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UNIVERSITY UNDERGRADUATE DIVISION ADVISOR INFLUENCE ON STUDENT CURRICULAR CHOICE IN THE FIELD OF AGRICULTURE

By

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ABSTRACT

UNIVERSITY UNDERGRADUATE DIVISION ADVISOR INFLUENCE ON STUDENT CURRICULAR CHOICE IN THE FIELD OF AGRICULTURE

By

Pamela Bellamy

The research hypotheses tested in the study were:

1. There is no significant difference between no-preference advisors and students in perception of the influence and importance of the advisory function in selecting a major.

2. There is no significant difference between no-preference advisors and students in their perception of selected factors in selecting an agricultural curriculum.

3. There is no significant difference between advisor and student perception of the field of agriculture.

METHODS AND PROCEDURES

The two sample survey instruments developed for use in the study included the advisor survey divided into five parts consisting of forty-six items and the student survey similar in design to the advisor survey consisting of five parts and fifty-two items.

Two sample groups were chosen for the study, University Undergraduate Division no-preference advisors and students

enrolled in an agricultural curriculum after original enrollment in no-preference.

Data from Parts 1 and 2 of the advisor and student surveys were analyzed by using percentages and distributions. Parts 3, 4, and 5 of the advisor and student surveys instituted the t- test method of analysis to determine statistically significant differences between the two survey samples. The level of significance used was .05. A Likert type scale was assigned to the survey items in Parts 3, 4, and 5 with one (1) being of most importance and four (4) being of least importance.

FINDINGS AND RECOMMENDATIONS

No significant differences were found in Part 3 of the survey concerning advisor and student perception of the field of agriculture. Statistically significant differences were found in Parts 4 and 5 of the surveys concerning the degree of importance of certain advisory functions in the student's selection of a major field of study and the influence of certain factors in assisting a student in selecting agriculture. Difference was determined at the .05 level of significance.

From the study, it may be concluded that no-preference advisors and students perceived the field of agriculture similarly. However, there were statistically significant differences in the advisor and student knowledge base of

career opportunities available within the field of agriculture. It is recommended that an in-service training program be implemented to enhance advisor knowledge of the career opportunities available in agriculture.

There were significant differences found in the importance of the advisory function in assisting a student in selecting a major as well as in the factors that may encourage a student to choose an agricultural curriculum. Recommendations based on the data are as follows:

a. Clarification of the role of the academic advisor.

b. Improved interaction between advisors and students including: career exploration; referral to the appropriate resources; and frequent follow-up with students to monitor progress.

c. Improvement in advisor training procedures. More emphasis should be placed on student development and the influence of family, peer and experiential interaction on a student selecting a major.

Finally, further research should be done to examine the variables which influence a student in choosing a major field of study.

DEDICATION

This dissertation is dedicated to my son Dwight whose energy and love has given me the stamina to complete this dissertation, to my parents Johnny and Genevieve whose support I drew both my strength and motivation, and to my grandmother the late Annie E. Smith who taught me the importance of education. Additionally, this dissertation is dedicated to my dear friends Stacia Scarborough, Judith Boyer, Linda Gross, and Pam Peterson whose support assisted me with the completion of this project. Lastly, I dedicate this dissertation to my major professor Dr. Eldon Nonmaker and to my doctoral committee for believing in me when I didn't. Thank you.

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CHAPTER 1

STATEMENT OF THE PROBLEM

INTRODUCTION

Modern agriculture demands highly skilled and professionally trained individuals. Except in a few competitive areas, enrollment in the Michigan State University College of Agriculture and Natural Resources has declined in recent years. An example of competitive areas offered in the College of Agriculture and Natural Resources are food systems management and packaging. Both of these fields demand specialized training and individuals who graduate in these areas are hired with competitive salaries. Enrollment in fields in agriculture such as food systems management and packaging have increased but the student enrollment within the College of Agriculture and Natural Resources at Michigan State University as a whole has decreased from 3,225 in 1980 to 1,991 in 1985.

There are a number of factors which may contribute to declining enrollment in the College of Agriculture and Natural Resources. One such factor may be the influence of academic advisors on students as they make their curricular

and career choices. At Michigan State University, the Undergraduate University Division is the unit designated to provide academic advisement to freshmen and sophomore students who do not yet have a major. The Undergraduate University Division Unit is seen as a valuable factor in assisting students in choosing a major and in making career decisions.

Currently, there is very little programming designed to increase the Undergraduate University Division No-preference Advisor's knowledge of the opportunities available in the fields of agriculture and natural resources. To date, there has been very little data to ascertain the knowledge base or perceptions of these advisors as to their awareness of academic programs and career opportunities available in the fields of agriculture and natural resources.

THE PROBLEM

The problem proposed in this study is to determine the perception of academic advisors about the field of agriculture and the perceptions of no-preference students of both the advisor's influence, and the influence of other factors on their choice of a major in the field of agriculture and natural resources. An additional aspect of the problem is to determine similarities and differences between advisors' and students' perception of the relative

significance of selected variables as they relate to the advisory process.

To determine whether, in fact, students and advisors do differ in terms of their perceptions of the advisory process and its influence on selection of majors, the following research hypotheses have been developed:

1. Students and advisors will not differ in their perceptions of the influence and importance of the advisory function in assisting a student in selecting a major.

2. Students and advisors will not differ in their perceptions of selected influence factors in assisting the student in selecting a major.

3. Students and advisors will not differ in their perception of career opportunities in the field of agriculture.

If both advisors and students have similar perceptions and expectations of the advising process, it may be assumed that the advising process can be a positive experience for students. On the other hand, dissimilar perceptions and expectations may impede the advising process.

Students enter the College of Agriculture and Natural Resources by three primary routes:

1. Entrance as a new freshman

2. Transfer from another post secondary institution

3. Selection of a major from No-Preference or another field of study after enrollment at Michigan State University.

Of these three avenues for admission to the College of Agriculture and Natural Resources, freshman enrollment accounts for the entrance of most students to the college. New Freshman enrollment is due in part to recruitment efforts. For example, the College of Agriculture and Natural Resources has instituted a summer program to recruit minority and educationally disadvantaged students. This program provides minority students with the opportunity to work in agriculturally related jobs, thus providing them with exposure to the field of agriculture. As a result of this program, the College of Agriculture enrolled 48 new minority students in the fall of 1985.

Programs such as the minority apprenticeship recruitment program have been successful in educating potential candidates about the College of Agriculture and Natural Resources. In another recruitment effort the college has established an Ambassador Program utilizing upper class students in agriculture to recruit high school students as potential applicants.

Although some efforts have been instituted to recruit more students into the College of Agriculture and Natural Resources, this study will concentrate on students who have

declared majors in the field of agriculture after their original enrollment as no-preference students. The evidence accumulated thus far suggests that the College of Agriculture has directed a majority of its programming to students rather than Undergraduate University Division Advisors. It is important to realize that there are several influences involved in the student's decision to change or choose a major. However, this study will be limited to the influence of academic advising. There have been several studies to date on the high school level that have dealt with the factors influencing student career decisions. Two such studies published by Bailey and Hoover (1967) indicate that students are misinformed about the field of agriculture by high school advisors. In effect, college-bound high school students are advised to undertake other major fields of study instead of agriculture.

This study is limited to no-preference academic advisors in the Undergraduate University Division at Michigan State University who are not associated with the College of Agriculture and Natural Resources. To date, no data exists on no-preference academic advisors' perceptions of the field of agriculture. Such a study would be valuable in helping the College of Agriculture and Natural Resources establish a mechanism to aid advisor awareness of the opportunities available within the fields of agriculture.

PURPOSE OF STUDY

The purpose of this study is to obtain information on the following: (1) Perceptions of the Undergraduate University Division Advisors and Agriculture and Natural Resources students on the advising process; (2) Perceptions of both the Undergraduate University Division Advisors and Agriculture and Natural Resources students about the field of agriculture; and, 3) Factors, including academic advising, which may influence students to go into the field of agriculture.

It is assumed that more meaningful and more effectual career and curricula information would be available through educating the Undergraduate University Division Advisor. Therefore, the goals of the study is threefold:

1. To obtain information on the perceptions and knowledge base of both Undergraduate University Advisor, No-preference Advisors and students who have declared agriculture as a major in the curricula available within the College of Agriculture.

2. To understand what factors, including academic advisement, which may influence these students to choose a major, with particular attention to agriculture as a major field of study.

3. To determine both University Undergraduate Division Advisor and no-preference student expectations and perceptions about the advisory process.

DESCRIPTION OF ADVISOR AND STUDENT SURVEY INSTRUMENTS

The subject population for this study is comprised of Undergraduate University Division No-preference Advisors and freshmen and sophomore students enrolled in agriculture after previous enrollment in a no-preference major. Collection of data on both populations will be through the use of surveys. Two surveys have been devised for the study, one specifically designated for advisors and the other for the student population. Areas included on the advisor survey are as follows:

1. Length of time the advisor has been involved in assisting students.

2. Identification of advising methods employed to assist in the student's curricula choice.

3. Of the students seen, the number no-preference advisors have recommended to go into agriculture in the past two years.

4. University Undergraduate Advisor perception of agriculture as a career choice.

5. The advisor's knowledge base of the curricula and areas of study in agriculture.

6. Their perception of the qualifications and qualities the student should possess to study agriculture

7. The relationship, if any, the advisors have had with College of Agriculture and Natural Resources faculty and the nature of that relationship.

Areas presented on the student survey are as follows:

1. Prior exposure to careers and areas of study in the field of agriculture.

2. Perception of the assistance given to the student by an Undergraduate University Division No-preference Advisor.

3. The number of times the student sought assistance from the Undergraduate University Division No-preference Advisor.

4. Factors which influenced the student to choose agriculture as a field of study.

5. Prior employment experience within the field of agriculture.

6. Exposure to Michigan State University College of Agriculture faculty.

Similarly, both survey instruments include sections which measure the degree of influence and importance of the advisory role and function in assisting the student in making a major selection.

The statistical method used to present the responses on these surveys will be through percentage distributions and the t- test method of analysis.

ASSUMPTIONS ON WHICH THE STUDY IS BASED

The primary assumptions underlying this study include:

1. Advisors are one of the many influences that aid students in deciding a major field of study.

2. A lack of knowledge of a particular major can affect the information given to a student by an advisor.

3. If the knowledge base of academic advisors were expanded to include all of the opportunities available in agriculture, more students would be encouraged to enroll in the College of Agriculture and Natural Resources.

4. The College of Agriculture and Natural Resources is a valuable college which offers a student an expansive variety of career opportunities.

5. Students do look to the advisor as a resource in making career decisions.

6. A student is more likely to choose the field of agriculture if there has been previous exposure to the field.

7. Increased awareness of career opportunities in the field of Agriculture and Natural Resources may increase student enrollment within the College of Agriculture and Natural Resources.

DEFINITIONS OF TERMS

Agriculture Major - Includes anyone of the following majors: Agriculture/No-Preference, Agriculture Business, Agriculture Biochemistry, Agricultural Communications, Agricultural Economics, Agricultural Engineering, Animal Science, Botany and Plant Pathology, Packaging, Human Nutrition, Agricultural Education, Crop and Soil Science, Food Science, Horticulture, Marketing, Horticulture Science, Poultry Science, and Entomology.

Natural Resources Major - Includes anyone of the following majors: Building Construction, Fisheries and Wildlife, Forestry, Park and Recreation Resources or Resources Development.

No-Preference Major - In this study no-preference refers to the student who enters the university as a freshman without declaring a major. Students already enrolled in the university have the option to declare no-preference from another major up to 85 credits. A student must declare a major after attaining 85 credits at Michigan State University.

Undergraduate University Division - In this study the Undergraduate University Division refers to an academic unit established on campus to provide advising services to students under 85 credits. In addition, advisors in the unit provide students with career and curricula counseling,

as well as monitor students academically. This division is administratively responsible for all students who have earned between 0-84 credits except those students enrolled either in James Madison College or Lyman Briggs School/College of Natural Science.

Enroll - Refers to the act of actually and officially becoming a student in college. A student is considered to be enrolled when he/she is registered for classes. Most university students declare a major area of study upon entrance as a freshman. Michigan State is unique in that entering freshman do not have to declare a major field of study and instead may enroll in a no-preference category.

Declaration of a Major - When a student pursues a particular curricular plan in order to be accepted into a college. At Michigan State University you must be accepted by a college at 85 credits.

LIMITATIONS OF THE STUDY

This study is limited to Undergraduate University Division academic advisors and to students who changed from No-preference to Agriculture and Natural Resources. Another significant limitation of the study is that it concentrates on the No-preference student who chose agriculture as a curricular choice. There may indeed be a number of students from other areas who have changed to an agricultural major.

OUTLINE OF THE STUDY

This study is divided into five chapters. In Chapter One the statement of the problem and the purpose of the study are discussed. Chapter Two provides a review of the literature directly related to the study. Chapter Three presents a description of the instruments and the methodology used in the study. Chapter Four presents an analysis and tabulation of the data collected from the research instruments. Chapter Five contains conclusions and recommendations related to the problem outlined in Chapter One.

CHAPTER 2

REVIEW OF LITERATURE

INTRODUCTION

This chapter provides a review of literature directly related to the study. The review is divided into the following five areas: (1) a descriptive narrative of the purpose and functions of advising; (2) a discussion of the types of advisory delivery systems available; (3) the influences of the advisory process on a student's selection of a major; (4) the decision-making process as it relates to educational planning; and, (5) factors associated with enrollment in the agricultural curricula.

PURPOSE AND FUNCTIONS OF ACADEMIC ADVISING

Academic advising in American Higher Education has evolved from an isolated and unrecognized process to a multifaceted and complex system. Academic advising in some form has been introduced into every higher educational institution in this country.

During the 1960's, colleges and universities across the country opened their doors to embrace a large influx of students seeking admission. This influx of students

presented a number of problems within the collegiate system; (1) students were more concerned with pursing majors that would make money, (2) technological advances in society created new and more technical careers. As a direct result of the student influx many changes took place within the collegiate system, as the system had to find new ways to accommodate student needs (Ender, Winston, Miller, and Grites, 1979). In order to gain a clearer perspective on the changes that have taken place within the collegiate system it is necessary to provide historical background on the evolution of the higher education institution.

