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RAI, RUKHSANA

A STUDY OF THE CAREER DEVELOPMENT SERVICES PROVIDED TO  
SOPHOMORES AT MICHIGAN STATE UNIVERSITY: STUDENT  
PERCEPTIONS

*Michigan State University*

PH.D.

1979

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A STUDY OF THE CAREER DEVELOPMENT SERVICES PROVIDED  
TO SOPHOMORES AT MICHIGAN STATE UNIVERSITY:  
STUDENT PERCEPTIONS

by

Rukhsana Rai

A DISSERTATION

Submitted to  
Michigan State University  
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for the Degree of

DOCTOR OF PHILOSOPHY

Department of Secondary Education and Curriculum  
Emphasis Field: Career Education

1979

## ABSTRACT

### A STUDY OF THE CAREER DEVELOPMENT SERVICES PROVIDED TO SOPHOMORES AT MICHIGAN STATE UNIVERSITY: STUDENT PERCEPTIONS

By

Rukhsana Rai

The purpose of this study was to examine the perceptions of the sophomores at Michigan State University regarding the university-sponsored Career Development Services. The study sought answers to the following three questions:

- (1) What are the perceptions of the sophomores regarding the importance of university-sponsored Career Development services?
- (2) What are the perceptions of the sophomores regarding the extent of assistance they have received from the existing Career Development services and programs?
- (3) What are the perceptions of the student regarding the assistance that they have received in Career Development from available formal and non-formal sources?

The study surveyed a 10 percent random sample of the 6,372 sophomores enrolled during Spring Term, 1978. The data was collected through a questionnaire developed by the

researcher for this particular study. The questionnaire was divided into four parts. Part I sought demographic information, Part II dealt with importance of certain university-sponsored services. The 22 questions in Part II were parallel to those in Part III which examined the extent of services provided to the sophomores, Part IV listed formal and non-formal sources of help in Career Development.

The general findings of the study indicated that the students considered it "important" or "very important" that the university-sponsored Career Development services assist them in the following areas:

- (1) Information from academic advisors on available career resources, careers related to their major, majors in the college of their choice, assistance in formulating their academic program and in the assessment of their interests. The range of this importance was from 54.7 to 75.6 percent. The extent of the assistance they had received ranged from 32.8 to 22.6 percent.
- (2) The Career Resource Center provide them with information on current job trends, on careers and jobs related to certain majors (range 73 percent to 82.0 percent). Over 50 percent of the sample perceived not getting this information.
- (3) Importance of assistance from the Counseling Center ranged from 61.5 to 73.9 percent and in most cases

fifty percent of the students perceived not having received this assistance.

### General Conclusions

- (1) Generally students consider all the Career Development services identified in this study as "important" or "very important."
- (2) The majority of the students do not perceive the services being provided having helped them in their Career Development.
- (3) It appears that the students are not adequately aware of, or do not know, how to access the available services.

### Recommendations

Based on the findings and the conclusions, the following recommendations are made:

- (1) The University and its administrative units should access the academic advising and the residence advising programs to determine their responsibilities for the Career Development services provided to the students.
- (2) The Career Development units at the University need to examine this data and existing data to provide better service to the students in their Career Development.

- (3) The University should provide credit courses that will help students in career-planning and decision-making.
- (4) The University should develop strategies for the involvement of parents in the students' Career Development process.
- (5) More information on inservice opportunities regarding Career Development should be made available to the academic advisors and the residence advisors.
- (6) Each unit needs to examine its role in providing Career Development services and ways it can work with the existing Career Development services within the University.
- (7) The University should organize a network for the planning, dissemination and coordination of Career Development programs.
- (8) The University should encourage and sponsor additional research on Career Development that would further assess student and faculty concerns regarding Career Development within the University.



To my brother Cas and his  
dear family for all the affectionate  
care they so profusely gave.

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A STUDY OF THE CAREER DEVELOPMENT SERVICES  
PROVIDED TO SOPHOMORES AT  
MICHIGAN STATE UNIVERSITY:  
STUDENT PERCEPTIONS

Chapter One

INTRODUCTION

Higher education now serves a more diverse group of students in terms of age, ability, and interest. The impact of these students on higher education, already great, will be greater over the next twenty years.

The traditional content of higher learning --will continue to be the major interest of millions of students in the future... but for millions of other students, the central purpose of going to college is the expectation of a satisfying career at high pay rather than the enjoyment of scholarly pursuits. (28, p. 42)

Unlike the youthful students of the 1960's, the career minded students of today plan their college programs within the context of job and family responsibilities, social and citizenship obligations, and as participants in a larger society.

These "new" students are leading us away from the custom of considering colleges as enclaves for a protected group of elite young people who were being prepared to become philosopher kings or critics of society. To be a student in this age is "not to be someone apart from

society--it is rather being a part of society, and a productive part." (28, p. 41) The central goal of higher education must be the preparation of the individual for a satisfying life style beyond the college experience. Commitment to one life style over another is a "super decision" according to Alvin Toffler in Future Shock, (78) and this "super decision" becomes all the more important at a time when students are questioning the practical value of higher education. This is the time for transition in higher education--a time for taking bearing for evaluation of trends and conditions, and for seeking new directions. The dichotomy between "academic" and "practical" education can be done away with by introducing career education at the post-secondary level.

#### The Need for Career Education at the University Level

Higher education is one of those institutions that for centuries has been guided by tradition was set aside to meet a societal need, (for example, the establishment of land grant colleges under the Morrill Land Grant Colleges' Act of 1862 for practical higher education in agricultural and mechanical arts) it soon reasserted itself and redirected higher education on to paths of the past... but the basic fact about American society is that it is not tradition directed, liberal-arts-oriented higher education has to be responsive to the needs and demands of present day society. (28, p. 18)

A Bureau of Labor Statistics study (28, p. 51-53) reveals that a college degree is no longer a stepping stone to upper income brackets and preferred jobs, or for that matter, for any job at all. The statistics show that

as far back as 1972 nearly 40 percent of the recent college graduates were employed in jobs having no direct relation to their major field of college study. Among social science majors the figure was 67 percent.

Should we continue to invest billions of dollars annually in an enterprise (higher education) that promises a meager or possibly negative rate of economic return? Are we not compounding the problems of the society by producing millions of disillusioned college graduates who may be underemployed or unemployed? Should we assay the distasteful and highly unpopular alternative of curtailing public investment in higher education?

William J. Micheels (46, p. 153), the former President of the University of Wisconsin, emphasizes the necessity for colleges to get involved in career education.

The career education movement is creating a groundswell of activity at every educational level, perhaps as one reflection of the temper of the times. Higher education cannot remain aloof from these new realities.

#### Why College Level Career Education?

Four-year and two-year undergraduate institutions provide a custodial service for an age group, facilitate the socialization of students into adult society, serve as a screen for certain roles and callings, provide a period of relative tranquility for the youth who are trying to seek and establish their own identities and prepare for some types of specific occupations. But it appears that there

is more to collegiate education than is being provided. Occupational, vocational, and career-oriented curricula in four-year bachelor's degree granting institutions reveal certain commonalities, a reasonable variety of programs, and a number of unresolved issues. Many curricula require students to take so many different courses, resulting in a frenzied life style. Too little thought has been given to relating sequences of course to stages in the developmental patterns of students.

Generally college catalogues and course descriptions have failed to indicate the sort of competencies programs were intended to foster, and have not indicated a rationale to enable the student to select courses congruent with their vocational needs. (44, p. 2)

The central concept that permeates the theme of career education is the notion that education must include academic training and career guidance.

Universities and colleges have a moral obligation to address all issues related to work in a technological culture and provide assistance to students in the form of career education. (44, p. 2)

Career education can be the vehicle to provide relevant instruction, improve career advising, and assist students in making more reasoned career decisions. It is important that education in post-secondary educational institutions should be able to illustrate the relationship between what is taught and the skills needed to survive in the working world.

### Purpose of the Study

The purpose of this study is to examine the university-sponsored career development services at Michigan State University in relation to their importance as perceived by sophomores and the extent to which these services are fulfilling their career development needs.

The study will answer the following questions:

- 1) What are the perceptions of MSU sophomores regarding the importance of university-sponsored career development services and programs?
- 2) What are the perceptions of MSU sophomores regarding the extent of assistance they have received from existing career development services and programs?
- 3) What are the perceptions of MSU sophomores regarding the assistance that they received in career development from available formal and non-formal sources?

### Definition of Terms

#### Career Education

Career education is defined as a total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-oriented society, to integrate these values into their lives in such a way that work becomes possible, meaningful, and satisfying. (41, p. 5)

Career education assists the individual in becoming aware of the relationship between his potentialities, aspirations, values, and how they can mature. (31, p. 65)

### Career Development

Career development is a developmental and continuous process and has no terminating points. It is viewed as a series of experiences, decisions, and interactions which, when taken cumulatively, assist in the formulation of a viable self-concept and provide the means through which that concept can be implemented both vocationally and avocationally.

Career development is viewed as a sequence of planned experiences designed to help students develop self-awareness, career awareness, and career decision-making skills. Career development is a link between abstract learning and the real world of needs and applications.

### Limitations of the Study

The study is limited to the sophomores at Michigan State University who have earned 84 credits and therefore must be ready to declare a major. They are at the decision-making stage in their career development and they are trying to relate their majors to their future career goals.

### Significance of the Study

This study is significant because besides being a part of the reservoir of information on career development, it will contribute to information and research on career education at the post-secondary level.

This study will help in planning career development program models and career development services at the university level.

## Chapter Two

### REVIEW OF RELATED LITERATURE

This chapter of the study gives an extensive review of career education as it appears in educational legislation, theories of career development, research studies, and educational programs. For purposes of this review the chapter has been divided into four parts:

- a) The roots of career education in educational and social reforms, and in legislation.
- b) A brief review of the theories of career development.
- c) A brief review of related research and studies conducted at institutions other than Michigan State University.
- d) A demographic landscape of Michigan State University as an institution, with a review of the various programs, research studies and projects conducted or underway. This review will enable us to see how far the goals and aims of Michigan State University as an institution are reflective of the needs of the students, and how the various services at Michigan State University can make this road from high school through



college and into the world of careers easier to walk on.

### Review of Career Education

Career education is a concept that has attracted a good deal of attention within the last six years.

Born out of both the successes and failures of the schooling process, career education is heralded as having the potential for creating a long-sought turn about in educational programs. (31, p. 62)

All social and educational movements have roots just as nations and persons do. They do not occur in a vacuum nor spring spontaneously from the mind of some visionary. They tend to evolve from and encompass earlier ideas, experiments, and movements which, at a previous historical moment, were directed at problems and issues so fundamental in our society that they tend to reoccur. It appears that career education is not only another stage in the developmental history of vocational education, but has its deep roots in the American educational enterprise. Antecedents of career education can be identified throughout the history of the country in debates among educators, labor leaders and educational critics. The roots of career education could be seen in issues like the practicality of education in fulfilling individual and societal needs.

As powerful and as temporarily cataclysmic as these events seemed, there were other more fundamental changes at work in the society as stimuli for career education.

The democratization of opportunities in education and in work, which was stimulated by the Supreme Court decisions and civil rights legislation of the 1950's. Related to this was a second force which became visible in 1960: information overload (Toffler, 1979, 78) the rapidity of change, shifting values and belief systems, which reflected the growing need to institutionalize career guidance. The third major impetus which the 1960's gave to career education lay with a variety of shifts these had upon segments of the population. It would be inaccurate to assume that the turbulent 1960's represented the total wellspring of career education. Additional review reveals that concepts of career education have historical roots deep in American thought and action and thus a natural sequence of concomitant factors in education. For Goldhammer and Taylor (25, p. 1) the three major sources which have contributed to the evolution of career education as a conceptual framework for American education are:

- I. Statements of the major goals of education enunciated by various groups.
- II. Educational legislation reflecting society's collective intentions in this area.
- III. Accumulation of research findings concerning individual development.

I. Statements of the Major Goals of Education Enunciated by Various Groups

Various commissions and professional groups have from time to time listed "vocation" as one of the primary objectives of education.

1. The Commission on the Reorganization of Secondary Education. "Vocation" was among the seven objectives listed in the 1918 publication by the Commission on Reorganization of Secondary Education entitled, Cardinal Principles of Secondary Education. According to the Commission:

A good citizen earns his living contributes to the general welfare by working, and maintains desirable relationships with fellow workers. (77, p. 91)

2. The Educational Policies' Commission of the National Education Association in 1938 listed "Economic Efficiency" among the four school objectives.

The school should produce an individual who selects his own vocation, understands and lives according to the requirements of his job, improves his working efficiency, and plans his own economic life. (75, p. 91)

3. The Educational Policies Commission of 1944 emphasized the need for developing salable skills among the school youth.

All youth need to develop salable skills and those understandings and attitudes that make the worker an intelligent and productive participant in economic life. To this end, most youth need supervised work experience as well as education in the skills and knowledge of their occupation. (76, p. 225)

4. The Educational Policies Commission of 1961

stressed the development of vocational competence. It stated that the central purpose of education was the development of rational thinking, but also reiterated the school's traditionally accepted obligation to teach the fundamental processes:

More than ever before, and for an ever-increasing proportion of the population, vocational competence requires developed rational capacities. The march of technology and science in the modern society progressively eliminates the positions open to low-level talents. The man able to use only his hands is at a growing disadvantage as compared with the man who can also use his head. Today even the simplest use of hands is coming to require the simultaneous employment of the mind. (74, p. 8)

II. Educational Legislation Reflecting Society's Collective Intentions in this Area

In addition to the statements of various commissions and professional groups, legislative action also contributed to the development of the concept of career education. The Morrill Act of 1862 established the land-grant colleges; according to this act, the federal government "abetted the development of collegiate level education in agriculture and mechanic arts." (8, p. 176)

Four additional acts, ending with the Nelson Amendment in 1907, expanded federal support and the scope of these colleges before legislation for vocational education was considered.

During the period 1906 to 1914, the Congress debated the merits of increased funding for land-grant colleges and of support for secondary vocational instruction. The Smith-Level Bill provided federal aid for extension training of farm people in agriculture and for industrial, agricultural and home economics education. It was during this period (1912) that a speech by Senator Page of Vermont voiced the concern and need for career development. Although it was not explicitly in these terms, it was an exposition of the philosophy behind career development.

The story of vocational education from 1917 to 1960 is closely associated with the provisions of the Smith-Hughes Law and related legislation. The Smith-Hughes Act, which is the National Organic Act for Vocational Education (later supplemented and refined by the George-Dean, George-Reed, George-Ellzey and George-Barden Acts). The National Vocational Education Act of 1963 and its 1968 amendments have all contributed materially to extending and strengthening the concept of career development.

#### Smith-Hughes Act: I

The major purposes of this Act were: (1) the promotion of vocational education; (2) cooperation with the states in the promotion of education in agriculture, trades and industries; (3) cooperation with the states in the preparation of vocational teachers; and (4) regulation of funding for these activities. The Act was a continuous authorization, i.e., it provided for annual appropriations by

the Congress. Funds were available for paying salaries of teachers, supervisors, and directors of vocational programs in agriculture, trades and industries, and home economics subjects. Only a few amendments were made to this bill. The most significant amendment abolished the Federal Board for Vocational Education in 1946.

To receive funds, states had to comply with several provisions of the Act. Each state had to: (1) create or designate a board of not less than three members for vocational education; (2) prepare a state plan, describing programs which would be conducted; (3) make an annual report to the Federal Board of Vocational Education; (4) provide a program, only in public schools, for students 14 years of age or older and of less than baccalaureate grade; (5) provide plant and equipment with state or local funds; and (6) gear programs to occupational entry.

#### George-Reed Act (Public Law 702)

This Act was effective from 1929 to 1934. It:

- (1) provided for further development of vocational agriculture and home economics in states and territories; and
- (2) removed home economics from the trade and industrial service area, making it subject to some features of the appropriations for agriculture.

#### George-Ellzey Act (Public Law 245)

This Act was effective from 1934 to 1937. It made modifications in the regulations affecting home economics,

part-time classes in trades and industries, and funds for attendance at professional meetings.

George-Deen Act (Public Law 673)

This Act was a continuous authorization, effective from fiscal year 1937. It made two major changes in existing regulations: (1) It provided for matching federal funds on a graduated scale. States could begin by matching 50 percent and increase over 10 years to 100 percent of their federal allotment; (2) Distributive education was added as a full partner (except that the authorization level was lower) in the vocational education family.

George-Barden Act (Public Law 586)

This Act amended the George-Deen Act and was continuous from fiscal year 1946. It allowed increased authorization levels and provided for greater flexibility in the administration of state and local programs. It permitted expenditures for salaries of vocational counselors, occupational information and data collection, training and work experience for out-of-school youth, apprentice training, purchase or rental of equipment, purchase of instructional supplies, support of a second youth organization in agriculture, pre-employment schools and classes for school leavers over 18 years of age, and professional travel for staff not previously approved. It limited support for distributive education to part-time and evening courses for employed workers.

George-Barden Act Amendment to Title I, Fishery Training Act

This Act was a continuous authorization from fiscal year 1957. Unlike other vocational education acts, this legislation provided for allotments according to the extent of the fishing industry in a state or territory and for universities and colleges to prepare scientists and technicians needed in commercial fishing.

George-Barden Act Title III, National Defense Education Act

This Act provided for the training of highly skilled technicians for the five-year period 1958-1962. It permitted much of the flexibilities of the original Act for the level of vocational education which is commonly called "technical." It also provided funds for transporting students, or for distribution to students who transported themselves to temporary housing. This Act made the first mention of using guidance funds to maximize retention. It required that state plans: (1) demonstrate need in the employment market for those trained, (2) demonstrate that curricula were developed by specialized analyses, (3) show that background general education was available to students, (4) show that technical courses were of sufficient duration to provide the background necessary to employment, (5) show that classrooms, laboratories, and instructional equipment and supplies would be available, (6) demonstrate that instructors and supervisors would have appropriate technical and professional preparation, and (7) show that



students would be selected on the basis of previous educational and work experience, aptitudes and interests. Programs had to be for technical, as contrasted to manual, occupations. The Act permitted the use of extension courses for employed persons and/or pre-employment trainees for technical or scientific occupations--not skilled trades. Programs were required to have appropriate advisory committees.

#### Area Redevelopment Act (Public Law 87-27)

The purpose of this Act was to alleviate substantial and persistent unemployment and underemployment. It authorized funds from 1961-65. It provided vocational education services and facilities for training and retraining of unemployed and underemployed.

#### Education Amendments of 1972 (Public Law 92-318)

Vocational-technical education was a primary concern of this legislation. Several of the features of the Act bear directly on vocational and career education. The Act established a National Institute of Education to study the educational process. Career education and its delivery system was the early concern of the Institute's research and demonstration system.

### III. Accumulation of Research Findings Concerning Individual Development

Current theories of Career Development began appearing in the literature during the early 1950's. At that time the

occupational choice focus of the first 50 years of career development was beginning to give way to a broader, more comprehensive view of the individual and his occupational development over the life span. Occupational choice was beginning to be seen as a developmental process, and since that time there has been a spate of research on vocational aspects of development. These theories of career development are dealt with in this part of the review of literature.

### Theories of Career Development

The problem of career decision-making has been covered by a variety of theories with an extensive research into an almost infinite number of issues. Theories representing different conceptual frames of reference are presented in this part of the review of literature. The theories are:

- 1) Trait-Factor Theory
- 2) Self-Concept Theory
- 3) Personality Theory
- 4) Psychoanalytic Theory
- 5) Learning Theory
- 6) Needs Theory
- 7) Social Influences Theory
- 8) Developmental Theory

For the purpose of this study the theories are organized somewhat on a pattern developed by Samuel Osipow. (54)

### Trait-Factor Theory

The trait-factor approach was the forerunner of all modern theories of occupational choice and still dictates much of the current practice of vocational guidance. The origin of this approach is traceable to Parson's (55) three step process of: (1) a clear understanding of the self; (2) knowledge of the requirements and conditions of various occupations; (3) "true reasoning" between the two sets of information. In other words, the individual compares his abilities with those demanded by the occupation and agrees on the one he "matches" best.

The trait-factor approach is an example of a theory that has been integrated or assimilated into others. Although most modern writers seem to agree that trait-factor theory is no longer a separate entity, this theory of E. G. Williamson (81, p. 204-205) has provided the basis for the development of many vocational choice theories. The trait-factor approach is probably the oldest organized approach to career development. This system attempts to match up the individual and his ability with the vocational opportunities that are available to him. With this theory there are assumptions made that man seeks to use self-understanding and factual knowledge of his abilities as a means of developing his potential. Williamson's concept represents a system of interdependent traits or factors such as aptitudes, interests, attitudes and temperament. The techniques which a counselor would use in implementing this method would be to:

(1) assess the traits of the individual by use of standardized tests; and (2) define or portray him. The trait-factor theory was the earliest influence on vocational psychology, and the vocational testing movement has grown from the trait-factor approach.

### Self-Concept Theory

An economist, a psychiatrist, a sociologist, and a psychologist collaborated to produce a rationale describing vocational choice which exerted a most profound influence on vocational psychology during the decade following its publication in 1951. The work was the result of an empirical investigation made by Ginzberg, Ginzberg, Axelrad, and Herma (1951) (24). The theoretical formulation was a direct reaction to the absence of elaborate and comprehensive theoretical constructs in vocational psychology.

Ginzberg and his associates perceive the career decision process as a developmental process which encompasses a period of six or seven years and generally more than 10 years. Ginzberg was one of the first theorists to break away from the trait-factor approach and emphasize a developmental viewpoint that suggested that the adolescent decision-making process is related to his own experiences; that is, a person is part of everything he has experienced and, thus, the decision-making process is basically irreversible. Compromise is a basic quality of Ginzberg's theory. This developmental process is characterized by a series of compromises that the individual must make between his wishes

and his possibilities. Occupational choice must be in terms of the values and the goals of the individual. Ginzberg's theory operates on a Freudian model of personality development that identifies specific behavior patterns of adolescent development. Ginzberg believes that emotional problems are an important factor in incongruent vocational choices.

Ginzberg and his associates, on the basis of earlier research, concluded that at least four significant variables are involved in vocational choice. The first of the four was identified as the reality-factor, which causes an individual to respond to the pressures of his environment in making decisions with vocational impact. The second is the influence of the educational process, the kind of education a person has had will limit or facilitate the flexibility and type of vocational choice he makes. The third is the emotional factor involved in the individual's response to his environment, since it seemed on an intuitive basis that personality and emotional factors should have vocational concomitants. Finally, individual values were deemed important in vocational choice.

Four important aspects essential to an adequate occupational choice process are: reality testing; suitable time perspective; the ability to defer gratifications; and the ability to accept and implement compromises in vocational plans. If these traits do not develop adequately, there is doubt that effective emotional adjustment can be accomplished.

This theory evisions three periods or stages within the process: first, 10 to 12 years of age--the fantasy period; second, 12 to 18 years of age--tentative; and third, 19 to 21 years of age--realistic crystalization stage.

### Personality Approach

Holland's (36) theory encompasses the concept of vocational personality types. It is sometimes referred to as the personality approach. It takes into consideration various needs that are inherent within the individual that will lead to careers which are useful in satisfying these needs. Holland has put forth a list of six occupational titles to which a person could relate his preferred life style.

These work classifications are as follows:

1. Realistic - motor-oriented, strength, "acting out" types, concreteness, etc.
2. Intellectual - thinking rather than acting.
3. Social - close interpersonal contact, not physical or intellectual.
4. Conventional - rules, self-discipline, power and status, structure and order.
5. Enterprising - verbally skilled, likes to manipulate, others aspires to power and status.
6. Artistic - self-expression, dislikes structure, asocial, femine.

