages. These are:

induction, transition and maintenance. The final stage is not necessarily permanent and may be disturbed by various events, such as new ambitions or competitors at any time. This simple sequence of events can be complicated by the possibility that events of relevance to several decisions may be unfolding simultaneously, and that these decisions may be viewed as a means-end chain. An end at one time can become a means for a later goal.

Havighurst (1964) also proposes stages of vocational development. These extend throughout the life of the person and are as follows:

1. Identification with a worker (age 5-10)
2. Acquiring the basic habits of industry (age 10-15)
During this time a person learns to organize time and energy and to put work before play when necessary.
3. Acquiring identity as a worker in the occupational structure (age 15-25) A person chooses and prepares for an occupation and obtains work experience during this time.
4. Becoming a productive person (age 25-40) The skills of the occupation are mastered and the person moves up in his field.
5. Maintaining a productive society (age 40-70) The emphasis shifts away from the individual and towards the societal aspects of his role. A person sees himself as a responsible member of the society and pays attention to inducing younger people into the third and fourth stages.
6. Contemplating a productive and responsible life (age 70+)
The person retires from work and looks back over his life.

More recently, Hershenson (1969) has formulated five stages of life-stage vocational development. There are four periods of transition and he points out that the task of the vocational counselor is to assist the transitions. Help can be formulated either in terms of facilitation, in which normal development is promoted, or remediation, in which blocks to development are removed. Certain techniques are optimally used to either facilitate or remediate at each particular transition stage. The stages are as follows:

1. Social-amniotic. The primary energy utilization is for awareness and the child is mainly concerned just with being. In aiding the first transition life style analysis, environmental manipulation or psychotherapy can be used.
2. Self-differentiation. The main energy utilization is for control and the vocational mode is play. In aiding the next transition either guidance or skill training are used.
3. Competence. The person becomes concerned with what he can do. The energy becomes more directed and the vocational mode is work. In aiding the third transition such techniques as client-centered therapy or training in decision making can be used.
4. Independence. The energy becomes goal directed and the vocational mode is occupation. The person begins to wonder what he will do. In this final transition existential or job matching techniques may be used.
5. Commitment. The energy is invested and the vocational mode is the vocation. The person questions what meaning what he does has for him.

A somewhat different approach was taken by Holland (1959). He listed six major occupational environments which correspond to six main personal orientations. The six major occupational environments are: the motoric environment, the intellectual environment, the supportive environment, the conforming environment, the persuasive environment and the esthetic environment. The six corresponding personal orientations can be ranked for each person in an hierarchy. Schematically the vocational choice process is outlined as follows:

1. The person directs himself toward a major occupational class. This is his range of choice.
2. Within this class, his selection of an occupation is a function of his self-evaluation and his ability to perform there.
3. Both processes are mediated by a series of personal factors, including self-knowledge and evaluation, knowledge of occupational classes, environmental factors, social pressures, etc.

The ease and adequacy of his choice are largely determined by the hindrance or facilitation of environmental events and by how clearly his occupational hierarchy is defined. Also, an appropriate choice can vary with the accuracy and adequacy of self-knowledge and the amount and adequacy of information about the occupational field.

Vocational choice has been seen as a decision making situation in which risk plays a major role by Ziller (1957). He felt that thus, occupational choice is determined in part, by individual risk-taking tendencies. Individual interests, abilities, economic limitations and

lack of information limit the field of choice. The alternatives then under consideration will then vary with regard to prize (what can be gained), price (what can be lost) and the possibility of success in a particular field. Mahone (1960) showed that people with high achievement motivation and low fear of failure tend to be realistic in their vocational choice with respect to both interests and abilities. On the other hand people with low achievement motivation and high fear of failure tend to be unrealistic.

Morris (1966) extended the theoretical model of motivation and risk taking. He looked at vocational choice from the viewpoints of both interest inventories and the level of aspiration. He formulated, tested and found support for four hypotheses:

1. The probability that individuals who are high in resultant motivation make typical (realistic) choices is greater than the probability that individuals low in resultant motivation make typical choices.
2. In making choices within an occupational field perceived as having a high probability of success, individuals high in resultant motivation are more likely to choose a difficult job than individuals low in resultant motivation.
3. In an occupational field with a low probability of success individuals with high resultant motivation are more likely to choose easy jobs than individuals with low resultant motivation.
4. If a career choice is made in a field with high probability of success, the level of difficulty of the choice is positively related to the person's resultant motivation.

Related to this is the career decision-making model of Hilton (1962) which is based on Simon's (1955) complex information processing model. A major premise of Simon's model; is that the individual is faced with a multitude of behavioral alternatives and his limited capacity to handle information about them limits the rationality of his decision-making. The incomparability of various factors and outcomes is circumvented. Rather than attempting to completely order the payoffs, the various values can be thought of as components of a vector function and a satisfactory payoff is one which satisfies all of the components of the vector and thus of the whole. Hilton (1962) combines this model with Festinger's theory of cognitive dissonance and proposes that the reduction of dissonance among a person's beliefs about himself and his environment is the major motivation of career decision-making. When inputs from the environment raise dissonance to an intolerable level, then the decision-making process is instigated. Several methods can be used to reduce dissonance:

1. The premises may be manipulated (beliefs are changed).
2. A new occupational plan or position may be selected (actions change to fit beliefs).
3. A very general non-committal career plan can be adopted.
4. The decision may be postponed.
5. A short-term career plan may be adopted with consideration of only short-term characteristics of the role.

When dissonance has been successfully reduced the decision-making process is for the time being terminated.

Social factors are introduced into vocational decision-making by Blau, Gustad, Parness, Jessor and Wilcock (1956). They proposed that social structure affects occupational choice in two analytically distinct ways: as the matrix of social experience which channels the personality development of potential workers and as the conditions of occupational opportunity which limit the realization of their choices. They propose a model dealing with individual and occupational factors to explain occupational entry. First, the personality development of the individual provides for general sociophysical attributes, which in turn result in specific immediate determinants (occupational information, technical qualifications, social role characteristics and the reward value hierarchy). On the other hand, with respect to the occupation, historical change results in a socioeconomic organization which provides more specifically the immediate occupational determinants (formal opportunities, functional and nonfunctional requirements and the amount of types of rewards). Occupational choice is conceived of as a continuously modified compromise between preferences for certain occupations. It is seen as a series of interrelated decisions, rather than a single choice. Thus it is a process.

The influence of social factors on vocational development is taken as far back as childhood experience by Roe (1957). According to her, patterns of early experience with parents, emotional concentration on the child and the avoidance or acceptance of the child by the parents

can result in a major orientation either toward people or away from people. This will then be reflected in the direction of vocational choice.

The approach of Roe (1957) is closely related to psycho-analytic conceptions of vocational choice, where career choice is construed merely as a by-product of personality development, and consequently is not worthy of attention in and of itself. Osipow (1968) summarizes the basic position,

If a person is developing normally in general, presumably his vocational life will also proceed according to schedule. . . career development deserves attention only because unusual difficulty in career choice is a symptom of more basic psychological disturbance, or as the choice process itself represents the general status of the individual's psychological development. (p. 84)

The psychoanalytic orientation concerns itself largely with mechanisms of psycho-analytic theory, such as identification (Crites, 1962; Segal and Szabo, 1964; Heilbrun, 1969; Hull, 1970) and ego strength (Crites, 1960).

In an effort to work towards a unifying theory, Stefflre (1966) set forth ten propositions dealing with the self-concept and the selection of an occupational persona (expression of the individual's personality in a particular occupation). He talks about how the choice is made and how a particular relationship between the self and society is expressed in the selection of an occupational persona.

Many theorists have investigated various aspects of vocational development and decision-making. A learning theory approach has been applied to the process of vocational decision making by Miller (1968). He proposes that prediction is based on knowledge of the individual's past history, his current stimulus situation and present motivational stages. Adam (1968) claims that the major advantage of the learning theory approach is that it has the potential for both accurate prediction and extensive control of decisions.

The need for vocational theory to be differentiated by sex has been pointed out by Rose and Elton (1971),

Although significant differences were found by sex and occupational category, it was the significant interaction effect which supported the conclusion that separate theories of occupational choice for females are required if the theories are to be based on personality constructs. (p. 5)

Zytowski (1969) has formulated nine postulates towards a theory of career development for women. These deal with elements of the vocational and homemaker roles and how they are largely mutually exclusive; vocational participation often demanding departure from the homemaker role. However, Saleh and Lalljee (1969) found that the higher the job level, the more intrinsically oriented employees are, regardless of sex. Thus casting doubt on the myth that the intrinsic aspects of work are more important to men than they are to women.

In testing Roe's theory, Green and Parker (1965) found that specific parent-child relationships appeared to affect boys and girls differently. When perceiving the positive parental behaviors outlined by Roe (1957), boys tended to select a towards-person occupation. However, there was no tendency to orient towards non-person occupations when perceiving negative parent-child relationships. On the other hand, with girls there was an orientation towards non-person occupations as a result of negative parent-child relationships, particularly when the father is involved. Roe and Siegelman (1964) also found limited positive results on investigating the theory. This time many more predicted relationships were found with males than with females. Smith, Roberts and Rosenberg (1964) found, while investigating sibling associations and role involvement, that the ordinal sex position and sibling sex status involves distinctive social learning. Also, various combinations of sibling ordinal-sex pairings influence such role involvements as strong parent identification, academic success, strategic vs. power success styles and creativity. On examining Roe's theory, Osipow (1968) decides that it is useful at its present stage of theoretical development, but there is little empirical support for it and it has few applied implications and consequently, unless a major revision is made it is not likely to have an increasing effect on vocational counseling in the future.