Henderson and Henderson (1974) suggest that higher education in America has evolved from a Judeo-Christian ethic which emphasized individual uniqueness, faculty/student mentoring, and the development of intellectual abilities and individual achievement. Institutions of higher education have changed drastically from a student centered system into one that encourages a depersonalized educational experience. This change is attributed to the rapid growth of institutional size and an increase in student enrollment (Ender, Winston, Miller, and Grites, 1984). To date, the changes that have taken place in higher education have de-emphasized community building and instead have created a collegiate experience that involves computerized registration, TV lectures, and generic

advising. Mass advising and high enrollment rates have contributed to the dilemma. Kerr and Gade (1981) indicate that the declining birthrate will result in a decrease of the total number of young Americans in the age group of 17 to 24 years old between the years of 1978 and 1998. Likewise, the college population will experience a decrease by approximately 23 percent. Competition among universities to recruit students has resulted in an increased interest for institutions to provide services that would expose students to a positive and personal atmosphere.

With increased competition for students and the need to develop personalized services, institutions of higher education have been faced with a number of issues, among them: (1) the development of an educational atmosphere where true learning takes place, and (2) the establishment of more competitive and credible major/curricula programs to meet the demands of a competitive society. One way in which colleges have met these needs is by instituting advising units. The primary function of the academic advising units is to promote: (1) faculty/student interaction, (2) academic and career development, and (3) a positive learning environment for students, (Grites, Ender, Winston, and Miller, 1982).

Astin (1977) believes the establishment of advising centers, with improved student/faculty interaction results

in higher academic achievement among students. Advising centers also promote an enhanced academic and personal collegiate experience for the student. In addition, the establishment of the advisement units has provided an easily accessible route to important information needed by students. More importantly, when student retention is an issue, the advisement center has proven to be effective in providing services to all students (Pino, 1975, Shelton, 1972). The advising unit provides services that intentionally guides the student towards achieving higher levels of academic competency (Grites, 1979).

Academic advising is defined as a systematic process based on a close student/advisor relationship intended to aid students in achieving educational, career, and personal goals, (Habley, 1981). Through the use of institutional and community resources, advising is intended to provide the student with a well rounded educational experience (Crookston, 1972; Crockett, 1978; Mash, 1978; Grites, 1979; Walsh, 1979; Ender, Winston, and Miller, 1982). The goals of advising summarized from these studies are as follows:

1. Academic advising is a continuous process which promotes advisor contact with students.

2. Advising must be concerned with quality of life issues. The advisor must be responsible for facilitating a positive atmosphere for the student in college.

3. Advising is goal related. These goals should encompass academic, career, and personal areas.

4. Advising requires the establishment of a caring human relationship for which the advisor must take the initial responsibility.

5. Advisors should be models for students to emulate, specifically demonstrating behaviors that lead to self-responsibility and self-directiveness.

6. Advising should seek to integrate both academic and student affairs personnel.

7. Advisors should seek to utilize as many campus and community resources as possible (Ender, Winston and Miller, 1982).

The above goals are the challenge of academic advising; implementation of these goals should begin, ideally, during the student's freshman year (Heath, 1968; Chickering, 1974; and Astin, 1977). Evidence has pointed to the fact that the freshman year is a critical period in the student's collegiate experience to introduce advising. Wilson (1981) has clearly pointed to the fact that the first year of college as experienced by the freshman student is filled with anxiety and frustration. Transitional issues, such as unfamiliarity with the environment; ethical and value concerns (i.e., sexuality and drugs); academic factors surrounding choice of major and college procedures; and

interaction with college personnel are some of the issues confronting the first year freshman. Wilson (1980) clearly advocates the use of advising as a strategy in which to address the aforementioned issues.

Thus far, the functions and goals of the advising process have been reviewed in this chapter. The next section examines the different types of advisory systems available in higher educational institutions. The advisory systems discussed include faculty/student advising, centralized advising and peer/para-professional advising. Although 80 percent of the advising process is done by college faculty members to date, the use of the centralized and para-professional advising have played a major role in the delivery of essential services to students. The following is a comprehensive view of the three major advisory systems as they currently exist in higher educational institutions. (Highee, 1979; Johnson and Spradel, 1975; Polson and Jurity, 1979; Spencer, Peterson, and Kramer, 1982).

ADVISORY DELIVERY SYSTEMS

An emerging trend in the delivery of academic advising services has been the establishment of centralized advisement. Centralized advising centers, which evolved in the 1960's, were specifically designed to handle administrative procedures for both freshmen and sophomore

students with undeclared majors. These centers monitor such areas as course registration, declaration and change of major and college rules and procedures. Advising centers are frequently staffed by full and part-time staff members whose primary role is exclusive to academic advising. Structurally, centralized academic advisement units are primarily unique to larger campuses because faculty/student interaction tends to be minimal within the larger institutional settings. These advisory units are usually housed in several locations on campus to provide improved student accessibility (Crockett and Levitz, 1980). The essential responsibilities of the centralized advisement centers include: (1) assisting freshman and sophomore students with declared or undeclared majors, (2) advising students on general education requirements, (3) conducting freshman orientation, and (4) development and maintenance of advisees' academic records (Crockett, 1982; Grites, 1979).

The popularity of centralized advising has been due in part to a larger student population and lessened faculty interest in the advising process as cited by Baxter (1970). There are several advantages to the centralized advising system. Centralized advising is especially responsive to the growing number of undecided or undeclared students. Approximately 25 percent of the student population enter college with an undecided major according to Gordon (1984).

These students, because of their uncertainty, present a problem to faculty advisors, as faculty advisors are equipped only with information concerning their particular college or department. Thus, the faculty advisor is ill-prepared to handle the concerns of a student with an undeclared major. It has been determined, more often than not, that the undecided student is a retention risk. By offering the undecided student intensive advising with respect to goal setting, career exploration and decision-making the student can be successful in the selection of a career goal (Bonar and Mahler, 1976; Trombley, 1979). Another advantage of centralized advising is the interaction created between university personnel and students. Terenzini, Pascarella and Logan (1982) report that freshman year achievement is highly influenced by the frequency of informal student/faculty contacts that focus on career, as well as intellectual matters. Thus, quality student experiences with university faculty and personnel has a positive influence on both academic achievement and general intellectual growth and competence (Terenzini, Pascarella and Logan, 1982). Other services offered by the centralized advising centers include advising dismissed or probationary students and assisting students in areas of skills development.

The use of centralized advisement centers have increased in recent years due to larger student populations seeking admission. These units are often able to integrate both academic and career information that is essential to student development and academic retention (Bonar and Mahler, 1976; Trombley, 1979).

PEER/PARA-PROFESSIONAL ADVISING

An increasingly popular delivery model in the advising process involves peer/para-professional advising. Students have often utilized other students for assistance in achieving independence and receiving academic information (Feldman and Newcomb, 1969; Upcraft, 1971). To capitalize on this concept, the peer/student helper has been established and used in freshman orientation, residence halls, tutoring, counseling, and the academic advising process. Peer/para-professional advising is usually utilized to complement both faculty and centralized advising systems. Carstensen (1971) estimates that 31 percent of the advising programs in existence use the peer advisor in conjunction with the primary advising services.

Although peer advising is a supplementary part of the total advising process, there are several important advantages to the system. Evidence suggests that many positive outcomes are achieved through the use of peer and para-professional advising. Students rate peer advisors

significantly higher than faculty advisors on human interest variables. Students viewed the peer advisor as more caring and concerned with their academic success (Hable, 1979). In addition, professional advisors were satisfied with the services rendered by the peer advisors (Crockett, 1982; Grites, 1979). When properly trained, peer advisors were found to be more effective in greatly reducing the drop-out rate and improving students' academic success (Upcraft, 1971; Murry, 1972; Baldwin, 1975; Brown and Myer, 1972; Brown, 1977). The most desirable characteristics which should be possessed by a peer advisor include the ability to relate to students, faculty, and administrators; to problem-solve; to possess knowledge of campus policies and procedures; to engender a strong sense of reality and motivation; and to demonstrate above average academic ability (Hable, 1979).

As case loads for advisors become over-crowed, providing supplementary support in assisting students has become a major practice in higher educational institutions. If implemented effectively, peer/paraprofessional is yet another vehicle in which to meet students needs.

FACULTY ADVISING

The oldest and most used system is that of faculty advising. Faculty members are considered the most knowledgeable and appropriate individuals for providing

academic information, scheduling and long range program planning. The faculty advising process involves faculty members from various departments on campus, providing academic advising to students who have declared majors in the faculty member's respective department. This process has long been recognized as an integral part of the advisory process (Feldman and Newcomb, 1969).

There are many positive aspects to faculty oriented advising. Feldman and Newcomb (1969) conclude that faculty advising encourages mentor relationships between faculty and students. They suggest that faculty/student interaction encourages improved academic achievement and increased intellectual development. In addition, higher motivational levels were observed in students who participated in the faculty advising process. It is also suggested that faculty advising promotes better intellectual stimulation for students. Students are encouraged to explore more in-depth the opportunities available within the faculty member's college (Gordon, 1984). The most encouraging support for faculty advising comes from Astin (1977) who views the student/faculty interaction as one of the strongest variables in the student's collegiate experience. Students who interact frequently with faculty are more satisfied with all aspects of their institutional experience, including student friendships, variety of courses, intellectual

environment, and even the administration of the institution. Finding ways to encourage greater personal contact between faculty and students can increase student satisfaction with their college experience (Feldman and Newcomb, 1969).

Faculty advising provides the student with an opportunity for student/faculty contact and a climate for establishing a relationship that is an important part of the college experience.

COMBINED ADVISING SYSTEMS

Evidence indicates that at least one third of all higher educational institutions have implemented combined advising processes to achieve the maximum quality of academic assistance provided for students (Winston, Miller, Ender, and Grites, 1984). Data seem to suggest that higher educational institutions which solely rely on faculty advising or the decentralized advising process might promote inconsistent delivery of information. On the other hand, those universities which use centralized systems tend to provide consistency in policy information but may fail to involve those university personnel who may provide more specific information on major areas. A combination of both centralized and faculty advising is the most desirable system, if providing quality academic assistance for students is to be a priority. (Winston, Miller, Ender and Grites, 1984).

With the rising demand for competitive majors in the market place, institutions of higher education have sought new and innovative ways in which to meet the demands of students. In meeting those demands, institutions of higher education have become increasingly concerned with preparing and counseling students towards competitive careers. Through the use of centralized, faculty, and peer/para-professional advising, universities and colleges have moved towards the ultimate goal of providing effective advising for all students.

EFFECTS OF ADVISING ON THE STUDENT POPULATION

There is much evidence that quality academic advising promotes a caring environment which facilitates positive student development. Advising fosters a student's understanding of university rules and procedures in addition to the administrative process. Academic advising, if effective, can be the primary integrative factor that brings students, university personnel, faculty members and academic curriculum together in a truly meaningful, educative experience (Ender, Miller, and Winston, 1980). Effective advising programs offer students greater opportunities to realize their potential as persons, citizens, and workers more fully (Winston, Miller, Ender, and Grites, 1984). To put it more clearly, academic advising has the potential for being a powerful educational tool, which can greatly improve

the quality of education experienced by students. The interactions between students and college personnel directly influences the quality of the students' educational and personal growth. Student/faculty dialogue and interactions in or out of the classroom that facilitate student educational and personal development are considered an integral part of the advising process (Terenzini, Pascarella, and Logan, 1982).

There has been renewed interest in the advising process in the last several years. Ender, Winston, and Miller (1982) cite several issues that contribute to the resurgence of interest in academic advising. These include the fact that most, if not all, institutions of higher education are failing in their mission of educating the student academically as well as personally (Grites, 1979). Additionally, the competition for students among institutions has fueled a renewed sense of consumerism on the part of the student. Students' expectations of the role education should play in their lives are such that they expect institutional representatives to respond to them individually. The needs the students bring to the educational arena are great and will require individual attention if the educational experience is to be worthwhile (Cross, 1974; Brodzinski, 1980; Chickering and Havighurst, 1981). Student satisfaction and retention are two key areas

that are promoting a renewed interest in academic advising (Heath, 1968; Astin, 1977; Bowen, 1977).

Astin's (1975) research presents relevant data which suggests the need for institutional commitment to retention. High student dropout rates, low student enrollments and student under-preparedness to handle college work have contributed to retention problems in the universities. Astin points to the value of better counseling and advising to help students plan their programs of study more carefully, organize their time and activities more efficiently, and get more positively involved in campus activities.

Glennen (1976) suggests that advisors be pro-active in their approach to advising the high risk students. Interaction with these students should involve assessing needs, and determining both short and long range goals. Snow, 1977 describes the need for pro-active intervention by stating that most students who may experience academic difficulty will not seek out professional counselors or advisors. Because of this, Snow advocates advisors serving as initiators rather than passive respondents.

Walsh (1980) asserts that the goal of advising is helping students to explore and synthesize academic, career and life goals. In research conducted by Weissberg (1980), students ranked career and personal needs as essential

elements in their development. Weissberg suggests that academic advising is an important variable in assisting students with personal and career development. On the other hand, there is evidence to support the fact that within the area of the advising process there indeed exists some fallacies regarding existing advisor training methods and advisor bias.

In a study conducted by Gonzaga University (1980) in Spokane Washington, advisory personnel responding to a survey felt that the training program designed for advisors was not adequate for meeting the needs of students. A study conducted by Walsh (1980) points towards the need for more intensive advisor training in the areas of goal and decision-making as it relates to career development. Other recommendations made for training advisors include: (1) a more intensive review of career models that greatly affect career decision-making; (2) more information on curriculum and major options should be implemented; (3) advisor training should involve counseling techniques (i.e., empathy skills and effective feedback techniques) (Walsh, 1980).