Individuals are attracted to the work orientation category that most closely represents their own personal orientation. If the first orientation is blocked, the individual will look to his second choice. Holland assumes that aptitude is correlated moderately with personality

variables. He defines a hierarchy level in terms of the individual's intelligence and, thus, one must not only consider which of the six work classifications provides the best fit, but he must also determine at which level within that work classification he will operate. Holland is another theorist who believes that childhood experiences have a great deal to do with influencing the shape of the hierarchy rather than influencing choices after the hierarchy is developed.

### Psychoanalytic Approach

Psychoanalytic conceptions of vocational behavior must be understood within the broader content of psychoanalysis.

The most comprehensive application of psychoanalysis to occupational choice has been made by Bordin, Nachmann, and Segal (1963) (10). The major contribution of Bordin and his associates has been to specify the aspects of work which satisfy various needs.

Another theorist who would be classified as having a psychoanalytic approach to a career choice is Brill. (11) Subconscious motivation and sublimation is intimately involved with his theory. He believes that the problem in career decision-making is multifaceted. Brill feels that vocational counseling based on interest and abilities will not be too useful since most people select jobs as a way of solving their emotional problems. It therefore follows that when the psychological problems of an individual are dissolved he will then be able to resolve his own vocational

selection problems. His major belief is that subconscious motives underlie all behavior, including vocational choice.

The scope of this theory is very limited. Psycho-analytic theorists are careful to say that their theory only applies to individuals who have maximum freedom of choice and to persons who obtain the largest part of their gratification from their work.

### Learning Theory

O'Hara (1968) (53) outlines a theoretical approach which views career development as a learning process. He reasons that changes in vocational behavior are the result of cognitive change. According to O'Hara all vocational learning is a function of motivation.

In order for vocational learning to take place, a proper learning environment is required. The adolescent should be involved in career development with emphasis being given to his interests, aptitudes, and values. The complex nature of career development itself, e.g. vocational life stages, irreversibility and compromise, should be presented to the student in a learning situation in such a way that he can comprehend it. This approach does not detract from the importance of affective and psychomotor learning, but merely recognizes that cognitive material is required to make intelligent occupational decisions.

The essence of O'Hara's theoretical approach is that the career development of students can be facilitated by involving them in various learning situations which have occupational implications.



Another attempt to relate learning theory to vocational behavior is proposed by Miller (1968) (51). His theme is that a learning theory of vocational behavior can contribute to both understanding and development in the area of vocational decisions.

The basic thesis of the learning theory approach is that vocational decisions are based on knowledge of the individual's past history, current stimulus situation and present motivational status.

#### Needs Approach to Career Development

Need theories of occupational choice focus on desires and wants which stimulate individuals to prefer one occupation over another. The most prominent need theory is the one formulated by Roe (1956, 1957, 1964) (58). Her theory contains elements of psychoanalytic, personality and developmental theories. The need structure for Roe is understood in two ways: organization of need and intensity of need. She hypothesizes that early parent-child relationships shape the child's pattern for satisfying his needs, i.e., learning to satisfy his needs largely through interaction with other people, or in activities not involving other people.

The level selected within any given occupational group is influenced by the person's need intensity. Need intensity in turn is composed of such elements as genetic factors and unconscious patterns of behavior. Zaccaria (1970) (82).

Hoppock's (1967) (39) theory is stated in the form of 10 postulates which focus upon occupational choice as a means for satisfying needs. Hoppock's approach stems from the assumption that occupational choice improves as people are better able to identify their own needs and the potential need satisfaction offered by a particular occupation.

### Social Influences and Career Development

Career development is influenced by the environment in which one is raised and to which one is exposed. The basic theoretical premise is that the self-concept and needs pattern are influenced by social factors, and these factors are a dominant force in career development over a life time.

Osipow states that social factor approach

...has as its central point the notion that circumstances beyond the control of the individual contribute significantly to the career choices he makes, and that the principal task confronting the youth (or older person, for that matter) is a development of techniques to cope effectively with his environment. (54, p. 200)

In his book, The Sociology of Work, Caplow (12) writes that parental influence aids in the "inheritance" of an occupational level. He notes that parents, particularly those of the middle class, press their ambitions on their children and expect them to rise socially through education. Those middle class parents reject the idea of unskilled and semi-skilled occupations for their children. Because of these influences, Caplow thinks that children tend to inherit

the occupational level of their parents and choose a vocation within a restricted range of occupations that is acceptable to a given class. Thus, his theory indicates that social class is a predominant factor in influencing career development.

Formal education is also seen by Caplow to be of great importance in career development and attainment. He states that occupational choices are often made when the student is still far from entering the world of work. Choices are often forced on students through school requirements and differentiated curricula, such as academic and terminal programs. Social characteristics also tend to exclude some students, such as lack of wealth, appropriate conduct, and previous education required for certain types of training. Caplow believes that as one acquires more education more vocational opportunities are open. He suggests that school dropouts are usually restricted to manual work or to semi-skilled, unskilled, or service and minor clerical occupations. In summary, Caplow emphasizes that family social status and the individual's education are the two most important determinants of vocational development.

Miller and Form (52) call the "accident of birth" the deciding factor in the determination of the occupations of most workers. This accident establishes family, race, nationality, social class, sex, residential district, and to a great extent educational and cultural opportunity.

Miller and Form are of the view that the following factors affect career patterns before entrance into the job market:

1. Socialization of children in the family.
2. Parents' education and occupation.
3. Selection and participation in part-time jobs before education is completed.
4. The level of education that one attains.

They believe that the process of trial and error within the environmental confines of the person determine his vocational and occupational goals.

Osipow (54) recognizes the importance of social factors. He notes that social environment and cultural organization are important ingredients in career development. He also concludes that social-class membership and sex are important situational determinants in overall social environment. He expands environment to include geographic, climatic, and economic factors.

Other writers and theorists have included social factors in their discussions of vocational development. Shartle (62) states that a child is born into a particular family and community, within which socioeconomic setting the individual develops concepts, values, and attitudes toward work. These change over time, because vocational development is a life-long process rather than a single incident. Shartle mentions that vocational choice is also influenced by requirements of an occupation, educational level, supply

and demand, and physical and mental attributes. He postulates that the values and attitudes of socioeconomic class help to determine the occupational possibilities that are acceptable in a particular social class.

Values derived from one's social class are again emphasized as important by Borow (9) who states that youth develop their social and psychological motives through social learnings from the primary reference group (the family) and from secondary reference groups (such as the school population). He believes that from these experiences, an individual selects, enacts, and appraises possible life roles, which include occupational possibilities. Borow feels that values, affected by social environment, lead to an occupation "considered appropriate." Hoppock (39) seems to be in agreement with Borow in that he theorizes that the social group helps to determine which occupation is socially acceptable and preferable to an individual. He believes that social factors affect occupational choice in that they help to determine the occupations with which a person is familiar by virtue of contacts with family and friends. In one of his earlier writings, Holland (1959) (37) mentioned that influential social factors included the following: peer groups, parents, social class, American culture, schools, and physical environment.

Besides the social factors that influence the career development of the individual, the family also plays an important role as the influencing factor.

Crites (15, p. 230) states:

As the basic social and psychological unit in the transmission of the culture and the development of personality, the family conditions almost all the responses the individual makes early in life and continues to exert control over his behavior into adolescence and sometimes adulthood.

For him family influence upon career development is enormous.

Roe (58) hypothesizes that "varying parental attitudes of acceptance, avoidance and emotional concentration on the child would lead to differing occupational choices." Although Crites (15) and Herr and Cramer (34) do not agree with other factors in the family background, but factors such as socio-economic class, must be included with the family's personal interactions in determining the full influence of the family on the child's self concept and career development.

The various societal factors also serve as role models. Role expectations or occupational stereotypes greatly influence perception of self in an occupational setting. Dipboye and Anderson (18) state:

The perceptions which an adolescent has of the roles played by the members of various occupations have an important influence on his career choice. The perceptions may be thought of as role expectations. When an individual is at some choice point in his career development and he must arrive at some sort of decision, he uses, among other things, ideas and feelings about people who work in the occupations which he is considering. These ideas and feelings include his perceptions or expectations of the occupational role. (p. 296)

### Developmental Approaches

This is the principal approach having the greatest impact on career development theory today. According to Osipow, (54, p. 11) "This approach actually weaves two models into one and can be called either the developmental or the self concept theory." The central theses of this approach are:

1. Individuals develop more clearly defined self concepts as they grow older, although these vary to conform with the changes in one's view of reality as correlated with aging.
2. People develop images of the occupational world which they compare with their self-image in trying to make career decisions.
3. The adequacy of the eventual career decision is based on the similarity between an individual's self concept and the vocational concept of the career he eventually chooses.

Carter (1940) (18) appears to have been the first writer to have stressed a developmental approach to vocational choice in presenting his hypotheses on the formulation of vocational attitudes. Shortly after Carter, Super (1942) (68) began to set forth his ideas on vocational exploration and establishment as life stages. The view that career choice is a life-long process involving a series of related decisions began to expand with the additions of such theorists as Dysinger (1951) (21), Havighurst (1953) (29), and Ginzberg, Ginzberg, Axelrad, and Herma (1951) (24).

Super's (69) first formal theoretical statements appeared in 1953, exploring the role of self concept tenets involved with a developmental theoretical structure. At this early stage of the developmental approach to vocational choice, Super recognized that many of the concepts involved in this approach had not been sufficiently analyzed and operationally defined. Because of this, he and his associates have sought through the Longitudinal Career Pattern Study (1957) (70) and other studies, to clarify the concepts of the developmental approach and make them operational. Super and Bachrach (1957) (70); Super, Crites, Hammel, Moser, Overstreet and Warnath (1957) (71); Super and Overstreet (1960) (72); Super, Starishevsky, Martlin and Jordaan (1963) (73).

One of the main tenets of Super's theory is that vocational development is a process of developing and implementing a self concept. He based part of his theory on life stages as proposed by Charlotte Buehler (52). These stages are: growth stage, 0-14 years; exploratory stage, 15-25 years; maintenance stage, 26-65 years; and decline, 65-99 years. He also proposed vocational development tasks: years crystalization of vocational preference, 14-18 years; specifying a vocational preference, 18-21 years; implementing a vocational preference, 21-24 years; stabilizing in a vocation, 25-35 years; consolidating status and advancing in a vocation, 30+ years.



His theory is constructed from a developmental frame of reference because it suggests that vocational behavior occurs as events in a process that takes place over a period of time. In each stage there are developmental tasks to be mastered. Prerequisite tasks must be mastered before one can go on to more advanced tasks of the more advanced stages. Super feels that children's vocational self concepts develop on the basis of the child's observation of and identification with adults involved in work. Self concept is implemented by means of vocational activities. Career development is evolutionary as is human development. Since self concept is more malleable in the adolescent years, it is suggested that this is the time when they could most benefit from counseling and assistance.

#### Developmental Notion of the Life Stages

Osipow (81) credits Charlotte Buchler for the formulation of stages of life which, in her scheme, included growth, exploration, establishment, maintenance and decline. A number of theorists have used this scheme and elaborated upon it. The stage which has received the most attention is the exploration stage.

Havighurst (1953) (29) called the exploration stage "Acquiring Identity as a Worker in the Occupational Structure." This stage encompasses the years of age 15 to age 25, follows "Acquiring the Basic Habits of Industry," and is followed by a stage called "Becoming a Productive Person."

Miller and Form (1951) (52) treated the stage in approximately the same way as Havighurst. What they called the "Initial" stage follows the "Preparatory" stage and lasts from age 14 to the end of formal education; the theme of the stage, as Miller and Form saw it, is the weakening of dependence on the home. The individual is indoctrinated to the values of responsibility, willingness to work, getting along with people. He acquires social skills relevant to job performance and aspires for a realistic level. After the end of formal education comes the "Final" stage in which permanent selection is settled on and a career orientation developed.

Super and his associates, Super, Critis, Hummel, Moser, Overstreet and Warnath (1957) (71), gave us a bit more to go on by dividing the exploration stage into three sub-stages. For them as for others, this stage covers the years of high school and college. The first stage, called the Tentative Substage, covers the high school years. The college years are included in the Transition Substage, this is followed by the Trial Substage. The framework of the actual exploration is seen to take place during the Tentative Substage, i.e. in the precollege years. During college, the increased importance of "reality considerations" such as being able to afford training, getting admitted to a desired training program, meeting the requirements of the program, etc. is recognized.

An effort to identify, collate and magnify the concepts and assertions of career development theory that pertains specifically to the college years, seemed to be futile because not much research has been done in the area. Even John Holland (1959) (37) whose research leading to his theoretical formulations, was based exclusively on the college years, does not speak about that period of development in theoretical terms.

The closest that one can identify the college years with is the developmental notion of the life stages. It has to be admitted that although the college student is performing the developmental tasks pertaining to a specific life stage, by no means do all of them enter college with adequate career choice. The weight of the argument is career choice must not be viewed in isolation, but rather as part of an ongoing process.

#### Conclusions Derived from the Various Theories

Based on the findings of the theorists discussed in this section of literature, certain heuristic statements can be made regarding the nature of career development.

- (1) Career development is considered to be one aspect of an individual's total development. It is viewed as longitudinal in nature and based on principles of developmental psychology. Vocational behavior develops over time through processes of growth and learning.

- (2) The theories of career development acknowledge a wide range of factors which determine, or at least influence, the process of human development. Career development is integrated to the total fabric of personality development and is the result of the synthesis of many personal, social, and vocational factors as one matures. Herr (33)
- (3) The unfolding of an individual's career development, beginning in early childhood, is seen as relatively continuous and long term, but divided into stages or life periods for purposes of description and presentation. Zaccaria (1970)  
(82)
- (4) Each vocational life stage involves meeting and learning to cope with critical developmental tasks. Many of these developmental tasks center on the acquisition of coping mechanisms and mastery behavior which subsume career-related choices and adjustments. The choices which an individual makes, and the manner in which he enacts the resulting roles, form a life sequence known as his career pattern.
- (5) Vocational behavior and career selection develop from less effective behavior and unrealistic or fantasy choice to more complex behavior and more realistic choosing. Career selection becomes

increasingly reality-oriented and more realistic as one moves toward the choice itself.

Herr (33)

- (6) An individual's striving to arrive at an appropriate vocational goal may be interpreted as a search for a work role that is harmonious with the need structures resulting from the gratification and frustration of early life, as a search for the new ego identity that marks the adolescent stage, or as an attempt to implement an already emerging self-concept.
- (7) Vocational development theories support the existence and casual role of inner tensional states, which, depending on the focus of the theory, are variously described as interests, needs, values, personality characteristics, or life styles.

#### Review of Related Studies/Research

Ewing (1974) (23) conducted a study at Montcalm Community College to identify and examine the relationship among the demographic characteristics of community college students and to investigate the existence of variables which may serve as predictors of growth in career maturity.

The instrument used was the Career Development Inventory College form yielding three scale scores: Planning Orientation, Resources for Exploration, and Information and Decision-making, as well as a total score.

The variables that the study looked into were: age, birth order, college and school grade point average, commitment to curricular choice, curriculum choice, educational goals, father's and mother's education, father's and mother's occupational category, source of funding, high school, etc. The data was subjected to chi square analysis to determine the significant relationship between demographic variables and career maturity scores and growth in career maturity on all subscales and total scores.

The findings of the study indicated:

- (1) On Scale A -- Planning Orientation -- There was a relationship between expressed program choice, level of commitment, parental income, father's education level, and educational goals.
- (2) On Scale B -- Resources for Exploration -- there was a relationship between age and expressed program choice.
- (3) On Scale C -- Information and Decision-making -- there was a relationship between parental income, educational goals, high school subjects best liked, number of people counseled for educational and vocational planning and expressed program choice.

Graves' (1974) (26) study focused on the problem of vocational maturity and career planning by sophomore and junior university students. The research examined three areas:

- (1) To determine if there were differences in the levels of maturity of sophomores and juniors, and also if differences in vocational maturity occur to a significant degree between males and females within the two class levels.
- (2) The possibility that vocational maturity might be a factor causing repeated changes of majors.
- (3) The vocational choice as reflected by choice of college major and the commitment to completing the baccalaureate degree as a function of vocational maturity.

The subjects of the study were first-quarter sophomores and juniors at the University of Northern Colorado.

The 0.5 level of significance was used in this study. The statistical analysis of the data produced the following results:

- (1) There is a significant difference in the vocational maturity of sophomore males and females. Junior females are significantly more mature than junior males.

- (2) There is a significant difference in the vocational maturity of sophomores and juniors. Juniors are significantly more vocationally mature than sophomores.
- (3) Vocational maturity of sophomores who change their majors two or more times is significantly lower than those who make either no changes or make only one change.
- (4) Correlation analysis show at a significant relationship exists with both sophomores and juniors in the level of vocational maturity and degree of certainty about career choice.
- (5) There was a significant correlation between commitment to completing the baccalaureate degree and vocational maturity of both sophomores and juniors.

Comas and Day (14) initiated a course in career exploration in the University of Alabama in the Spring semester of 1975. This course aimed at providing the undergraduates with a comprehensive developmental program of self-exploration, development of decision-making skills, exploration of educational and career possibilities, and contact with the world of work.



The course was started with the following four objectives in mind:

- (1) To identify a group of undergraduate students who expressed interest in emphasizing education and vocational possibilities.
- (2) To provide opportunities to students to become more aware of themselves as personalities in the process of choosing a major area of study and a vocational area of interest.
- (3) The development of decision-making skills that could be applied both immediately and on a continuous basis, using personal and environmental information in educational and occupational choice.
- (4) To provide on-the-job field experiences in areas of specific interest. This involved observation of and participation in work activities in the community and university.

Student evaluations of the course suggested that:

- (1) Students enter the course feeling that they do not receive adequate assistance in career development from either secondary educational institutions or the University of Alabama.

- (2) The expectations of the students were similar to the established objectives of the course.
- (3) The course seemed to meet most of the personal objectives each student was asked to identify on the initial planning questionnaire.
- (4) The self-exploration activity was the most positive and significant contribution of the course.

Hanes, et al (1978) (27) in their study conducted at Purdue University, attempted to measure the level of self-awareness and self-readiness a student had developed in respect to the concept of career planning.

The staff was concerned that many students were unaware of the necessary procedures to be followed to ensure adequate preparation for a career. The evaluation was carried out during the spring academic semester. Data was collected from a survey mailed to a computerized random selection of 33% of the juniors within the nine university colleges. Approximately 1,500 students were selected. A 40% response was considered good. A follow-up mailing was not undertaken. The survey instrument, consisting of 53 items; sought to measure the following: demographic information; job factors; non-job factors; career orientation; awareness; readiness. In addition to these questions, one item solicited the respondents' opinions as to whether or not a "career planning course" would be beneficial. Due to the exploratory nature of the

study, the findings in the opinion of the researchers, should be limited to the students at Purdue University.

The findings of the study revealed:

- (1) A significant difference between the sexes in response to the non-job factors.
- (2) A significant difference by age in response to questions on readiness.
- (3) A marginal significant difference in response to non-job factors by race.
- (4) A significantly higher concern for non-job factors by married than by single respondents.
- (5) Female juniors were most career oriented.
- (6) Female juniors were more interested in a career planning course than males.
- (7) Juniors with professional fathers seemed to be least interested in a career planning course.
- (8) Juniors who had never changed majors, or changed once, were more ready to participate in the job selection process.
- (9) Juniors between the age of 20 and 21 were most interested in a career planning course.

Allen's (1973) (1) study on why college students change their majors asked the following questions:

- (1) The perceptions of the deans and advisors as to why the students change majors at the college level; are those perceptions congruent with the perceptions of the students?
- (2) What the colleges are doing to minimize the changes in majors?
- (3) How many students were satisfied with their majors?
- (4) How many students made changes in their majors?

The questionnaire was mailed to the deans of 36 institutions listed in the 1970 Year Book of Higher Education which met the criteria of enrollment. Students were selected from one public institution, one private, non-denominational and one religiously affiliated institution.

The findings of the study showed that:

- (1) Fifty-five percent of the student population changed their major.
  - a. Thirty-six percent changed once.
  - b. Eleven percent changed twice.
  - c. Eight percent changed more than twice.

The reasons for change of major were:

- (1) Change of interest.
- (2) Had greater success in another field.

- (3) Discovered he had unrealistic goals in terms of ability.
- (4) Felt he had received inadequate counseling.

The study recommended that:

- (1) Students should be encouraged to delay declaring a major until they have had adequate time to explore and to learn more about themselves.
- (2) Students felt that they were not receiving adequate counseling; colleges should therefore develop a program for the training of college advisors in the task of advising students.

Evans and Rector (1978) (22) describe an elective credit course in the University of Southern Illinois designed to assist undergraduates in their career-related decision-making. The course was "Decision-making for Career Development." This course aimed to explore:

- (1) Alternative process of reaching career decisions.
- (2) Alternative academic majors and career choices.
- (3) Self-information, interests, abilities, etc.
- (4) The long term personal consequences of entering alternative academic majors and occupations.

Ninety-freshmen and sophomore students who stipulated being undecided about academic majors, career field or occupation within a career field, were the subjects of this study.

Each student was involved in three basic activities a week:

- (1) Students were given an independent assignment.
- (2) Students met with an instructor in large group meetings.
- (3) Students met with a counselor in smaller group meetings.

As part of the independent assignment the students were required to:

- Complete certain tests.
- Complete the Occupational Preference Checklist.
- Read Future Shock.
- Identify three alternative occupations.
- Identify one academic major.
- Complete a project designed to integrate various pieces of information on decision-making.

Findings of the study suggested that course activities made a positive contribution to the vocational development of students.

- (1) Future Shock helped students in considering the changing nature of the society and occupations.
- (2) The academic major sheet was helpful in clarifying specific academic major requirements.
- (3) Personal contact and group instruction is effective in facilitating career development among college students.

The purpose of Schell's (1977) (61) study was to isolate the difference between the level of assistance in career development as perceived and desired by the students at the State University College at Oswego.

The subjects of this study consisted of 24 students, 12 males and 12 females, evenly divided among freshmen, sophomores, juniors and seniors. These subjects were randomly selected from a large sample of students who responded to a questionnaire presented in conjunction with a Career Fair. Each subject was asked to read 11 statements pertaining to the delivery of career information on the campus of the State University at Oswego. Each subject was asked to respond twice to each item on a 5-point scale, ranging from strong disagreement that the statement "is" or "should be" true = 1, to strong agreement that the statement is or should be true = 5. Each student generated 22 responses, 11 of them indicating the level of services that they believed to be in existence and 11 of them related to the level of services that they believed should exist.

The results suggested that (1) the delivery of career information and counseling is uneven, (2) the discrepancy between the perceived and desired benefits of ED 101/303, the Free program, are not statistically significant, (3) the students irrespective of sex or year in college expect the college to help them in developing and carrying out their career plans.

Weaver (1976) (80) investigated the educational and vocational development and decision-making skills of the

freshmen entering University College of Ohio State University. The sample consisted of 267 students representing all academic programs within University College. The study used work values inventory developed by Super. The Career Assessment Form, developed by Goodson (1970), Carney (1972), and Shepherd (1972) was used to determine educational and vocational decisions.

The study revealed that:

- Freshmen who vary in terms of their curricular academic program, sex and age, tend to have differing work value preferences.
- Students are deficient to varying degrees in terms of their educational and vocational development.
- The data suggested that deficiencies range from pure cognitive to pure affective factors that contribute to educational and career maturity.

Meacci (1972) (45) studied the effects of three career counseling approaches upon a group of college freshmen, considered in this study as "highly uncertain" about their career plans. These three approaches were:

- (a) giving occupational information.
- (b) teaching decision-making skills.
- (c) assisting the counselee in developing an awareness of his own qualities.

A pre-test, post-test experimental design was employed to study these effects. The students that were part of the population were the incoming freshmen on the Beaver Campus of Pennsylvania State University.



The subjects were randomly assigned to one of the four treatment groups. These groups were:

- |           |                                 |
|-----------|---------------------------------|
| Group I   | Comparison                      |
| Group II  | Occupational Information        |
| Group III | Teaching Decision-making Skills |
| Group IV  | Career Process                  |

The investigator came to the following conclusion:

There was no significant difference in the career interest of the "highly uncertain college freshmen" even after counseling.