Osipow (1968) also investigates Ginzberg's (1951) theory. He has found the empirical evidence to be mixed with a thread of data consistent with the major tenets of the theory, but lacking specificity as to just what the stages are, when they occur and the order in which they occur. Ginzberg (1972) has taken another look at his earlier theory and has made some changes,

Our reformulated theory is that occupational choice is a life-long process of decision-making in which the individual seeks to find the optimal fit between his career preparation and goals and the realities of the world of work. (p. 172)

While his theory was originally a developmental approach, his reformulated theory stands on sociopsychological foundations. The crucial questions to be asked are whether the individual has sufficiently clear objectives and goals and whether he is able and willing to put forth the effort to realize them.

Considerable research has been done investigating various aspects of Holland's theory. Elton (1971) found support for his theory as did Folsom (1969) who used College Student Questionnaires to investigate Holland's theory. He found that Holland's descriptions of the six personality types are generally consistent with the ways in which students classified within the types describe themselves on the CSQ scales. Elton and Rose (1970) attempted to predict male occupational constancy and change with Holland's theory. Their data suggest that the personality patterns of occupational groups are more a function

of those who enter and persist in a particular group, than of those who transfer into it. Hollander and Parker (1969) found support for certain aspects of Holland's theory,

Stereotypes of occupations representing each of the categories were found generally consistent with the theoretical formulations for each category. This finding was very important to understanding the theoretical statement that a person, in making a vocational choice "searches" for environments which satisfy his orientations and needs. . . . The present investigation indicated that stereotypes exist and represent a foundation for vocational choices. (p. 97)

On the other hand, Ingram (1970) concluded that

. . . [T]he typology has limited practical implications for the prediction of college counseling and academic behaviors. Its validity for providing discrete or categorical predictors was not supported and will require further study. (p. 151)

Osipow (1968) notes that most research done has been supportive, but his samples have had serious limitations and there is little explanation about the process of personality development and its role in vocational decision-making.

Super's various theories have also been investigated by many people and generally seems to find the largest amount of support. Ziegler (1970) found certain self-concept features for subjects attracted to different occupational areas, supporting Super's theory. Bare (1970) indicates that inaccurate self-concepts play a part in unrealistic or apathetic vocational goal setting behaviors. Oppenheimer (1966) used the Modified Repertory Test (a semi-structured test allowing the subject

to use his own system of personal constructs to rate self and occupational concepts) and found evidence for two of his three hypotheses. These were that people prefer occupations perceived as congruent with their self-concepts and that self-esteem is positively related to the degree of agreement between self-concepts and occupational preferences. Korman (1966) has found that self-esteem operates as a moderator variable in the process of vocational choice. Those high in self-esteem have self-perceived needs that have usually been satisfied and therefore it is appropriate and consistent for the individual to seek out those roles where they will be satisfied in the future. On the other hand, low self-esteem individuals have not had their needs met in the past and consequently have become more familiar with non need-satisfying situations and more accepting of them. Lewis (1968) has established that self-concept implementation correlates positively with satisfaction in the present job and with satisfaction with the work itself.

Super (1969) makes a distinction between occupational and career models and places greater emphasis on the self-concept as a possible "mortar" which could bind the other theoretical units into a solid structure. Osipow (1968) has observed that the results of the research done provide an impressive amount of empirical support for the general aspects of Super's theory. One shortcoming is that relatively small samples have usually been studied. In his comparison of the various theories, Osipow indicates that as a conceptual model Super's theory

seems to be the most highly developed and advanced, as is reflected in its explicitness, fairly high degree of empirical support and substantially larger number of practical applications.

The Practice of Vocational Counseling

Vocational developmental and decision-making theory was examined in the previous section. In this section, the literature dealing with its practical application, vocational counseling, will be reviewed.

Wade and Shertzer (1970) observed that students seeking vocational counseling had higher anxiety than those who were not seeking vocational counseling. After counseling, the level of anxiety of those seeking counseling was reduced to the level of the others. This evidences the existence of a situational anxiety among these people and indicates that one of the functions of vocational counseling is to reduce this anxiety. Tiedeman (1961) sees the aim of vocational counseling as being to

. . . [E]nhance the operation of reason in this dynamic process of vocational development and to free the person for progress in making and acting upon a particular decision as well as in viewing decisions in relation with those taken and those possible. (p. 18)

Lipsett (1962) views all the social factors which influence the course of vocational development and feels that in view of all these factors the counselor should view his role in a better, more humble perspective. He shouldn't try to pick an occupation for the counselee on the basis of only a few tests. He should realize that he is only a part of the process of vocational development.

Stefflre (1966) draws some implications for counseling from his propositions:

1. The choice of an occupation may be a very ego involving and central problem to some and to others it may be insignificant and have little to do with their identity as a person.
2. The hidden meaning of a vocational choice should be looked for, (is it a denial of the self, or how clearly is it worked out?).
3. Counselors should aim to help students to understand themselves and should not merely be concerned with making a "wise" choice.

As previously mentioned, Hershenson (1969) pointed out that the task of the vocational counselor is to assist the person through the transition periods between the five stages that he postulated in vocational development. This help can be in the form of either facilitation or remediation and certain techniques are appropriate at each stage.

Group vocational counseling has recently come into use and has been investigated by several researchers. Davis (1970) found that vocational realism (as measured by the discrepancy between expressed vocational aspiration and the expressed vocational expectation) increased as the number of hours of group counseling increased. Hower (1968), in studying group vocational counseling, utilized 6-8 member groups which were carefully screened and selected. The dynamics of the group involved self-understanding, attitude change and career choice.

It was concluded that the most effective models for group counseling are those which utilize both trait assessment and depth exploration of personality within a developmental context. Anderson (1971) studied the effects of a group counselor's cues and reinforcements and found that groups which received both cues and reinforcement demonstrated the greatest effectiveness of career information-seeking.

A program to improve occupational choice-making of post-high school individuals was devised by Ryan (1968). The results of this study supported the four major hypotheses that were proposed:

1. Reinforcement counseling techniques are effective for improving student's vocational decision-making.
2. Reinforcement counseling techniques are effective for helping students acquire knowledge of sources of personal data and occupational information.
3. Simulation materials are effective for helping improve the student's vocational decision-making.
4. Simulation materials are effective for helping students acquire knowledge of sources of occupational information.

Graff, Danish and Austin (1972) compared the effectiveness of three kinds of vocational-educational counseling: individual counseling, group counseling and programmed self-instruction. They found that the programmed self-instruction was more effective on three of their criteria measures: becoming informed of vocational opportunities and requirements, learning about how to make educational-vocational

decisions and setting up educational and vocational goals consistent with abilities, interests and personality characteristics. On the other four criteria the self-instruction was found to be as effective as individual and group counseling.

College Level Vocational Counseling

A review of the literature on vocational guidance has revealed no college-specific models of vocational counseling. However, various facets of vocational counseling have been investigated in the college setting. Appel, Haak and Witzke (1970) found six meaningful factors to be associated with indecision about college major and career choices:

1. Situation-specific anxiety.
2. Data-seeking orientation.
3. Concern with self-identity.
4. Generalized indecisiveness.
5. Multiplicity of interest.
6. Humanitarian orientation.

Buck (1970) studied vocational exploration among college students and concluded that neither extensiveness nor effectiveness of reported vocational exploratory behavior were significantly related to the level of final interest crystallization. Ashby, Wall and Osipow (1966) examined vocational certainty and indecision in college freshmen and found a correlation with dependency needs. Also, Resnick, Fauble and Osipow (1970) found a positive relationship between rate of final

interest crystallization and high and low self-esteem. Munday, Braskamp and Brandt (1968) correlated SVIB and MMPI profiles and discovered that there is nothing "wrong" with a person who has an unpatterned SVIB profile, probably much to the surprise of many vocational counselors.

Graff and Maclean (1970) surveyed students who had received educational-vocational counseling center. They found the majority had two main complaints: students felt that they did not receive adequate information about vocational opportunities and requirements, and they received inadequate information about how to make educational and vocational decisions. Further support for the need for more adequate vocational guidance services on college campuses is found in their research. Two of three freshmen had no idea where to find vocational information on campus. Only ten percent of the students knew of the occupational library run by the campus counseling center and forty-four percent felt they had experienced a need for vocational information in their college experience up to that point.

Berger (1967) on examining vocational choices in college concluded that

Many students commit themselves to vocational choices prematurely and then perceive the experience as a "failure". Students should be encouraged to consider any early decision as tentative, a choice to be tested, confirmed or disconfirmed. They should be relieved of pressure to "know" what they want to do by way of a process of exploration, experimentation and personal development that may go on through their lifetime. (p. 888).