A significant study done by Althen Scott (1980), points to fallacies in the existing advisor training procedures are cited. Scott suggests that standard training methods used for advisors perpetuate bias, thereby rendering the advice given by academic advisors useless to certain students who

are undecided on a career goal. Scott attributes bias amongst advisors to a number of factors, one such factor contributing to advisor bias is the non-directive theory inherent in most counseling practices. Scott explains that non-directive or feeling responses are of little help to the non-assertive student. The second issue presented by Scott contends that the advisor's previous cultural and family background play a significant factor in inhibiting the student's choice of major. Scott makes several recommendations to improve the advising process; he suggests better coordination of college and central advising units to make advisors aware of the career and financial opportunities available in different fields. More importantly he states better coordination should be set up between colleges and the advising units to encourage both advisors and students to seek out more appropriate career opportunity information.

Thus far, the studies reviewed indicate that academic advising is a crucial component in a student's career development. The role of the advisor should be to assist the student in clarifying a student's career decision. Advising seems to be the most appropriate vehicle in which to accomplish the aforementioned tasks. The next portion of this chapter will focus on major decision-making models as they relate to educational planning.

DECISION MAKING AND EDUCATIONAL PLANNING

A critical component of the academic advising process involves educational planning. Educational planning for students seeks to integrate both academic and career alternatives while assisting students in making decisions that are relevant to their proposed career choices. The academic advising relationship is an excellent vehicle in which to incorporate educational planning. Effective academic advising should involve decision-making, self assessment, and career decision-making for students. Studies conducted on college students based on career development and effective decision-making indicate that most students need assistance in making academic choices, but more importantly, students need help in learning the steps necessary in making effective decisions (Gordon, 1982). The effect of assistance given to students in the educational planning process can have a great impact in formulating a student's career and life style for the future (Chickering, 1969).

Several theories concerning the career decision-making process as they relate to educational planning have been formulated. Some of these theories are mathematical in nature and based loosely on concepts of probability (Dilly, 1967; Geblatt and Clark, 1967; Thoresen and Mehrens, 1967; Herr, 1970). The more widely used advising techniques

involve a more psychological approach such as lifestyle and family background influences (Lipsett, 1962); Clark, Gelatt and Levine, 1969; Herr, 1970; Holland, 1973).

It is essential that the approaches taken in advising students should be based on a student's needs. Several variables will determine the type of advising technique used to assist a student. The technique should involve a recognition and acceptance of a student's lifestyle and family background. Additionally, the technique should ascertain the skill levels that a student may bring to the advising process.

One advising approach which reflects the aforementioned variables involve a decision-making model developed by Janis and Mann (1977). This model which involves five stages traces the development of the decision-making process as it relates to student development.

1. Appraising the challenge: Students characteristically will not acknowledge a decision-making situation exists until challenged by some disturbing situation which inevitably forces the student to change course. These situations may involve academic difficulty or institutional criteria for which a student may not qualify.

2. Surveying alternatives: A student once faced with this challenged situation may seek advice in an effort to find viable alternatives in majors, courses or curricula. The advising process is a viable tool in assisting these students in generating viable options.

3. Weighing alternatives: Once alternatives have been identified, it is essential that each alternative be evaluated and studied as to its credibility and student ability. Those alternatives that are not conducive should be eliminated.

4. Deliberating about a commitment: After a student makes a decision concerning a major field of study, acting on the decision may be interrupted until feedback on the decision is given by significant others.

5. Responding to feedback: If feedback is positive and the choice is accepted by appropriate others, action to implement that decision is taken. If negative feedback is given, the alternative may be eliminated and the student may proceed to other alternatives.

Mann and Janis provide effective insight into the decision-making process often utilized by students. By understanding the phases taking place within the decision-making process used by students, advisors can implement skills necessary to accommodate student needs within the advising process.

Tiedman and O'Hara (1978) describe decision-making in three stages. The first stage involves an exploration phase in which a student may consider many alternatives, none of which may be realistic. At this point the student often lacks vital information to make appropriate decisions. During the second phase the student may begin to synthesize information based on more relevant data gathered from resources. The student then starts to weigh the advantages and disadvantages of each option. During this stage, a student may make a decision despite feedback from outside

influences. The third stage actually involves formulation and implementation of the decision. This phase involves the student making a final career decision based on information gathered from the previous phases.

Tiedman and O'Hara recognize the importance of the appropriateness of information given to the student as essential in assisting the student in making an appropriate decision. Both theorists warn against possible bias by advisors in relating information to students. The appropriateness of the information given to students by advisors have a significant impact on the student's decision-making capacity.

A theory formulated by Harren (1979) outlines the decision-making process in the following stages:

1. Awareness; appraisal of self-in-situation
2. Planning; exploration-crystallization
3. Commitment; integration with self concept, bolstering, action planning
4. Implementation; success and satisfaction outcomes; conformity-autonomy-interdependence

Harren explains that many college freshmen are in the awareness stage. Students at this level know who they are and need focus on their goals. However, the self-appraisal phase may cause anxiety if the student realizes that he/she needs to make an academic and career decision. Only when

students can internalize their strengths and abilities can they move on to the planning stage.

During the planning stage self-concept plays a vital role in the decision-making process of exploration and crystallization. The student begins to search and explore information and interpret it in a personal way. During this stage the advisor can be helpful in providing information in a non-judgmental way. Students may bring to the information gathering process a wealth of experiences which include different levels of skill and motivation to perform the task and different degrees of cognition complexity.

While students are gathering data on certain majors, they are apt to read the information in different ways. Mann and Janis (1977) divide students into three categories; the rational student, the intuitive student and the dependent student. The student with the rational decision-making style will often approach the situation with objectivity. The intuitive student gathers information and reacts to it in an emotional way. The dependent student denies responsibility for a decision and projects the responsibility for making the decisions on the advisor.

Once the appropriate information is gathered the crystallization stage takes place. This phase is characterized by a student beginning to narrow down appropriate career-related information. Some students may

need to gather more data or re-assess their knowledge about their personal characteristics, such as their values and abilities, before a decision can be reached. Finally, the student moves into the decision-making procedure. Once the information is synthesized and conceptualized, the student is ready to choose a career alternative. Thus, the commitment phase begins. Unlike the crystallization phase, the commitment stage is characterized by the student discussing his/her decision with significant others. If the feedback is positive, the student moves into the implementation stage with specific action steps and plans. Once the decision is implemented the student puts closure on the process.

Harran (1979) not only presents an intensive framework for the decision-making process, but in fact, provides an insight into the advisor/student relationship as it relates to the educational planning and curricula choice. Advisors working with students in the awareness stage can help students expand their perspective, which includes assisting students in assessing their experiences and projecting future goals. The advisor can be of most help by alleviating the anxiety felt by students in exploring possible directions. In the planning phase the advisor can help in narrowing down academic options. The information gathering done by students needs to be assessed critically

by the student. Advisors can assist by asking probing questions and helping the student to clarify personal issues. It is essential for the advisor to understand the complex way in which students make decisions if effective advising is to take place.

Ginzberg (1951) developed a classical theory of occupational decision-making nearly forty years ago. He divided occupational decision-making into three stages: the period of fantasy choice, the period of tentative choice, and the period of realistic choice. Each of these stages roughly corresponds to the preadolescent, adolescent and early adulthood stages. These phases are emphasized by the following characteristics.

Fantasy choice: This preadolescent stage is characterized by childhood games emulating adult occupational roles. These games are usually influenced by a child's environment and familial backgrounds.

Tentative choice: This is manifested in the adolescent stage which is composed of four phases: interest, capacity, value and transition. An individual begins to develop a vocational interest based on their skills and capacities to handle the vocational choice.

Realistic stage: This stage takes place in the early adult phase. The period is characterized by exploration, crystallization and specification. Once a career or

vocational choice is made, an individual may seek to explore additional information concerning the vocational choice. If the information gathered is satisfactory, a final vocational decision may be made at this time.

Ginzberg's theory of career development seeks to explore the cognitive stages experienced by students in the decision-making process. His theory is different from Harren's career/decision-making theory in that he gives a more comprehensive overview of the evolutionary stages of occupational development as it relates to career decision-making. His tripartite approach to the occupational decision-making process may be used as an effective vehicle in career planning.

Super (1976), on the other hand, suggests that vocational choices are the outcome of an individual in his/her relation to the environment. Super and Ginzberg are very similar in that they view career decision-making as an evolutionary process. Both theorists agree that occupational choice takes place throughout one's life and is greatly influenced by social and environmental issues. As such, Super contends that vocational choice is compounded into varying degrees of the desire for prestige, security or affluence, family influence, romantic conceptions of actual working conditions in a specific job, frequently inaccurate self appraisal, and probably an inaccurate estimate of the

needs of the labor world.

Super's life/career theory is based on total development of the individual. His theory defines career to mean the combination and sequence of roles that one plays in a lifetime, and the pattern in which those roles fit together at a given point in time. In describing the life/career rainbow, Super identifies nine major roles that may be played by an individual within five life career theaters:

LIFE CAREER ROLES	LIFE CAREER THEATERS
1. Son/daughter	Home
2. Student	Community
3. Worker	School
4. Spouse	Work place
5. Homemaker	Retirement community/home
6. Parent	
7. Leisurite	
8. Citizen	
9. Pensioner	

Super contents that the roles and theaters can interrelate at any one point in time. It is highly conceivable that an individual will play several roles at the same time and, more importantly, the various roles can be dominant or subordinate at different stages in a person's life. For example, at one phase, work may be a predominant factor with parenting occupying a less prominent role.

Super's model provides an excellent opportunity for gaining insight into the decision-making process. Career choices are the outcome of an individual's needs, and the

way in which an individual may perceive self in relationship to their environment. Within the context of decision-making and educational planning it is essential for the advisor to assist the student in realizing the maximum educational benefits while exploring career objectives.

The career and decision-making models presented indicate that a number of external and internal factors (i.e., acquired self-concept, environment, relatives, and college advisors) can influence one's choice of career. Thus far, it has been determined that the decision-making process is an important element in major and career choices made by students. Successful decision-making requires that a number of variables be considered and recognized for advising to be effective (Habley, 1981). Personal, social and economic influences may interact with career and major planning. Academic advisors can be influential in assisting the student in gathering relevant information, and more importantly, facilitating careful examination of data necessary to make decisions (Crockett, 1978). In facilitating decision-making techniques, advisors should assist the student in clarifying goals and helping the student to gather appropriate information. When integrated appropriatedly into the advising process, educational and occupational decision-making facilitated by an advisor can greatly enhance a student's academic career (Cope and

Hannah, 1975; Beal and Noel, 1980). Learning decision-making techniques are not only an excellent survival tool educationally, but can also be incorporated in other life experiences.

In conclusion, decision-making in the context of educational planning should be a crucial goal of the advising process. With knowledge of academic programs, occupational alternatives, and student development strategies, the advisor becomes an essential component in assisting students to plan their lives. Effective advising also recognizes that all students make curricula and career decisions differently, and it is important to approach these differences accordingly.

The next portion of this chapter is a review of the cognitive factors associated with student enrollment in the field of agriculture.

COGNITIVE FACTORS ASSOCIATED WITH ENROLLMENT IN THE AGRICULTURAL CURRICULA.

Presently, there exists no current literature related to cognitive factors associated with enrollment in the agriculture curricula. The literature review in this section of the chapter is confined to studies published between 1953 and 1961.

Powers (1958) indicates that graduates of the field of agriculture were influenced by several factors to enter the

field of agriculture. Those factors frequently indicated were natural aptitude and attraction to the type of work; availability of positions in the field; experience while attending college; counsel and influence of an elementary school teacher; experience in the field; parents' desire, approval and/or encouragement; experiences while attending high school; counsel and influence by a college teacher; counsel and influence of a college advisor or counselor; and counsel and influence of close relatives.

Freeh (1961) studied the characteristics of freshmen enrolled in agricultural majors and compared farm and non-farm youth in respect to influences on their curricular choice. Farm youth most often responded that parents and vocational teachers were the most influential in their choice of a major. Non-farm youth most often reported that employers, adults other than parents, or teachers and college faculty members encouraged students in their choice of a major. Farm-reared youth highly rated vocational agriculture courses, speeches and publications about the agriculture curricula, agricultural careers, visits to the college campuses, and experiences in agricultural clubs as a source of influence on their choice of college curricula.

In a related study conducted by Leuthold, Phillips, Pother, and Wells (1960) at Ohio State University, 34 percent of the students enrolled in the agricultural

curricula had changed their major at least once. Approximately 60 percent of the students had chosen a career and one-third of the group had decided on a curriculum prior to entering college. Haller (1961) cites that a student's choice of a curriculum is part of a larger system of influences which include (1) occupational decisions, (2) changing occupations in a changing society, (3) immediate situation of youth including available facilities, and the expectations of others, and (4) the youth's personality. The study concluded, after a review of the research in this area, that the two broad factors in choosing a career choice for a youth includes: the facilities available to youth and the expectations other people have for them. The study suggests that ties between occupation and education are important factors in occupational choice. There was very little, if any, research to explore the extent of influence of the academic advisor on student choice of major.

Bently and Hemp (1952) indicate that students who enroll in agricultural curricula felt they were influenced in their choice of major by persons outside the field of agriculture, vocational factors and agricultural publications. Persons cited as being most influential were parents, friends, and teachers of vocational agriculture. Of next importance were relatives, county extension agents, college professors, high

school principals, and teachers not associated with agriculture. The vocational factors cited as having the most influence were (1) economic advantages of the occupation; (2) opportunity for employment: (3) previous agricultural employment before entering college and (4) social advantages of the job. The study shows that three-fourths of the students were influenced by reading agricultural books and magazines, while less than one-half reported that college catalogs, announcements and hobbies helped to influence their curricula choice in agriculture.

Powers (1953) found that approximately 20 percent of former college students, who previously had enrolled in agricultural curricula had indicated the decision to choose curricula was made before entering college.

Rhea (1953) reports that one out of three students who enter the agricultural curricula have employment experiences in areas other than agriculture. Rhea further cites that one out of every five students transferred to agricultural curricula from some other division in the university. Gardner (1957) found that individuals who enrolled in agricultural curricula were influenced by previous farm work, and participation in agricultural clubs (i.e., Future Farmers of America and 4-H Club).

CONCLUSION

Thus far, several assumptions can be inferred from the literature presented in this chapter:

1. Advising has an impact on student success.

2. Faculty, centralized, and peer/para-professional advising are essential elements in providing a successful collegiate experience.