Shourts (1975) (63) in his study evaluated the Sophomore Career Decision Program at the Jackson State University. The study was designed to achieve the following objectives:

- To describe the current instructional and procedural features of the sophomores' Career Decision Program at Jackson State University.
- To describe similar programs that are reported both in the literature and through correspondence.
- To identify the perceptions of all participants (students, public and faculty) relative to the program.

The major findings of the study revealed that:

- (1) The Career Decision Program was effective in helping students to make tentative career decisions.
- (2) There was statistically no significant difference between the scores of the students on the pre and

post tests of the Minnesota Teacher Attitude Inventory.

- (3) University teachers regarded lack of input from public school teachers as the greatest limitation.
- (4) Sixty percent of the students indicated that participation by public school teachers could probably be improved through university-sponsored workshops for them.

Drummand (1974) (19) in her study explored the importance of personal values as they related to the career concerns of college undergraduates.

The study contrasted two approaches to career exploration for college students. The traditional approach centered on providing occupational information, the experimental approach emphasized work and life style. The sample of the study consisted of 25 undergraduate students enrolled in a two unit, pass/fail elective course during spring semester, 1973, at the University of Southern California. Students were randomly assigned to the two groups, the traditional or experimental.

The instruments administered to the students were the Work Values Inventory (Super, 1969) and a summary section from a University of Southern California Instruction and Course Evaluation which provided participants an opportunity to rate the educational effectiveness of the class. The findings of the study indicated that:

- (1) Both groups felt that they needed more of what the other had.
- (2) Increasing consideration of work as it related to life styles.
- (3) Increasing participant awareness of the process of career information within the wider content of self rather than job per se.

Baird (1968) (7) in his article suggested that indecision among bright students may be due to the capacity to do many things and to the many alternatives that are open to them.

Baird's contention is supported by Hollander (36) who indicates that by age 18, 81 percent of the most able students (those able to survive) have "realistic" occupational choices compared to only 53 percent of those more likely to be academically dismissed from college. In another study of 59,618 college-bound students, the following results were obtained.

Baird came to the conclusion that the undecided are not different in academic aptitudes from other students. It can be noted that nearly 30 percent of his sample fell within the undecided group.

TABLE 1 -- Comparisons of Undecided Students With Other Groups of Students

	Undecided College Applicants	Decided College Applicants
<hr/>		
ACT Composite		
Mean	20.4	20.4
SD	5.1	5.2
High School Grade Point Average		
Mean	2.54	2.63
SD	.70	.70
Goals in Attending College (%)		
Developing Mind	46.9	38.9
Vocational Training	36.2	53.9
Higher Income	9.7	4.9
Other	7.2	5.3
Total Number	13,695	45,923
<hr/>		

Research on Changes in Majors

Sparling (67) reported in 1933 that 65 percent of the students changed their vocation before graduation from college. The main reason for this change was because of the students' failure in the subjects that were the prerequisites for the vocation chosen.

Studies by Rosenberg and Iffert (61) suggest that 50 percent of the students in some majors are likely to change their occupational objectives prior to receiving the bachelor's degree. They found students leaving the fields of mathematics, biology and chemistry more often than those who had entered such fields as engineering and medicine.

In a study by Anderson (3) of the 3,000 entering junior college students, nearly 60 percent changed their vocational goals by the end of their sophomore year. The typical student would be just as satisfied in any one of three or four occupations, and the student should not be unduly concerned if he cannot arrive at a decision during the first two years of college.

In 1961 a study by Davis (16) from a large sample representing many colleges and universities investigated this question, "How much change do we find between the freshman and senior years?" The results of the study suggested that around 50 percent of the students reported career shifts during college.

The fairest conclusion perhaps is that college students maintain a constant orientation toward the professions and white collar jobs, but within this limited part of the world of occupations they show rather high rates of shifting during college. (14, p. 33)

Davis reports that majors like education and business are better able to retain students who initially enrolled in them; whereas the arts, sciences, medicine, and engineering do not. The recruitment of new students to these same fields coincides with the holding power of each. Davis (16, p. 34) hypothesizes that the loss of students from the sciences might represent a reaction to society and to high schools for putting such heavy emphasis on science and technology.

A study by Akenson and Beecher (2) on the Harvard College graduating class of 1965 revealed that 61 percent of the students investigated had "changed their

plans." (2, p. 179) They hypothesized that "the fundamental difference between high school and college curricula is largely responsible for the direction of the change."

(2, p. 179) The high school curriculum has placed emphasis on English, mathematics, history and science, and the latest curriculum changes at the high school level have been in the area of the natural sciences. At the same time the college curriculum offers courses considered more relevant by students, such as, government, social relations, economics, anthropology, architecture, and sciences. The college freshmen register in courses with traditional high school names, then later they select different fields. In addition to this finding, Akenson and Beecher hypothesized that a growing interest in the social service occupations, such as the Peace Corps, accounted for a certain percentage of changes.

Paul Heist (32) of the Center for Research and Development in Higher Education at Berkeley, California, found that the bright, creative students many times left the colleges of their original choice. They particularly left the field of science education for the liberal arts.

Astin and Panos (5) assessed the student's career preference and field of study at the time of entering college and four years later at the expected time of graduation from college. Their data clearly showed that the student's selection of a career at the time he entered college "typically" changed by the time of graduation. Nursing and teaching were found to have the greatest holding power; they managed to hold as many as half the students initially choosing them.

Astin and Panos mentioned: "Although there is no obvious relationship between type of career and degree of stability; but the more popular careers tended to be more stable over time than did the less popular." (5, p. 85-86) Two exceptions to this trend were the career choice of being an engineer and a physician, which suffered heavy losses. The authors did not suggest any reasons for the attrition.

In the same study it was observed that businessman, housewife, and college professor, were the careers that had the largest net gains over a period of time. It is interesting to note that the largest net losses occurred in the three career groupings that were most closely related with mathematics and science; natural scientist, engineer, and physician or dentist. The Astin and Panos study and the Davis study are in agreement with respect to the relative stability of the various careers.

One could infer from the studies of Davis and Astin and Panos that there is a movement from the more difficult fields to the less difficult. Although Astin and Panos would not disagree with this statement, they believe that high academic standards are not the only explanation. They believe that certain rigidities in the curricula may be partly to blame. The careers that register the greatest losses are those that prescribe a large number of specific introductory and prerequisite courses for admission to each higher level of study. By contrast, those careers showing the largest gains of students often accept students without

requiring an elaborate background of related courses. Consequently, while courses in mathematics and sciences do not necessarily handicap the student who wishes to become a lawyer or a businessman, courses other than mathematics or science are of little direct or obvious use to the student who wishes to become an engineer, a doctor, or a scientist. (5, pp. 85-141)

Further, Astin and Panos suggest that changes in major field and career choice were not random or haphazard. The changes occurred most often between related fields; for example, a salesman changing to a business executive and a psychologist to a physician. A student also is more likely to maintain his initial selection of a given career, or to shift from some other selection into that career, if a relatively high percentage of his peers also choose the same career. In Snelling and Boruch's (66) study of science majors, the chairmen of science departments indicate the following as being major causes of transfers of science majors to other fields:

- (1) Lack of mathematical competence.
- (2) Student's general inability to comprehend advanced theories.
- (3) The greater excitement and personal challenge offered by other fields.



Research Studies on Satisfaction with Choice of Major

Rochester and McBride (67) report in their study that many universities demand that their students select a major prior to the end of the first semester of their junior year. The authors also stated that "an examination of college applications indicates that many schools ask for a selected major at the time of entrance." (57, p. 54) These researchers wished to determine whether the students were satisfied with their selection of a major at a later date in their program.

The study was conducted on seniors attending Southern Illinois University, Edwardsville Campus. The sample population consisted of 483 students, 196 males and 277 females. The majority of the students were within the age of 20 to 24.

Ninety-one percent of the students indicated that they were satisfied with the major for which they were registered during their senior year. Seven percent of the seniors indicated dissatisfaction with their major.

The students were also requested to indicate whether they would change their majors if the date of graduation was unaffected, 15 percent replied that they would change their majors.

In response to the question regarding who helped the students in the choice of major, the researchers reported that 38 percent of the students chose their own major and 14 percent of the students were influenced by a college teacher. Only four percent of the student indicated their parents influenced their selection of a major.

Finally, Rochester and McBride asked the students the number of times they changed their major. Fifty-three percent indicated they had changed their majors at least once, 19 percent indicated they had changed their majors at least twice, and 10 percent indicated they had changed their majors three times. (p. 54-60) The percentages these researchers report for number of changes in majors are higher than the percentages reported by other researchers.

Rosenberg in his study of students at Cornell University in the early 1950's came to the following conclusions:

...in those fields requiring extensive specialized training, in which this training is started at the undergraduate level, we find the smallest amount of occupational turnover; in those fields requiring specialized training, in which the official formal training has not started at the undergraduate level but in which some preparation may be underway, the amount of turnover is somewhat higher; and in those fields requiring relatively little specialized training, the amount of turnover is highest. (59, p. 65)

His explanation for this is that the cumulation of specialized courses enhances one's involvement in the field and also produces an investment in energy and time which the individual may be reluctant to discard. (59, p. 65)

Rosenberg also found that people were less inclined to change occupations and majors in college if their occupation choice was in "harmony" with their values. For example, if a person was "people oriented," he would be more likely to stay in teaching than one who was not. (59, p. 78-79)

### Conclusions Derived from the Various Studies

In summary, the studies indicated that there was a significant difference between the maturity of sophomores and juniors. Sophomores who changed their major two or more times were lower in maturity than those who did not change at all or changed once.

Female juniors were more career-oriented and interested in career planning courses than males. Between 50 and 65 percent of the students changed their majors and vocational goals before graduating from college. The difference between high school and college curricula seemed largely responsible for changes in major. The studies suggested that nursing and teaching were two of the more stable career selections, whereas the sciences were the less stable career choices. Ninety-one percent of the students were satisfied with their major upon reaching their senior year.

Most students selected their own major; college teachers had the greatest influence on students' selection of a major followed by high school teachers. The field requiring the highest degree of specialization early in one's college career had the greatest holding power.

### Michigan State University as an Institution

Michigan State University, founded in 1855, was the first Agricultural land-grant college. The initial curriculum concentrated on farm science, but now includes nearly 200 programs of undergraduate studies and 76 areas of graduate studies. The current enrollment at MSU is: 35,645

undergraduate students, 7,005 graduate students and 1,094 professional students. There are 22,976 men and 20,768 women. Single students number 38,213, and the number of married students is 5,531. The statistical breakdown of the student body at MSU is shown in Table 2.

TABLE 2 -- Michigan State University Enrollment Summary

---

Total University	43,744	
New to MSU	11,656	
Readmissions	1,888	
Returns	30,200	
<u>CLASS</u>		
<u>Undergraduates</u>		
Freshman	9,725	
Sophomore	7,767	
Junior	9,145	
Senior	8,427	
Special	580	
Total Undergraduate	35,645	
<u>Graduate</u>		
Master	4,544	
Doctor	2,461	
Total Graduate	7,005	
Graduate Professional	1,094	
<u>Sex</u>		
Women	20,768	
Men	22,976	
<u>Marital Status</u>		
Married	5,531	
Single	38,213	
<u>Geographic Origin</u>		
Ingham County	5,412	
Other Michigan	32,140	
Other States	5,329	This data as of Annual Report 1977-78
Foreign Countries	1,330	

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SOURCE: MSU Enrollment Report, Fall, 1978 and MSU Annual Report, 1977-78. Office of the Registrar, Michigan State University.

NOTE: The enrollment data as of September 27, 1978.

### Aims, Goals and Purposes of Michigan State University

For over a hundred years, Michigan State University has played a significant role of service to the people of Michigan. Throughout this period, the University has been sensitive to the needs of the people and responsive to their problems, and at the same time, has increased in academic quality and effectiveness.

Michigan State University is the land-grant university for the State of Michigan. It was designated in 1863 by the Michigan Legislature to be the beneficiary of the endowment provided by the Morrill Act and supplemented by several acts of the Congress of the United States.

The Morrill Act defines the leading objectives of the land-grant institution as offering academic programs such as "scientific and classical studies.. branches of learning as are related to agriculture and the mechanic arts... in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." (47) (Appendix A-1)

The statement, "several pursuits and professions in life," as given in the Morrill Act, was interpreted as preparation, not only for agriculture, but also for medicine, teaching, law, journalism, engineering, business administration, and other specialties.

As a land-grant institution, MSU is committed to:

- (1) Strong professional and vocational education firmly based on the liberal arts and basic sciences.

- (2) Transmittal of new knowledge as quickly, effectively, and efficiently as possible to the people of Michigan for their use in improving their lives and surroundings.
- (3) Application of new knowledge to the solution of problems and enhancement of the general qualities of life.
- (4) Provision of wide access to higher education to qualified persons, regardless of race, creed, economic circumstances, sex, or age.
- (5) Diffusion through all media, the knowledge and information that will contribute to the well-being and development of the people of the state, the nation, and the world.
- (6) Response to the ever-increasing needs of a dynamic and complex society, by developing and carrying on programs of public service. (47, p. 6)

In its efforts to attain its aims, goals, and purposes, Michigan State University offers a wide variety of programs. Besides the approved programs of study, there are, "numerous options or variations within programs whereby individual student needs are met." (47) (Appendix A, p. 3)

The various services and the programs that have been established at Michigan State University are reviewed under three sections:

- (a) Services at Michigan State University to assist students in Career Planning and Career Development.

(b) Review of research and studies undertaken by faculty and students relating to the use of these services and programs.

(c) Programs and courses connected with career planning.

(a) Services at Michigan State University to Assist Students in Career Planning and Career Development

Placement Services (49, p. 51) -- Serves graduates seeking jobs in business, industry and government, as well as the teaching profession. Also included in its services are assistance to undergraduates seeking part-time and summer employment and an alumni placement system. Extensive work also is done with students concerning career-related employment opportunities for different majors. Staff members also provide information on career planning. Annually several hundred presentations are made by Placement Services' staff to student groups on aspects of the job campaign.

Counseling Center (49, p. 59) -- The services of the Counseling Center are available at no charge to all MSU students. The Counseling Center offers individual and group counseling for assistance with a wide range of student concerns, including career development planning, personal-social adjustment, and emotional problems. Complete testing services are available and career information materials are maintained. Counseling Center branch offices are located at several points on the campus.

Most of the counseling provided is group counseling, and individual counseling is very rare. Counseling one to 25 persons is considered individual counseling. Some of the data available from the Counseling Center is reported in Table 3.

TABLE 3 -- Breakdown of Students According to Class (percentages)

Class	Counseling Center	Brody	Fee	Olin	Wonders
Matriculates		2			41
Freshmen	13	28	31	13.5	36
Sophomores	20	27	29	12	15.5
Juniors	21	16	17.5	19	5.5
Seniors	19	13	8	20	3
Grads	19	7	14	19.5	
Others (Parents, etc.)	8	6		16	

Total number of students who were given counseling: 5,393

Administrative 1,066 - 20%

Educ. Voc. 1,574 - 29%

Personal/Social 2,753 - 51%

Career Counseling (1976-77) 297 persons

Career Counseling (1977-78) est. 186 persons

Of the 5,393 persons who visited any of the counseling centers, women comprised 56 percent of the total (3,020).

It was estimated that the ratio between men and women would rise next year. The ratio for the last two years was:



1975 - 76	Men 44%	Women 56%
1976 - 77	Men 44%	Women 56%
1977 - 78	Men 44%	Women 57%

Career Resource Center (49, p. 59) -- The Michigan State University Career Resource Center is an educational opportunity center where individuals can go to find tools to use for self-assessment, information on occupations and the educational programs required for preparing them for their career objectives.

Program and liaison activities designed to relate career information to academic affairs have top priority in the Career Resource Center.

Smith (1978) (64) conducted a survey with students who used the Career Resource Center. Her sample consisted of 2,565 students in a 16-week period in 1976-77 and 648 students in a seven-week period in 1978. A total of 1,503 useable questionnaires was obtained. Her results indicated that females showed slightly more interest in using the Career Resource Center than males. Forty-seven percent of the total number of students surveyed were concerned about job market trends and job possibilities. Forty-percent of the 1,503 students using the Career Resource Center were undecided about their choice of major and 34 percent needed assistance in career planning efforts. Some of the other reasons for the students using the Career Resource Center were to identify personal interests and aptitudes, 20.8 percent; 13.3 percent needed to talk to someone about career planning.

Office of Volunteer Programs (49) -- The Office of Volunteer Programs provides an educational experience for the student while meeting established community needs. The office staff works closely with community agencies helping them to orient, assign, train and supervise the student volunteer. Forty major programs and over 100 request book opportunities are available. Information on national volunteer programs, such as VISTA and Peace Corps, is also available.

Information was supplied by the Director of the program, Jane S. Smith (65), on the use of the service. This information was based on the results of the questionnaire distributed to all students making use of the service. A total of 2,445 questionnaires were distributed and the returns were 1,013 which was 41.4 percent. Some of the highlights of the results indicated that 45.5 percent of the students were able to affirm their previous career choices. Thirty-eight percent were able to affirm major selection, 20.3 percent felt that this experience helped them in identifying courses useful to their careers. Fifty percent of the students felt that this experience was extremely valuable in gaining first hand exposure to work environment and personnel.

The survey also indicated that the volunteers were from all the colleges. The sources through which the student became aware of the program were State News, 22.9 percent; 29.2 percent knew from friends; 11 percent were recommended by their advisors. Fourteen and eight-tenths percent students indicated that volunteer experience was a course

requirement or option, 11.4 percent indicated that it was required for admission into a major.

#### Review of Research Studies Conducted at MSU

Of all the services available to the students at MSU, academic advising is one formal service every student goes through. In 1959, The Committee on the Future of MSU, described the functions of the academic advisors - which ran somewhat like this:

- (a) An understanding of the goals of the university.
- (b) Understanding of the student and enough information about him to see if social and emotional factors are not in conflict with his educational goals.
- (c) To make students aware of available resources and make effective referral whenever needed.

A few studies have been conducted at MSU to see the effectiveness of this service.

Vener and Krupka (1979) (79) in their paper discuss the problems of the "new" college student. The "new" student, unlike the student of the 1960s, is not in the college for sheer enjoyment of seeking knowledge and for a professional career, but has a different motivation and interest and an occupational goal. Career education becomes a necessity at the university level, if the needs of these "new" students are to be met. According to Vener and Krupka these needs can be met through better academic advising and career counseling.

The case under study is the advisement at Michigan State University. Since the problems of students at MSU are not unique, the findings and recommendations can be generalized to other colleges and universities. The pattern of advisement at MSU was studied through interviews with 36 key academic advising/career counseling network personnel. These included deans of all colleges, directors of advisement centers, the directors of the Counseling Center, the Placement Bureau, the Career Resource Center, and a number of chairpersons and their assistants.

The issues that emerged from these interviews were:

- (1) There was inadequate commitment to advising because it was not adequately recognized and rewarded.
- (2) Lack of coordinated network of academic advising.
- (3) Insufficient flow of information.
- (4) Certain concerns were voiced over issues like whether career advising/career counseling carry academic credit, and at what level should these courses be offered, and if they should be designed for special students.

On the basis of these concerns and existing inadequacies in the advising procedure, the following recommendations were made:

- (1) Academic advising should be adequately recognized and rewarded with reduction in teaching load, awards, promotions and tenure.
- (2) Establishment of a maximal advisor-advisee ration.

- (3) A position of a coordinator of academic advising/ career counseling be established.

It was also recommended that academic credit should be given for courses concerning career planning and these should be offered at freshmen level. It was decided that the courses should be offered at the college rather than the departmental level. They should not be designed for special groups of students.

DeLisle (1965) (17) conducted a study on undergraduate academic advising. This study was the result of interviews conducted with the faculty members from each of the colleges. Furthermore, three additional faculty members and three students were interviewed for their reactions to the innovations and experiments in progress in their respective colleges.

The aim behind the interviews was to elicit their ideas regarding the responsibility of the faculty academic advisors, how academic advising should be carried on. A questionnaire was distributed to 6,127 undergraduates. For purposes of results 5,440 questionnaires were used.

The findings of the study indicated that there was satisfaction on the part of the students, wherever the size of the college permitted a close student faculty relationship.

Krupka and Vener (41) point out the dire need to make the student aware of the existing resources and services around them. They came to this conclusion on the basis of interviews with students at Michigan State University.

According to them, 75-80 percent of entering freshmen have already declared a major; however, about 75 percent of these students will eventually change their original major before they graduate.

Krupka and Vener (41) support the category of students called the "no preference" because it decreases the anguish of premature decisions, which are later on changed keeping in view either personal interests or expectations of the job market.

"The 'no preference' category acts as a moratorium whereby students can put off premature decisions and use this time to find out more about themselves." (41) (6)  
In principle, they support the "no preference" system with the following modifications:

- (1) All incoming students should be enrolled in the "no preference" category.
- (2) General academic advisors should also be trained in career counseling.
- (3) Other career education resources, such as placement bureaus and career resource centers, should be adequately staffed and publicized early in the undergraduate college experience.
- (4) Career education credited courses should be developed.

They contend that there is a great need to expand the programs related to careers and their recommendations concur with those of Heilman (1977) (30).

- (1) Establish courses and workshops specifically related to career development.
- (2) Organize and expand career resource centers.
- (3) Develop materials that can be infused into subject matter courses.
- (4) Plan and implement professional development programs for improving post-secondary staff competencies to present career education within subject matter courses.
- (5) Establish programs to ensure that teachers, counselors, and administrators enrolled in teacher education institutions have career development competencies.

Lorimer (42) in her study of No-Preference First Time Freshman observed that "no preference" was a convenient classification for some certain kinds of students. Her study was concentrating on 1,299 first-time freshmen who were no-preference and constituted 27.4 percent of the total enrollment of students on the campus of Michigan State University. Because of the increase in the number of no-preference, the number of students decreased in designated majors. The data on these students was obtained from the Registrar's Office, the Admissions Office, the Office of Evaluation and Research, the Assistant Dean of University College and the Counseling clinics set up in summer. Forty students, 20 men and 20 women (from the no-preference category) were chosen at random and interviewed by phone.

The increase in the number of no-preference can be attributed to various reasons based on the responses of these students:

- (a) No-preference is a convenient kind of classification for several kinds of persons: those who want more time to decide between strong interests, and those who must first take remedial work.
- (b) This category of students includes one group who have really chosen a major, pre-law.
- (c) This classification, according to the students, offered distinct advantage to them.
- (d) Some students had stayed with no-preference or had changed to no-preference during the Counseling Center clinics. The Counseling clinics do not much approve of sudden changes either way because the changes are costly to the university and because the changes may be based on impressions which are not valid.
- (e) The Dean's Office, University College, suggested that the reason that students had chosen no-preference were:
  - (1) Some opportunity for exploration before entering the rigid curricula prescribed by some colleges.



- (2) The personal attention given to no-preference students.
- (3) Possible reaction to the group advising used in certain departments and colleges.

Rai (1978) (56) in a pilot study conducted as part of a class project, interviewed 37 students. Sixty-two percent of the students in the sample were freshmen. Twenty-one students were enrolled in a Career Planning and Academic Programming course. The others had not been in this course and had not taken it. The study aimed at finding out the reasons for their being in college, why they selected Michigan State University, if they were aware of the career development services at MSU, and if they had selected a major.

The reasons for being in college were:

- (a) Getting away from home.
- (b) Get a good job and earn more money.
- (c) To get a good education.

These reasons were similar to Astin's (6) study done on a national sample. His study indicated that 9.1 percent of the students were in college to get away from home, 53.8 percent wanted to earn more money.