Myers (1972), after examining a number of related studies decides that there is a definite deficit in the vocational maturity of college students, particularly when they first enter college. One-fifth of entering college freshmen cannot or do not express a vocational choice when asked to do so. He points out that the percentage among those who seek counseling assistance is much higher and that they are different from those who can express a vocational choice, in that they may be more dependent. He also emphasizes the tentativeness of early college vocational choices.

Pesqueira and White (1971) point out our failure in the area of vocational counseling and job placement with the fact that half of the students who obtain their Bachelor's degrees do not work at jobs consistent with their education. In an effort to reverse this type of failure Sovilla (1970) outlines a seven step plan for career planning that can be implemented at the college level:

1. Selection of a major field.
2. Self-analysis.
3. Career field analysis.
4. Short-range career goals.
5. Analysis of employment environments.
6. Long-range career goals.
7. The job campaign.

In the interests of more effective career counseling, Kirk (1971) describes how the counseling service and the placement service at one college have been combined to form a "Career Development Center", which apparently has met with quite favorable response.

Graff and Maclean (1970) in concluding their study, emphasized that with the current lack of sophistication and knowledge about the effects of counseling, it is extremely important for counselors and counseling agencies to assume a continual research orientation. The literature on vocational guidance indicates several facts very clearly. First, there is a very definite need for improved vocational guidance on the college level, and second, no comprehensive models of vocational guidance specific to college students have yet been developed. There are a considerable number of studies available that can be utilized in constructing a comprehensive college level vocational guidance model. New research needs to be generated to combine with present information in the formulation of this model.

PROCEDURE

In order to obtain information as to how to construct our instrument and fulfill our objectives, a pilot study was conducted. This consisted of a preliminary questionnaire (see Appendix A) which asked about a tentative vocational choice and the degree of commitment to it, and people and factors other than people that have had a significant influence on the student's vocational choice. The person filling out the questionnaire was asked to list the people and other factors so that a representative sample of answers could be obtained to these questions. This would then aid in making the final questionnaire more objective and easy to tabulate. This questionnaire was administered to a random sample of 100 students on the Utah State University campus.

In constructing the final questionnaire, the question arose whether obtaining information in a written questionnaire would yield as valid and complete data as using an interview technique. It was then decided that the pilot study should be extended and another preliminary questionnaire administered, this time with two objectives: to provide some information as to the effectiveness of the specific questions in obtaining the information that was being sought and to determine whether the written questionnaire could be considered equivalent to the oral interview survey technique. Jones (1972) was of great assistance in

constructing this questionnaire, which closely approached the format of the final questionnaire. Again a random sample of students on the Utah State University campus was obtained, this time of 48 students. Twenty-four of these were administered the survey as a written questionnaire and the other twenty-four were given the survey as an oral interview. The results of each method were then compared by a test of significance of proportions.

With some modification in the format, the final questionnaire (see Appendix C) was constructed. This was administered as a written questionnaire to a random sample of 500 students on the Utah State University campus. Demographic data on these students was obtained, regarding sex, class rank, and college. Then the representativeness of the sample was documented in comparison to the student enrollment for Spring quarter 1972 (see Appendix D).

Subsequently, an analysis of the data obtained was done by means of analysis by item of the individual questions by sex and class rank.

RESULTS

The results of the two preliminary questionnaires used in the pilot study for building the instrument and the results of the final survey will be presented primarily by means of charts and graphs dealing with individual items.

Pilot Survey

In the first questionnaire only 4% of the students surveyed were unable to at least tentatively identify a vocational choice. On the second questionnaire, 73% of the students expressed strong commitment (defined as either a 4 or a 5 on a scale from 1 to 5, with 5 being maximum commitment) to their vocational choice.

Answers to question #3 (List the people that have had a significant influence in your choice of a vocation) will be listed with the percentage of students giving that answer beside it (Table 1).

Answers to question #4 (Other than people, what sources of information or other factors have had an influence on your vocational choice?) will be listed with the percentage of students giving that answer beside each one (Table 2).

From the responses to the first questionnaire, which was open-ended, objective, multiple choice questions were formulated to the question "Which of the following people have been most influential in

Table 1

People That Have Had A Significant Influence
In The Choice of a Vocation

Parents	44%
Teachers.....	31%
Friends	24%
Professors.....	18%
Immediate Family.....	18%
Self.....	16%
Friend-model.....	15%
Relatives	11%
None.....	7%
Employers.....	4%
Prominent people	3%
Children	2%
High School Counselor.....	2%
College Counselor	2%
Coworkers	1%
Doctor	1%
Neighbor	1%
Coach.....	1%

Table 2

Sources of Information or Other Factors That Have
Had An Influence on Vocational Choice

Interests	28%
Reading	19%
Money	12%
Job Market.....	11%
Work experience	11%
Desire to Contribute.....	9%
Classes.....	7%
Practical Considerations	4%
Interest & Aptitude tests	4%
Travel	4%
None	3%
Aptitude	3%
Field itself	3%
Vocational benefits	3%
Status and prestige	2%
Church	2%
Personal needs	2%
Life itself	2%
Television	1%

your vocational choice?", the following possibilities were given:

a) high school counselor, b) immediate family, c) relatives, d) high school teacher, e) college professor, f) college counselor, g) personal or family friend, and h) other. Another multiple choice question was similarly constructed dealing with factors other than people that have contributed to career choice. For the second survey a number of other questions were added to the format of the first survey (see Appendix B).

Partial results of the second survey will be presented to demonstrate the equivalence of the two sampling methods.

For question #4 (Which of the following factors contributed most to your career choice?), the following results were obtained:

Table 3

Factors Other Than People Contributing to Career Choice

	%Written	%Interview	%Total	z-value
H. school or Coll. classes	12.5	16.7	14.6	0.42
Reading books, magazines, etc.	4.2	8.3	6.3	0.59
Personal interests	45.8	62.5	54.2	1.19
Desire to contrib. to society	37.5	8.3	22.9	2.43*
Potential earnings	4.2	8.3	6.3	0.59
High demand for people	16.7	20.8	18.7	0.37
Previous work experience	16.7	25.0	20.8	0.69
Other	8.3	4.2	6.3	0.59

*A z-value over 1.96 indicates there is a significant difference between the two values obtained.

In answering question #7 (Do you have definite plans to seek vocational counseling?), the following responses were obtained:

Table 4

Students With Definite Plans to Seek Vocational Counseling

	% Written	% Interview	%Total	z-value
Yes	25.0	25.0	25.0	0.0
No	75.0	75.0	75.0	0.0

In response to question #8 (If no, what turns you off about the idea of you seeking vocational guidance?) a number of different answers were given.

Table 5

Reasons for Not Seeking Vocational Counseling

	% Written	% Interview	% Total	z-value
Don't need it	44.4	44.4	44.4	0.0
Not much help	16.7	16.7	16.7	0.0
Has bad connotation	5.5	11.1	8.3	0.62
They don't understand	11.1	0.0	5.5	1.39
Should decide myself	5.5	5.5	5.5	0.0
Don't know location.....	5.5	5.5	5.5	0.0
Don't know about it	5.5	0.0	2.8	1.0
Already had enough	5.5	0.0	2.8	1.0
Not enough time	5.5	0.0	2.8	1.0
No sincere interest in me	5.5	0.0	2.8	1.0

One of the answers to question #8 was particularly interesting; some people didn't seek vocational counseling because it has a bad connotation. These people, on further questioning indicated that they felt that the word "vocational" connotes something related to the blue collar occupations and thus doesn't apply to them. As a result of this, "career counseling" was substituted on the final questionnaire for "vocational counseling". It may be of interest how many people do not seek vocational counseling merely because of this misunderstanding.

Of all the answers given to the second preliminary questionnaire (total of 57), one would expect to obtain a difference on two or three of them, at the .05 level of significance. On the questionnaire that was administered by the two methods, a significant difference was obtained on only one answer. Thus, it may be assumed at the .05 level of significance, that there is no significant differences between the two methods of administering the survey.

Final Survey

On the first question of the final survey (What is your intended career at present?) there was a certain percentage of people who did not express a choice, either because they would not or could not (Table 6).

On question #2 (How committed are you to this career?), a strong commitment was defined as responding to either a 4 or 5 on a scale from 1 to 5, with 5 being maximum commitment (Figure 1).