3. Educational planning and decision-making are interrelated.

4. The influence of parents, friends, school personnel and others is important in contributing to a student's curricular choice.

5. Final curricula and occupational choices are based upon tentative occupational choices, arrived at by decision-making and role playing.

6. Job choices are on the basis of an individual's experience, knowledge of occupations, financial and rewards, the individual's preference, and personality characteristics.

The literature cited provides a foundation in understanding the problem proposed in the study concerning advisor perception about the field of agriculture, and student perception of advisor influence on their selection of agriculture as a major field of study. In so far as it can be determined, there have been no previous studies to

date to determine advisor perception of the field of agriculture and student perception on advisor influence in making a curricular choice.

CHAPTER 3

DESIGN AND PROCEDURE OF THE STUDY

The overall purpose of this study was to investigate advisors' perceptions of the field of agriculture, and students' perceptions of advisor influence on their chosen field of study. A secondary aspect of the study was to determine the differences and similarities of advisor and student perceptions of the importance of selected variables in the advising process. The following hypotheses were formulated:

1. Students and advisors will not differ in their perceptions of the influence and importance of the advisory function in assisting the student in selecting a major.

2. Students and advisors will not differ in their perceptions of selected influence factors in assisting the student in selecting a major.

3. Students and advisors will not differ in their perception of the field of agriculture.

This chapter contains a description of the population, rationale for the selection of the populations, description of the measurement instruments used in the study, and a presentation of the statistical method used to collect data.

METHODOLOGY

The populations which were selected for the study included (1) all Undergraduate University Division advisors and (2) freshmen and sophomore students enrolled in the College of Agriculture after their original enrollment in no-preference. Students included in the study involved freshmen and sophomores transferring from a no-preference status to an agricultural major from Spring 1984 to Fall 1986. Permission was obtained from the Committee on Release of Confidential Information for release of data from the Office of the Registrar. Students given the survey were located through the Office of the Registrar, College of Agriculture and Natural Resources, and University Undergraduate Division. One hundred and thirty-seven names were secured through the College of Agriculture and Natural Resources. Student surveys were mailed through the U.S. mail with a self-addressed envelope between May 1986 and June 1986.

Seventy-two student surveys were returned by June 1986. Additional follow-up was done by written correspondence and telephone. Twenty-eight additional surveys were secured as a result of telephone follow-up. Advisors selected for the study included advisory personnel from the four Undergraduate University Division units on the Michigan State University Campus located in Bessey, Wonders and Brody

Halls. Surveys were given to twenty senior no-preference advisors from the University Undergraduate Division. The senior advisors consisted of all the advisory personnel employed with the Division four or more years. This procedure allowed for an improved return rate. Meetings were set to distribute the questionnaire. Respondents were asked to return surveys via campus mail. Sixteen of the twenty advisors agreed to participate in the study.

RATIONALE FOR THE SELECTION OF THE POPULATIONS

The rationale for the selection of Undergraduate University Division Advisors and freshmen and sophomore students enrolled in agriculture after original enrollment in no-preference is based on the following:

1. All freshmen and sophomore students upon admission to Michigan State University are under the jurisdiction of the Undergraduate University Division. Thus, all freshmen and sophomore students with declared or undeclared majors receive advising assistance from the Undergraduate University Division Advisor. The fact that the advisor is giving assistance to the no-preference student implies that the advisor is offering assistance to students who may not have made a decision on a major field of study. Therefore, these students may be more influenced by the advising process.

2. All Undergraduate University Division Advisors must have knowledge of all curricula areas available on the University campus. A resource person familiar with career options can be most helpful to a student in career decision-making.

3. The basic purpose of this study is to investigate the influence of advising on a student's career choice or major field of study. The undergraduate University Division Advisor and the freshmen and sophomore student enrolled in agriculture after original enrollment in no-preference are the appropriate populations to have included in this study. The required interaction between the two groups may yield evidence as to the effectiveness of the advisory process as it relates to career decision-making.

DESCRIPTION OF THE SURVEY INSTRUMENTS

Both the advisor and student surveys were similar in design to the survey questionnaire developed for use in A Study of Undergraduate Academic Advising of Undergraduate Students, Delisle (1965). The Delisle Survey contained questions particularly relevant to the data which was being sought. The use of the survey was approved by the Office of Evaluation and also by my Committee Chairperson.

The two instruments developed for this study included both student and no-preference advisor survey questionnaires. The advisor survey consisted of 46 items

and the student survey contained 52 items. Each survey was divided into five sections: (1) personal data, (2) knowledge base and contact with agricultural faculty, (3) perceptions about the field of agriculture, (4) the degree of importance of tasks and functions performed by the University Undergraduate Division Advisor, and (5) the degree of influence of other variables that assisted the student in making agriculture a choice of major.

ADVISOR SURVEY

The advisor survey way divided into five sections. Part I of the questionnaire was a request for personal data. Areas included in the personal section were advisor level of education, type of degree received, status of employment (full-time or part-time), and number of years employed in the advisory capacity. Part II contained questions concerning the advisor's knowledge base about the field of agriculture. Also, included in Part II were questions concerning the degree of contact the Undergraduate University Division Advisor had with faculty from the College of Agriculture and Natural Resources. Part III of the survey asked for the advisor's perceptions of the field of agriculture. Part IV asked the advisor to rank the degree of importance of advising functions. Finally, Part V of the survey sought to measure the advisor's perception of

the degree of influence of other variables as they relate to a student choosing a major field of study with particular attention to agriculture.

Of the twenty-five University Undergraduate Division advisory personnel employed with the University Undergraduate Division, a decision was made to administer the survey to twenty no-preference advisors employed with the Division four years or more. The procedure was done in an effort to gain more accurate and insightful data. The numbers of University Undergraduate personnel participating in the study is illustrated in Table 1:

TABLE 1

SAMPLE OF NO-PREFERENCE ADVISOR RESPONDENTS AND ACTUAL SAMPLE RETURNING THE SURVEY INSTRUMENT

ADVISOR SAMPLE	N	SURVEY RETURNS	%
Advisor Sample Given Survey Instrument	20	16	80.0
TOTAL			80.0

Of the twenty advisors asked to participate in the study of a total of 16 advisors or 80 percent actually responded to the survey. Four advisors chose not to participate in the study.

STUDENT SURVEY

The student survey questionnaire was similar in design to the advisor survey. The student survey was divided into five sections. Part I of the survey elicited personal data factors such as parent's level of education, student residence before attending Michigan State University, number of credits earned, employment experience, and overall grade point average. Part II of the survey asked students to assess the quality of contact with the University Undergraduate Division Advisors. Part III asked for the student's perceptions of the field of agriculture. Part IV asked the student to assess the degree of importance of the Undergraduate University Division Advisor function in assisting a student in choosing a major field of study. Finally, Part V sought to measure the degree of influence of a series of variable presented which may encourage student enrollment in an agricultural curricula.

A total number of 137 students were secured from the College of Agriculture and Natural Resources who were reportedly enrolled in the College of Agriculture and Natural Resources after original enrollment as a no-preference major between September 1984 and Fall 1986. One hundred students surveyed or 72.9 percent of the surveys were returned. The reason given for the discrepancy in reported student enrollment and survey return rate is 37

students chose not to participate in the study.

A breakdown of students participating in the study is illustrated in Table 2 below:

TABLE 2

SAMPLE OF STUDENT RESPONDENTS AND ACTUAL SAMPLE RETURNING THE SURVEY INSTRUMENT

SURVEY ENROLLMENT	N	SURVEY RETURNS	%
Student Respondents given survey instruments	137	100	72.9
TOTAL		100	72.9

METHOD OF ANALYSIS

After careful consultation with a research consultant, percentages and distributions were utilized in Parts I and II to summarize the data of both the advisor and student surveys. The t- test method of analysis was used in both surveys to analyze data in Parts III, IV, and V. A .05 level of significance was chosen to test the hypotheses. The formula for the t- test analysis was:

$$t = \frac{X_1 - X_2 - (u_1 - u_2)}{s_{X_2 - X_2}}$$

The null hypotheses as presented in this study states that there are no significant differences between: (1) advisor and student perception of the influence and importance of the advisory function in assisting the student in selecting a major, (2) advisor and student perceptions of selected influence variables in assisting the student in selecting a major, and (3) advisor and student perceptions of the field of agriculture.

SUMMARY

This chapter has described the methodology used in this study to investigate advisors' perceptions of the field of agriculture, and students' perceptions of advisor influence on their chosen field of study. The design of the questionnaires, methods of securing the data, and the procedures used to record and analyze the data have been outlined. The following chapter is a presentation and analysis of the data.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

This chapter is a presentation of the results of both the advisor and student surveys. Students chosen to participate in the study were enrolled in agriculture after originally enrolling as no-preference students. The student responses were analyzed and compared to the responses of the University Undergraduate Division No-preference Advisors. Emphasis on both survey questionnaires was given to the influence of factors associated with a student's curricular choice and the degree to which the advisory process is related to the student's curricular choice.

A total number of 137 students were secured from the College of Agriculture and Natural Resources who were reportedly enrolled in the College of Agriculture and Natural Resources after original enrollment as a no-preference major between September 1984 and Fall 1986. Of the 137 University Undergraduate Division given the survey, 100 or 72.9 percent of the student surveys were returned. The reason given for the discrepancy in reported student enrollment and survey return rate is 37 students

chose not to participate in the study.

Of the twenty-five University Undergraduate No-Preference Division Advisors, twenty surveys were given to the no-preference advisors employed with the advisory division four years or more. This was done to secure more accurate and insightful data. Twenty University Undergraduate Division Advisors were given the survey. Of that number, sixteen or 80 percent advisor questionnaires were returned.

PROBLEMS PRESENTED IN THE STUDY

Although 72.9 percent of the students and 80 percent of the advisors returned surveys, there were absences in the responses to some questions in Parts III, IV and V of both the advisor and student surveys. Assumptions possibly contributing to the response discrepancies were:

1. Some questions provided on the survey questionnaires were not perceived to be relevant by the respondents. Therefore, these questions were unanswered.

2. The survey was completed in haste, therefore, some questions were overlooked.

3. The respondents had difficulty in understanding some of the questions asked in the survey questionnaire. Therefore, these questions were unanswered.

HYPOTHESES TO BE TESTED

The purpose of this study is to test the following

research hypotheses:

1. Students and advisors will not differ in their perceptions of the influence and importance of the advisory function in assisting the student in selecting a major.

2. Students and advisors will not differ in their perceptions of the influence of selected variables in assisting the student in selection of a major.

3. Students and advisors will not differ in their perception of the field of agriculture.

BRIEF REVIEW OF THE SURVEY INSTRUMENT

Two groups were asked to respond to a series of items on two survey questionnaire instruments designed for the study. The groups included in the study were University Undergraduate Division Advisors and students enrolled in agriculture after original enrollment in a no-preference major. Both the advisor and student surveys were divided into six parts. For the purpose of clarifications, each part will be discussed separately.

ADVISOR SURVEY

The advisor survey covered five areas which included:

Part I:

Part one covered personal information on the advisor such as location of employment, employment status, years of employment, educational background; and the field in which the advisor's degree was received.

Part II:

Part two asked the University Undergraduate Division Advisor to characterize his/her knowledge of the curricular choices and career choices available in the field of agriculture. In addition, University Undergraduate Division Advisors were asked the number of contacts and type of contact with agriculture advisory staff and faculty.

Part III:

Part three asked the University Undergraduate Division Avisors to assess their perception of the field of agriculture. Advisory respondents were asked to respond to the following areas: The social standing associated with agriculture; the potential for agriculture as a growth industry; the potential for making money in an agriculturally related field; career opportunities available in agriculture and natural resources, and the achievement level of students choosing agriculture as a major field of study.

Part IV:

Part four referred to the wide variety of functions performed by the University Undergraduate Division Advisor. Advisors were asked to assess the degree of importance of each function. Respondents were asked to respond to the following questions: academic advising is an essential educational service; advising should contribute to

individualizing and personalizing educational goals: advising should encourage student utilization of campus resources; assistance in student self-assessment; advising should encourage clarification of values and goals; advising should assist the student in understanding and choosing a major; the divisional relationship should be genuine, honest, and competent; and advising should help the student in his personal and academic adjustment to the university.

Part V:

Part five of the survey asked the University Undergraduate Division Advisors to indicate the degree of influence selected factors has in influencing a student in choosing agriculture and natural resources as a major field of study. The variables in this section were parents, relatives, a student in agriculture, high school teacher, agriculture faculty, University Undergraduate Division Advisor, Michigan State Advisor other than University Undergraduate Advisor and agriculture advisory personnel. The subsection of Part 5 included such variables as Michigan State College of Agriculture and agricultural representatives, university open house, Michigan State University Freshman Orientation, high school courses, agriculturally related club experience, agriculture college courses, and Michigan State Placement Services Office.

STUDENT SURVEY

Students included in the study were those enrolled in agriculture after original enrollment in no-preference. These students were enrolled at Michigan State University between 1984 and 1986. The student survey instrument was divided into five parts. Parts included in the survey questionnaires were:

Part 1:

Part one of the questionnaire asked the students to respond to questions concerning their personal history. Information asked for in this section included level of education achieved by father and mother, age, sex, estimation of the total population of students, permanent place of residence; total number of credits earned; present student status; grade point average; involvement in agriculturally related clubs; and the time at which the decision was made to pursue a major in the field of agriculture.

Part 2:

Part two of the survey instrument asked students to indicate the type of contact and the number of contacts with the University Undergraduate Division Advisors. This section also included number and types of contacts with the College of Agriculture and Natural Resources advisory

personnel and faculty. Students were also asked to respond to the helpfulness of the assistance received from the agricultural advisory staff.

Part 3:

Part three of the survey asked students to respond to questions concerning their perception of agriculture. Areas covered in this section included the social standing associated with agriculture; potential for making money in the field of agriculture; perceptions about the career opportunities and chance for advancement in an agricultural career.

Part 4:

Part four of the survey asked respondents to respond to a wide variety of functions presently being performed by the University Undergraduate Division Advisor. Respondents were asked to respond to the degree of importance held by each function. Areas included in this section as part of the advisor function were as follows: Academic advising as an important educational service; academic advising should contribute to personalizing educational goals; advising should assist the student in self-assessment; advising should assist the student toward a better clarification of values and goals; advising should assist in student decision-making; advising should assist students in choosing from a variety of majors available at Michigan State

University; advising should establish a relationship of genuineness, honesty, and competence; and advising should help with personal and academic adjustment to the university community.