Reasons for selecting Michigan State University as a school were diversity of programs, familiarity with campus, relatives had attended it, good academic reputation. In the national sample of Astin's study (6), 43.1 percent students had selected a particular university for its academic reputation. Twenty-seven percent of the students

in the pilot study had selected a major and the same 27 percent were aware of the career connected with their major. This study was conducted in order to see the right population for the doctoral study to be conducted later. It was decided that the freshmen had not been at the university long enough to have received assistance or to have explored the university-sponsored career development service.

Duly (1978) (20) surveyed the various programs in field experience at Michigan State University. He carried this survey in collaboration with the Council for the Advancement of Experiential Learning. The survey interview schedule was based on the CAEL questionnaire, "Inventory of Current Practices in Sponsored Experiential Learning." Of the 172 existing field experience programs at Michigan State University, 106 were included in the survey. The program at the colleges of Human and Osteopathic Medicine and the School of Nursing were not included in the survey because these programs are essentially a part of the student's curriculum.

Of the 172 programs offered at Michigan State University, 103 of them are for undergraduates and 69 are for graduate level. Table 4 gives a summary of the programs in field experience education at Michigan State University. The survey was conducted through interviews. Eighty-nine of the faculty offering the 172 programs which met the definitional criteria were interviewed and 17 others, who were unavailable during the time of the interview, were given the CAEL questionnaire.

TABLE 4 -- Summary of the Programs in Field  
Experience Education (20, 4)

Types of Program	Percent of Undergraduate	Percent of Graduate
Pre-Professional	56%	57%
Research Projects	18%	23%
Career Exploration	10%	3%
Career Development	9%	9%
Public Service	4%	3%
Cooperative Education	1%	0%
Cross Cultural	1%	3%

The faculty were asked to indicate the theoretical framework, the educational goals and the order of importance assigned to these programs. The most important goal in both the undergraduate and graduate programs was, "to put theory into practice." The other goal that received a significant top priority ranking was "to acquire and develop specific skills." Citizenship education and career exploration, although the outcomes of this field education were ranked significantly low.

The faculty who were teaching or were involved in these programs voiced certain concerns. They felt that these programs received inadequate financial support. They also felt that their work was not given equal importance nor regarded as worthwhile for administrative decisions like promotions, tenure, raises, etc. They emphasized a better linkage between the programs and the Volunteer Bureau.

Hill and Rai (1979) (35) in their study on University College advising have analyzed the advising from Fall 1976-Spring 1978.

The report presents most of the data in for the form of tables and reports, some of the significant results were:

- (1) Higher percentages of conferences with students who had already selected majors than with those who were no-preference.
  - (2) As far as the primary services were concerned, greater amount of time was being spent on career/major discussion.
  - (3) Of all the services listed by University College, change of majors ranked second in spring terms and third in all other terms.
  - (4) Discussion on career/major was by far the predominant additional service in all terms.
  - (5) For freshmen and for sophomores one of the reasons they saw the advising faculty was for change of major.
- (c) Programs Related to Career Development at Michigan State University

An undergraduate at Michigan State University has the option of choosing a major field of study from among nearly 200 programs. Some of these programs and courses offer field experiences in the form of internships, while others may

help a student in deciding a major or future careers. A brief description of the programs at Michigan State University that cater to these specific needs are given in the following pages.

#### Field Experience Program at James Madison College

The Field Experience Internship Program is a degree requirement at James Madison College. All Madison students are required to enroll in MC 390: Field Experience, sometime during the junior or senior year.

The students are expected to spend one term interning in a full-time position that is related to their academic program and especially designed to complement their career goals. It is stressed that since MC 390: Field Experience, is a full-time position, students are not permitted to enroll in other courses during the term of internship.

#### The College of Engineering Cooperative Program at Michigan State University (48)

The Engineering Cooperative education plan at Michigan State University extends the usual four-year program by one year. The entire freshman and senior years are spent on campus, with the three intervening years divided between experience and study, alternating on either six month or quarterly basis. An unusual feature of the program is the wide variety of employment schedules available. It is possible to hire two students on alternating schedules so that one is always available for work, allowing them to fill

a single position year around. Other schedules are tailored to the seasonal peak manpower needs of certain industries.

The Engineering Cooperative Program is optional so that only those students who want employment experience enroll in the program. No academic credit is given for participation and cooperative students must fulfill the same graduation requirements as others.

According to the statistics supplied by the College, the cooperative students as of March 1979 were:

Cooperative Education Students - Placed	129
Cooperative Education Students Available	62
Cooperative Education Students Provisional	28
	<hr/>
Total number of Students in Cooperative Education	219

The primary purpose for participating in cooperative education is to learn engineering skills through practice. In the working environment a student encounters problems and tasks related to systems, processes, and materials that are not available in the classroom. Experiential education permits theory to be put into practice and demonstrates the relevance of classroom topics.

The second benefit of cooperative education is learning about careers. While doing technical work in the company of professional engineers, students are sampling the challenges and demands of engineering and observing the responsibilities and career options they will face after graduation. Cooperative has a monetary benefit, too, because the Co-op

student is paid the salary that a permanent employee would get for the same work, but the Co-op employment does not constitute a basis for claiming unemployment compensation.

College of Urban Development - Experiential Education Program (50)

The Experiential Education programs are designed to provide the students with the opportunity to apply and integrate their academic training to real world situations and to explore learning experiences that are not available in the traditional classroom setting. This kind of education provides community agencies and organizations with short term trained personnel who bring to the agency the objectivity of an outsider and the acquired knowledge of three or four years of college preparation.

The College of Urban Development has adopted the service learning concept into the Experiential Education Program. These field experiences take the form of:

- An agency internship, focusing on career exploration.
- A social/political action experience, whereby students may explore-extra institutional alternatives to social change through working with grass roots, or political campaigns.
- Cross-cultural experience, emphasizing the independent investigation of unfamiliar racial, ethnic, as socio-economic cultures.
- Community Based Field Research, oriented towards supervised research into existing community problems.

The Experiential Education Program uses management by objective techniques, and the student is responsible for seeing that the contract is written in objective form. This contract is important because it provides the means of evaluating the internship. The primary responsibility for the internship is with the student. Students are expected to conduct themselves as employees of the organization, to meet all deadlines for assignments and to maintain good communication with their supervisors.

#### College of Agriculture and Natural Resources

During the last six years, the College of Agriculture and Natural Resources has been able to provide the faculty and students with insights into issues of economic, social and political nature as they relate to the community.

Since the needs of the students and the trends in enrollment have changes (50 percent of the students enrolled in this college are women), the college has put forth a model for career preparedness.

It has been proposed in this model that the faculty of the college should work closely with the University Counseling Center. The college will also have a placement coordinator who will work in conjunction with the Placement Services. It has also been proposed that all incoming students should be administered the Meijer Briggs Personality Test. Incoming no-preference students will be administered the Holland Self-Inventory Survey. The students will bring the results of their surveys to their academic advisors and they will work



together in the selection of courses which would give the student the opportunity to investigate academic areas which relate to his/her chosen professional interest.

In coordination with the members of the Counseling Center, the college plans to put forth an intensive life planning workshop. This four-hour workshop will help the student in determining who he is now and what needs to be done to reach his job and lifelong career objectives.

It is also proposed that when businessmen come on campus they will be interviewed to discuss careers relating to their particular area of industry. These interviews will be videotaped and saved as career models for counseling with students on campus.

#### Lifelong Education Resources Network

The Lifelong Education Resources Network, located in Kellogg Center, directed by Dr. Mildred Erickson, serves as a contact point for older women and men who have been out of the work force or formal education. These individuals would like to help in making decisions concerning their future. Through self-assessment, relating their skills and interests to available educational and job opportunities, the older student develops the perception that he/she is capable of achievement in education and job settings.

Individuals that contact Lifelong Education Resources Network received up-to-date information on all phases of the University. Through referrals they can access individuals or agencies, which may include assistant deans, department

heads, advisers, counselors, admissions and financial aids officers, and others with specific expertise; agencies may include the Learning Resources Center, the Career Resources Center, the Financial Aids Office, Women's Resource Center, Cooperative Extension's DEAL Program, the Library, Office of Volunteer (Office of Service Learning), Placement Services, Supportive Services, and additional agencies appropriate to the individual's needs. Whether the referral is made to an individual or an agency the client usually leaves with an appointment and written information for steps to take in the future.

## Chapter Three

### PROCEDURES

Chapter three presents the methods and procedures used to answer the questions raised in Chapter One. The chapter is devoted to a discussion of the population and the sample of the study, the research instrument, data collecting procedures, and the methods used in analyzing the data.

#### Population and Sample

The study comprised of 10 percent of the modified random sample of the sophomores enrolled at Michigan State University in Spring term of 1979.

With the permission from Dr. Dressel of the Office of Institutional Research (Appendix A), a list of all the sophomores with the current addresses was obtained from the Office of the Registrar. The sample was selected by taking every 10th student on the list. A total of 640 questionnaires were mailed out. Four hundred sixty-five were sent to students living on campus and 165 were mailed to students living off-campus. The questionnaires were coded for purposes of follow-up. The questionnaires sent to the students living on-campus were coded from 0-0465 and the students living off-campus had code numbers from 1-175.

### Description of the Instrument

The instrument used in this study was developed by the researcher for this particular study. (Appendix B) The instrument is divided into four parts and contains 65 items. The distribution of items in the various parts is shown in Table 5.

TABLE 5 -- Showing the Distribution of Items in the Instrument

Part	Content	Items
Part I	Demographic data	12
Part II	Importance of career development services	22
Part III	Extent of assistance from the various career development services	22
Part IV	Sources of help in career plans	9

Part I of the questionnaire sought personal and demographic data: age, sex, marital status, parents' occupation, and means of financial assistance in their college education, their current grade point average, the number of terms enrolled at Michigan State University, and the number of credits earned to date. Also included were items dealing with their major, if they had been enrolled in other majors, the degree of certainty in their selected major, and the certainty of an occupational choice.

Part II of the instrument related to a variety of possible career development needs that students may desire

for more effective career development. This part of the instrument had 22 items. The students were asked to indicate the degree of importance of a particular need relating to career development. The degree of importance was indicated on a five point scale:

- 1 - not important
- 2 - slightly important
- 3 - somewhat important
- 4 - important
- 5 - very important

Example from Part II

How important is it:

1. That the academic advisors inform you about the career information sources that are available in the university?

Part III of the instrument related to the extent of assistance the students had received regarding their statement of need. This part of the questionnaire also contained 22 items. These statements were the same as in Part II. The extent of assistance was measured on a five point scale also:

- 1 - not at all
- 2 - a little
- 3 - moderate
- 4 - high
- 5 - very high

Example from Part III

To what extent:

1. Has your academic advisor informed you about the career information sources that are available in the university?

The difference in the format is that Part II measures "importance" or "what should be" and Part III measures "extent" or "what is."

Part IV of the questionnaire listed nine formal and informal sources which could help students in their career development. The students were asked to respond "to what degree were the services helpful to them." The degree of helpfulness was measured on a five point scale:

- 1 - never used
- 2 - useless
- 3 - slightly helpful
- 4 - somewhat helpful
- 5 - very helpful

This part of the questionnaire was developed in order to include certain informal sources, such as parents, friends and unlisted others as well as formal sources, including subject matter courses, career planning courses, Academic Advisors, the Counseling Center, Career Resource Center, and Residence Advisors.

### Data Collection Procedures

Six hundred and forty questionnaires were mailed to the students during spring term of 1978. No self-addressed envelopes were enclosed because the design of the instrument was such that it need not be put in an envelope for returning it. The last page of the instrument had mailing instructions. (Appendix B) A brief letter on the opening page of the questionnaire indicated the intent and purpose of the study. Two weeks after the initial mailing, a telephone follow-up was conducted of fifty non-respondents in order to encourage them in filling out the questionnaire and return it to the researcher.

By the end of the term, 163 (25.8%) usable questionnaires had been returned. No questionnaire had to be eliminated for inadequate information.

The data from the questionnaires were transferred by the researcher on IBM sheet 07928 - MSU - 05 - 100. These data were key punched on IBM cards by the Scoring Office at Michigan State University.

### Analysis of Data

The data for the study were analyzed in statistical terms by using the SPSS Method of data analysis.

The data is reported in frequencies, means, and mean differences, and standard deviations. Correlations were also calculated and these are reported in Appendix C.

The items in Part II and Part III of the questionnaire were placed into five categories. Part II of the

questionnaire reports the percentages of importance and Part III reports the percentage in extent. Part IV of the questionnaire gives the percentage in terms of the helpfulness of formal and informal sources.



## Chapter Four

### RESEARCH FINDINGS

The purpose of this study was to examine the university-sponsored career development services at Michigan State University as perceived by sophomores and to determine the extent to which these services were fulfilling their career development needs.

The study was conducted on 10 percent of the modified random sample of the 6,372 sophomores enrolled during Spring Term 1978. Table 6 describes the sample and the returns.

TABLE 6 -- Description of Sample

Total Mailed	640
Total Returns	165
Number included in the data	163*
Returned for inadequate address	8
Returned unfilled by students	2

\*Two questionnaires were returned late and could not be included in the analysis of the data

The data have been reported in parts. Part I of the study deals with the demographic statistics of the sample. Part II reports the importance of certain university-sponsored

services in career planning. Part III deals with the extent to which the services have helped them in their career plans, and Part IV describes the sources of help in their career and academic plans.

### Part I - Demographics of the Sample

Part I of the questionnaire aimed at getting a profile of the respondents of the study, the major they are enrolled in, the certainty of the choice of a major, certainty of their anticipated occupation and their grade point average.

Table 7 gives a statistical profile of the respondents of the study.

TABLE 7 -- Statistical Profile of the Respondents

Total Number of Respondents	163
Male	69
Female	94
Average Age of the Respondents	20
Single	161
Married	2
Average terms spent on campus	5.65

Table 8 and Figure 1 show the distribution of the students according to their major.

TABLE 8 -- Distribution of Students According to Major

College	N = 163*	Percent
University College (No Preference)	13	18.1
Agriculture and Natural Resources	11	6.9
Arts and Letters	8	5.9
College of Business	39	24.5
College of Communication Arts	10	6.2
College of Education	10	6.2
College of Engineering	15	9.4
College of Human Ecology	13	8.1
College of Human Medicine	9	5.7
James Madison College	2	1.3
Justin Morrill College	1	.6
Lyman Briggs College	5	3.1
College of Natural Science	12	7.5
College of Social Science	9	5.7
College of Veterinary Medicine	3	1.9

\*Four of the respondents did not indicate their major.

The distribution of the students according to the majors indicated that the majors the students had selected were in keeping with the enrollment trends within the university.

It appeared from the responses to the item "How sure are you that your present major is the 'right' one?", that 70.1 percent were either "certain" or "absolutely certain" that they were in the right major.

Figure 1: Distribution of Students According to Their Majors.

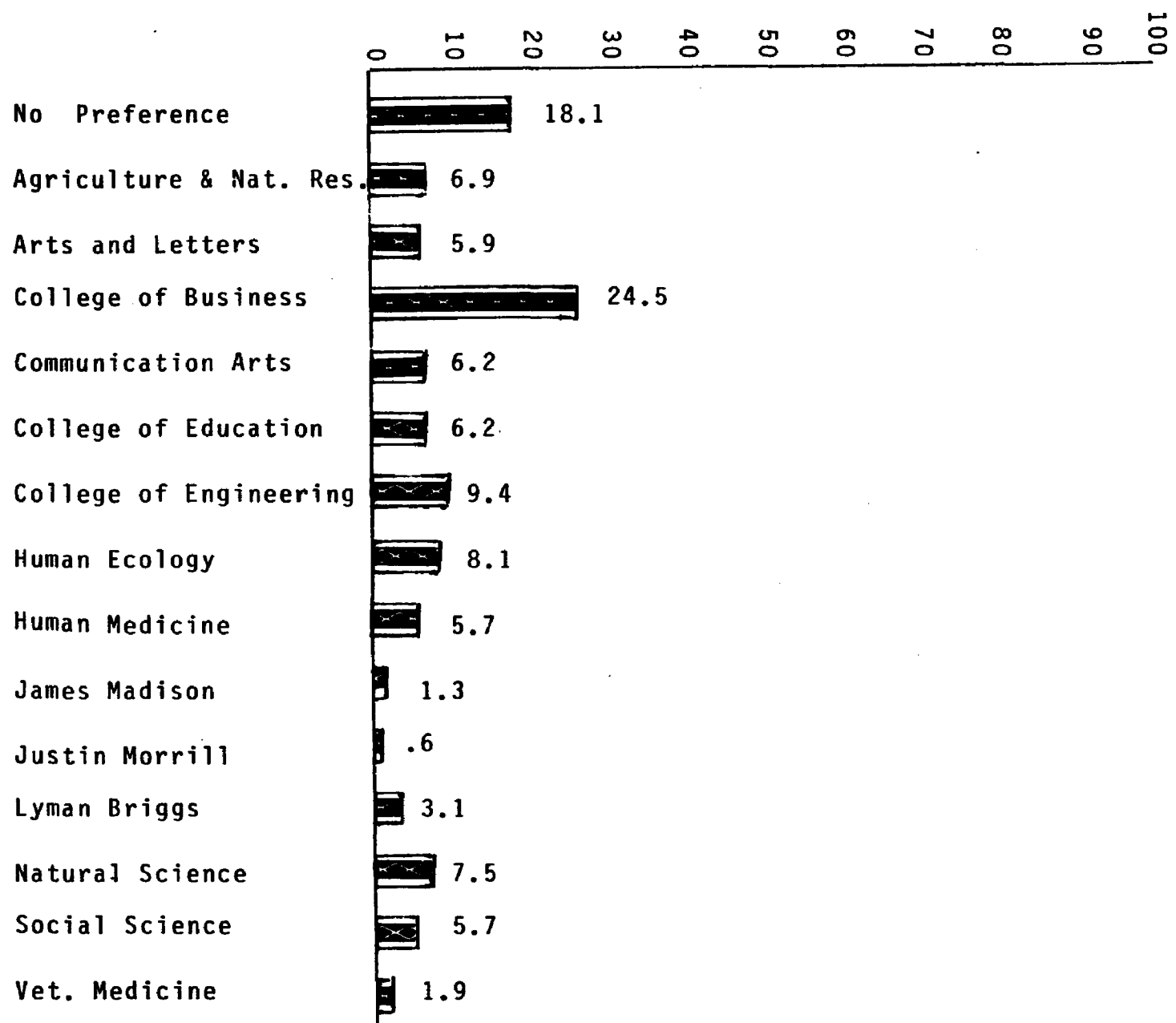


TABLE 9 -- Response to the Item: "How Sure Are You That Your Present Major is the Right One?"

Response	Percent
It is the Wrong Major	7.4
Very Uncertain	5.5
Uncertain	16.7
Certain	47.2
Absolutely Certain	22.9

Table 10 gives the responses of the students to the item regarding their occupational choice.

TABLE 10 -- Response to the Item: "How Certain Are You That This Occupation is the Right One For You?"

Response	Percent
Not Sure	8.5
Somewhat Sure	20.2
Sure	19.0
Very Sure	34.4
Absolutely Sure	11.7

Table 11 shows that 70.1 students were "certain" or "absolutely certain" that they were in the right major, on the other hand, 46.1 percent were "very sure" or "absolutely sure" that they would go into their anticipated occupation. Although half of the sample were not sure of their occupation

TABLE 11 -- Comparison Between Certainty of Choice of Major and Occupation

Major	Percent	Occupation	Percent
It is the Wrong Major	7.4	Not Sure	8.5
Very Uncertain	5.5	Somewhat Sure	20.2
Uncertain	16.7	Sure	19.0
Certain	47.2	Very Sure	34.4
Absolutely Certain	22.9	Absolutely Sure	11.7

even though they were sure of their major, they had a choice of going into any occupation related to their major.

TABLE 12 -- Range of Grade Point Average

Range	Percent
1.5 - 2.0	2.5
2.0 - 2.5	20.9
2.5 - 3.0	33.1
3.0 - 3.5	31.9
3.5 - 4.0	11.7

The data is Part II, Part III and Part IV of the questionnaire were analyzed in accordance with the purposes of the study.

- a) What are the perceptions of the sophomores at Michigan State University regarding the importance of university-sponsored career development services and programs?

- b) What are the perceptions of the sophomores regarding the extent to which these services have helped them in their career plans?
- c) Which sources, formal and informal, have helped them in their career plans?

For purposes of data analysis, the 22 items in both Part II and Part III were placed in five categories.

- (1) Academic Advising
- (2) Career Resource Center
- (3) Courses
- (4) Counseling Center/Services
- (5) Miscellaneous
  - a) Volunteer Programs
  - b) Placement
  - c) Parents

The 22 items in Part II of the questionnaire were similar to the same number of items in Part III. Part II intended to study the perceptions of the students regarding the importance of certain university-sponsored career development services and programs, whereas Part III examined the perceptions in terms of the extent to which these services had helped them in their career plan.

TABLE 13 -- Distribution of Items in the Various Categories

Categories	Numbers	N
(1) Academic Advising	1, 4, 6, 8, 9	5
(2) Career Resource Center	12, 13, 14,	3
(3) Courses	16, 17, 18, 19, 20	5
(4) Counseling Center	2, 5, 7, 10, 11	5
(5) Miscellaneous		
a) Volunteer Programs	3	1
b) Summer Employment	15	1
c) Parents	21, 22	2
	TOTAL	22

The data relating to Parts II, III, and IV are reported in the form of tables and figures. The tables show the frequency of responses to the 22 items in the five categories. The figures illustrate the responses by percent and the mean distribution in a particular category.

#### Academic Advising

This category includes five items intended to study the perceptions of the students regarding the importance, and the extent of assistance they had received in their career plans from their academic advisors.

In response to the question that academic advisors inform them about career information sources in the university,



TABLE 14 -- Importance and Extent That Academic  
Advisors Provide You With Information  
on Career Resources in the University

Importance	Percent	Extent	Percent
Not Important	3.7	Not At All	44.7
Slightly Important	8.6	A Little	30.8
Somewhat Important	13.8	Moderate	20.7
Important	31.2	High	0.0
Very Important	42.5	Very High	3.8

73.7 percent of the students said that it was "important" or "very important" that their academic advisors give them this information. In contrast to the perceived importance, 3.8 percent of the students rated this assistance as "high" or "very high."

TABLE 15 -- Importance and Extent of Assistance From  
Academic Advisors in Formulating Academic  
Program

Importance	Percent	Extent	Percent
Not Important	3.7	Not At All	21.4
Slightly Important	7.5	A Little	22.6
Somewhat Important	18.2	Moderate	25.2
Important	31.4	High	22.0
Very Important	39.0	Very High	8.8

Seventy and four-tenths of the students said that it was "important" or "very important" that their academic advisors help them in formulating their academic programs. On the other hand only 30.8 percent of the students had rated this assistance as "high" or "very high."

TABLE 16 -- Importance and Extent of Getting Information on the Careers Related to the Major of Your Choice

Importance	Percent	Extent	Percent
Not Important	.6	Not At All	42.0
Slightly Important	2.5	A Little	32.1
Somewhat Important	15.0	Moderate	16.1
Important	32.5	High	9.0
Very Important	49.4	Very High	0.0

It was considered "important" or "very important" by 81.9 percent of the respondents that their academic advisors give them information on careers related to their majors. This was considered an important service but only nine percent rated the assistance they received as "high" or "very high."

TABLE 17 -- Importance and Extent of Getting Details  
About Majors in the College of Your Choice

Importance	Percent	Extent	Percent
Not Important	3.2	Not At All	39.6
Slightly Important	4.4	A Little	33.9
Somewhat Important	17.1	Moderate	13.2
Important	34.8	High	10.6
Very Important	40.5	Very High	2.5

It was perceived as "important" or "very important" by 75.3 percent of the students that their advisors give them details about majors in the college of their choice. The extent to which they received this assistance was rated as "high" or "very high" by 13.1 percent of the students.