Table 6

People Not Expressing
a Vocational Choice
(By Categories)

Freshmen	15.5%
Sophomores	4.8%
Juniors	8.9%
Seniors	5.0%
Graduates	6.2%
Males	6.6%
Females	9.2%
Total	7.6%

People With Strong Commitment to Career Choice

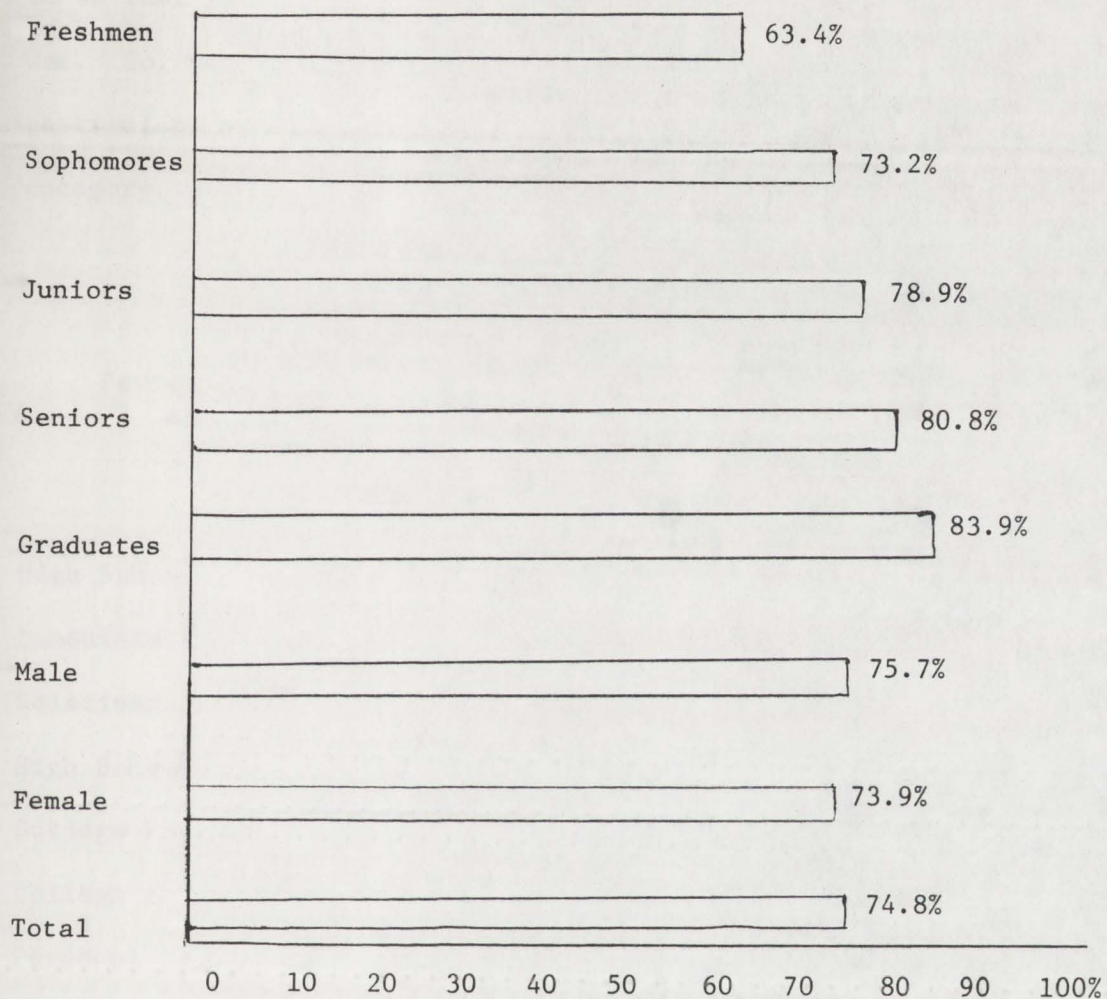


Figure 1. Percentage comparison of people with strong commitment to career choice, by category.

For question 3# (Which of the following people have been most influential in your career choice?) there were eight multiple choice possibilities. The last of these was "other" with a blank line after it so that people could indicate, if they wanted to what the "other" was. So, when any significant number of responses occurred under a particular "other" response these have been grouped together under that category, otherwise the response will simply be listed as "other".

Table 7

Percentage of Students By Category, Listing Various People
As Being Most Influential In Their Career Choice

	Frosh	Soph.	Jr.	Sen.	Grad.	Male	Female	Total
High School counselor	1.1	2.3	0.0	1.8	2.5	1.3	2.2	1.6
Immediate family	21.5	26.8	22.2	15.0	11.5	16.0	26.1	20.0
Relatives.....	7.1	5.6	4.4	1.8	2.5	3.5	5.4	4.2
High School teacher	19.1	14.5	10.0	7.6	4.6	7.6	17.4	11.4
College Professor.....	4.8	8.5	16.7	16.8	32.5	15.8	13.6	15.2
College counselor	3.6	3.2	5.5	4.0	0.0	3.2	3.8	3.4
Personal or family friend..	21.3	23.8	14.4	20.0	22.3	22.5	17.4	20.6
Self	13.0	12.6	18.8	17.6	9.5	15.6	13.0	14.8
None	0.0	2.3	1.2	3.4	2.5	2.2	1.6	2.0
Other	8.3	7.2	8.9	13.4	10.5	10.8	7.1	9.4
Blank	14.5	2.3	7.7	3.4	5.0	5.3	7.1	6.0

The results of question #3 will also be presented graphically, showing the total percentage of people indicating each source as being most influential.

Most Influential People in Career Choice

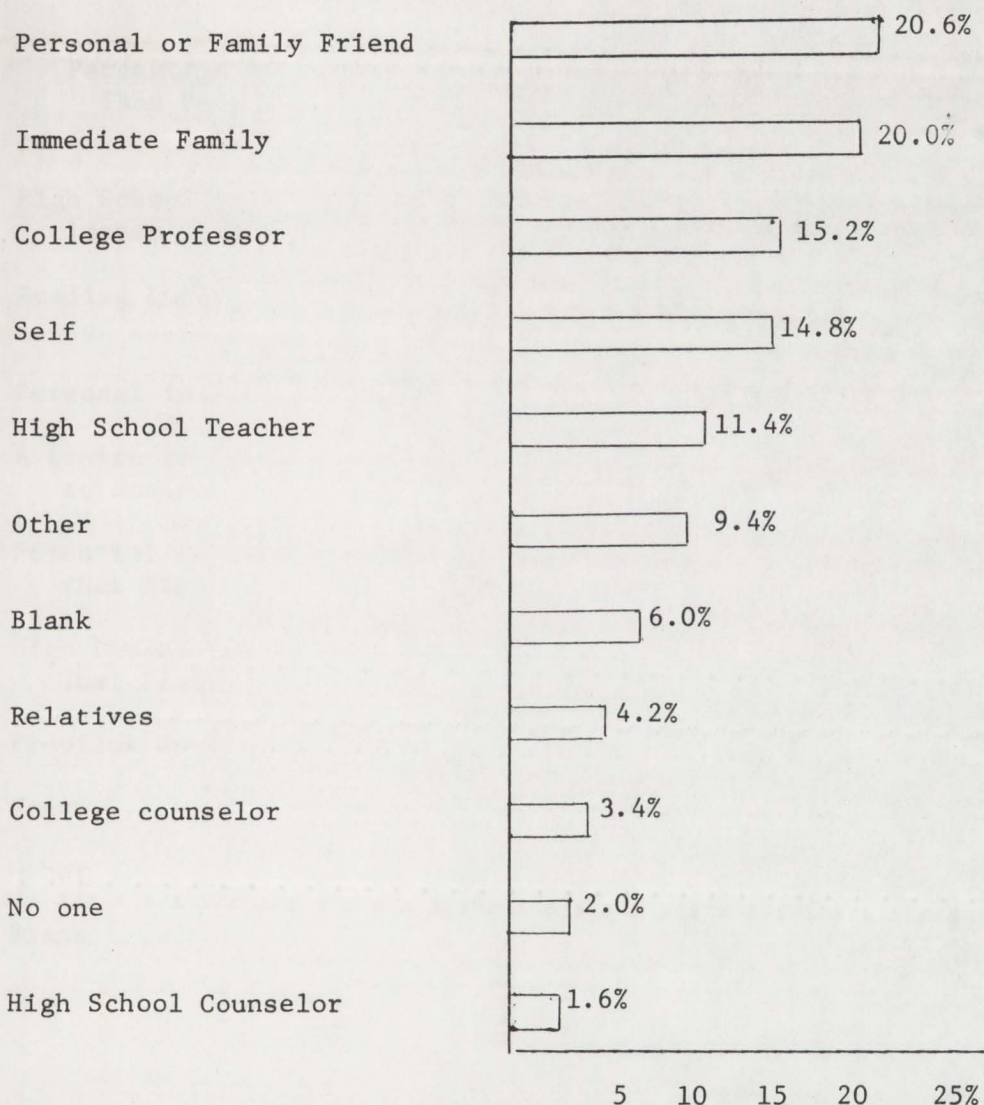


Figure 2. Percentage comparison of students indicating various people as being most influential in their career choice.

The responses to question #4 (Which of the following factors other than people, contributed most to your career choice?) are again expressed as percentages, first in tabular form by category and then graphically, by totals.