Part 5:

Part five of the survey asked students to choose those factors which were of influence in assisting a student in choosing agriculture as a field of study. Respondents ranked presented variables and the degree of influence each had on a student's decision to choose agriculture and natural resources as a field of study. Variables presented in this section are as follows: parents; relatives other than parents; high school teacher; student in College of Agriculture; faculty from College of Agriculture; university undergraduate advisor; admissions counselor at Michigan State University; high school counselor, and Michigan State University Advisor. The subsection of Part 5 of the survey instrument covered such areas as Michigan State University College of Agriculture and Natural Resources brochure; Michigan State Course Catalog; presentation by a College of Agriculture Representative; high school agricultural courses; agricultural club experiences; college agriculture related courses, and Michigan State Placement Services Office.

The next portion of the chapter is a presentation of the analysis of the data collected in the following areas: characteristics of study populations; summary of student contact with University Undergraduate Division Advisory personnel and agricultural personnel; advisory and student perceptions of the field of agriculture; advisor and student perceptions on the degree of importance of advisor functions on assisting a student in selecting a major field of study; advisor and student perceptions on the degree of influence of selected factors on a student choosing agriculture as a curriculum choice; and a summary review of the results obtained from the data.

CHARACTERISTICS OF THE UNIVERSITY UNDERGRADUATE NO-PREFERENCE ADVISORS

Table 1 indicates that 69 percent of the no-preference advisor respondents worked full-time in the advisory capacity. Thirty-one percent (31%) of the no-preference advisors were employed on a part-time basis.

TABLE 1

EMPLOYMENT STATUS OF UNIVERSITY UNDERGRADUATE DIVISION ADVISORS (N=16)

EMPLOYMENT STATUS	N	%
Part-time	5	31
Full-time	11	69
TOTAL	16	100.0

As indicated in Table 2, 44 percent of the no-preference advisors were employed with the University Undergraduate Division 5 to 10 years. Nineteen percent (19%) reported employment with the Division 11 to 15 years, and 31 percent indicated employment with the advisory division more than 15 years. Thus, a majority (over 93 percent) of the no-preference advisors were employed within the Universidy Undergraduate Division five years or more.

TABLE 2

NUMBER OF YEARS ADVISOR EMPLOYED WITH UNIVERSITY UNDERGRADUATE DIVISION (N=16)

EMPLOYMENT STATUS	N	%
Less than 5 years	1	6.0
5 to 10 years	7	44.0
11 to 15 years	3	19.0
Greater than 15 years	8	31.0
TOTAL	16	100.0

On the educational level of the advisors, approximately eight of the advisors had received a Bachelors degree and six had received a Masters degree. The two remaining advisors held Ph.D. degrees. Of the 16 respondents, types of areas in which degrees were received included science,

education, liberal arts, and education.

CHARACTERISTICS OF THE STUDENT POPULATION

The distribution of males and females responding to the study were almost the same. Table 3 shown below indicates the distribution of student respondents according to sex. There were slightly more females than males who responded to the survey. Refer to Table 3 for percentages and distributions.

TABLE 3

BREAKDOWN OF STUDENT RESPONDENTS BY SEX (N=100)

SEX	N	%
Female	56	56.0
Male	44	44.0
TOTAL	100	100.0

The age level of students responding to the survey were between 18-21 years of age. Sixty-four percent (64%) of the respondents were between the ages of 18-21 and 36 percent of the survey respondents were older than 21 years of age.

Educational levels of both parents of the student participants are shown in Table 4.

TABLE 4

EDUCATIONAL LEVEL OF PARENTS
(N=100)

EDUCATIONAL LEVEL	FATHER N	%	MOTHER N	%
High School	34	34.0	36	36.0
Associate Degree	16	14.0	16	16.0
Bachelors Degree	23	23.0	24	24.0
Masters Degree	9	9.0	11	11.0
Ph.D.	18	18.0	13	13.0
TOTAL	100	100.0	100	100.0

As indicated in Table 4 most of the parents had received at least a high school diploma. While a slightly higher number of mothers held high school diplomas, associate degrees, bachelors and masters degrees, a larger percentage of fathers had received Ph.D's in comparison to mothers.

Table 5 shown below indicates the number of credits accumulated by the student respondents.

TABLE 5

NUMBER OF CREDITS EARNED BY STUDENT RESPONDENTS (N=100)

NUMBER OF CREDITS EARNED	N	%
0 - 30	7	7.0
40 - 84	23	23.0
85 - 129	35	35.0
Greater than 130	35	35.0
TOTAL	100	100.0

Thirty-five percent (35%) of the student respondents (refer to Table 5) had earned 85-129 credits. Additionally, another 35 percent had earned more than 130 credits; thus, over two-thirds of the students responding to the survey were of junior and senior status.

Ninety-three percent (93%) of the students responding to the survey were attending Michigan State University on a full-time basis. To be considered full-time a student must be enrolled for 12 credits or more. Only 7 percent of the respondents were attending on a part-time basis.

Fifty percent (50%) of the respondents carried a grade point of 2.0 - 2.5. Shown in Table 6 is the distribution of respondents' grade point averages.

TABLE 6

GRADEPOINT AVERAGES HELD BY STUDENT RESPONDENTS (N=100)

GRADEPOINT AVERAGES	N	%
Less than 2.0	3	3.0
2.0 - 2.5	50	50.0
2.6 - 3.0	33	33.0
3.1 - 3.5	13	13.0
Greater than 3.6	1	1.0
TOTAL	100	100.0

A slightly higher number of students were involved in agriculturally related clubs than those not as involved. Fifty-five percent (55%) of the student respondents had been or were still involved with an agriculturally related club in comparison to 46 percent who were not involved with any agriculturally related club.

Approximately 44 percent of the students responded that agriculture as a major field of study was chosen during their second year of college. Table 7 shows the results in response to the survey question.

TABLE 7

STUDENT DECISION TO CHOOSE AGRICULTURE AS A CURRICULAR CHOICE (N=100)

DECISION TO CHOOSE AGRICULTURE AS A MAJOR	N	%
Prior to Junior High School	6	6.0
Junior High School	6	6.0
High School	18	18.0
1st Year College	24	24.0
2nd Year College	43	43.0
Other	3	3.0
TOTAL	100	100.0

STUDENT INTERACTION WITH UNIVERSITY UNDERGRADUATE NO-PREFERENCE DIVISION ADVISORS

The number of times respondents had interacted with University Undergraduate Division Advisor are shown in Table 8. Approximately 56 percent of the students had interacted with the advisor at least 1-5 times.

TABLE 8

NUMBER OF STUDENT CONTACT WITH UNIVERSITY UNDERGRADUATE ADVISOR (N=100)

NUMBER OF CONTACTS	N	%
More than 10 times	9	9.0
6-10 times	24	24.0
1-5 times	56	56.0
None	11	11.0
TOTAL	100	100.0

The distribution indicated that 89 percent of the student participants had contact with the University Undergraduate Division Advisors, while 11 percent indicated no contact with the advisor. Students were asked to

indicate the type of contact made with the University Undergraduate Division Advisor. Refer to Table 9 shown below for student responses.

TABLE 9

TYPE OF CONTACT WITH UNIVERSITY UNDERGRADUATE DIVISION ADVISORS (N=170)

CONTACT TYPE	N	%
Career Assistance	44	44.0
Class Scheduling	74	74.0
Below 2.0 Conference	14	14.0
Drop/Add Courses	6	6.0
Other Contacts	32	32.0
TOTAL	170	170.0

Seventy-four percent (74%) of the students reported class scheduling as the type of contact had with the no-preference advisor, while 44 percent of the students indicated career assistance as the type of contact had with the no-preference advisor. Thirty-two percent (32) of the students reported informal contacts with the no-preference advisors and 14 percent indicated the below 2.0 conference

as the type of contact had with the no-preference advisor. The least reported contact with the no-preference advisor was drop/add's only 6 percent of the students indicated this type of contact.

STUDENT CONTACT WITH ADVISORS FROM THE COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

When asked how often the students had contact with the College of Agriculture and Natural Resources advisory personnel within the past year, approximately 45.5 percent of the students had contact with the Agriculture and Natural Resources advisors more than 5 times within a year. Approximately 29.3 percent had contact with the Agriculture advisory personnel at least 3 to 5 times.

Students were asked how they were referred to the agriculture advisory personnel. Forty-two percent (42%) of the students responded that other campus resources were responsible for a referral to the College of Agriculture and Natural Resources. Approximately 26.3 percent of the students were referred to the College of Agriculture and Natural Resources through the University Undergraduate Division No-preference Advisors.

Student response to the question on the quality of assistance rendered by the advisor from the College of

Agriculture and Natural Resources indicated that 54.1 percent of the students felt that the agriculture and natural resources advisory personnel were helpful.

UNIVERSITY UNDERGRADUATE ADVISOR KNOWLEDGE BASE AND PERCEPTION OF THE COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

University Undergraduate Division Advisors were asked to assess their knowledge base and perceptions of the curricula available in the College of Agriculture. Table 10 shows the results of the survey question.

TABLE 10

ADVISOR KNOWLEDGE OF AGRICULTURE CURRICULA (N=16)

CHARACTERIZE YOUR KNOWLEDGE BASE OF THE AGRICULTURE CURRICULA SUBSCALE	N	%
Excellent Knowledge	5	31.0
Good Knowledge	11	69.0
Little Knowledge	0	0.0
No Knowledge	0	0.0
TOTAL	16	100.0

Sixty-nine percent (69%) of the university undergraduate advisors responding to the questionnaires felt they had a good working knowledge of the curricula available within the College of Agriculture and Natural Resources as compared to 31.3 percent who responded to having an excellent knowledge base of the curricula available in the College of Agriculture and Natural Resources.

On the question asking the advisors to characterize their knowledge base of career opportunities available in the field of agriculture, approximately 87.5 percent of the advisors perceived themselves as having some knowledge of career opportunities available in agriculture. This is compared to 12.5 percent who felt they had a good working knowledge of career opportunities in the field of agriculture. Table 11 on the following page displays the results of perceived advisor knowledge of career opportunities available in the field of agriculture and natural resources.

TABLE 11

ADVISOR KNOWLEDGE OF CAREER OPPORTUNITIES AVAILABLE IN THE FIELD OF AGRICULTURE (N=16)

CHARACTERIZE YOUR KNOWLEDGE BASE OF CAREER OPPORTUNITIES AVAILABLE IN THE FIELD OF AGRICULTURE		
SUBSCALE	**N**	**%**
Good Knowledge	2	12.5
Some Knowledge	14	87.5
Little Knowledge	0	0.0
No Knowledge	0	0.0
TOTAL	**16**	**100.0**

Regarding the question of advisor comfort level on advising a student in choosing a major within the College of Agriculture and Natural Resources, half of the advisors felt very comfortable in advising a student to choose a curricula choice with the College of Agriculture and Natural Resources.

Refer to Table 12 for distribution and percentages regarding the survey question:

TABLE 12

ADVISOR PERCEPTION ON ASSISTING A STUDENT IN CHOOSING AGRICULTURE AS A MAJOR (N=16)

WHICH STATEMENT BEST DESCRIBES YOUR FEELINGS CONCERNING ADVISING A STUDENT INTO THE FIELD OF AGRICULTURE		
SUBSCALE	**N**	**%**
Very Comfortable	10	62.5%
Comfortable	6	37.5
Little Comfort	0	0.0
No Comfort	0	0.0
TOTAL	**16**	**100.0**

The advisor respondents fell in the range of 'very comfortable' and 'comfortable' in advising a student to choose a major in the College of Agriculture and Natural Resources. Advisors did not respond to the additional choices provided in the question which included "little comfort in advising a student to pursue a major in agriculture, and do not feel comfortable in advising a student to pursue a major in the College of Agriculture and Natural Resources."

University Undergraduate Division Advisors were asked to respond to the question, "If students were given an opportunity to enter into a career at the same rate of pay, prestige and job advancement as agriculture, which of the following areas would you advise a student towards?" Options given were the following: Education, Liberal Arts, Science Engineering and Agriculture. Fifty percent (50%) of the advisor respondents indicated they would advise students to choose science as a major field of study.

Referring to the number of University Undergraduate Division No-preference Advisor contacts with advisory personnel from the College of Agriculture and Natural Resources, the distribution is indicated in Table 13 on the following page. Thirty-three percent (33%) of the University Undergraduate Division No-preference Advisors had contact with agricultural advisor personnel 1 to 5 times within the year, while 25 percent of the no-preference advisors reported contact with agricultural personnel 6 to 10 times. Thirteen percent (13%) reported contact with agricultural personnel 11 to 15 times and another 13 percent indicated contact over 15 times. No contact with the agricultural advisory personnel was reported by 6.3 percent of the no-preference advisors. Refer to Table 13 for results.

TABLE 13

NUMBER OF CONTACTS WITH AGRICULTURAL ADVISORY PERSONNEL (N=16)

CONTACT TIMES	N	%
1 - 5 times	7	35.0
6 - 10 times	4	28.0
11 - 15 times	2	14.0
Over 15 times	2	14.0
No Contact	1	9.0
TOTAL	16	100.0

University Undergraduate Division No-preference Advisors were asked to indicate their working relationship with agricultural advising personnel, (refer to Table 14) and were found almost evenly split between their having worked very closely with agricultural advisory personnel and having had little or no contact with agricultural personnel. Refer to Table 14 for percentages and distributions:

TABLE 14

ADVISOR WORKING RELATIONSHIP WITH AGRICULTURE PERSONNEL (N=16)

CHARACTERIZE YOUR WORKING RELATIONSHIP WITH AGRICULTURE PERSONNEL		
SUBSCALE	**N**	**%**
Worked very closely	0	0.0
Worked closely	7	50.0
Little contact	6	42.9
No working relationship	3	7.1
TOTAL	**16**	**100.0**

COMPARISON OF UNIVERSITY UNDERGRADUATE DIVISION ADVISOR AND STUDENT PERCEPTION OF THE FIELD OF AGRICULTURE

The next portion of this chapter is a comparison of the perceptions of both advisors and students about the field of agriculture. The t- test statistic was used to determine whether differences existed between the two groups' perceptions of the field of agriculture. A level of significance of .05 was chosen for the statistical tests.