TABLE 18 -- Importance and Extent of Getting Help  
From Academic Advisors in Assessment  
of Interests and Career Goals

Importance	Percent	Extent	Percent
Not Important	3.1	Not At All	50.3
Slightly Important	16.8	A Little	27.7
Somewhat Important	24.4	Moderate	17.0
Important	34.4	High	4.4
Very Important	21.3	Very High	0.6

It was "important" and "very important" for 55.7 percent of the students that their academic advisors help them assess their interests and career goals. Only five percent of the students rated this assistance as "high" or "very high."

Figure 2a provides a comparison of the percentage distribution of the responses of students in the category of Academic Advising. The figure illustrates the importance of academic advising as perceived by the students and the extent to which their academic advisors have assisted them in their career plans. This assistance is perceived by the students in providing information on available career resources in the university, formulating an academic program, giving information on careers related to certain majors, and help in assessing interests and plan careers.

Figure 2b gives a mean distribution of the importance of academic advising as perceived by the students.

#### Career Resource Center

The three items in this category were designed to study the importance of the Career Resource Center as perceived by the students. The importance and the extent of getting information on careers, jobs related to certain majors, and on job trends, is examined in this section.

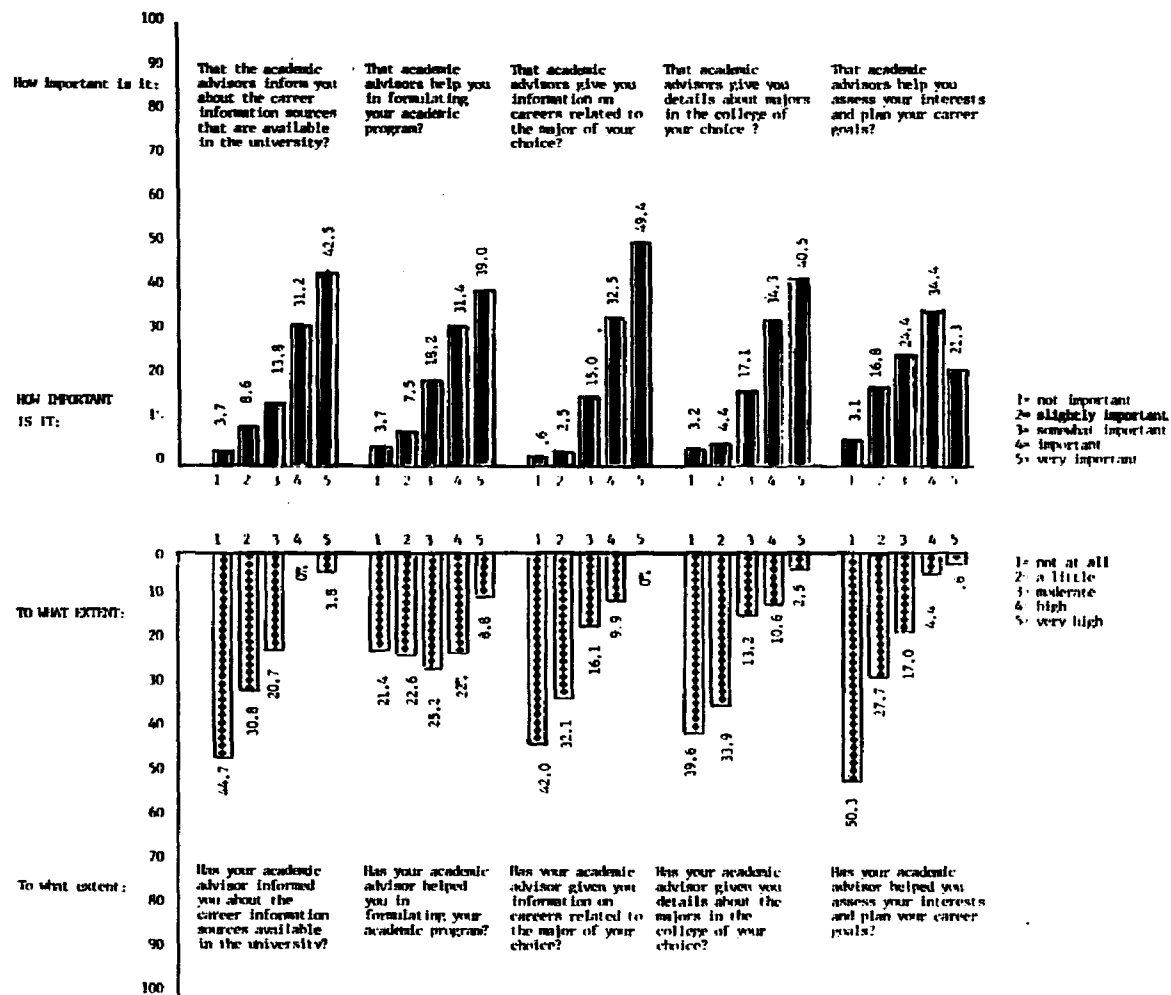


Figure 2a: Distribution of Responses by Percentage in the Category: Academic Advising

<u>Academic Advising</u>							
How important is it:	N	Mean*	S.D.	To what extent:	Mean	S.D.	Mean Difference
That academic advisors give you information on careers related to the major of your choice?	159	4.28	.85	Has your academic advisor given you information on careers related to the major of your choice?	2.05	1.06	2.23
That academic advisors give you details about majors in the college of your choice?	154	4.13	.94	Has your academic advisor given you details about majors in the college of your choice?	2.02	1.08	2.11
That the academic advisors inform you about the career information sources that are available in the university?	156	4.01	1.12	Has your academic advisor informed you about the career information sources that are available in the university?	2.04	1.05	1.97
That academic advisors help you in formulating your academic program?	155	3.94	1.11	Has your academic advisor helped you in formulating your academic program?	2.82	1.28	1.22
That academic advisors help you assess your interests and plan your career goals?	156	3.53	1.17	Has your academic advisor helped you assess your interests and plan your career goals?	1.77	.93	1.76

\* Items ranked in order of importance as perceived by the students.

 = Importance       = Extent

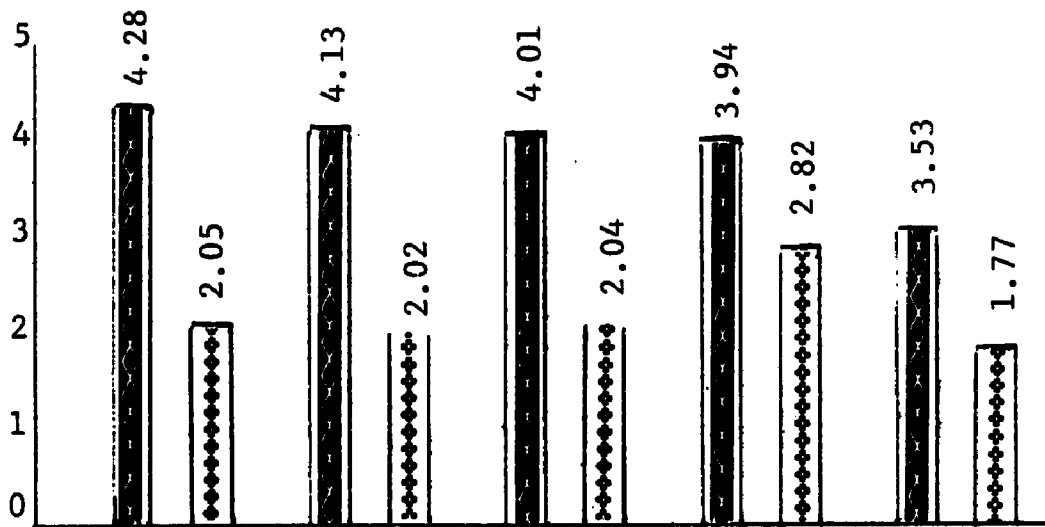


Figure 2b; Mean Distribution of Responses in the Category: Academic Advising

TABLE 19 -- Importance and Extent of the Career Resource Center Providing Information of Careers

Importance	Percent	Extent	Percent
Not Important	.6	Not At All	53.5
Slightly Important	4.3	A Little	19.5
Somewhat Important	19.3	Moderate	13.2
Important	39.1	High	11.3
Very Important	36.6	Very High	2.5

Getting information from the Career Resource Center pertaining to careers was considered "important" and "very important" by 75.7 percent of the students. Thirteen and eight-tenths of the students had received assistance that they rated as "high" or "very high."

TABLE 20 -- Importance and Extent of Getting Information From the Career Resource Center on Jobs Related to Certain Majors

Importance	Percent	Extent	Percent
Not Important	0.0	Not At All	54.7
Slightly Important	4.3	A Little	20.4
Somewhat Important	13.7	Moderate	16.8
Important	37.3	High	6.8
Very Important	44.7	Very High	1.2

All respondents considered it important that they receive information on jobs related to their majors, 82 percent considered it an "important" or "very important" task of the Career Resource Center. The extent to which they had received this information was rated as "high" or "very high" by eight percent of the students.

TABLE 21 -- Importance and Extent of Getting Current Information on Job Trends From the Career Resource Center

Importance	Percent	Extent	Percent
Not Important	3.8	Not At All	49.7
Slightly Important	8.8	A Little	20.0
Somewhat Important	11.9	Moderate	19.4
Important	31.9	High	6.5
Very Important	43.8	Very High	4.5

Students do not only want information on careers related to majors, or jobs related to majors, but they also want to know about current job trends, 75.7 percent considered this item "important" or "very important." Considering its importance, only 11 percent rated this assistance as "high" or "very high."

Figure 3a gives the distribution, by percentage, of the responses of the students to the items related to the Career Resource Center. The figure illustrates the perceptions of the students regarding the importance of the Career Resource Center in career planning and the extent to which they have



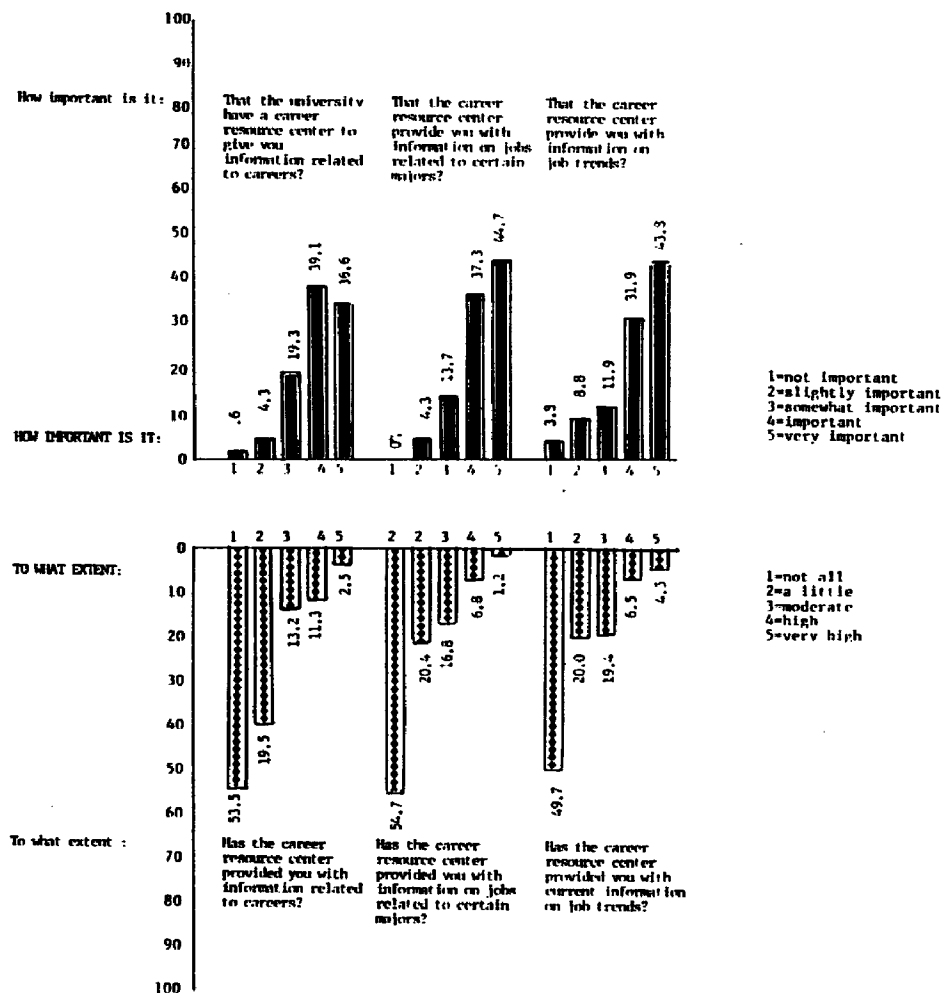



Figure 3a: Distribution of Responses by Percentage in the Category: Career Resource Center

Career Resource Center

How important is it:	N	Mean*	S.D.	To what extent:	Mean	S.D.	Difference
That the career resource center provide you with current information on job trends?	152	4.31	.957	Has the career resource center provided you with current information on job trends?	1.91	1.17	2.40
That the career resource center provide you with information on jobs related to certain majors?	158	4.13	.915	Has the career resource center provided you with information on jobs related to certain majors?	1.85	1.06	2.27
That the university have a career resource center to give you information related to careers?	157	4.01	.855	Has the career resource center provided you with information related to careers?	1.93	1.10	2.07

\* Items ranked in order of importance as perceived by the students.

 = Importance

 = Extent

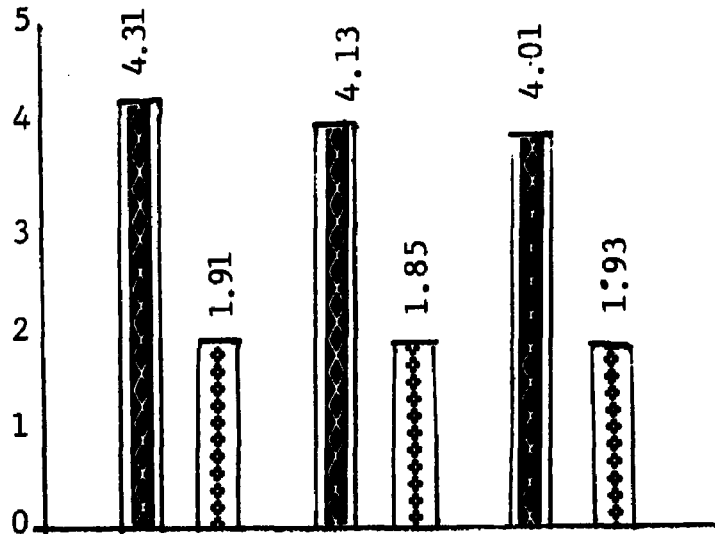


Figure 3b: Mean Distribution of Responses in the Category: Career Resource Center

received this assistance. The importance of this service was seen in terms of getting information on careers related to certain majors and on current job trends.

Figure 3b gives the mean distribution of importance and extent of the Career Resource Center as perceived by the students.

### Counseling Services

The five items in this category measured the perceptions of the students regarding the counseling services in the university and the extent to which these services provided them with: counseling on available majors, assistance in identifying the available counseling services, identifying their interests, assessing aptitudes through tests, and identification of their career goals.

TABLE 22 -- Importance and Extent of Information on Available Counseling Services in the University

Importance	Percent	Extent	Percent
Not Important	1.9	Not At All	13.8
Slightly Important	7.1	A Little	42.8
Somewhat Important	15.6	Moderate	29.5
Important	39.6	High	11.9
Very Important	35.7	Very High	1.9

Information on the counseling services was "important" or "very important" to 75.3 percent of the respondents. In contrast to the importance, 13.8 percent rated the assistance received as "high" and "very high."

TABLE 23 -- Importance and Extent of Receiving Counseling on Available Majors

Importance	Percent	Extent	Percent
Not Important	2.5	Not At All	39.8
Slightly Important	5.0	A Little	26.7
Somewhat Important	18.6	Moderate	19.3
Important	32.9	High	10.6
Very Important	41.0	Very High	3.7

Students want to receive counseling on available majors. This service was rated as "important" or "very important" by 73.9 percent of the students, but only 14.3 percent rated the assistance they received as "high" or "very high."

TABLE 24 -- Importance and Extent of Getting Help in Assessment of Interests

Importance	Percent	Extent	Percent
Not Important	2.5	Not At All	53.3
Slightly Important	7.5	A Little	23.3
Somewhat Important	21.9	Moderate	16.6
Important	33.8	High	3.7
Very Important	34.3	Very High	3.1

For 68.1 percent of the students it was "important" or "very important" that they receive help in the assessment of their interests, but only 6.8 percent rated the help received as "high" or "very high."

TABLE 25 -- Importance and Extent of the University Administering Tests to Determine Interests and Aptitudes

Importance	Percent	Extent	Percent
Not Important	10.7	Not At All	67.7
Slightly Important	12.6	A Little	12.6
Somewhat Important	30.8	Moderate	10.8
Important	23.9	High	4.4
Very Important	22.0	Very High	4.4

It was "important" and "very important" for 45.9 percent of the students that the university administer tests to determine their interests and aptitudes. Eight and eight-tenth percent rated the help that they received from them as "high" and "very high."

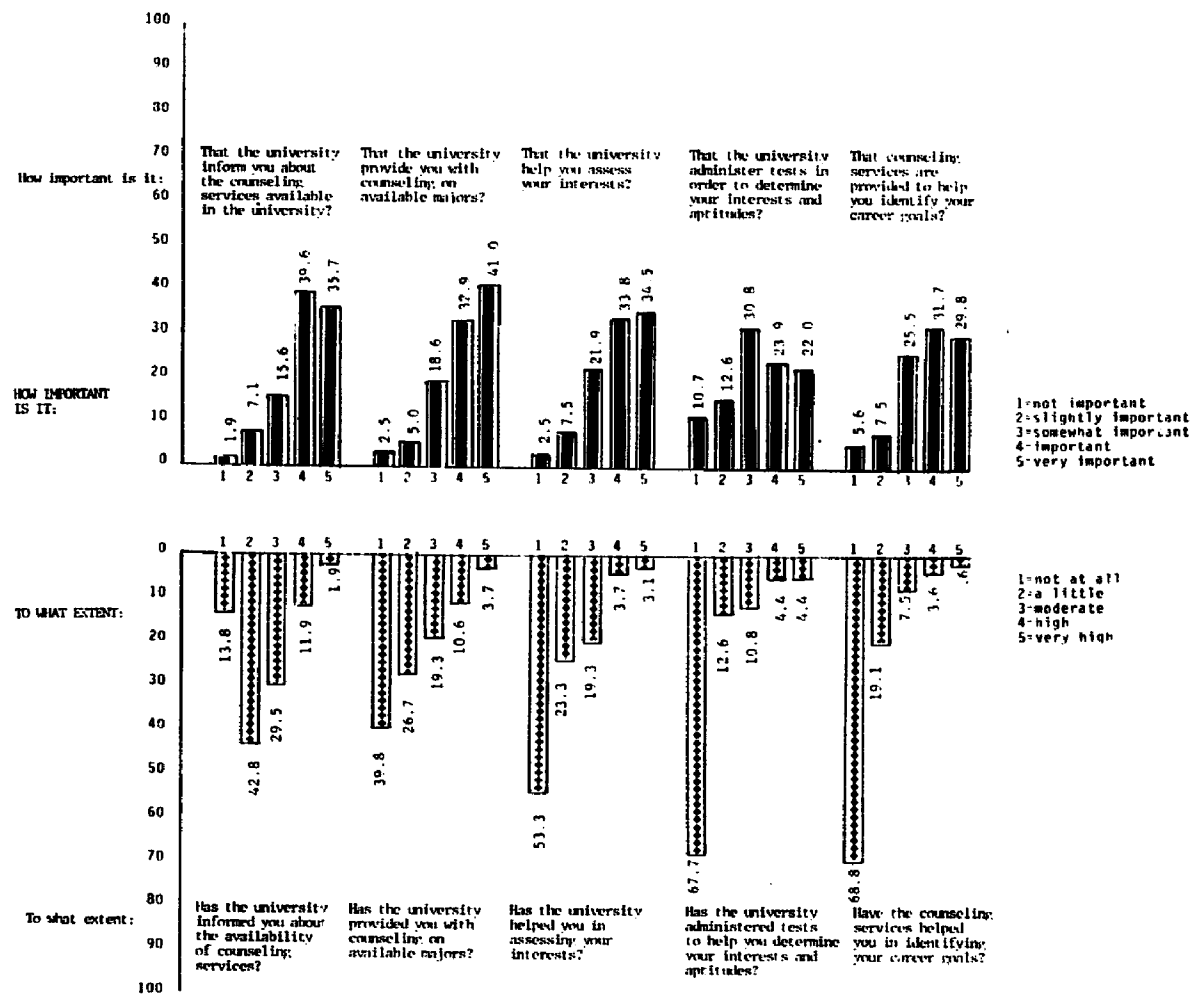


Figure 4a: Distribution of Responses by Percentage in the Category: Counseling Services

Counseling Center/Services							
How important is it:	N	Mean*	S.D.	To what extent:	Mean	S.D.	Mean Difference
That the university provide you with counseling on available majors?	159	4.05	1.01	Has the university provided you with counseling on available majors?	2.13	1.07	1.92
That the university give information about counseling services available in the university?	150	4.02	.97	Has the university informed you about the availability of counseling services?	2.47	.95	1.55
That the university help you assess your interests?	160	3.53	1.12	Has the university helped you in assessing your interests?	1.81	1.03	1.72
That counseling services are provided to help you identify your career goals?	159	3.52	1.14	Have the counseling services helped you in identifying your career goals?	1.52	.09	2.01
That the university administer tests in order to help you determine your interests and aptitudes?	156	2.97	1.24	Has the university administered tests to help you determine your interests and aptitudes?	1.67	.89	1.31

\* Items ranked in order of importance as perceived by the students.

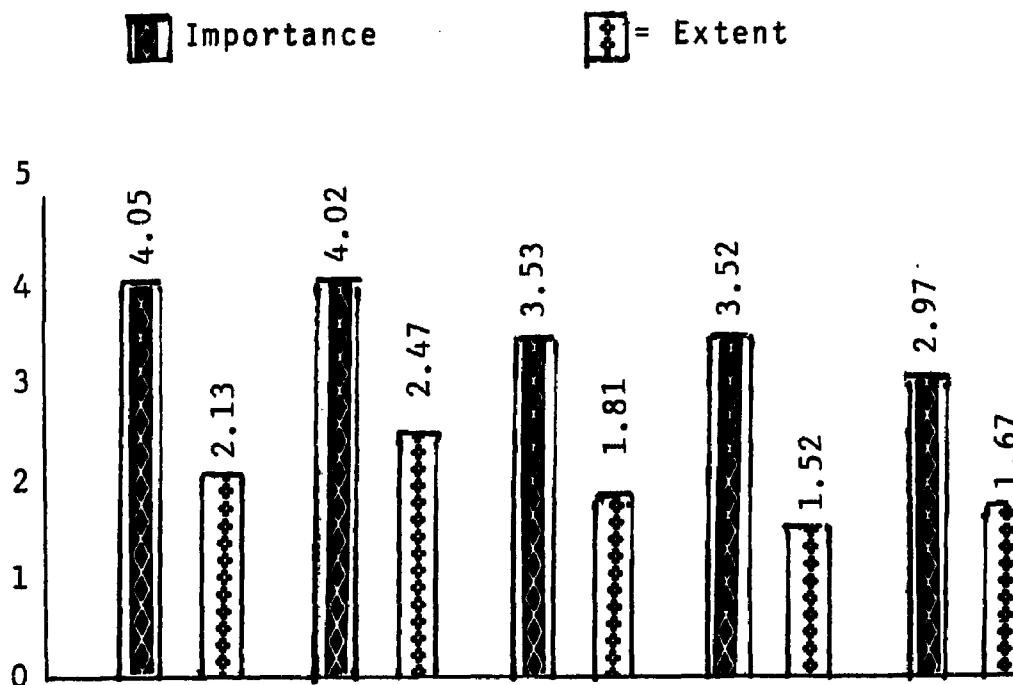


Figure 4b: Mean Distribution of Items in the Category Counseling Center/Services

TABLE 26 -- Importance and Extent of Help From the  
Counseling Services in Identifying Career  
Goals

Importance	Percent	Extent	Percent
Not Important	5.6	Not At All	68.8
Slightly Important	7.5	A Little	19.1
Somewhat Important	25.5	Moderate	7.5
Important	31.7	High	3.8
Very Important	29.8	Very High	.6

Counseling to identify their career goals was "important" or "very important" for 61.5 percent of the students. Looking into the extent to which the Counseling Center had helped the students in the identification of their goals, 4.4 percent had rated it as "high" or "very high."