Table 8

	Fr.	So.	Jr.	Sen.	Grad.	Male	Female	Total
High School or College classes	10.7	14.7	7.8	14.6	11.5	8.6	17.4	11.8
Reading books, magazines, etc.	2.3	5.4	1.1	4.2	6.5	3.5	4.9	4.0
Personal interests	56.5	58.3	60.0	53.3	51.3	55.1	57.1	55.8
A Desire to Contribute to Society	13.1	17.3	15.5	23.1	12.5	13.6	16.8	14.8
Potential earnings in that Field	3.6	10.4	5.5	5.0	9.0	8.9	3.3	6.8
High Demand for People in That Field	7.1	3.9	5.5	3.6	9.0	5.3	5.4	4.5
Previous Work Experience..	8.3	14.3	15.5	22.7	12.5	18.0	10.3	15.2
None	0.0	0.0	0.0	0.0	6.3	1.6	0.0	0.0
Other	2.4	1.6	2.2	1.7	2.4	2.2	1.6	2.0
Blank	17.9	3.1	8.9	7.0	6.3	7.6	8.7	8.0

Most Influential Factors Other Than People in Career Choice

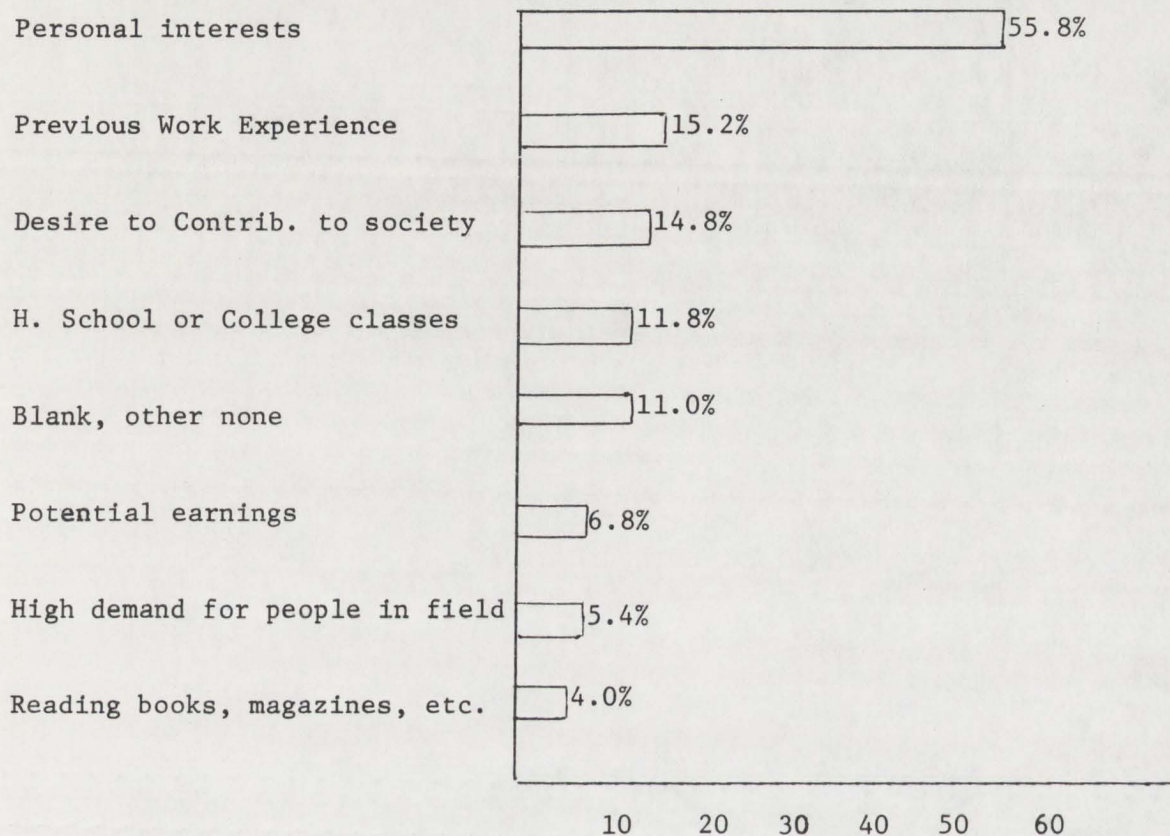


Figure 3. Percentage comparison of students indicating various factors other than people as being most influential in their career choice.

Question #5 (According to your present knowledge, what sources of help in making a career choice are available to students in general on this campus?), was asked as an open-ended question so that they wouldn't have suggestions as to what possible answers might be.

Table 9

% Of Persons Listing Various Sources of Help Available on Campus For Making a Career Decision

	Frosh	Soph	Jun.	Sen.	Grad.	Male	Female	Total
Counseling	25.0	30.9	36.9	35.9	31.8	34.2	31.5	33.2
Testing	4.7	14.1	7.7	14.7	14.1	11.1	11.9	11.4
Advisory.....	23.9	25.2	19.7	19.2	12.0	15.8	28.3	20.4
Professor.....	9.5	9.4	16.8	13.3	26.4	15.8	13.0	14.8
Library.....	1.2	9.5	6.6	5.9	12.5	8.5	4.9	7.2
Blank.....	23.8	14.3	14.4	15.0	14.7	13.0	21.2	16.0
Don't Know.....	8.4	10.8	15.6	3.3	8.8	9.2	9.2	9.2
None	12.0	10.9	12.2	14.3	22.1	18.6	7.6	14.2
Placement Center.	0.0	3.1	4.4	16.9	11.2	9.8	3.3	7.4
Classes	5.8	7.0	5.5	5.8	2.5	5.7	4.9	5.4
Department	7.1	3.4	2.2	5.1	3.7	3.5	5.4	4.2
Dean.....	0.0	3.2	3.3	0.8	0.0	1.3	2.2	1.6
Other.....	3.8	8.4	3.3	4.2	23.8	9.5	6.0	8.2
Friends	1.1	0.8	2.2	3.5	2.5	1.9	2.2	2.0
Catalog	1.1	0.8	2.2	0.0	0.0	1.9	2.2	0.8

On question #6 (Indicate the university resources you personally have utilized in making your career decision. After listing these, now rate on the scale below to indicate how helpful they have been for you) the percentage of persons listing each source was computed as well as the average rating of each source for helpfulness (on a scale from 1 to 5, with 5 being very helpful and 1 being useless).

Table 10

Percentage of People Using Various University Resources in Making
A Career Decision And Their Average Helpfulness

	Male % Listing	Average rating	Female %Listing	Average rating
Counseling	12.0	3.0	13.0	3.0
Testing	4.8	2.9	3.7	2.4
Advisor	11.1	3.3	19.6	3.3
Professor	13.3	3.7	11.4	3.6
Library	11.4	3.5	3.3	3.0
Placement Center	3.8	3.0	0.5	4.0
Classes	7.6	3.5	9.2	4.1
Department	6.3	4.0	4.3	3.3
None	30.4		25.5	
Blank	21.0		24.5	
Friends	1.0	4.3	2.7	3.7
Experience	1.0	4.6	1.1	4.5
Other	9.2	4.3	4.3	3.5

The results of #6 will also be presented graphically, giving the average ratings for each of the university resources used by the students.

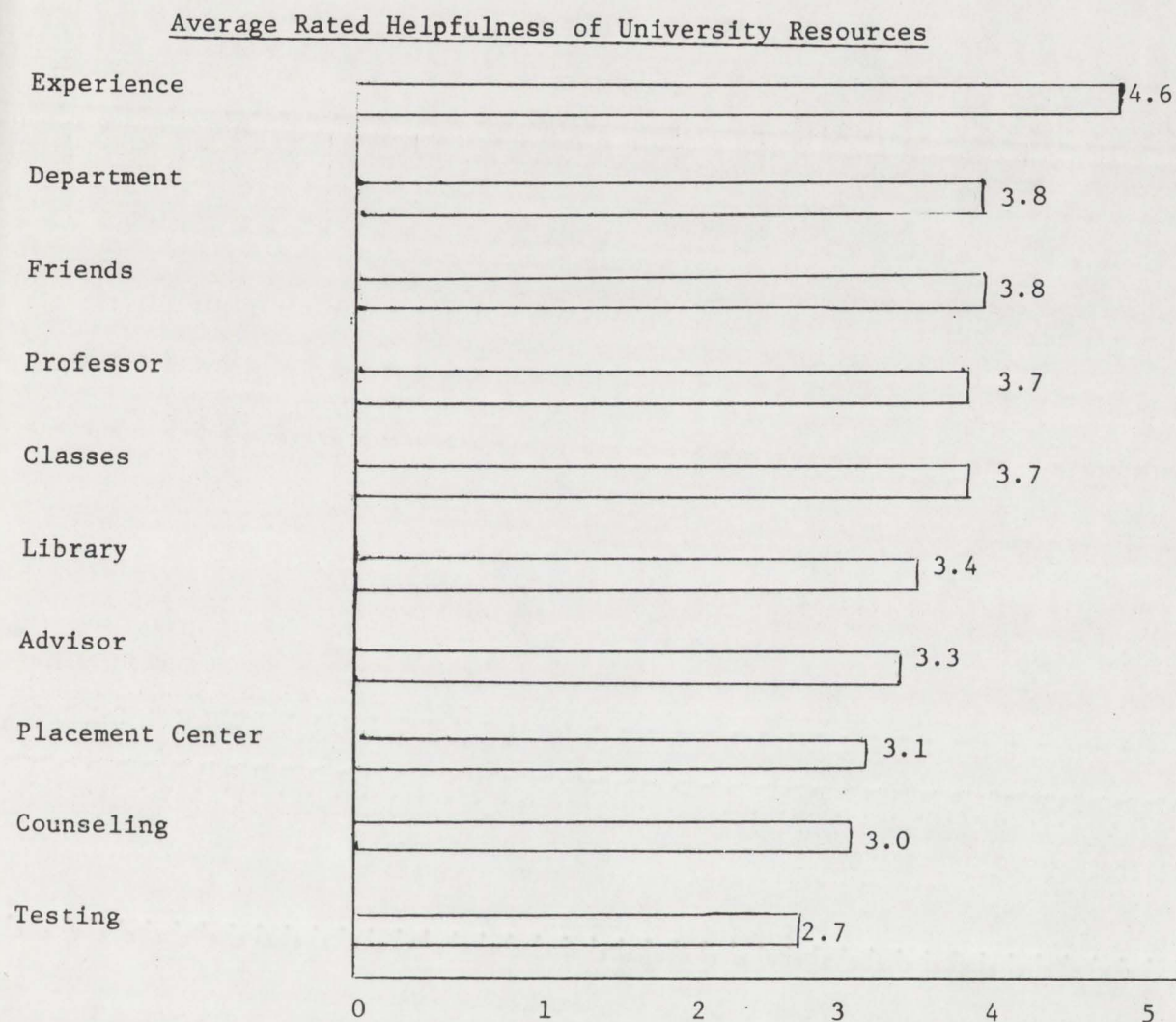


Figure 4. Scaled comparison of students rating various university resources for helpfulness in aiding in career decision-making (scaled from 0 as useless to 5 as maximum helpfulness).