Subject areas included on both the advisor and student surveys were as follows:

1. The perceived social standing associated with a career in agriculture.

2. Perceptions of the field of agriculture as an industry.

3. The perceived potential for making money in the field of agriculture.

4. The perceptions of career opportunities available in the field of agriculture.

5. The perception of one's chances for advancement in the field of agriculture.

6. Finally, perceptions on the achievement level of a student who chooses agriculture as a curriculum.

A Likert type scale was used in Part 3 of both surveys to determine advisor and student perceptions of the field of agriculture. A four-point scale was assigned to each variable, one (1) being of most importance through four (4) being of least importance.

The following results were obtained from the data. (Refer to Table 15).

Item 1: Social standing associated with the field of agriculture.

Response received to survey Item 1 (refer to Table 15) included 14 advisor responses and 97 student responses. As

TABLE 15

COMPARISON OF ADVISOR AND STUDENT PERCEPTION ON THE FIELD OF AGRICULTURE

Advisors (n^1=20) Students (n^2=100)

	RESPONDENTS	MEAN RESPONSE	SD	T	DF	PROB
ITEM 1						
Social standing associated with the field of agriculture	Advisors 14	2.000	0.555	0.00	109.00	1.000
	Students 97	2.000	0.540			
ITEM 2						
Opinions about agriculture as an industry	Advisors 14	1.5000	0.941	-1.66	109.00	0.100
	Students 97	2.0309	1.141			
ITEM 3						
The potential for making money in the field of agriculture and natural resources	Advisors 13	1.8420	0.376	-0.08	25.39	0.941
	Students 97	1.8557	0.707			

"Table 15 (cont.)"

ITEM 4							
Career opportunities available in the field of agriculture	Advisors	14	1.0714	0.267	-5.05	46.34	0.000
	Students	96	1.5833	0.706			
ITEM 5							
Chance for advancement in an agriculture career	Advisors	16	2.0650	0.250	-0.78	66.95	0.440
	Students	94	2.1383	0.727			
ITEM 6							
Type of student who chooses agriculture as a curricula choice	Advisors	14	1.7857	0.426	0.22	106.00	0.839
	Students	94	1.7553	0.591			

NOTE: Statistically Significant at .05.

indicated the mean response for advisors was 2.00 and the mean response for students was 2.00 on a scale of 1 to 4. The level of significance was more than .05. There were no statistically significant differences between advisor and student mean responses indicating that both advisors and students viewed as essentially the same the social standing associated with agriculture, $t(109)=1.0, p \geq .05$.

Item 2: Opinions about agriculture as an industry.

Response received to survey Item 2 (refer to Table 15) included 16 advisor responses and 95 student responses. As indicated the mean response for advisors was 1.50 and the mean response for students was 2.03. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses indicating that no-preference advisors viewed more strongly agriculture as a growing industry than students, $t(109)=0.100, p>.05$).

Item 3: The potential for making money in the field of agriculture.

Response received to survey Item 3 (refer to Table 15) included 13 advisor responses and 97 student responses. As indicated, the mean score for advisors was 1.84 and for students was 1.85 on a scale of 1 to 4. The level of significance was more than .05. There was no statistically significant difference between advisor and student mean

responses indicating that both advisors and students viewed the potential for making money in agriculture as essentially the same, $t(25.39)=0.941, p \geq .05$.

Item 4: Career opportunities available in the field of agriculture.

Response received to survey Item 4 (refer to Table 15) included 14 advisor responses and 96 student responses. As indicated, the mean response for advisors was 1.07 and the mean response for students was 1.58 on a scale of 1 to 4. There was a statistically significant difference of less than .05; indicating that advisors viewed more strongly than did students career opportunities available in the field of agriculture, $t(46.34)=0.000, p \geq .05$.

Item 5: Chance for advancement in an agriculture career.

Response received to survey Item 5 (refer to Table 15) included 16 advisor responses and 94 student responses. As indicated, the mean response for advisors was 2.06 and the mean response for students was 2.13 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses indicating that no-preference advisors view more strongly than did student, one's chances for career advancement in an agricultural career, $t(66.95)=0.444, p \geq .05$).

Item 6: Which of the following closely represents your opinions on students who chose agriculture as a curricula choice.

Response received to survey Item 6 (refer to Table 15) included 14 advisor responses and 97 student responses. As indicated the mean response for advisors was 1.78 and the mean response for students was 1.75 on a scale of 1 to 4. The level of significance was more than .05. There was no statistically significant difference between advisor and student mean response, indicating that both advisors and students viewed as essentially the same type of student who chooses agriculture as a curricula choice, $t(106)=0.830, p \geq .05$.

UNIVERSITY UNDERGRADUATE DIVISION ADVISOR AND STUDENT PERCEPTION OF THE DEGREE OF IMPORTANCE OF DESIGNATED ADVISORY FUNCTIONS

Part 4 of the survey asked both advisors and students to respond to the level of importance of the advisory function in helping the student to determine curricula choice. The t- test statistic was used to determine whether statistically significant differences existed in the importance of the advisory function as viewed by the advisors and students. A level of significance of .05 was chosen. A Likert type scale was used to determine advisor and student perception of the advisory process. A four-point scale was assigned to each value ranging from one (1) being the most important through four (4) being the least important. Values assigned to each variable in this portion of both the advisor and student surveys included: One (1) being the most important through four (4) being the least important. Values assigned to each variable in this portion of both the advisor and student surveys included:

SCALE VALUE	RESPONSE
1	Very important
2	Important
3	Of little importance
4	Not important

TABLE 16

ADVISOR AND STUDENT PERCEPTION ON THE DEGREE OF IMPORTANCE OF DESIGNATED ADVISORY FUNCTIONS

Advisors (n^1=20) Students (n^2=100)

	RESPONDENTS	MEAN RESPONSE	SD	T	DF	PROB
ITEM 1						
Academic advising from a university undergraduate division advisor is an important educational service	Advisors 15 Students 97	1.0667 1.5876	0.258	-5.39	52.46	0.000
ITEM 2						
Academic advising should contribute to individualizing and personalizing educational goals within a university environment	Advisors 15 Students 97	1.2667 1.5876	0.458 0.573	-2.07	110.00	0.041

"Table 16 (con't.)"

ITEM 3							
Academic advising should assist the student in self assessment	Advisors	14	1.3571	0.497	-2.33	110.00	0.022
	Students	98	1.7851	0.662			
ITEM 4							
Academic advising should assist the student towards a better clarification of values and goals	Students	14	1.5000	0.650	-2.07	110.00	0.041
	Advisors	98	1.9286	0.736			
ITEM 5							
Academic advising should assist students in choosing from a variety of majors available at Michigan Stage University	Advisors	13	1.1538	0.376	-1.85	109.00	0.068
	Students	98	1.4388	0.539			

"Table 16 (con't.)"

	ITEM 6						
The advising relationship should establish a relationship of genuineness, honesty and competence	Advisors	14	1.1429	0.363	-3.01	25.19	0.006
	Students	98	1.4898	0.613			
	ITEM 7						
Academic advising should help with academic adjustment to the university community	Advisors	14	1.4286	0.646	-.89	110.00	0.062
	Students	98	1.8673	0.833			

NOTE: Statistically Significant at .05.

The following data were obtained from the survey items. (Refer to Table 16).

Item 1: Academic advising from a University Undergraduate Division Advisor is an important educational service.

Response to survey Item 1 (refer to Table 16) included 15 student responses and 97 advisor responses. As indicated, advisors reported a mean response of 1.06 and students reported a mean response of 1.58 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed academic advising as more important than students, $t(52.46)=0.00$, $p<.05$).

Item 2: Academic Advising should contribute to individualizing and personalizing educational goals within a university environment.

Response to survey Item 2 (refer to Table 16) included 15 advisor responses and 97 student responses. As indicated, advisors reported a mean response of 1.26 and students reported a mean response of 1.58 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean response indicating that no-preference advisors viewed academic advising as more important in contributing

to individualizing and personalizing goals then students, $t(110)=0.050), p<.05$.

Item 3: Academic advising should assist the student in self-assessment.

Response received to survey Item 3 (refer to Table 16) included 14 advisor responses and 98 student responses. As indicated advisors reported a mean response of 1.35 and students reported a mean response of 1.78 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean response, indicating that no-preference advisors viewed academic advising as more important than did students assisting in assisting with self-assessment, $t(110)=0.022, p<.05)$.

Item 4: Academic advising should assist the student towards a better clarification of values and goals.

Response to survey Item 4 (refer to Table 16) included 14 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 1.50 and students reported a mean response of 1.92 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between student and advisor mean response, indicating that no-preference advisors viewed academic advising as more important than students in assisting the student towards a better

clarification of values and goals, $t(110)=0>041, p<.05$.

Item 5: Academic advising should assist students in choosing from a variety of majors available at Michigan State University.

Response received to survey Item 5 (refer to Table 16) included 13 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 1.15 and students reported a mean response of 1.43 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean response, indicating that no-preference advisors viewed academic advising as more important than students in assisting students in choosing from a variety of different majors, $t(109)=0.068, p\geq.05$.

Item 6: The advising relationship should establish a relationship of genuineness, honesty, and competence.

Response received to survey Item 6 (refer to Table 16) included 14 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 1.14 and students reported a mean response of 1.48 on a scale of 1 to 4 and students reported a mean response of 1.48 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean scores, indicating that no-preference advisors viewed academic advising as more

important than students in establishing a relationship of genuineness, honesty and competence, $t(25.19)=0.006, p<.05$.

Item 7: Academic advising should help with academic adjustment to the University Community.

Response received to survey Item 7 (refer to Table 16) included 14 and 98 student responses. As indicated, advisors reported a mean response of 1.42 and students reported a mean response of 1.86 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses indicating that no-preference advisors viewed academic advising as more important than students in assisting the student with academic adjustment to the University community, $t(110)=0.062, p\geq.0$.

ADVISOR AND STUDENT PERCEPTION OF THE DEGREE OF INFLUENCE OF CERTAIN VARIABLES ON A STUDENT CHOOSING AGRICULTURE AS A CURRICULAR CHOICE

In this portion of the chapter, both advisors and students were asked to respond to the level of influence of variables in assisting a student in choosing agriculture as a major. The t- test statistic was used to determine whether statistically significant differences existed between the perceptions of advisors and students on the level of influence of certain factors associated with

student curriculum choice. A level of significance of .05 was chosen. A Likert type scale was used to determine advisor and student perception. A four-point scale was assigned to each value ranging from one (1) being the most influential through four (4) being the least important, values assigned to each variable in this portion of both the advisor and student surveys included:

SCALE VALUE	RESPONSE
1	Most influential
2	Influential
3	Of little influence
4	No influence

The following data were obtained from the survey items. (Refer to Table 17).

Item 1: Parents

Response to survey Item 1 (refer to Table 17) included 14 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 1.71 and students reported a mean response of 2.63 on a scale from 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean scores indicating that no-preference advisors viewed as more influential than did students,

TABLE 17

ADVISOR AND STUDENT PERCEPTION OF THE DEGREE OF INFLUENCE OF CERTAIN VARIABLES ON A STUDENT CHOOSING AGRICULTURE AS A CURRICULAR CHOICE

Advisors (n^1=20) Students (n^2=100)

	RESPONDENTS		MEAN RESPONSE	SD	I	DF	PROB
ITEM 1							
Parents	Advisors	14	1.7143	0.469	-5.78	32.04	0.000
	Students	98	2.6327	0.967			
ITEM 2							
Other Relatives	Advisors	13	2.2308	0.599	-2.90	108.00	0.004
	Students	97	2.9794				
ITEM 3							
High School Teacher	Advisors	12	2.2500	0.425	-6.14	23.35	0.000
	Students	98	3.2245	0.891			

"Table 17 (cont'd.)"

ITEM 4							
Agriculture Students	Advisors	13	2.3077	0.480	-2.19	28.31	0.037
	Students	98	2.6735	0.993			
ITEM 5							
Michigan State Agriculture Faculty	Advisors	14	2.2100	0.426	-1.94	42.81	0.038
	Students	98	2.5200	1.077			
ITEM 6							
University Undergraduate Division Advisor	Advisors	13	2.1500	0.555	-3.99	109.00	0.000
	Students	98	3.1500	0.878			
ITEM 7							
Michigan State Counselor	Advisors	14	2.5000	0.650	-4.92	110.00	0.000
	Students	98	3.5204	0.735			

"Table 17 (con't.)"

	ITEM 8						
High School Counselor	Advisors	12	2.0833	0.793	-4.88	107.00	0.000
	Students	97	3.3711	0.870			
	ITEM 9						
Other Michigan State Academic Advisors	Advisors	12	2.3300	0.793	-2.17	107.00	0.033
	Students	97	3.0100	0.870			
	ITEM 10						
Michigan State Department Agriculture Catalog	Advisors	11	2.2700	0.786	-2.58	107.00	0.011
	Students	98	2.9600	0.855			
	ITEM 11						
Michigan State Course Catalog	Advisors	12	2.5833	0.793	-0.81	108.00	0.418
	Students	98	2.7959	0.861			

"Table 17 (cont'd.)"

	ITEM 12						
Presentation by a Michigan State Agriculture Representative	Advisors	13	2.0000	0.408	-6.21	35.52	0.000
	Students	98	2.9388	0.993			
	ITEM 13						
Presentation by Michigan State University Admissions Counselor	Advisors	12	2.3333	0.651	-4.38	107.00	0.000
	Students	97	3.3402	0.762			
	ITEM 14						
University Open House	Advisors	13	2.3077	0.480	-4.49	108.00	0.000
	Students	97	3.3299	0.800			
	ITEM 15						
Michigan State Freshman Orientation	Advisors	13	2.1538	0.555	-5.51	108.00	0.000
	Students	97	3.3299	0.748			

"Table 17 (con't.)"