Figure 4a gives the distribution by percentage of responses to items in the category Counseling Services. The importance of each item as perceived by the students and the extent to which they have received this assistance is illustrated in this figure.

Figure 4b gives the mean distribution of the Counseling Center as perceived by the students.

### Courses

The five items in this category identified the need and importance of having credit courses, as a university requirement, and the usefulness of credit courses in exploring different options and different careers.



TABLE 27 -- Importance and Extent of Having Elective Credit Courses to Explore Career Options

Importance	Percent	Extent	Percent
Not Important	3.8	Not At All	46.8
Slightly Important	8.9	A Little	22.8
Somewhat Important	19.1	Moderate	18.4
Important	31.9	High	10.8
Very Important	36.3	Very High	1.2

Credit courses were perceived "important" and "very important" by 68.2 percent of the students. The extent to which credit courses had been helpful was rated "high" or "very high" by 12 percent of the students.

TABLE 28 -- Importance and Extent of Each College Having a Course to Explore Career Options

Importance	Percent	Extent	Percent
Not Important	0.0	Not At All	36.9
Slightly Important	7.1	A Little	26.8
Somewhat Important	26.1	Moderate	19.1
Important	34.8	High	15.3
Very Important	31.7	Very High	1.9

Sixty-six and five-tenths of the students thought it "important" or "very important" that each college offer a course to explore career options. For 17.2 percent of the students the assistance was "high" or "very high."

TABLE 29 -- Importance and Extent of Having Credit Courses to Explore Different Career Fields

Importance	Percent	Extent	Percent
Not Important	15.2	Not At All	38.1
Slightly Important	13.9	A Little	26.4
Somewhat Important	22.2	Moderate	21.9
Important	30.4	High	11.0
Very Important	18.4	Very High	2.5

Students perceived it as an important need to be able to have credit courses to explore different career fields. It was "important" or "very important" to 48.8 percent of the students. Credit courses had been of "high" or "very high" assistance to 13.5 percent of the students.

TABLE 30 -- Importance and Extent of Having Courses to Explore Career Options as a University Requirement

Importance	Percent	Extent	Percent
Not Important	5.8	Not At All	60.3
Slightly Important	25.0	A Little	15.4
Somewhat Important	22.4	Moderate	11.5
Important	31.4	High	9.0
Very Important	15.4	Very High	3.8

Table 30 shows that 46.8 percent of students perceived it as "important" and "very important" that the university require them to take courses to explore career options.

Courses exploring career options had helped 12.8 percent of the students who rated this assistance as "high" or "very high."

TABLE 31 -- Importance and Extent of Providing Courses to Make Decisions and Plan Programs

Importance	Percent	Extent	Percent
Not Important	8.1	Not At All	53.2
Slightly Important	25.1	A Little	25.0
Somewhat Important	21.4	Moderate	15.4
Important	29.4	High	5.7
Very Important	15.7	Very High	.6

It was "important" or "very important" for 45.1 percent of the students that the university provide them with courses that can help them in making decisions and plan programs. The extent of service was rated as "high" or "very high" by 6.3 percent of the students.

Figure 5a illustrates, by percentage, the frequency distribution of the responses to the items in the category entitled "courses." The responses illustrate the perceptions of the students to the importance of having credit courses to explore different majors, courses that can help make decisions and plan programs, and courses that can help explore different career options.

The figure also illustrates the extent to which these courses have been of assistance to the students in their career plans.

Figure 5b gives the mean distribution of the responses to the items in the category of courses.

### Miscellaneous

This category had four items and examined three different areas. These areas were the volunteer programs, summer employment, and parents.

#### Volunteer Programs

The one item in this category intended to examine the importance of the volunteer program and the extent that this program had assisted students.

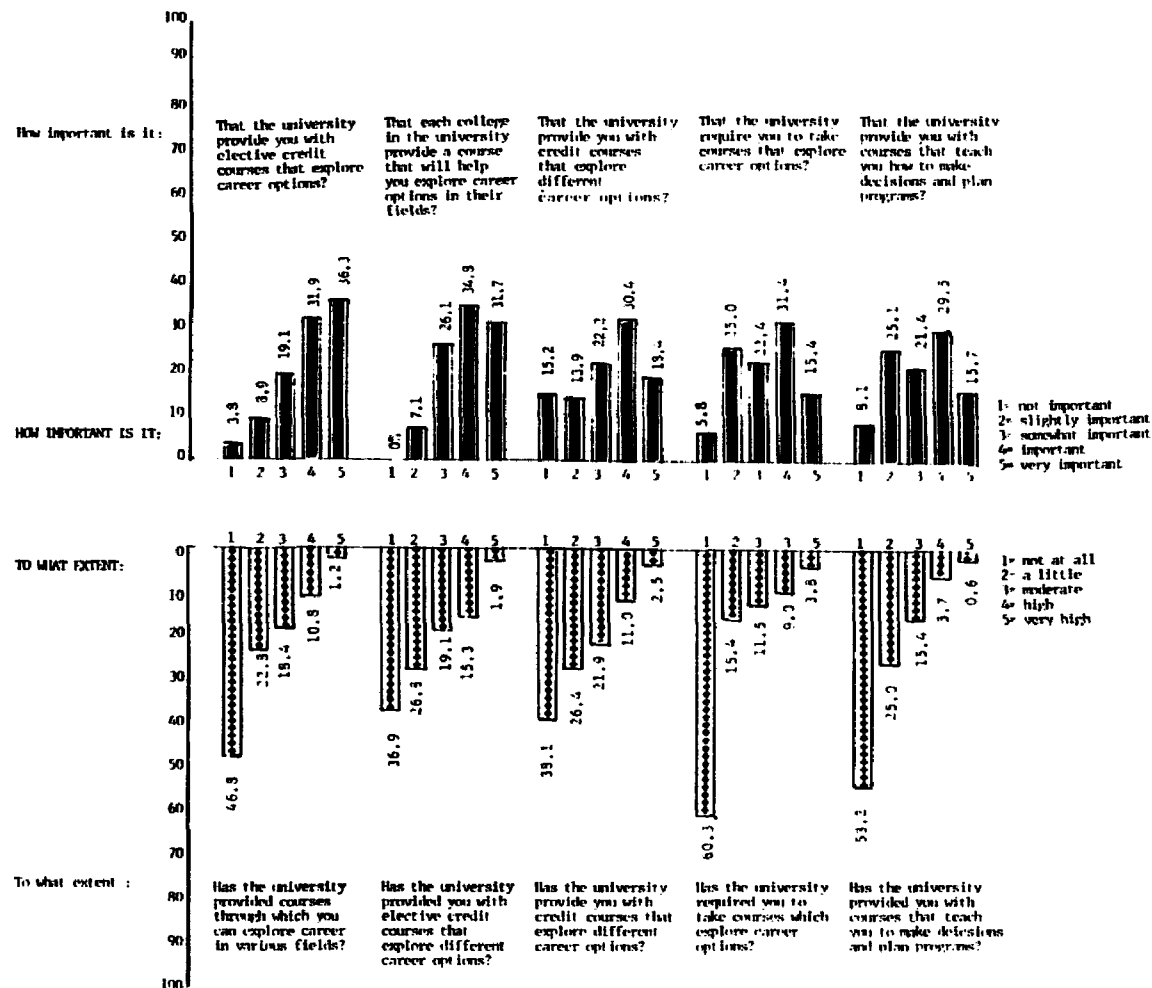


Figure 5a: Distribution of Responses by Percentage in the Category: Courses

<u>Courses</u>							
How important is it:	N	Mean*	S.D.	To what extent:	Mean	S.D.	Mean Difference
That the university provide you with elective credit courses that explore career options?	152	3.86	1.06	Has the university provided courses through which you can explore career options in various fields?	2.07	1.11	1.80
That each college in the university provide a course that will help you explore career options in their fields?	155	3.80	1.07	Has the university provided you with elective credit courses that explore career options?	2.17	1.15	1.63
That the university provide you with credit courses that explore different options in their field?	150	3.74	1.04	Has the university provided you with credit courses that explore different career fields?	2.16	1.14	1.59
That the university provide you with courses that teach you how to make decisions and plan programs?	152	3.15	1.22	Has the university provided you with courses that teach you to make decisions and plan programs?	1.76	.96	1.39
That the university require you to take courses which explore career options?	150	2.59	1.33	Has the university required you to take courses which explore career options?	1.86	1.21	.73

\* Items ranked in order of importance as perceived by the students.

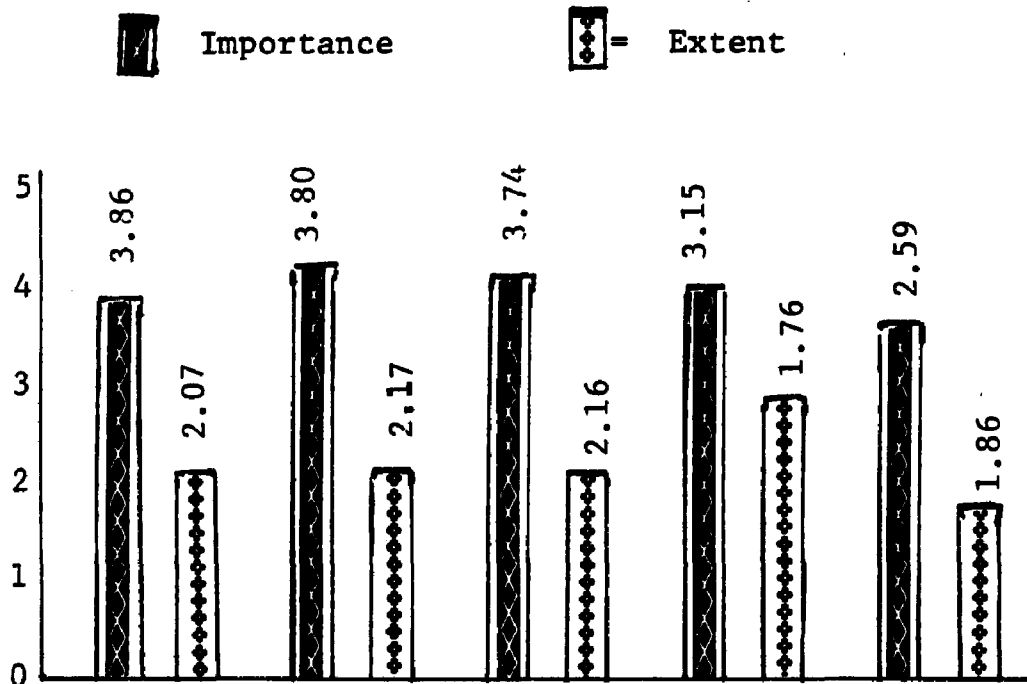


Figure 5b: Mean Distribution of Items in the Category: Courses

TABLE 32 -- Importance and Extent of Having Opportunities to Gain Experience Through the Volunteer Program

Importance	Percent	Extent	Percent
Not Important	.6	Not At All	44.1
Slightly Important	6.9	A Little	31.7
Somehwat Important	18.4	Moderate	12.4
Important	37.3	High	8.6
Very Important	36.7	Very High	3.1

Sixty-four percent of the students considered it "important" or "very important" to have opportunities to gain experience through the volunteer programs. The experiences gained from the volunteer programs was rated as "high" or "very high" by 11.7 percent of the students.

#### Summer Employment

The one item in this category examined the importance of the university helping the students in getting summer and part-time employment.

For 68.4 percent of the students it was "important" and "very important" that the university assist them in obtaining part-time and summer employment. Only 5.5 percent rated this assistance as "high" or "very high."

TABLE 33 -- Importance and Extent of Help From the University in Obtaining Part-Time and Summer Employment

Importance	Percent	Extent	Percent
Not Important	4.4	Not At All	80.8
Slightly Important	7.6	A Little	8.0
Somewhat Important	19.6	Moderate	5.5
Important	36.1	High	4.3
Very Important	32.3	Very High	1.2

#### Parents

It was assumed that parents may be concerned about the availability of career development at the university. Therefore, two items were included regarding career information and career courses. Students responded based on their interpretation of their parent's expectations and satisfaction.

TABLE 34 -- Importance and Extent of Providing of Career Information - Its Importance to the Parents

Importance	Percent	Extent	Percent
Not Important	10.5	Not At All	36.5
Slightly Important	11.2	A Little	29.7
Somewhat Important	18.4	Moderate	24.8
Important	29.6	High	6.9
Very Important	30.3	Very High	2.1



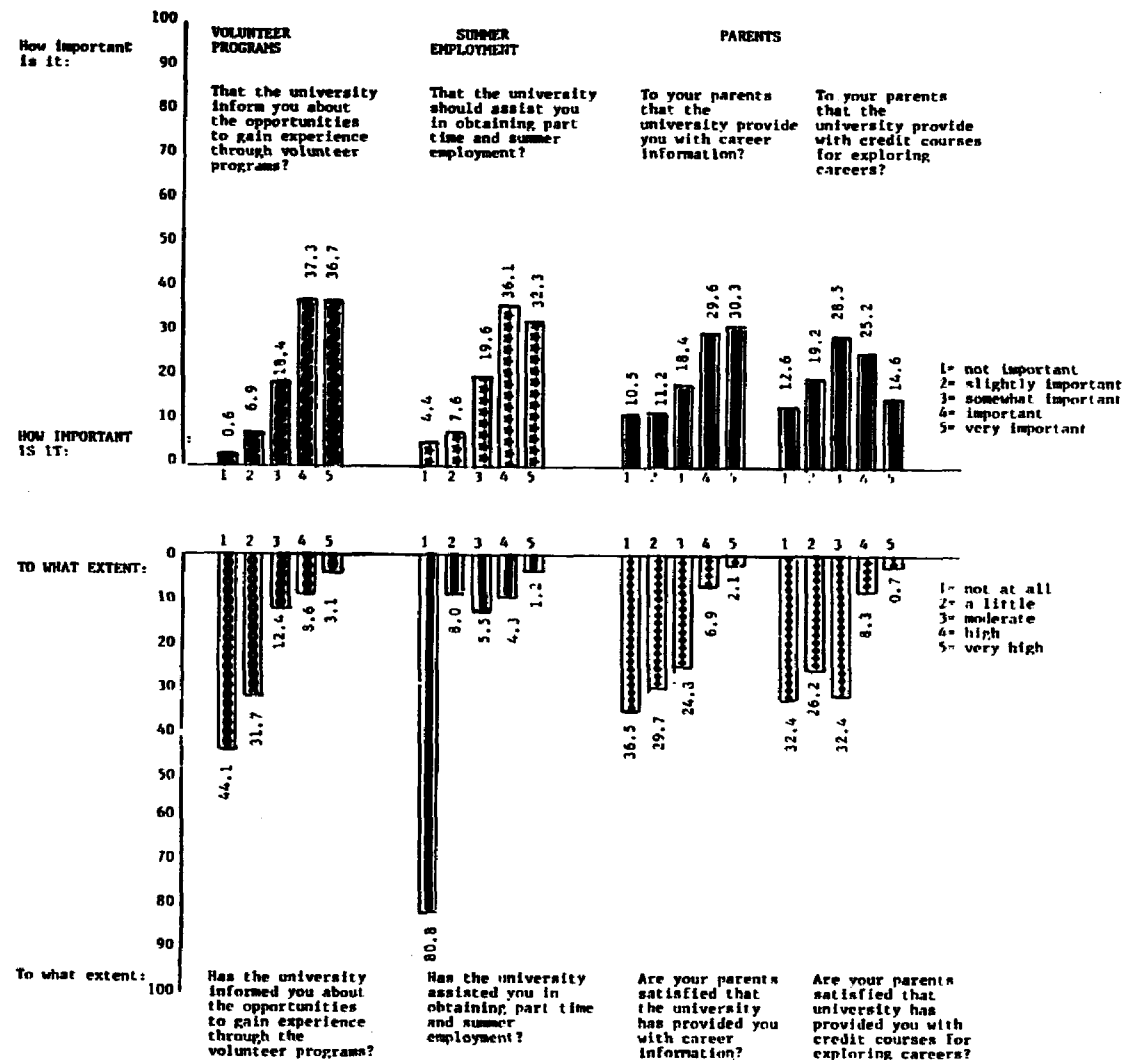


Figure 6a: Distribution of Responses of the Students to the Category: Miscellaneous.

<u>Miscellaneous</u>								
How important is it	N	Mean*	S.D.	To what extent:	Mean	S.D.	<u>Mean Difference</u>	
<u>Volunteer Programs</u>				<u>Volunteer Programs</u>				
That the university inform you about the opportunities to gain experience through volunteer programs?	157	4.03	.95	Has the university informed you about the opportunities to gain experience through volunteer programs?	2.08	1.08	1.96	
<u>Summer Employment:</u>				<u>Summer Employment</u>				
That the university should assist you in obtaining part time and summer employment?	157	3.6	1.14	Has the university assisted you in obtaining part-time and summer employment?	1.34	.89	2.21	
<u>Parents:</u>				<u>Parents</u>				
To your parents that the university provide you with career information?	141	3.59	1.26	Are your parents satisfied that the university has provided you with career information?	2.45	1.03	1.13	
To your parents that the university provide you with credit courses for exploring careers?	140	3.19	1.22	Are your parents satisfied that the university provides you with credit courses for exploring careers?	2.39	1.10	.79	




 = Importance
 


 = Extent

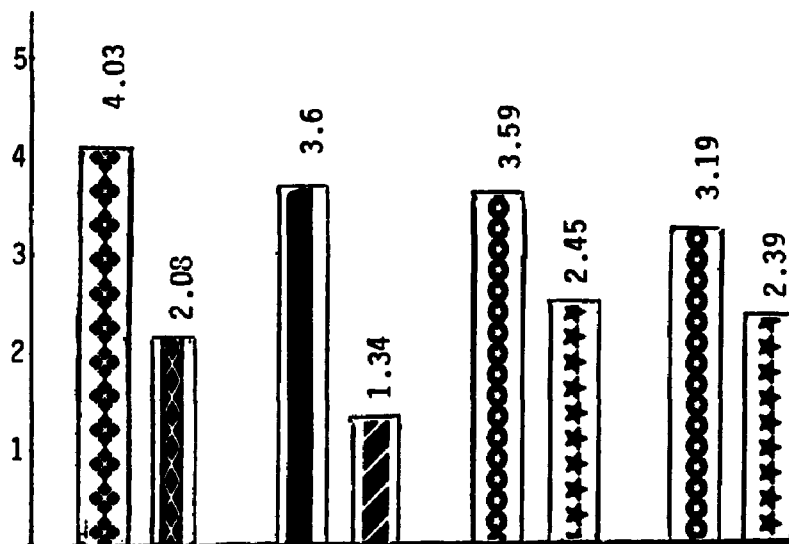


Figure 6b: Mean Distribution of Items in the Category: Miscellaneous

Fifty-nine and nine-tenths of the students said that it was "important" and "very important" to their parents that the university provide career information. Considering the satisfaction that the parents of the students had with the information, nine percent rated it as "high" or "very high."

TABLE 35 -- Importance and Extent of the University Providing Courses for Exploring Careers

Importance	Percent	Extent	Percent
Not Important	12.6	Not At All	32.4
Slightly Important	19.2	A Little	26.2
Somewhat Important	28.5	Moderate	32.4
Important	25.2	High	8.3
Very Important	14.6	Very High	.7

Thirty-nine and eight-tenths of the students felt that it was "important" or "very important" to their parents that the university provide credit courses to explore careers. The extent of assistance from credit courses was rated as "high" or "very high" by nine percent of the students.

Figure 6a gives the overall responses of the students to the category of items entitled "miscellaneous".

Figure 6b gives the mean distribution of the four items in the Miscellaneous category.

### Summary of Responses

Category	Importance	Extent	Difference
	Important and Very Important	High and Very High	
<u>Academic Advising</u>			
Information on Career Resources	73.7	3.8	69.9
Assistance in Formulating Program	74.4	30.8	43.6
Information on Careers Related to Majors	81.9	9.0	72.9
Details About Majors in the College of Your Choice	75.3	13.1	52.2
<u>Career Resource Center</u>			
Information on Careers	75.7	13.8	61.9
Information on Jobs Related to Certain Majors	82.0	8.0	74.0
Current Information on Job Trends	75.7	11.0	64.7
<u>Counseling Services</u>			
Information on Counseling Services	75.3	13.8	61.5
Counseling on Majors	73.9	14.3	59.6
Assessment of Interests	68.1	6.8	61.3
Administration of Tests	45.9	8.8	37.1
Identification of Career Goals	61.5	4.4	57.1
<u>Courses</u>			
Elective Credit Courses	68.2	12.0	56.2
Colleges Have Courses	66.5	17.2	49.3
Credit Courses to Explore Careers	48.8	13.5	35.3
Career Courses as a University Requirement	46.8	12.8	34.0
Courses to Make Decisions and Plan Programs	45.1	6.3	39.4

Summary of Responses (con't)

Category	Importance	Extent	Difference
	Important and Very Important	High and Very High	
<u>Miscellaneous</u>			
Volunteer Programs	64.0	11.8	52.2
Summer Employment	68.4	5.5	62.9
Parents - Career Information	59.9	9.0	50.9
Parents - Career Courses	39.8	9.0	30.8

#### Part IV - Sources of Help in Career Planning

The items in this category examined the helpfulness of formal and informal sources for students in their career plans. The nine sources of help listed in the category were: Counseling Center, Parents, Career Resource Center, Friends, Academic Advisors, Residence Advisors, Subject Matter Courses, Career Planning Courses and a category called Others.

TABLE 36 -- Counseling Center as a Source of Help in Career Planning

Degree of Help	Percent N=157	Percent of Those That Used the Service N=59
Never Used	62.4	--
Useless	8.9	23.7
Slightly Helpful	15.9	42.4
Somewhat Helpful	8.2	22.0
Very Helpful	4.5	11.9

The Counseling Center was "never used" by 62.4 percent of the students. Students that used the Counseling Center, 23.7 percent found it useless and it had been "very helpful" or "somewhat helpful" to 33.9 percent of the students in their career plans.

TABLE 37 -- Parents as Sources of Help in Career Planning

Degree of Help	Percent N=159	Percent of Those That Used the Service N=144
Never Used	9.4	--
Useless	11.9	13.2
Slightly Helpful	16.4	18.1
Somewhat Helpful	34.0	37.5
Very Helpful	28.3	31.3

Nine and four-tenths of the students "never used" their parents as a source of assistance in their career plans. Assistance from parents in career plans was rated "useless" by 13.2 percent of the students who used them. Sixty-eight and eight-tenth percent of those that used their parents found them "very helpful" or "somewhat helpful."

TABLE 38 -- Career Resource Center as a Source of Help in Career Planning

Degree of Help	Percent N=160	Percent of Those That Used the Service N=66
Never Used	58.8	--
Useless	7.5	18.2
Slightly Helpful	16.3	39.4
Somewhat Helpful	14.4	34.8
Very Helpful	3.1	7.6

Considering the importance of the Career Resource Center as a source of help in career planning, 58.8 percent of the students had "never used" this service. It was rated "useless" by 18.2 percent of those that used it. The Career Resource Center was found to be "very helpful" or "somewhat helpful" by 42.4 percent of the students who used it.