From these results the resources listed were compared for their "total helpfulness", which was computed by multiplying percentage of people using that resource by the average helpfulness rating, yielding an index of how helpful each resource is for how many people (Total helpfulness = % of people X average helpfulness rating).

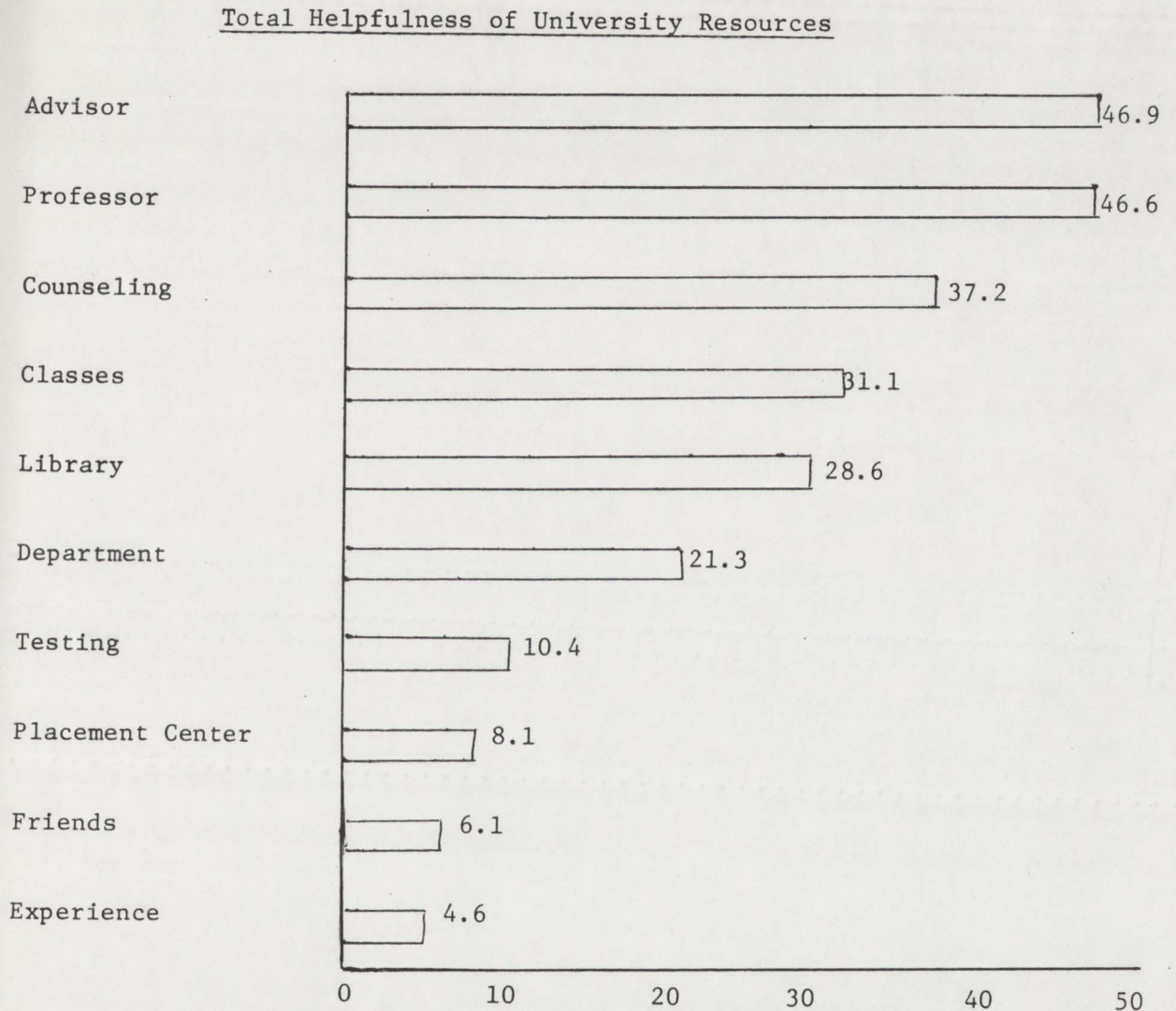


Figure 5. Scaled comparison of students rating various university resources for total helpfulness in aiding in career decision-making (total helpfulness = % of people X average helpfulness rating).

For question #7 (How many times have you changed your career choice since coming to college?) the answers were divided into six categories: 1, 2, 3, 4+ and blank.

Table 11

Number of Times Students Have Changed Their Career
Choice Since Coming to College

	Frosh.	Soph.	Jun.	Sen.	Grad.	Male	Female	Total
None	70.1	52.2	46.7	42.6	34.9	47.5	51.6	49.0
One	14.3	26.7	25.7	26.1	28.9	23.1	27.2	24.6
Two	7.2	8.6	6.6	16.7	16.1	12.3	8.1	11.0
Three	1.2	6.9	5.5	5.4	8.8	5.7	6.0	5.8
Four+	0.0	0.8	4.4	4.3	3.9	3.2	1.6	2.6
Blank	7.1	3.9	12.2	4.4	8.9	7.6	5.4	6.8

The results of #10 (How many times have you changed your major since coming to college?), since the question is similar, will be presented in a similar fashion before questions 8 and 9 (Table 12).

The results of questions #7, and 10 will be combined in a graph indicating career and major changes by totals (Figure 6).

Table 12

Number of Times Students Have Changed Their Major
Since Coming to College

	Frosh.	Soph.	Jun.	Sen.	Grad.	Male	Female	Total
None	72.2	55.1	46.8	42.7	41.1	48.1	57.1	51.4
One	16.7	33.2	31.0	27.6	30.0	28.8	27.2	28.2
Two	6.0	7.8	11.1	15.9	13.7	12.3	9.2	11.2
Three	0.0	3.1	4.4	4.2	11.3	5.7	2.2	4.4
Four+	0.0	0.0	7.8	6.8	1.2	3.5	2.7	3.2
Blank	4.8	0.8	0.0	2.5	2.5	2.2	1.6	2.0

Number of Times Students Have Changed Their Career Choice
And Major Since Coming to College