OTHER SOURCES

ITEM 16							
High School Agriculture Courses	Advisors	13	1.8462	0.001	-4.51	108.00	0.000
	Students	97	2.2062	1.145			
ITEM 17							
Agricultural Employment Related Experiences	Advisors	13	1.6100	0.439	-4.51	23.53	0.011
	Students	97	2.2000	1.145			
ITEM 18							
Agriculture Club Experience	Advisors	13	1.5385	0.519	-6.70	34.34	0.000
	Students	97	2.8144	1.228			

"Table 17 (cont'd.)"

	ITEM 19						
Michigan State College of Agriculture and Natural Resources Courses	Advisors	13	1.7692	0.439	-1.80	36.11	0.481
	Students	59	2.0678				
	ITEM 20						
Michigan State Placement Services Office	Advisors	13	2.3846	0.650	-3.09	107.00	0.003
	Students	96	3.2083	0.928			

NOTE: Statistically Significant at .05.

parents in assisting a student in choosing agriculture as a major, $t(23.35)=0.00, p<.05$.

Item 2: Other relatives

Response to survey Item 2 (refer to Table 17) included 13 advisor responses and 97 student responses. As indicated advisors reported a mean response of 2.23 and students reported a mean response of 2.97 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses indicating that no-preference advisors viewed as more influential than did students, other relatives in assisting a student in choosing agriculture as a major, $t(108)=0.104, p<.05$.

Item 3: High School Teacher

Response to survey Item 3 (refer to Table 17) included 12 advisor responses and 98 student responses. As indicated advisors reported a mean response of 2.30 and students reported a mean response of 2.67 on a scale from 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students, High School Teachers in assisting a student in choosing agriculture as a major, $t(23.35)=0.00, p<.05$.

Item 4: An Agriculture student

Response to survey Item 4 (refer to Table 17) included 13 advisor responses and 98 student responses. As indicated, advisors reported a mean response score of 2.30 and students reported a mean score of 2.67 on a scale from 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students, an agriculture student in assisting a student in choosing agriculture as a major, $t(28.31)=0.037)$, $p<.05$.

Item 5: Michigan State Agriculture Faculty

Response to survey Item 5 (refer to Table 17) included 14 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 2.21 and students reported a mean response of 2.52 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student responses, indicating that no-preference advisors viewed as more influential than did students, Michigan State agriculture faculty in assisting a student in choosing agriculture as a major, $t(42.81)=0.038$, $p<.05$.

Item 6: University Undergraduate Division Advisor

Response to survey Item 6 (refer to Table 17) included 13 advisor responses and 98 student responses. As indicated

advisors reported a mean response of 2.15 and students reported a mean response of 3.52 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students, University Undergraduate Division Advisors in assisting a student in choosing agriculture as a major, $t(109)=0.000, p<.05$.

Item 7: Michigan State University Admissions Counselor

Response to survey Item 7 (refer to Table 17) included 14 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 2.50 and students reported a mean response of 3.52 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students, the Michigan State Admissions Counselor in assisting a student in choosing agriculture as a major, $t(109)=0.000, p<.05$.

Item 8: High School Counselor

Response to survey Item 8 (refer to Table 17) included 12 advisor responses and 97 student responses. As indicated advisors reported a mean response of 2.08 and students reported a mean response of 3.37 on a scale of 1 to 4. The

level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students High School Counselors in assisting a student in agriculture as a major, $t(107)=0.000, p<.05$.

Item 9: Other Michigan State Academic Advisors

Response to survey Item 9 (refer to Table 17) included 12 advisor responses and 97 student responses. As indicated, advisors reported a mean response of 2.33 and students reported a mean response of 3.01 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students other Michigan State Academic advisors in assisting a student in choosing agriculture as a major, $t(107)=0.033, p<.05$.

The next portion of Part 5 was concerned with the level of influence of the media and publications type materials on a student choosing agriculture as a major. The following survey items were presented:

Item 10: Michigan State Department of Agriculture Catalog

Response to Item 10 (refer to Table 17) included 11 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 2.27 and students

reported a mean response of 2.96 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students the Michigan State Department Agriculture Catalog in assisting a student in choosing agriculture as a major, $t(107)=0.011, p<.05$.

Item 11: Michigan State Course Catalog

Response to survey Item 11 (refer to Table 17) included 12 advisors and 98 student responses. As indicated, advisors reported a mean response of 2.58 and students reported a mean response of 2.79 on a scale of 1 to 4. The level of significance was more than .05. There was no statistically significant difference found at .05, indicating that both advisors and students viewed the Michigan State Catalog as essentially the same in assisting a student in choosing agriculture as a major, $t(108)=0.418$, $p\geq.05$.

Item 12: Presentation by a Michigan State Agriculture Representative

Response to survey Item 12 (refer to Table 17) included 13 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 2.00 and students reported a mean response of 2.93 on a scale from 1

to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that advisors viewed as more influential than did students, Michigan State Agricultural Representative in assisting a student in choosing agriculture as a major, $t(35.52)=0.000, p<.05$.

Item 13: Presentation by a Michigan State University Admissions Counselor

Response to Item 13 (refer to Table 17) included 12 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 2.33 and students reported a mean response of 3.34 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students, a presentation by a Michigan State Admissions Counselor in assisting a student in choosing agriculture as a major, $t(107)=0.000, p<.05$.

Item 14: University Open House

Response to survey Item 14 (refer to Table 17) included 13 advisor responses and 98 student responses. As indicated, advisors reported a mean response of 2.30 and students reported a mean response of 3.32 on a scale of 1 to 4. The level of significance was less than .05. There was

a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students the University Open House in assisting a student in choosing agriculture as a major, $t(108)=0.000, p<.05$.

Item 15: Michigan State Freshman Orientation

Response to survey Item 15 (refer to Table 17) included 13 advisor responses and 97 student responses. As indicated, advisors reported a mean response of 2.15 and student reported a mean response of 3.32 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students Michigan State Freshman Orientation in assisting a student in choosing agriculture as a major, $t(108)=0.000, p<.05$.

The third section of the survey was concerned with the level of influence of other resources. Those resources included high school agriculture courses, agricultural employment experience, agricultural club experiences, college agriculture courses, and Michigan State Placement Services Office. The following survey items were presented:

Item 16: High School Agriculture Courses

Response to Item 16 refer to Table 17) included 13 advisor responses and 97 student responses. As indicated,

advisors reported a mean response of 1.84 and students reported a mean response of 2.20 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students, High School Agriculture course in assisting a student in choosing agriculture as a major, $t(108)=0.000, p<.05$.

Item 17: Agricultural employment related experience

Response to survey Item 17 (refer to Table 17) included 13 advisor responses and 97 student responses. As indicated advisors reported a mean response of 1.61 and students reported a mean response of 2.20 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students Agricultural employment related experience in assisting a student in choosing agriculture as a major, $t(23.53)=0.011$, $p<.05$.

Item 18: Agricultural Club Experience

Response to survey Item 18 (refer to Table 17) included 13 advisor responses and 97 student responses. As indicated, advisors reported a mean response of 2.23 and students reported a mean response of 3.20 on a scale of 1

to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students, Agricultural Club Experience in assisting a student in choosing agriculture as a major, $t(34.34)=0.000, p<.05$.

Item 19: Michigan State College of Agriculture and Natural Resources Courses

Response to survey Item 19 (refer to Table 17) included 13 advisor responses and 59 student responses. As indicated, advisors reported a mean response of 1.75 and students reported a mean response of 2.06 on a scale of 1 to 4. The level of significance was greater than .05. There was no statistically significant difference between advisor and student. There was a difference between advisory and student mean responses beyond .05. There was a difference between advisor and student responses indicating that no-preference advisors viewed Michigan State College of Agriculture and Natural Resources Courses as more influential than students in assisting a student in choosing agriculture as a major, $t(36.11)=0.481, p\geq.05$.

Item 20: Michigan State Placement Services Office Bulletin

Response to survey Item 20 (refer to Table 17) included 13 advisor responses and 96 student responses. As indicated advisors reported a mean response of 2.38 and students

reported a mean response of 3.20 on a scale of 1 to 4. The level of significance was less than .05. There was a statistically significant difference between advisor and student mean responses, indicating that no-preference advisors viewed as more influential than did students the Michigan State Placement Services Office Bulletin in assisting a student in choosing agriculture as a major, $t(107)=0.003, p<.05$.

CONCLUSION

The following Chapter is a presentation of the summary, conclusions and recommendations for further research.

SUMMARY AND RECOMMENDATIONS

The primary purpose of the study was to obtain information on the following: (1) Perceptions of both advisors and students on the effectiveness of the advisory process in assisting a student in choosing a major field of study; (2) Perceptions of both advisors and students about the field of agriculture; and (3) Perceptions of both advisors and students on the factors which may influence a student to choose agricultural curriculum as a field of study.

Sample populations used in the study were University Undergraduate Division No-preference Advisors and students enrolled in Agriculture after original enrollment in no-preference. The study was conducted Spring 1987. Two survey instruments were developed for the study. The advisor survey was mailed to twenty senior no-preference advisors and student survey instruments were given to 137 students. Seventy-three percent (73%) of the student surveys were returned and 80 percent of the advisor surveys

were returned. The information obtained from both the advisor and student survey constitute the basis for this study.

THE DESIGN AND PROCEDURE OF THE STUDY

Two sample groups were chosen for the study, University Undergraduate Division No-Preference Advisors and students enrolled in an agricultural major after original enrollment in no-preference.

The two survey instruments developed for use in the study were the advisor survey divided into five parts consisting of forty-six items, and a student survey of similar design consisting of five parts and fifty-two items.

For the purpose of clarity the advisor and student surveys will be discussed separately:

REVIEW OF ADVISORY SURVEY

The advisor survey covered five areas:

Part 1:

Part 1 covered personal information on the advisor such as location of employment; employment status, years of employment; educational background; and the field in which the advisor's degree was received.

Part 2:

Part 2 asked the No-preference Advisor to characterize his/her knowledge of the curricula and career choices available in the field of agriculture. In addition,

University Undergraduate Division Advisors were asked the number of contacts and type of contact with agricultural advisory staff and faculty.

Part 3:

Part 3 asked the advisor to assess their perception of the field of agriculture.

Part 4:

Part 4 asked the advisor to assess the degree of importance of advisory functions in assisting a student to choose a major field of study.

Part 5:

Part 5 asked the advisor to assess the degree of influence certain influence factors in assisting a student in enrolling in an agricultural curricula.

REVIEW OF STUDENT SURVEY

Similar in design to the advisor survey, the student questionnaire was divided into five parts.

Part 1:

Part 1 of the questionnaire covered biographical data on the student such as age, sex, estimation of the total population of student's permanent residence; educational level of education achieved by mother and father; total number of credits earned by student; present student status; grade point average; and time in which the decision was made to choose agriculture as a major field of study.

Part 2:

Part 2 of the survey instrument asked the student to indicate the type of contact and number of contacts with the University Undergraduate Division Advisor. This section also included number and type of contacts with the college of Agriculture and Natural Resources advisory personnel and faculty.

Part 3:

Part 3 of the survey asked the student to assess their perceptions of the field of agriculture.

Part 4:

Part 4 asked the student to assess the degree of importance in which certain advisory functions encourage a student in choosing a major field of study.

Part 5:

Part 5 asked the student to assess the degree of influence certain factors have in assisting a student in enrolling in an agricultural curricula.

The instrument was submitted to 137 students and 20 no-preference advisors from University Undergraduate Division during Spring term, 1986. A total of 100 student surveys or 72.0 percent were returned and 16 or 80 percent of the surveys were secured from advisors.

Data from Parts 1 and 2 of the advisor and student surveys were analyzed by using percentages and

distributions. Parts 3, 4 and 5 of both the surveys used the t- test method of analysis to determine statistically significant differences between the sample groups. The level of significance was chosen at .05

A Likert type scale was assigned to the survey items in Parts 3, 4 and 5, one (1) being of most importance and four (4) being of least importance.

ANALYSIS AND CONCLUSIONS

The three major research hypotheses tested in the study were as follows:

1. Students and no-preference advisors will not differ in their perceptions of the influence and importance of the advisory function in assisting the student in selecting a major.

2. Students and advisors will not differ in their perception of selected influence variables in assisting a student in selection of a major.

3. Students and advisors will not differ in their perception of the field of agriculture.

Analysis of the data indicated that statistically significant differences were found in hypotheses 1 and 2. Therefore, research hypotheses 1 and 2 were rejected. No statistical differences occurred in hypothesis 3, thus the hypothesis could not be rejected.

The following is a descriptive summary and conclusions of the survey results. For the purposes of clarity, the results of the advisor and student surveys were reported separately:

SUMMARY RESULTS OF THE ADVISOR SURVEY

Approximately 16 advisors responded to the survey. A majority of the University Undergraduate Division Advisors (68 percent) were employed on a full-time basis. The majority of advisors were employed with the division five years or more. Educational levels of the advisors were the following: 8 advisors held bachelors degrees, 6 advisors held master's degrees and 2 advisors had received Ph.D. degrees. The 16 respondents received degrees in the following areas: science, liberal arts, and education.

Summary results from Parts 1 and 2 of the advisor survey indicated that no-preference advisors had some working knowledge of career opportunities available in the field of agriculture. Approximately 62.5 percent of the advisors surveyed reported being very comfortable in advising a student in choosing an agricultural curriculum and over half of the advisors also indicated a good knowledge of the curricula available in agriculture. Fifty percent of the advisors indicated that they worked very closely with the advisory staff in the College of Agriculture. Approximately 43.8 percent of the advisors reported between 1 and 5

contacts with Agriculture and Natural Resources advisory staff within a year. But when asked what field they would advise a student to enter at the same rate of pay and prestige other than Agriculture, 50 percent of the no-preference advisors reported that they would advise a student toward a science based field of study. The data indicates the no-preference advisors reported a good knowledge base of majors available in agriculture and feel comfortable in advising a student to enter the agriculture curricula. Advisor knowledge of career opportunities in the field of agriculture was limited.