TABLE 39 -- Friends as Sources of Assistance in Career Planning

Degree of Help	Percent N=157	Percent of Those That Used the Service N=143
Never Used	8.9	--
Useless	6.9	7.7
Slightly Helpful	45.9	50.3
Somewhat Helpful	29.9	32.9
Very Helpful	8.3	9.1

Friends were another source of assistance in the career plans of the students. The degree of help they received from friends was varied, 8.9 percent did not use their friends, 7.7 percent of those that used them found them useless, and 42 percent found them to be "very helpful" or "somewhat helpful."



TABLE 40 -- Academic Advisors as Sources of Help  
in Career Planning

Degree of Help	Percent N=157	Percent of Those That Used the Service N=141
Not Used	10.1	--
Useless	20.4	22.7
Slightly Helpful	38.9	43.3
Somewhat Helpful	22.9	25.5
Very Helpful	7.6	8.5

Ten and one-tenth percent of the students did not use their academic advisors in their career plans, 34 percent of those that used them found them to be "very helpful" or "somewhat helpful." This assistance was rated as useless by 22.7 percent of the students.

TABLE 41 -- Residence Advisors as Sources of Help  
in Career Planning

Degree of Help	Percent N=157	Percent of Those That Used the Service N=77
Never Used	51.0	--
Useless	26.8	54.5
Slightly Helpful	12.7	26.0
Somewhat Helpful	5.0	10.4
Very Helpful	4.5	9.1

The majority of students did not use the Residence Advisors in getting assistance in their career plans, 51 percent never used them. Their assistance was rated "useless" by 54.5 percent of those that used them and 9.5 percent found them to be "very helpful" or "somewhat helpful."

TABLE 42 -- Subject Matter Courses as Sources of Help in Career Planning

Degree of Help	Percent N=155	Percent of Those That Used the Service N=132
Never Used	14.8	--
Useless	6.5	7.6
Slightly Helpful	27.7	32.6
Somewhat Helpful	37.4	44.9
Very Helpful	13.5	15.9

Subject matter courses were "very helpful" and "somewhat helpful" to 60.8 percent of the students who took these courses. Fourteen and eight-tenth percent never took these courses and 7.6 percent of the students who took these courses found them useless in career planning.

#### Career Planning Courses

As far as the specific career planning courses were concerned, the breakdown of responses is as follows:

No Response	49%
Never Used	39%

Only 12 percent of the students had taken career planning courses and the importance of these courses as perceived by the students who took them had a positive mean of 4.35 percent on a five point scale.

#### Others

The sources of help identified in this category were, school counselors, school teachers, instructors at M.S.U., relatives, courses that they had taken, and experiences they had a summer jobs.

Figure 7 gives the frequency distribution of the seven sources of help in career planning.

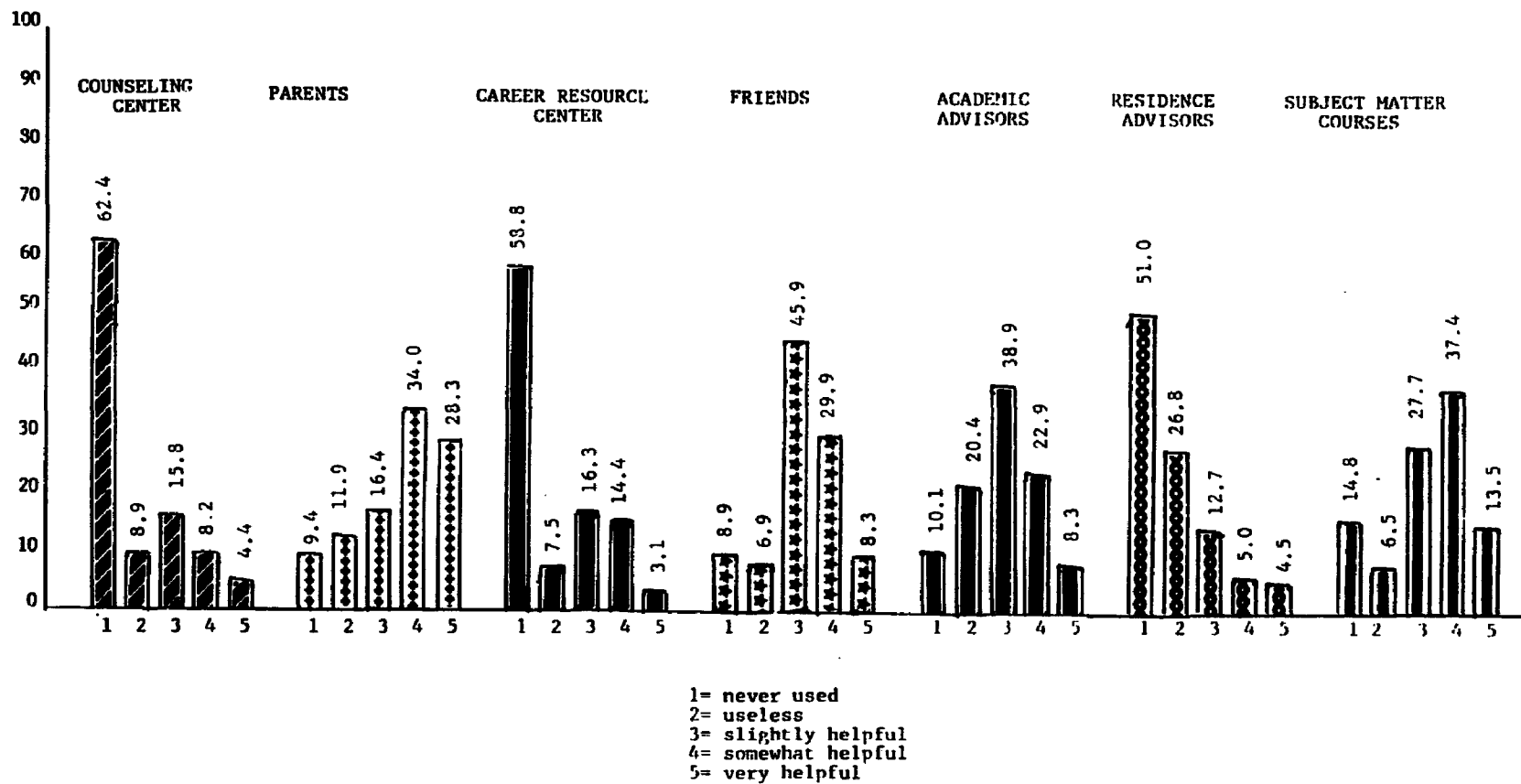


Figure 7: Distribution of the Seven Sources of Help in Career Planning

## Chapter Five

### CONCLUSIONS AND RECOMMENDATIONS

The study examined the perceptions of the sophomores at Michigan State University regarding university-sponsored Career Development services. These perceptions were studied keeping in mind the three purposes of the study:

- (1) Perceptions of the students regarding the importance of university-sponsored Career Development services.
- (2) Perceptions of the students regarding the extent of assistance they had received from the existing Career Development services and programs.
- (3) Perceptions of the students regarding the assistance they received in Career Development from available formal and non-formal sources.

The following conclusions are reported under the five categories: Academic Advising, Career Resource Center, Counseling Center/Services, Courses, and Miscellaneous.

#### Academic Advising

The general findings indicated 73.7 percent of the students considered it "important" or "very important" that their academic advisors give them information about available career resources. Evidently this assistance was not being

provided because 44.7 percent had not received any assistance and 30.8 percent rated the extent of this assistance as "a little."

Students needed help from their academic advisors in formulating their academic programs, 70.4 percent perceived it as an "important" or "very important" service. The students (21.4 percent) indicated that they had not received this assistance and 22.6 percent rated it as "a little."

It was "important" or "very important" to 71.9 percent of the students that their advisors give them information on careers related to the major of their choice. Forty-two percent had received no assistance, and 32.1 percent rated it as "a little."

Students perceived it was "important" or "very important" that their advisors give them details about majors in the college of their choice (75.6 percent) but compared to their expectations, 73.5 percent received "little" or "no assistance."

It was "important" or "very important" for 54.7 percent of the students that their advisors assist them in the assessment of their interests and help plan their career goals. An equal number, 50.3 percent, received no assistance in this area, and 27.7 percent received a little.

#### Career Resource Center

Students perceived it an "important" or "very important" function of the Career Resource Center (75.7 percent) that they should get information on careers. In comparison with

the perceived need, 53.5 percent had received no information. It can be concluded that either the students had not gone to the right sources or they had not received the desired information.

Two-thirds of the total sample (75.7 percent) perceived it an "important" or "very important" function of the Career Resource Center that it provide them with current information on job trends. Half the sample (49.7 percent) reported not having received this information.

Getting information on jobs related to certain majors was "important" or "very important" for 82 percent of the students but 54.7 percent did not get this information.

#### Counseling Center/Services

It was evident from the perceptions of the students that they considered the Counseling Services important in their Career Development.

It was "important" or "very important" for 75.3 percent of the students that they get information on available counseling services in the University, 13.8 percent had not received any assistance and 42.8 percent rated this assistance as "little."

It was "important" or "very important" for 73.9 percent of the students that they receive counseling on available majors but 39.8 percent said that they did not receive this information.

Students needed help in assessment of interest 68.3 percent considered it "important" or "very important," but 53.3 percent did not get any help.

Forty-five and nine-tenths percent of the students considered it important that the university administer tests to determine their interests and attitudes, but the perceptions of 67.7 percent of them showed that they had not received such assistance.

Students also needed assistance in identifying their career goals. This was "important" or "very important" to 61.5 percent of the students. An almost equal number, 68.8 percent did not get this kind of assistance.

### Courses

Student's considered it "important" or "very important" (68.2 percent) that the university provide elective credit courses that explore career options. Almost half the sample, 46.8 percent, had either not taken these courses or were not aware of them.

It was perceived "important" or "very important" by 66.5 percent of the students that each college have courses to explore career options in various fields. A little over a third of the sample (36.9 percent) said that they had not taken such courses.

Students considered it "important" or "very important" that courses to explore career options be a university requirement, (46.8 percent). Evidently, such courses were



not a university requirement according to 60.3 percent of the students.

It was "important" or "very important" for 45.2 percent of the students that the university provide them with courses that could help them in making career decisions. Fifty-three and two-tenths of the students had not taken such courses or were not aware of them.

It was "important" or "very important" for 48.8 percent of the students that the university provide them with credit courses to explore different career fields. A little over a third of the sample perceived that such courses did not exist.

#### Miscellaneous

The four items in this category dealt with three areas: Volunteer Programs, Summer Employment and Parents.

#### Volunteer Programs

Opportunities to gain work experience through the volunteer programs was perceived "important" or "very important" by 74 percent of the students. In contrast to its perceived importance 44.1 percent of the students did not use this opportunity.

#### Summer Employment

It was "important" or "very important" to 68.4 percent of the students that the university assist them in obtaining part-time and summer employment. A high percentage (80.8

percent) of the students said that they were not assisted in obtaining part-time or summer employment.

### Parents

The perceptions of 59.9 percent of the students indicated that it was "important" or "very important" to their parents that the university provide career information. It was also perceived "important" or "very important" by 39.8 percent of the students that their parents want the university to provide courses for exploring careers.

### Sources of Help in Career Planning

The eight formal and informal sources of help in the Career Development of the students were: Counseling Center, Parents, Career Resource Center, Friends, Academic Advisors, Residence Advisors, Subject Matter Courses and Career Planning Courses.

### Counseling Center

The Counseling Center was "never used" by 62.4 percent of the students. Of the 37.6 percent who used it as a source of help in their Career Development, 8.9 percent found it "useless," 15.8 percent found it "slightly helpful" and 12.4 percent found it "somewhat helpful" or "very helpful."

### Parents

Students had received considerable help from their parents in their Career Development, 62.3 percent perceived

this assistance as "very helpful" or "somewhat helpful," 11.9 percent rated their assistance as "useless."

#### Career Resource Center

Considering the importance of the Career Resource Center as a source of getting information on careers, 58.8 percent of the students had "never used" it. Of the 41.2 percent who used it, 17.5 percent found it "very helpful" or "somewhat helpful," and 7.5 percent found it useless.

#### Friends

The degree of help that the students had received from their friends was varied, 8.9 percent did not go for help to their friends, 6.9 percent found them useless. A considerable number (45.9 percent) found them to be "slightly helpful" and 38.2 percent found them to be "somewhat helpful" or "very helpful."

#### Academic Advisors

Over 10 percent of the sample (10.1 percent) had not used their academic advisors to get help in their Career Development, of the 89.9 percent who used them, 20.4 percent found their help as useless, 30.5 percent rated them as "very helpful" or "somewhat helpful."

#### Residence Advisors

Only 9.5 percent of the students had found the residence advisors as being "somewhat helpful" or "very helpful" in their career plans, 26.8 percent found them to be useless

and 51 percent did not use them to get help in their career development.

### Subject Matter Courses

Subject matter courses had been "somewhat helpful" or "very helpful" to 50.9 percent of the students.

### Career Planning Courses

As far as the specific career planning courses were concerned, only 12 percent of the students had taken these courses, 87 percent perceived them to be "helpful."

### General Conclusions

- (1) Generally students consider all the Career Development services identified in this study as "important" or "very important."
- (2) The majority of the students do not use the Career Development services provided in the university.
- (3) The majority of the students do not perceive the services being provided as having helped them in their Career Development.
- (4) It appears that students are not adequately aware of or do not know how to access the available services.

### Recommendations

Based on the findings reported in Chapter IV and the Conclusions, the following recommendations are made:

- (1) The university and its administrative units should assess the academic advising and the residence

advising programs to determine their responsibilities for the Career Development services provided to the students.

- (2) The Career Development units at the university need to examine these data and existing data to provide better service to the students in their Career Development.
- (3) The university should provide credit courses that would help students in career-planning and decision-making.
- (4) The university should develop strategies for the involvement of parents in the student's Career Development process.
- (5) More information on inservice opportunities regarding Career Development should be made available to the academic advisors and the residence advisors.
- (6) Each unit needs to examine its role in providing Career Development services and ways it can work with the existing Career Development services within the university.
- (7) The university should organize a network for the planning, dissemination and coordination of Career Development programs.
- (8) The university should encourage and sponsor additional research on Career Development that would further assess student and faculty concerns regarding Career Development within the university.

A study utilizing a similar design should be concluded on juniors and seniors as separate groups to study their perceptions of the Career Development Services within the university.

A comparative study of the Career Development needs of the sophomores, juniors and seniors should be conducted, so that programs can be directed to the needs of that particular group of students.

Information on current job trends should be sent by the units responsible for it i.e. the Placement Services and the Career Resource Center, to all the colleges within the university and to the residence halls. This dissemination of information will assist the academic and residence advisors in assisting students.

Information on current job trends should be posted at places where it can be easily accessible to the students.

### Reflections

In this section it is the intent of the researcher to take the prerogative and stress upon the importance of introducing Career Education at the university level, and how it can become a viable concern for higher education.

Career Education has long been associated with Elementary and Secondary Education, it is equally important that it become a component of Higher Education also. Although the prestige of Higher Education is somewhat diminished by the current inability to deliver adequately the implied promise of a rewarding profession.

Based on these assumptions the following observations can be made regarding the importance of this study to Higher Education.

The present study and earlier researchers have shown that it is more a myth than a reality that the freshman entering the university is ready to make all career decisions. In fact, the students at the university have expressed the need to get all kinds of assistance in the assessment of interests and aptitudes, in the formulation of academic program, in selecting majors, and about careers related to certain majors on jobs and job trends. It appears that students are asking for more than just the layout of an academic program, they want to be made aware of the available resources that can assist them in their career development.

It therefore becomes necessary that Career Development become a part of the university activity. A university committee on Career Development can study the current status of Career Development, and also help formulate a definition of Career Development. They can pool together resources and material information for dissemination to the various teaching units on the campus.

The campus based Career Development services subsumed under Career Resource Center, Counseling Services, Placement Services, Volunteer Programs, Academic Advisors, Residence Advisors, are fragmented with little close interaction between each service. In order for better interaction, there is a need for a comprehensive Career Development program at the University level, so that there is coordination among the existing services.

It appears from this research and other researches that work learning experiences like Volunteer Programs and Experiential learning, do not appear to attract many of the "academicians." They do not consider these programs to be purely "academic" and it is for this reason that many students are not referred to them and therefore they have not looked into these experiences. Another factor that shows up in research is that when ever Experiential programs or any work learning activity is offered as part of a course requirement, it is considered primarily academic. The extent to which it is career developmental depends on the individual faculty member's perception of it and the students understanding of



it. There is the need for direct or indirect involvement of experiential learning, field experiences or volunteer programs in the academic program of the students.

There is a great need for a concerted effort at the departmental level to have the academic advisors make the students aware of the available Career Development services in the university and other information connected with it that can help the students in making career decisions.

There is need for the university to have a more open-minded attitude towards the acceptance of career education at the university level. The faculty who are currently connected with Career Development programs, need to be given due recognition in terms of tenure, promotions, etc. This will enable them to help meet the needs of the students, and also make the university take the substantive responsibility as best as possible to equip the students to achieve their career goals upon graduation.

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## **APPENDICES**

## APPENDIX A

## MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION  
DEPARTMENT OF SECONDARY EDUCATION AND CURRICULUM  
ERICKSON HALL

EAST LANSING • MICHIGAN • 48824

April 27, 1978

Dr. Paul Dressel  
Institutional Research  
331 Administration Building  
Campus

Dear Dr. Dressel:

Attached is the dissertation proposal for Rukhsana Rai. This proposal has been reviewed and approved by her doctoral committee members, Dr. William Brookover, Dr. Carl H. Gross, Dr. Walker H. Hill, Dr. Ben Bohnhorst, and Dr. Lawrence Krupka.

It is requested that approval be granted to conduct this study entitled, "A Study of the Career Development Services Provided to Sophomores at Michigan State University: Student Perceptions."

In order to get the required data for the study, it is necessary to have the names and addresses of sophomores currently enrolled at Michigan State University. It is requested that this list be released to Miss Rai.

Sincerely,



Cas Heilman  
Chairman, Doctoral Committee

Attachment

*Pigeon's Notebook:*

*A approval of this  
request. Any changes  
will have to be approved  
by Miss Rai.  
P.L.O.*

## MICHIGAN STATE UNIVERSITY

OFFICE OF INSTITUTIONAL RESEARCH  
ADMINISTRATION BUILDING

EAST LANSING • MICHIGAN • 48824

May 8, 1978

## MEMORANDUM

TO: Cas Heilman, Chairman, Doctoral Committee for  
Rukhsana Rai

FROM: Paul L. Dressel, Chairman, Committee on Release  
of Confidential Information (P.L.D.)

I have approved the request that Miss Rai have a list of the names and addresses of sophomores currently enrolled at Michigan State University. I have directed a note to Phyllis Wilkie asking that she arrange for this. If there are charges to be assessed for the list, these will have to be assumed by Miss Rai.

P.L.D.

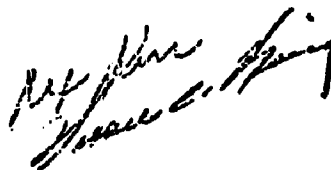
## MICHIGAN STATE UNIVERSITY

OFFICE OF THE REGISTRAR

EAST LANSING • MICHIGAN • 48824

May 10, 1978

TO: Director, Data Processing  
FROM: Rex Kerr, Assistant Registrar  
SUBJECT: Release of Registrar's Data



Permission is hereby given to release data from the file of the Office of the Registrar to cover the following request:

FOR: Rukhsana Rai  
301 Erickson Hall  
Secondary Education

TELEPHONE: 5-1691, 3-8646

ACCOUNT NO.: Bill to requestor

DUE DATE: May 17, 1978

REQUEST: Select all class 2 students enrolled on campus Spring 1978

## OUTPUT:

1. One list of students in alpha order to include name, local address, and local telephone number.
2. Two sets of local address mailing labels in alpha order.

Please begin processing of this request immediately, and supply a cost estimate concurrent to completion of the job.

PURPOSE: Completion of study for doctoral dissertation.

Please return completed project to Data Processing Coordination, Office of the Registrar.

Copy to Requestor

For Registrar's Use:

Project Number 195

Date Returned to DPC \_\_\_\_\_

For Data Processing Use:

Project Code \_\_\_\_\_

Date Received \_\_\_\_\_

Pick up Signature \_\_\_\_\_ Date \_\_\_\_\_

Returned to Data Processing for Delivery Date \_\_\_\_\_ Time \_\_\_\_\_

**APPENDIX B**

**CAREER DEVELOPMENT SERVICES PROVIDED TO  
SOPHOMORES AT MICHIGAN STATE UNIVERSITY**

**QUESTIONNAIRE**

Dear Student:

This questionnaire is a part of a study to survey the Career Development Services provided to sophomores at Michigan State University. The study intends to find out the importance of these services and the extent of the help you have received from them in your career and academic plans.

I know this is a busy time in the term, but I request you to please spare fifteen minutes of your time and fill out this questionnaire and return immediately.

Thank you.

Rukhsana Rai



## PART I

DEMOGRAPHIC DATA

1. MALE \_\_\_\_\_ AGE \_\_\_\_\_ SINGLE \_\_\_\_\_  
 FEMALE \_\_\_\_\_ MARRIED \_\_\_\_\_

2. Do you live on campus \_\_\_\_\_ with parents \_\_\_\_\_  
 frat/sorority \_\_\_\_\_ other \_\_\_\_\_

3. What is your major?

4. Have you enrolled in other majors? If so, please list:

\_\_\_\_\_  
 \_\_\_\_\_

5. How sure are you that your present major is the "right" one?

It is the Wrong Major	Very Uncertain	Uncertain	Certain	Absolutely Certain
.....	.....	.....	.....	.....
: : :	: : :	: : :	: : :	: : :
.....	.....	.....	.....	.....

6. Overall G.P.A.

1.5-2.0	2.0-2.5	2.5-3.0	2.5-3.5	3.5-4.0
.....	.....	.....	.....	.....
: : :	: : :	: : :	: : :	: : :
.....	.....	.....	.....	.....

7. Total credits earned at MSU to date \_\_\_\_\_ (include Spring term 1978)

How many terms enrolled at MSU (including Spring term 1978)

1 2 3 4 5 6

8. Parents' Occupation

a) Mother's occupation

b) Father's occupation

## 9. How do you finance your college education?

	None	1-25%	26-50	51-75	Over 75%
Scholarships/grants	_____	_____	_____	_____	_____
Veterans Benefits	_____	_____	_____	_____	_____
Spouse	_____	_____	_____	_____	_____
Parents	_____	_____	_____	_____	_____
Loans	_____	_____	_____	_____	_____
Summer Employment	_____	_____	_____	_____	_____
Part-time Employment	_____	_____	_____	_____	_____
during school year	_____	_____	_____	_____	_____
Other (Specify) _____	_____	_____	_____	_____	_____

## 10. Upon completing college, what occupation do you anticipate (hope for)? Be as specific as possible.

---



---

## 11. How certain are you that the above occupation is the "right" one for you?

Not sure	Somewhat sure	Sure	Very sure	Absolutely sure
.....	.....	....	.....	.....
: : :	: : :	: :	: : :	: : :
.....	.....	....	.....	.....

## 12. The university requires you to select a major at the end of your sophomore year. To what extent do you agree with this policy?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
.....	.....	.....	.....	.....
: : :	: : :	: : :	: : :	: : :
.....	.....	.....	.....	.....

PART II

The statements in this part of the questionnaire relate to certain services that may assist you in your academic and career plans. Please indicate the degree of importance that they have for you by circling the appropriate rank.