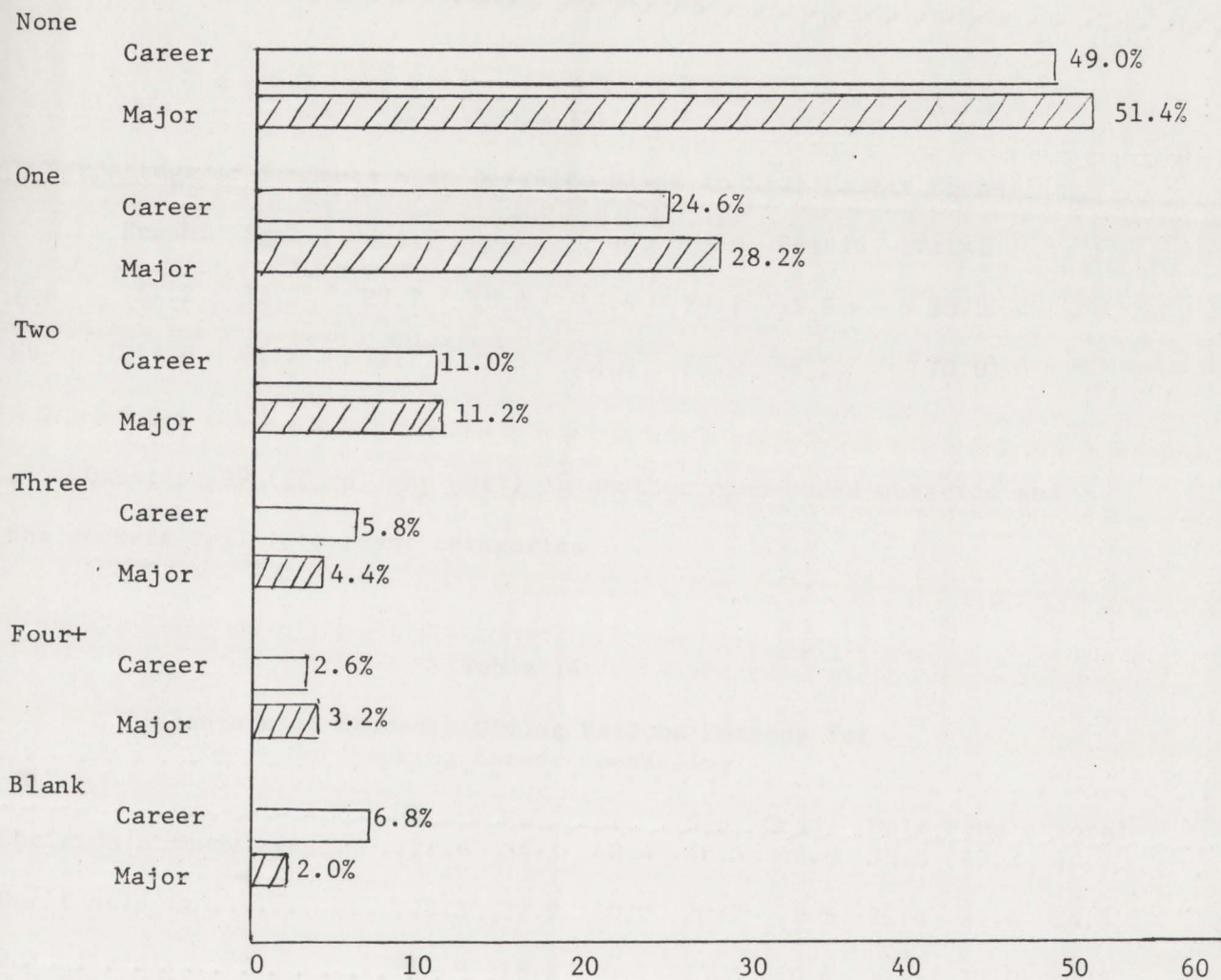


Figure 6. Percentage comparison of the number of times students have changed their career choice and major since coming to college, by totals.

The response to question #8 (Do you have definite plans to seek career counseling?) indicated that the majority of students did not have definite plans to seek career counseling.

Table 13

Percentage of Students With Definite Plans to Seek Career Counseling

	Frosh.	Soph.	Jun.	Sen.	Grad.	Male	Female	Total
Yes	51.2	38.2	27.7	18.3	17.4	29.1	31.5	30.0
No	48.8	61.8	72.2	81.5	82.6	70.9	68.5	70.0

Question #9 (If no, why not?) is another open-ended question and the answers fall into eight categories.

Table 14

Percentage of Students Giving Various Reasons For Not Seeking Career Counseling

	Fr.	So.	Jr.	Sen.	Grad.	Male	Female	Total
Decision already made.....	28.6	34.1	42.4	46.3	46.8	39.3	43.2	40.7
Don't need it	23.3	34.9	20.0	20.7	28.5	25.4	22.4	24.3
Not helpful.....	11.9	18.2	4.7	13.6	10.6	12.5	12.0	12.3
Don't know much about it...	11.0	8.6	11.0	4.1	1.5	7.1	6.4	6.8
Not interested	8.8	1.5	11.3	6.1	1.4	7.5	1.6	5.4
Other.....	17.7	1.1	3.2	3.0	4.6	3.6	7.8	5.6
Blank	0.0	0.0	4.3	7.3	7.8	4.0	4.2	4.3
No Reason	0.0	2.9	0.0	0.0	0.0	0.9	0.0	0.5

DISCUSSION

It appears that the number of students who cannot express a vocational choice is not unduly high. A possible exception to this are the freshmen, about a sixth of whom did not express a vocational choice. Since they have just come from high school and still have some time before a vocational decision must be made, even this figure may not be unexpectedly high. However, based on this statistic, it would appear that the extension of vocational counseling services should be aimed particularly at the freshman class.

Regarding commitment to the vocational choices that are given, it appears to be generally quite strong, with the weakest commitment among the freshmen. Much as one might expect, the degree of commitment increases with each successive year of college attended, as the person moves closer to the time when a decision must be made.

When asked to list the person most influential in their career choice, the immediate family and personal or family friends form the largest category of responses, between them accounting for over 40% of the responses given. The immediate family seems to have decreasing importance as the student progresses in college. This may be made up for by the increasing influence of the college professors, which climbs from 4.8% among the freshmen up to 32.5% among graduate students, averaging 15.8% overall. A number of people choose to think that there is no most influential person in their career choice, other than themselves,

and this group comprises the next largest group, almost 15%. High school teachers comprise the next largest group, but their influence is also a decreasing one, declining from 19.1% among freshmen to only 4.6% among graduate students. College counselors do not fare very well; only 3.4% of the students name them as the most influential person in their career choice. Whether it is unrealistic to expect that they be more influential than this is a matter for speculation.

More than half of the students name personal interests as being the most influential factor other than people in their career choice. Previous work experience and a desire to contribute to society are the factors most commonly referred to other than personal interests. High school and college classes also seem to exert considerable influence.

When asked to list sources of help which are available on campus in making a career decision, more people listed the counseling service than any other source, but still fully two thirds of the students surveyed were not conscious enough of the counseling service that they would mention it. This, despite the fact that the title on top of the survey was "USU Counseling and Testing Center Career Guidance Questionnaire". Another third of the students listed advisors and professors as sources of possible help. It is interesting to note that over a third of the students indicated that there are no sources of help available, or they didn't know of any, or else they just left the question blank. There seems to be a great lack of knowledge among students as to just what sources of help are actually available to them in making a career choice. A glance at the data reveals that the freshmen are not generally

more ignorant in this respect than those who have attended college for several years.

There appears to be something lacking in the methods currently being used to inform the students of the career guidance resources that are available. It is important that these methods be reevaluated and possibly changed to the effect that a greater number would be aware of the help that is available to them. In other words, the career guidance facilities need to be actively promoted. Part of what this promotion would involve is the change of the name from "vocational" counseling or guidance to "career" counseling or guidance. This would eliminate whatever misunderstandings the connotation of the word "vocational" may produce. Otherwise, the major part involves the use of more effective methods to publicize the existence and availability of the resources that are currently available to the student to aid in career decision-making.

When asked which university resources students had personally used in making their career decision, the most common responses were none and blank, together accounting for more than half of the responses. After these, the next most frequently used resources were advisors, professors and then counseling services. These accounted for over a third of the responses. Although the counseling service was high on the list for amount of usage, the average helpfulness rating was very low on the list, bettering only the rating given to the testing service. Utilizing our "Total helpfulness" rating index (obtained by multiplying the percentage

of people using the resource by the helpfulness rating), the counseling service fared somewhat better, being third, behind advisors and professors. However, this is largely because of the relative frequency of its use rather than the help it provides.

Thus, another issue is raised; once the resources are being utilized by the student, how much help do they actually provide? Apparently not very much; according to the students' ratings almost all other sources of help, when actually used, provide more help than the counseling service.

It seems that the counseling services are in need of reevaluation and subsequent modification in order to provide more help to the students who make use of them. Otherwise the promotion of them cannot justifiably be wholehearted.

There appears to be a definite relationship between the number of times students change their majors and the number of times they change their career choice. About half of the students have changed either during their college career, with the largest number, quite naturally, among freshmen, who have not really had much time to do so. About a quarter of the students have changed their major once and a similar number have changed their career choice once. It seems that the majority of students do not repeatedly change their majors throughout college. Even among seniors and graduate students two thirds of them have changed their career choice and major either only once, or not at all.

When asked if they had definite plans to seek career counseling only 30% of the students indicated that they did. This ranges from over half of the freshmen planning on seeking career guidance, down to about a sixth of graduate students planning on it. The most common reasons given for not having plans for career guidance were that a career decision had already been made, or they just didn't need it; these two accounting for about two thirds of the reasons given. The rest either felt that it was not helpful, or they didn't know much about it, or else they simply were just not interested. The only noticeable trend was the number of students who did not plan on career counseling because their career decision was already made increased with each year of college attended.

SUMMARY AND RECOMMENDATIONS

In an effort to improve vocational counseling on the college level, it was decided that more information than is currently available in the literature would be needed. It was then decided that a survey should be conducted to gain this information and , more specifically, to fulfill the following objectives:

1. To estimate what percentage of students can express a vocational choice.
2. To evaluate the degree of commitment to a vocational choice of those students who are able to express a choice.
3. To estimate how many times students change their choice of a major while they are in college.
4. To estimate how often students change their vocational choice while they are in college.
5. To determine what resources are commonly used by students in making a vocational choice.
6. To evaluate the knowledge that students have the resources that are available to them in making a vocational choice.
7. To estimate what percentage of students have definite plans to seek vocational counseling.
8. To evaluate the relationships that exist, if any, between or among any of the previously mentioned factors.

In order to design a final questionnaire and fulfill these objectives, a pilot study was done. In this pilot study a preliminary questionnaire was drawn up and administered to a random sample of 100 students. A second preliminary questionnaire was drawn up when the question arose whether a written questionnaire would yield as complete and valid results as a survey conducted by interviews. In constructing this questionnaire, the information gained from the open-ended questions of the first questionnaire was used to build more objective, multiple-choice items.