- 1 = Not Important  
 2 = Slightly Important  
 3 = Somewhat Important  
 4 = Important  
 5 = Very Important

	Not Important	Slightly Important	Somewhat Important	Important	Very Important
How important is it?					
1. That the academic advisors inform you about the career information sources that are available in the university?	1	2	3	4	5
2. That the university give information about counseling services available in the university?	1	2	3	4	5
3. That the university inform you about the opportunities to gain experience through volunteer programs?	1	2	3	4	5
4. That academic advisors help you in formulating your academic program?	1	2	3	4	5
5. That the university provide you with counseling on available majors?	1	2	3	4	5
6. That academic advisors give you information on careers related to the major of your choice?	1	2	3	4	5
7. That the university help you assess your interests?	1	2	3	4	5
8. That academic advisors give you details about majors in the college of your choice?	1	2	3	4	5
9. That academic advisors help you assess your interests and plan your career goals?	1	2	3	4	5
10. That the university administer tests in order to help you determine your interests and aptitudes?	1	2	3	4	5
11. That counseling services are provided to help you identify your career goals?	1	2	3	4	5

## Part II (con't)

How important is it:		Not Important	Slightly Important	Somewhat Important	Important	Very Important
12.	That the university have a career resource center to give you information related to careers?	1	2	3	4	5
13.	That the career resource center provide you with information on jobs related to certain majors?	1	2	3	4	5
14.	That the career resource center provide you with current information on job trends?	1	2	3	4	5
15.	That the university should assist you in obtaining part-time and summer employment?	1	2	3	4	5
16.	That the university provide you with elective credit courses that explore career options?	1	2	3	4	5
17.	That each college in the university provide a course that will help you explore career options in their fields?	1	2	3	4	5
18.	That the university provide you with credit courses that explore different career fields.	1	2	3	4	5
19.	That the university require you to take courses which explore career options?	1	2	3	4	5
20.	That the university provide you with courses that teach you how to make decisions and plan programs?	1	2	3	4	5
21.	<u>To your parents</u> that the university provide you with career information?	1	2	3	4	5
22.	<u>To your parents</u> that the university provide you with credit courses for exploring careers?	1	2	3	4	5

PART III

The statements in this part of the questionnaire relate to the extent to which the various services in the university have been of assistance to you. Please indicate the extent of this assistance by circling the appropriate rank.

- 1 = Not At All  
 2 = A Little  
 3 = Moderate  
 4 = High  
 5 = Very High

Not At All	A Little	Moderate	High	Very High
------------	----------	----------	------	-----------

To what extent:

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. Has your academic advisor informed you about the career information sources that are available in the university? | 1 | 2 | 3 | 4 | 5 |
| 2. Has the university informed you about the availability of counseling services?                                    | 1 | 2 | 3 | 4 | 5 |
| 3. Has the university informed you about the opportunities to gain experience through volunteer programs?            | 1 | 2 | 3 | 4 | 5 |
| 4. Has your academic advisor helped you in formulating your academic program?  | 1 | 2 | 3 | 4 | 5 |
| 5. Has the university provided you with counseling on available majors?  | 1 | 2 | 3 | 4 | 5 |
| 6. Has your academic advisor given you information on careers related to the major of your choice?                   | 1 | 2 | 3 | 4 | 5 |
| 7. Has the university helped you in assessing your interest?   | 1 | 2 | 3 | 4 | 5 |
| 8. Has your academic advisor given you details about majors in the college of your choice?                           | 1 | 2 | 3 | 4 | 5 |
| 9. Has your academic advisor helped you assess your interests and plan your career goals?                            | 1 | 2 | 3 | 4 | 5 |
| 10. Has the university administered tests to help you determine your interests and aptitudes?                        | 1 | 2 | 3 | 4 | 5 |
| 11. Have the counseling services helped you in identifying your career goals?  | 1 | 2 | 3 | 4 | 5 |
| 12. Has the career resource center provided you with information related to careers?                                 | 1 | 2 | 3 | 4 | 5 |

## Part III (con't)

1

To what extent:	Not At All	A Little	Moderate	High	Very High
13. Has the career resource center provided you with information on jobs related to certain majors?	1	2	3	4	5
14. Has the career resource center provided you with current information on job trends?	1	2	3	4	5
15. Has the university assisted you in obtaining part-time and summer employment?	1	2	3	4	5
16. Has the university provided you with elective credit courses that explore career options?	1	2	3	4	5
17. Has the university provided courses through which you can explore career options in various fields?	1	2	3	4	5
18. Has the university provided you with credit courses that explore different career fields?	1	2	3	4	5
19. Has the university required you to take courses which explore career options?	1	2	3	4	5
20. Has the university provided you with courses that teach you to make decisions and plan programs?	1	2	3	4	5
21. Are you parents satisfied that the university has provided you with career information?	1	2	3	4	5
22. Are your parents satisfied that the university provides you with credit courses for exploring careers?	1	2	3	4	5

PART IV

Please check source/sources that have helped you in your career plans and the degree of their helpfulness to you.

- 1 = Never Used  
 2 = Useless  
 3 = Slightly Helpful  
 4 = Somewhat Helpful  
 5 = Very Helpful

How helpful have the following been in assisting you in developing your career plans?

Sources

	Never Used	Useless	Slightly Helpful	Somewhat Helpful	Very Helpful
1. M.S.U. Counseling Center	1	2	3	4	5
2. Parents	1	2	3	4	5
3. M.S.U. Career Resource Center	1	2	3	4	5
4. Friends	1	2	3	4	5
5. Academic Advisors	1	2	3	4	5
6. Residence Advisors	1	2	3	4	5
7. Subject Matter Courses	1	2	3	4	5
8. Career Planning Courses (specify)					
_____	1	2	3	4	5
_____	1	2	3	4	5
9. Other (specify)					
_____	1	2	3	4	5
_____	1	2	3	4	5
_____	1	2	3	4	5

INSTRUCTIONS FOR MAILING

AFTER YOU HAVE FILLED OUT THE QUESTIONNAIRE, PLEASE  
STAPLE AND DROP IN CAMPUS MAIL IF YOU LIVE ON CAMPUS AND U.S.  
MAIL IF YOU LIVE OFF CAMPUS.

(POSTAGE PROVIDED)



## **APPENDIX C**

# FREQUENCY DISTRIBUTION OF RESPONSES

## Part II

The statements in this part of the questionnaire relate to certain services that may assist you in your academic and career plans. Please indicate the degree of importance that they have for you by circling the appropriate rank.

1=not important  
2=slightly important  
3=somewhat important

4=important  
5=very important

How important is it:	N	Not Important	Slightly Important	Somewhat Important	Important	Very Important	Total Percent
1. That the academic advisors inform you about the career information sources that are available in the university?	160	3.7	8.6	13.8	31.2	42.5	99.8
2. That the university give information about counseling services available in the university?	154	1.9	7.1	15.6	39.6	35.7	99.9
3. That the university inform you about the opportunities to gain experiences through volunteer programs?	158	.6	6.9	18.4	37.3	36.7	99.9
4. That academic advisors help you in formulating your academic program?	159	3.7	7.5	18.2	31.4	39.0	99.8
5. That the university provide you with counseling on available majors?	161	2.5	5.0	18.6	32.9	41.0	100.0
6. That academic advisors give you information on careers related to the major of your choice?	160	.6	2.5	15.0	32.5	49.4	100.0
7. That the university help you assess your interests?	160	2.5	7.5	21.9	33.8	34.3	100.0
8. That academic advisors give you details about majors in the college of your choice?	158	3.2	4.4	17.1	34.8	40.5	100.0
9. That academic advisors help you assess your interests and plan your career goals?	160	3.1	16.8	24.4	34.3	21.3	100.0
10. That the university administer tests in order to help you determine your interests and aptitudes?	159	10.7	12.6	30.8	23.9	22.0	100.0
11. That counseling services are provided to help you identify your career goals?	161	5.6	7.5	25.5	31.7	29.8	100.1
12. That the university have a career resource center to give you information related to careers?	160	.6	4.3	19.3	39.1	36.6	99.9

How important is it:	N	Not Important	Slightly Important	Somewhat Important	Important	Very Important	Total Percent
13. That the career resource center provide you with information on jobs related to certain majors?	161	0.0	4.3	13.7	37.3	44.7	100.0
14. That the career resource center provide you with current information on job trends?	160	3.8	8.8	11.9	31.9	43.8	100.2
15. That the university should assist you in obtaining part time and summer employment?	158	4.4	7.6	19.6	36.1	32.3	100.0
16. That the university provide you with elective credit courses that explore career options?	157	3.8	8.9	19.1	31.9	36.3	100.0
17. That each college in the university provide a course that will help you explore career options in their fields?	161	0.0	7.1	26.1	34.8	31.7	99.7
18. That the university provide you with credit courses that explore different options in their field?	158	15.2	13.9	22.2	30.4	18.4	100.1
19. That the university require you to take courses which explore career options?	156	5.8	25.0	22.4	31.4	15.4	100.0
20. That the university provide you with courses that teach you how to make decisions and plan programs?	159	8.1	25.1	21.4	29.5	15.7	99.8
21. To your parents that the university provide you with career information?	152	10.5	11.2	18.4	29.6	30.3	100.0
22. To your parents that the university provide you with credit courses for exploring careers?	151	12.6	19.2	28.5	25.2	14.6	100.0

To what extent:		N	Not at all	A little	Moderate	High	Very high	Total percent
13.	Has the career resource center provided you with information on jobs related to certain majors?	160	54.7	20.4	16.8	6.8	1.2	99.9
14.	Has the career resource center provided you with current information on job trends?	155	49.7	20.0	19.4	6.5	4.5	100.1
15.	Has the university assisted you in obtaining part time and summer employment?	162	80.8	8.0	5.5	4.3	1.2	99.8
16.	Has the university provided courses through which you can explore career options in various fields?	158	46.8	22.8	18.4	10.8	1.2	100.0
17.	Has the university provided you with elective credit courses that explore career options?	157	36.9	26.8	19.1	15.3	1.9	100.0
18.	Has the university provided you with credit courses that explore different career fields?	155	38.1	26.4	21.9	11.0	2.5	99.9
19.	Has the university required you to take courses which explore career options?	156	60.3	15.4	11.5	9.0	3.8	100.0
20.	Has the university provided you with courses that teach you to make decisions and plan programs?	156	53.2	25.0	15.4	5.7	0.6	99.9
21.	Are your parents satisfied that the university has provided you with career information?	145	36.5	29.7	24.8	6.9	2.1	100.0
22.	Are your parents satisfied that the university provides you with credit courses for exploring careers?	145	32.4	26.2	32.4	8.3	0.7	100.0

# FREQUENCY DISTRIBUTION OF RESPONSES

## Part III

The statements in this part of the questionnaire relate to the extent to which the various services in the university have been of assistance to you. Please indicate the extent of this assistance by circling the appropriate rank.

1=not at all  
2=a little  
3=moderate

4=high  
5=very high

To what extent:	N	Not at all	A little	Moderate	High	Very high	Total percent
1. Has your academic advisor informed you about the career information sources that are available in the university?	159	44.7	30.8	20.7	0.0	3.8	100
2. Has the university informed you about the availability of counseling services?	159	13.8	42.8	29.5	11.9	1.9	99.9
3. Has the university informed you about the opportunities to gain experience through volunteer programs?	161	44.1	31.7	12.4	8.6	3.1	99.9
4. Has your academic advisor helped you in formulating your academic program?	159	21.4	22.6	25.2	22.0	8.8	100.0
5. Has the university provided you with counseling on available majors?	161	39.8	26.7	19.3	10.6	3.7	100.1
6. Has your academic advisor given you information on careers related to the major of your choice?	162	42.0	32.1	16.1	9.9	0.0	100.1
7. Has the university helped you in assessing your interests?	163	53.3	23.3	16.6	3.7	3.1	100.0
8. Has your academic advisor given you details about majors in the college of your choice?	159	39.6	33.9	13.2	10.6	2.5	99.8
9. Has your academic advisor helped you assess your interests and plan your career goals?	159	50.3	27.7	17.0	4.4	0.6	100.0
10. Has the university administered tests to help you determine your interests and aptitudes?	160	67.7	12.6	10.8	4.4	4.4	99.9
11. Have the counseling services helped you in identifying your career goals?	161	68.8	19.1	7.5	3.8	0.6	99.8
12. Has the career resource center provided you with information related to careers?	159	53.5	19.5	13.2	11.3	2.5	100.0

Academic Advising

How important is it:	N	Mean*	S.D.	To what extent:	Mean	S.D.	Mean Difference
That academic advisors give you information on careers related to the major of your choice?	159	4.28	.85	Has your academic advisor given you information on careers related to the major of your choice?	2.05	1.06	2.23
That academic advisors give you details about majors in the college of your choice?	154	4.13	.94	Has your academic advisor given you details about majors in the college of your choice?	2.02	1.08	2.11
That the academic advisors inform you about the career information sources that are available in the university?	156	4.01	1.12	Has your academic advisor informed you about the career information sources that are available in the university?	2.04	1.05	1.97
That academic advisors help you in formulating your academic program?	155	3.94	1.11	Has your academic advisor helped you in formulating your academic program?	2.82	1.28	1.22
That academic advisors help you assess your interests and plan your career goals?	156	3.53	1.17	Has your academic advisor helped you assess your interests and plan your career goals?	1.77	.93	1.76

\* Items ranked in order of importance as perceived by the students.

Career Resource Center

How important is it:	<u>N</u>	<u>Mean*</u>	<u>S.D.</u>	To what extent:	<u>Mean</u>	<u>S.D.</u>	<u>Difference</u>
That the career resource center provide you with current information on job trends?	152	4.31	.957	Has the career resource center provided you with current information on job trends?	1.91	1.17	2.40
That the career resource center provide you with information on jobs related to certain majors?	158	4.13	.915	Has the career resource center provided you with information on jobs related to certain majors?	1.85	1.06	2.27
That the university have a career resource center to give you information related to careers?	157	4.01	.855	Has the career resource center provided you with information related to careers?	1.93	1.10	2.07

\* Items ranked in order of importance as perceived by the students.

Counseling Center/Services

How important is it:	<u>N</u>	<u>Mean*</u>	<u>S.D.</u>	To what extent:	<u>Mean</u>	<u>S.D.</u>	<u>Mean Difference</u>
That the university provide you with counseling on available majors?	159	4.05	1.01	Has the university provided you with counseling on available majors?	2.13	1.07	1.92
That the university give information about counseling services available in the university?	150	4.02	.97	Has the university informed you about the availability of counseling services?	2.47	.95	1.55
That the university help you assess your interests?	160	3.53	1.12	Has the university helped you in assessing your interests?	1.81	1.03	1.72
That counseling services are provided to help you identify your career goals?	159	3.52	1.14	Have the counseling services helped you in identifying your career goals?	1.52	.09	2.01
That the university administer tests in order to help you determine your interests and aptitudes?	156	2.97	1.24	Has the university administered tests to help you determine your interests and aptitudes?	1.67	.89	1.31

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\* Items ranked in order of importance as perceived by the students.



Courses

How important is it:	<u>N</u>	<u>Mean*</u>	<u>S.D.</u>	To what extent:	<u>Mean</u>	<u>S.D.</u>	<u>Mean Difference</u>
That the university provide you with elective credit courses that explore career options?	152	3.86	1.06	Has the university provided courses through which you can explore career options in various fields?	2.07	1.11	1.80
That each college in the university provide a course that will help you explore career options in their fields?	155	3.80	1.07	Has the university provided you with elective credit courses that explore career options?	2.17	1.15	1.63
That the university provide you with credit courses that explore different options in their field?	150	3.74	1.04	Has the university provided you with credit courses that explore different career fields?	2.16	1.14	1.59
That the university provide you with courses that teach you how to make decisions and plan programs?	152	3.15	1.22	Has the university provided you with courses that teach you to make decisions and plan programs?	1.76	.96	1.39
That the university require you to take courses which explore career options?	150	2.59	1.33	Has the university required you to take courses which explore career options?	1.86	1.21	.73

\* Items ranked in order of importance as perceived by the students.

Miscellaneous

How important is it:	<u>N</u>	<u>Mean*</u>	<u>S.D.</u>	To what extent;	<u>Mean</u>	<u>S.D.</u>	<u>Mean Difference</u>
<u>Volunteer Programs</u>				<u>Volunteer Programs</u>			
That the university inform you about the opportunities to gain experience through volunteer programs?	157	4.03	.95	Has the university informed you about the opportunities to gain experience through volunteer programs?	2.08	1.08	1.96
<u>Summer Employment</u>				<u>Summer Employment</u>			
That the university should assist you in obtaining part time and summer employment?	157	3.6	1.14	Has the university assisted you in obtaining part-time and summer employment?	1.34	.89	2.21
<u>Parents</u>				<u>Parents</u>			
To your parents that the university provide you with career information?	141	3.59	1.26	Are your parents satisfied that the university has provided you with career information?	2.45	1.03	1.13
To your parents that the university provide you with credit courses for exploring careers?	140	3.19	1.22	Are your parents satisfied that the university provides you with credit courses for exploring careers?	2.39	1.10	.79

# ACADEMIC ADVISING: Distribution of responses by percentage.

Importance	N	Not Important	Slightly Important	Somewhat Important	Important	Very Important
That the academic advisors inform you about the career information sources that are available in the university?	160	3.7	8.6	13.8	31.2	42.5
That academic advisors help you in formulating your academic program?	159	3.7	7.5	18.2	31.4	39
That academic advisors give you information on careers related to the major of your choice?	160	.6	2.5	15.0	32.5	49.4
That academic advisors given you details about majors in the college of your choice?	158	3.2	4.4	17.1	34.8	40.5
That academic advisors help you assess your interests and plan your career goals?	160	3.1	16.8	24.4	34.4	21.3

Extent	N	Not At All	A Little	Moderate	High	Very High
Has your academic advisor informed you about the career information sources that are available in the university?	159	44.7	30.8	20.7	0	3.8
Has your academic advisor helped you in formulating your academic program?	159	21.4	22.6	25.2	22	8.8
Has your academic advisor given you information on careers related to the major of your choice?	162	42	32.1	16.1	9.9	0
Has your academic advisor given you details about majors in the college of your choice?	159	39.6	33.9	13.2	10.6	2.5
Has your academic advisor helped you assess your interests and plan your career goals?	159	50.3	27.7	17	4.4	.06

# CAREER RESOURCE CENTER: Distribution of responses by percentage.

Importance	N	Not Important	Slightly Important	Somewhat Important	Important	Very Important	Extent	N	Not At All	A Little	Moderate	High	Very High
That the university have a career resource center to give you information related to careers?	161	.6	4.3	19.3	39.1	36.6	Has the career resource center provided you with information related to careers?	159	53.5	19.5	13.2	11.3	2.5
That the career resource center provide you with information on jobs related to certain majors?	161	0	4.3	13.7	37.3	44.7	Has the career resource center provided you with information on jobs related to certain majors?	160	54.7	20.4	16.8	6.8	1.2
That the career resource center provide you with current information on job trends?	160	3.8	8.8	11.9	31.9	43.8	Has the career resource center provided you with current information on job trends?	155	49.7	20	19.4	6.5	4.5

### COUNSELING CENTER/SERVICES: Distribution of responses by percentage

Importance	N	Not Important	Slightly Important	Somewhat Important	Important	Very Important	Extent	N	Not At All	A Little	Moderate	High	Very High
That the university give information about counseling services available in the university?	154	1.9	7.1	15.6	39.6	35.7	Has the university informed you about the availability of counseling service?	159	13.8	42.8	29.5	11.9	1.9
That the university provide you with counseling on available majors?	161	2.5	5.0	18.6	32.9	41.0	Has the university provided you with counseling on available majors?	161	39.8	26.7	19.3	10.6	3.7
That the university help you assess your interests?	160	2.5	7.5	21.9	33.8	34.5	Has the university helped you in assessing your interests?	163	53.3	23.3	16.6	3.7	3.1
That the university administer tests in order to help you determine your interests and aptitudes?	159	10.7	12.6	30.8	23.9	22	Has the university administered tests to help you determine your interests and aptitudes?	160	67.7	12.6	10.8	4.4	4.4
That counseling services are provided to help you identify your career goals?	161	5.6	7.5	25.5	31.7	29.8	Have the counseling services helped you in identifying your career goals?	161	68.6	19.1	7.5	3.8	0.6

### COURSES: Distribution of responses by percentage

Importance	N	Not Important	Slightly Important	Somewhat Important	Important	Very Important
That the university provide you with elective credit courses that explore career options?	157	3.8	8.9	19.1	31.9	36.3
That each college in the university provide a course that will help you explore career options in their fields?	161	0	7.1	26.1	34.8	31.7
That the university provide you with credit courses that explore different career fields.	158	15.2	13.9	22.2	30.4	18.4
That the university require you to take courses which explore career options?	156	5.8	25	22.4	31.4	15.4
That the university provide you with courses that teach you how to make decisions and plan programs?	159	8.1	25.1	21.4	29.5	15.7

Extent	N	Not At All	A Little	Moderate	High	Very High
Has the university provided courses through which you can explore career options in various fields?	158	46.8	22.8	18.4	10.8	1.2
Has the university provided you with elective credit courses that explore career options?	157	36.9	26.8	19.1	15.3	1.9
Has the university provided you with credit courses that explore different career fields?	155	38.1	26.4	21.9	11	2.5
Has the university required you to take courses which explore career options?	156	60.3	15.3	11.5	9	3.8
Has the university provided you with courses that teach you to make decisions and plan programs?	156	53.2	25	15.4	5.7	.6

# MISCELLANEOUS: Distribution of responses by percentage

Importance	N	Not Important	Slightly Important	Somewhat Important	Important	Very Important
<u>Volunteer Programs</u>						
That the university inform you about the opportunities to gain experience through volunteer programs?	158	16	6.9	18.4	37.3	36.7
<u>Summer Employment</u>						
That the university should assist you in obtaining part time and summer employment?	158	4.4	7.6	19.6	36.1	32.3
<u>Parents</u>						
To your parents that the university provide you with career information?	152	10.5	11.2	18.4	29.6	30.3
To your parents that the university provide you with credit courses for exploring careers?	151	12.6	19.2	28.5	25.2	14.6

Extent	N	Not At All	A Little	Moderate	High	Very High
<u>Volunteer Program</u>						
Has the university informed you about the opportunities to gain experience through volunteer programs?	161	44.1	31.7	12.4	8.6	3.1
<u>Summer Employment</u>						
Has the university assisted you in obtaining part time and summer employment?	158	80.8	8	5.5	4.3	1.2
<u>Parents</u>						
Are your parents satisfied that the university has provided you with career information?	145	36.5	29.7	24.8	6.9	2.1
Are your parents satisfied that the university provides you with credit courses for exploring careers?	157	32.4	26.2	32.4	8.3	.7

Table of Correlations for  
Academic Advising

EXTENT						
Item	1	4	6	8	9	
IMPORTANCE	1	.0390	.0383	.0893	-.0253	.0504
	4	.2385	.2528	.2807	.1344	.1383
	6	-.0626	.0995	.0178	-.0424	-.0424
	8	-.223	.0488	.1956	.0200	.0633
	9	.1925	.1613	.2668	.1891	.1827

Table of Correlations for  
Career Resource Center

		EXTENT		
Items		12	13	14
IMPORTANCE	12	.1024	.0472	.0046
	13	.1241	.0996	.0563
	14	.1002	.1141	.1262



Counseling Center/ServicesTable of Correlations

		E X T E N T				
		2	5	7	10	11
I M P O R T A N C E	2	-.0259	.0968	.1181	-.0083	.1716
	5	.0299	.1549	.1055	-.0091	.1867
	7	.0628	.2045	.1628	.1399	.2275
	10	.1535	.1616	.1929	.0782	.2499
	11	.0968	.1492	.1934	.0696	.2402

CoursesTable of Correlations

I M P O R T A N C E	<u>E X T E N T</u>					
	16	17	18	19	20	
	16	.1293	.1162	.1929	.0855	.0541
	17	.0148	-.0071	.1336	.0165	-.0843
	18	.0496	.0318	.1809	.0128	.0547
	19	-.0229	-.0745	.0967	.1556	.0753
	20	.0024	-.0541	.0278	.1428	.2066