In order to determine whether the two survey methods are equivalent, the second questionnaire was administered to a random sample of 48 students, half of which were administered the survey with each method. A test of significance of proportions indicated that there was no significant difference between the two methods questionnaire.

The final questionnaire was given to a random sample of 500 students and the representativeness of the sample was demonstrated by comparing the demographic data obtained with the statistics of Spring quarter enrollment for 1972.

It was found that over 15% (compare with Myers' 1972 findings of approximately 20%) of freshmen did not express a career choice, and of those who did their career commitment was the weakest, with not quite two thirds of them expressing a strong commitment. The people most influential in the students career choice were the immediate family,

with a decreasing influence with each year of college and personal or family friends. College professors had an increasing influence with each year of college and college counselors hardly had any influence at all. Among factors other than people, personal interests was by far the most frequent choice as most influential in career choice, with previous work experience and a desire to contribute to society also important factors.

When asked to list the source of help available on campus for making a career decision two thirds of the students did not mention the counseling service and one third were not able to list any sources of help at all. Regarding the sources of help personally used, the counseling service was the third most popular, behind advisors and professors, but its helpfulness rating was quite low compared to other sources of help.

Half of the students surveyed have not changed their major or career choice since coming to college and a quarter have changed them once. There does not appear to be as much shifting about among majors and career choices as one might expect. 70% of the students indicated that they did not have plans to seek career counseling, two thirds of this group indicating that a decision had already been made or they just didn't need it. Others felt it was not helpful, or they didn't know much about it, or else they just weren't interested.

It was indicated by Bergeson (1972) that the present counseling services provide vocational counseling and testing to students who come into the counseling center and make requests for these services. No

single, comprehensive model for vocational counseling or decision-making is followed by the members of the counseling staff. Rather, an eclectic approach is utilized, with interest tests such as the Strong and Kuder and personality tests such as the MMPI and Edwards being administered and subsequent counseling being provided. Occasionally, members of the staff presented information about vocational decision-making to various groups on campus.

Since there is no comprehensive, college-specific model available for vocational counseling, it would be difficult to adopt one. (What could be done, however, is to make more extensive use of the theoretical and applied research that is currently available. There is presently much useful research that has been done on various aspects of vocational counseling, segments of which could be investigated and possibly incorporated into a tentative model for college-level vocational counseling.

Perhaps some general theoretical model, such as that proposed by Hershenson (1969), could be adopted as a broad framework. This would provide a general schema for the stages of vocational development and what can be done by the counselor to most effectively assist the student in making the transitions between these stages with a minimum of difficulty. Then a more specific model such as the seven step plan for career planning outlined by Sovilla (1970), could be incorporated with the broader, general model already mentioned. The adoption of such a course of action would aid the counseling staff in the examination of their basic premises in this area, and a framework for further critical thought would be provided.

There are also many, specific investigations into various innovations and aspects of vocational counseling that our counseling service might profit by. For example, Hewer (1968) has done some research on the feasibility of group vocational counseling. She found it to be helpful, with the most effective model for group vocational counseling utilizing both trait assessment and in depth exploration of personality within a developmental context. More recently, Graff, Danish and Austin (1972) have compared the effectiveness of three kinds of vocational-educational counseling; individual counseling, group counseling and programmed self-instruction. They found that programmed self-instruction was equal or better on all seven of their criteria measures. Another recent innovation, reported by Kirk (1971) involves combining the counseling service and the placement service into a "career development center". Apparently the combined service provides more effective service for students who would formerly have consulted either one or both of these services.

It is suggested that the counseling center investigate and experiment with the models found in the literature as a step towards further development of their services. Given the current lack of sophistication and knowledge about the effects of counseling, it is extremely important, as Graff and Maclean (1970) emphasize, for counselors and counseling agencies to assume a continual research orientation.

The following recommendations are made:

1. In the extension of career counseling services an emphasis should be placed on reaching freshmen.
2. In labeling the services offered, the term "career counseling" should be used instead of "vocational counseling" to avoid the mistaken connotations often attached to the word "vocational".
3. The current methods of informing the students of the career counseling services available to them should be reevaluated and changed to more effectively publicize these services.
4. The present career counseling services need to be further developed, using information from the literature and survey that has been reported.

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APPENDICES

Appendix AUSU Counseling and Testing Center Vocational
Guidance Research Questionnaire

1. For what vocation are you tentatively aiming: _____

2. Rate the strength of your commitment to this vocation

Just thinking of this as a possibility	1	2	3	4	5	Definitely will be working in this area someday
--	---	---	---	---	---	---

3. List the people that have had a significant influence in your choices
of a vocation (e.g., father, mailman, etc.) _____

4. Other than people what sources of information or other factors have
had an influence on your vocational choice? _____

Appendix B

USU COUNSELING AND TESTING CENTER

CAREER GUIDANCE QUESTIONNAIRE

What is your intended career at present?

How committed are you to this career?

Circle the appropriate number

Just thinking of this as a possibility	1	2	3	4	5	Definitely plan on working in this area
--	---	---	---	---	---	---

Which of the following people have been most influential in your vocational choice?

- a. high school counselor
- b. immediate family
- c. relatives
- d. high school teacher
- e. college professor
- f. college counselor
- g. personal or family friend
- h. other _____

Which of the following factors contributed most to your career choice?

- a. high school or college classes
- b. reading books, magazines, newspapers, etc.
- c. personal interests
- d. a desire to contribute to society
- e. potential earnings in that field
- f. high demand for people in that field
- g. previous work experience
- h. other _____

According to your present knowledge, what sources of help in making a career a choice are available on campus?

Indicate the university resources you have utilized in making your decision and rate their helpfulness.

Source	Useless	Helpfulness					5 very helpful
		1	2	3	4	5	
_____		1	2	3	4	5	
_____		1	2	3	4	5	
_____		1	2	3	4	5	
_____		1	2	3	4	5	

Do you have definite plans to seek vocational counseling?

Yes

No

If no, what turns you off about the idea of you seeking vocational guidance?

Indicate:

Male

Female

freshman

sophomore

junior

senior

graduate

Which college are you in?

- a. Agriculture
- b. Business
- c. Education
- d. Engineering
- e. Family Life
- f. Humanities, Arts and Social Sciences
- g. Natural Resources
- h. Science
- i. General Registration

Appendix CUSU Counseling and Testing Center
Career Guidance Questionnaire

1. What is your intended career at present ? _____
(If you have absolutely no idea, go to #8)
2. How committed are you to this career?
Circle the appropriate number
- | | | | | | | |
|--|---|---|---|---|---|---|
| Just thinking
of this as a
possibility | 1 | 2 | 3 | 4 | 5 | Definitely plan
on working in
this area |
|--|---|---|---|---|---|---|
3. Which of the following people have been most influential in your career choice? (Choose only one.)
- | | |
|--------------------------|------------------------------|
| a. high school counselor | e. college professor |
| b. immediate family | f. college counselor |
| c. relatives | g. personal or family friend |
| d. high school teacher | h. other _____ |
4. Which of the following factors (Other than people) contributed most to your career choice? (Choose only one.)
- | | |
|--------------------------------------|---|
| a. high school or college classes | e. potential earnings in that field |
| b. reading books, magazines, etc. | f. high demand for people in that field |
| c. personal interests | g. previous work experience |
| d. a desire to contribute to society | h. other _____ |
5. According to your present knowledge, what sources of help in making a career choice are available to students in general on this campus?

6. Indicate the university resources you personally have utilized in making your career decision. _____

- After listing those, now rate on the scale below to indicate how helpful they have been for you.
- | | | | | | | |
|---------|---|---|---|---|---|--------------|
| useless | 1 | 2 | 3 | 4 | 5 | very helpful |
|---------|---|---|---|---|---|--------------|
7. How many times have you changed your career choice since coming to college? _____
8. Do you have definite plans to seek career counseling? Yes ___ No ___
9. If no, why not?

10. How many times have you changed your major since coming to college? _____
11. Indicate: Male ___ Female ___ 12. Age _____
13. Indicate: Freshman ___ Sophomore ___ Junior ___ Senior ___ graduate ___ Other ___
14. Which college are you in?
- | | |
|-----------------|---|
| a. Agriculture | f. Humanities, Arts and Social Sciences |
| b. Business | g. Natural Resources |
| c. Education | h. Science |
| d. Engineering | i. General Registration |
| e. Family Life. | |

Appendix DDemographic Documentation

	<u>Sample</u>	<u>Population</u>
Male	63.2%.....	63.2%
Female	36.8%.....	36.8%
Freshmen	16.8%.....	16.4%
Sophomores	24.8%.....	23.8%
Juniors	18.0%.....	17.4%
Seniors	23.8%.....	24.6%
Graduates	16.4%.....	17.8%
Agriculture	5.4%.....	5.6%
Business	11.2%.....	12.0%
Education	17.2%.....	18.5%
Engineering	9.4%.....	9.4%
Family Life	6.2%.....	6.0%
Humanities, Arts and Social Sciences	22.8%.....	23.5%
Natural Resources	11.6%.....	8.3%
Science	11.4%.....	9.7%
General Registration	4.8%.....	6.9%

VITA

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