SUMMARY RESULTS OF THE STUDENT SURVEY

Summary results from Parts 1 and 2 of the student survey indicate that 56 percent of the students surveyed had contact with the University Undergraduate Division No-preference Advisor at least 1-5 times per year. At least 45.5 percent of the students had contact with the advisory staff from the College of Agriculture and Natural Resources more than 5 times within the year. Of those students surveyed, over one-half indicated that resources other than the no-preference advisors were responsible in referring them to the College of Agriculture and Natural Resources. The data results seem to indicate that although students have contact with the University Undergraduate Division No-preference Advisor for class scheduling and career

assistance, there seems to be no active referral by advisors to students to the appropriate resources. It would seem from the survey results that a more improved referral service needs to be developed between the no-preference advisor and the College of Agriculture. Improved interaction between the no-preference advisor and students which would include a clearer definition of the role of the no-preference advisor and closer monitoring of advisor and student interactions which should involve follow-up and monitoring procedures for these students.

The last 3 parts of the advisor and student surveys sought to measure the differences between advisors and students; the t- test statistic was used to compare advisor and student perception of the field of Agriculture and Natural Resources; perceptions of the level of importance of expectations of the University Undergraduate Advisor; the level of importance of the advisory functions; and the level of influence of selected variables on assisting a student in choosing agriculture as a major field of study. The level of significance of .05 was chosen.

Part III of the survey was concerned with advisor and student perceptions about the field of agriculture. There were no statistical differences between advisor and student perception about the field of agriculture in the following areas: the social standing associated with the field of

agriculture; perception on the field of agriculture as an industry; the potential for making money in the field of agriculture; chances for job advancement in an agricultural career and the achievement level of the type of student who chooses agriculture as a curricula choice. There was a statistically significant difference between advisor and student perception in the following area: career opportunities available in the field of agriculture.

The conclusions that were drawn from the results indicated that advisors and students showed no statistically significant differences in their perception of the field of agriculture. This does not support the original assumption that advisors and students would have differing opinions of the field of agriculture.

Based on the aforementioned findings the research hypothesis that no-preference advisors and students will not differ in their perceptions of the field of agriculture cannot be rejected.

Part IV of the advisor and student surveys referred to the level of importance of the wide variety of functions performed by the University Undergraduate Division Advisor in assisting a student in choosing a field of study. The areas which indicated statistically significant differences were the following: academic advising as an important educational service; academic advising should contribute to

individualizing and personalizing educational and career goals; academic advising should assist the student with self-assessment; academic advising should contribute to a better clarification of values and goals; academic advising should assist the student with self-assessment; the advisory relationship should be one of genuineness, honesty and competence.

The areas which indicated no statistically significant differences included: academic advising should assist students in choosing from a variety of majors at Michigan State University, and academic advising should assist with student personal adjustment to the University community.

The aforementioned results support the original rationale of the study in that it was suspected that one of the difficulties in the advisory function and its influence on a student's choosing a major field of study lay in the fact that the role of the University Undergraduate Division No-preference Advisor is not clearly defined. The difference found in the research hypothesis indicate a number of conclusions: the need for better clarification of advisory functions; improved understanding of the dynamics of the advisory process in assisting a student in choosing a major field of study.

Based on the aforementioned data the research hypothesis no-preference advisors and students will not differ in their

perceptions of the advisory function and its influence on a student choosing a major field of study indicating statistically significant difference in all but two areas. Therefore, the research hypothesis was rejected.

Part V of the survey presented variables that were of influence in assisting a student to choose agriculture as a curricula choice. There were statistically significant differences at the .05 in all areas indicated in the first subsection of Part 5. Those variables indicating statistically significant differences were: parents, relatives, high school counselors and teachers, an agriculture student, agriculture faculty, University Undergraduate Division Advisor, Michigan State Admissions Counselor, and other college advisors. The second subsection of Section 5 was concerned with the influence level of the media and publications on a student's choosing agriculture as a curricular choice. Statistically significant differences at .05 were in the following areas: Michigan State College of Agriculture and Natural Resources representative; presentation by a Michigan State Admissions Counselor; University Open House and Michigan State Freshman Orientation. The third subsection included the following areas which showed statistically significant difference at .05: high school agriculture courses; agricultural employment related experiences; agricultural club

experiences; and Michigan State Placement Services office. The one variable that showed no statistical difference was between advisor and student perception regarding the Michigan State Course Catalog and Michigan State College of Agriculture and Natural Resources course.

Statistically significant differences were indicated in 18 of the 20 items presented. Based on the data, the research hypothesis, no-preference advisors and students will not differ in their perception of certain selected variable and its influence on a student choosing agriculture as a curricula choice, was rejected.

It may be assumed from the results of the survey that educational experiences have little or no influence on a student choosing a major field of study. Those variables which seemed to have the most influence on a student choosing a major seemed to be based on familial, peer and experiential interactions. It may be concluded that more emphasis should be placed on career development in the training of the advisor. Particular attention should be given to the following factors in assisting students to choose majors: family, educational and peer influences. More attention should also be given to the introduction of career courses into the curriculum as well as advisor knowledge of co-op and club experiences available within the College of Agriculture and Natural Resources.

In analyzing both the advisor and student survey, it is evident that the process of academic advising for the no-preference student and its importance in assisting a student in the selection of a major is not agreed upon by both advisors and students. It is evident that the goals of advising are not being accomplished in assisting the student in choosing a major. There were some discrepancies in advisor response to role expectations and actual accomplishment of the tasks as recorded by students. Difference in mean response were clearly evident between advisor and student perception of influencing variables as it related to curricula choice. The results presented clearly support the assumption that differences exist between student and no-preference advisor perception of the influence of advising on curricula choice.

RECOMMENDATIONS

Several recommendations may be made on the basis of the above conclusions. They are as follows:

A. No-preference advisors and students indicated differences in perception of agriculture as an industry and career opportunities available in agriculture. Perhaps more in-service training on improved information sharing could be

facilitated between the College of Agriculture personnel and the University Undergraduate No-preference Division Advisors on career opportunities available in agriculture.

B. Advisors and students reported differences in the advisory and function of the University Undergraduate Division advisor and its influence on a student choosing a major field of study. Students indicated a need to have the role of the University Undergraduate Division Advisor better clarified. Closer supervision of the undecided student is necessary; students in this category should meet with advisors more frequently. Thus, a more structured regiment of student activities should take place, encouraging active participation in the career exploration process.

C. There were noticeable discrepancies between advisor and student perception on influence variables in assisting students in choosing agriculture as a major. More attention needs to be given to adult development theories in assisting a student in career exploration. In addition, added emphasis should be given to familial, peer and employment experiences in the advisory process. Perhaps a career exploration course and career testing could be made an integral part of the advisory process.

D. Students indicated a lack of referrals by advisors to other resources in assisting the student in choosing a

curricula choice. Better coordination between the University Undergraduate Division and other campus resources need to be complemented in assisting the undecided student.

IMPLICATIONS FOR FURTHER RESEARCH

The study points to the need for further research into the effects of advising in assisting a student in choosing a major field of study. A survey instrument should be developed asking students to respond to advisor competence.

Further research might be done to examine the role of influence variables in helping a student to choose a major field of study. This study also has implications for further research with career specialists in improving approaches to student career development.

As suggested previously, if an in-service training program could be established to improve information between agriculture personnel and University Undergraduate Division Advisors, a study should be conducted to determine advisor perception of the field of agriculture as it relates to career opportunities and agriculture as an industry.

Additionally, a career exploratory course could be introduced into the curriculum of those students who choose no-preference. More emphasis should also be placed on career testing. A study should then be implemented to determine student perceptions of the effectiveness of such an intervention procedure.

APPENDIX A

APPENDIX A
Advisor Instruments Used in the Study

May 18, 1987

Dear Undergraduate University Division Advisor:

I am currently conducting a study on perceptions of the role of academic advising and its influence on a student's choice of major. Enclosed is a questionnaire designed to obtain information on the following: your perceptions about the advisory process; your perceptions about the field of agriculture and natural resources; and finally, your perceptions of other factors including advising which may influence a student into the field of agriculture and natural resources.

There will be no consequence to you if you decide to participate or not participate in the study. If your decision is to participate, you are not obligated to complete the study. Complete anonymity is guaranteed and the study results will be available upon request.

Please return all completed questionnaires to the Undergraduate University Division Coordinators by JUNE 1st. Thank you for your time and cooperation.

Sincerely,

Pamela Bellamy

Date _____

ADVISOR SURVEY

Personal Data

Part I

Please check the appropriate response:

1. Please indicate which location in the university undergraduate division which you presently work.

   a. ( ) Central Campus
   b. ( ) South Campus
   c. ( ) East Campus
   d. ( ) Brody

2. How are you presently employed?

   a. ( ) Part-time
   b. ( ) Full-time

3. Indicate how many years you have been employed as a university undergraduate division no-preference advisor?

   a. ( ) Less than 4 years
   b. ( ) 5 to 10 years
   c. ( ) 11 to 15 years
   d. ( ) More than 15 years

4. Please indicate the level of your educational background.

   a. ( ) Bachelors
   b. ( ) Masters
   c. ( ) Ph.D.
   d. ( ) Other _____

5. Indicate the field in which you received your degree.

   a. ( ) Education
   b. ( ) Agriculture
   c. ( ) Science
   d. ( ) Liberal Arts
   e. ( ) Other _____

Part II

This section refers to your comfort level, and knowledge base and interaction with personnel from the College of Agriculture and Natural Resources. Please check the appropriate response:

1. How would you characterize your knowledge of the curriculum available in the College of Agriculture?

   a. ( ) I have an excellent knowledge of majors available in the College of Agriculture.

   b. ( ) I have a good knowledge of majors available in the College of Agriculture.

   c. ( ) I have little knowledge of majors available in the College of Agriculture.

   d. ( ) I have no knowledge of majors available in the College of Agriculture.

2. How would you characterize your knowledge of career opportunities available in the fields of Agriculture and Natural Resources?

   a. ( ) I have a very good knowledge of career opportunities available in the fields of Agriculture and Natural Resources.

   b. ( ) I have some knowledge of career resources in Agriculture and Natural Resources.

   c. ( ) I have little knowledge of career opportunities in Agriculture and Natural Resources.

   d. ( ) I have no knowledge of career opportunities available in Agriculture and Natural Resources.

3. Which statement best describes how you feel about advising a student to choose a major in the college of Agriculture.

   a. ( ) I feel very comfortable advising students to pursue a major in the College of Agriculture.

   b. ( ) I feel comfortable in advising students to pursue a major in Agriculture.

   c. ( ) I feel little comfort in advising students to pursue a major in fields of Agriculture.

d. ( ) I do not feel comfortable advising students to pursue majors in the College of Agriculture.

4. If a student were given an opportunity to enter into a career at the same rate of pay, prestige, and job advancement: which of the following areas would you advise a student towards?

a. ( ) Education
b. ( ) Liberal Arts
c. ( ) Science
d. ( ) Engineering
e. ( ) Agriculture
f. ( ) Other

5. How often have you had contact with faculty from the College of Agriculture in the past year?

a. ( ) 1 to 5 times
b. ( ) 5 to 10 times
c. ( ) 11 to 15 times
d. ( ) Over 15 times
e. ( ) No contact

6. If you had contact with the staff/faculty from the College of agriculture, what was the nature of the contact?

a. ( ) Formal (i.e., workshop, lecture, open house,
b. ( ) etc.)
c. ( ) Informal (i.e., party, chance contact, etc.)
d. ( ) Other (Please specify)
No contact

7. How would you characterize your working relationship with the faculty in the College of Agriculture?

a. ( ) I have worked very closely with faculty from the College of Agriculture.

b. ( ) I have worked closely with faculty from the College of Agriculture.

c. ( ) I have had little contact with faculty members from the College of Agriculture.

d. ( ) I have no working relationship with the faculty from the College of Agriculture.

Part III

This section refers to your perceptions of the field of agriculture. Please respond to each question by checking the appropriate response:

1. How would you characterize the social standing you feel is associated with a career in agriculture?

   a. ( ) High prestige
   b. ( ) Average prestige
   c. ( ) Low prestige
   d. ( ) No prestige

2. Please indicate which of the following most closely represents your opinion about the field of agriculture.

   a. ( ) Agriculture is a growing industry
   b. ( ) Agriculture is neither growing nor declining
   c. ( ) Agriculture is a declining field
   d. ( ) Never thought about it enough to develop a real
   e. ( ) opinion

3. Please indicate the potential you feel an agricultural career offers for making money.

   a. ( ) High potential for making money
   b. ( ) Some potential for making money
   c. ( ) Little potential for making money
   d. ( ) No potential for making money

4. Which of the following most closely represents your opinion about the career opportunities in the field of agriculture?

   a. ( ) The career opportunities in agriculture are growing

   b. ( ) The career opportunities in agriculture remain stable or have not changed

   c. ( ) Career opportunities in agriculture are declining

5. Indicate which of the following closely represents your feeling about one's chances for advancement in an agricultural career.

   a. ( ) Agricultural careers offer greater opportunities for advancements than do most other career areas

   b. ( ) Agricultural careers offer as much advancement as do most careers areas

   c. ( ) Agricultural careers offer less opportunity for advancement than most other career areas

d. ( ) Agricultural careers offer no opportunities for advancements that I am aware of

6. Which of the following closely represents your opinions on students who chose agriculture as a curricula choice?

a. ( ) High achieving student
b. ( ) An average student
c. ( ) Marginal achieving student
d. ( ) Low achieving student

Part IV

This section refers to a wide variety of functions performed in your role as advisor. This section will help assess your perceptions of the degree of importance for each function in assisting a student in choosing a major. Use the following key to answer questions appropriately.

	Very Important	Important	Of Little Importance	Not Important
1. Academic Advising is an essential educational service	1	2	3	4
2. Advising should contribute to individualizing and personalizing educational goals within a university environment.	1	2	3	4
3. Advising should promote student utilization of campus resources	1	2	3	4
4. Advising should assist the student in self-assessment	1	2	3	4
5. Advising should assist student towards a clearer clarification of values and goals	1	2	3	4

6. Advising should assist the student in understanding and choosing a major.	1	2	3	4
7. The advising relationship should be genuine, honest and competent.	1	2	3	4
8. Advising should help the student in their personal, social, and academic adjustment to the university	1	2	3	4

Part V

Please indicate those factors which you feel influence assisting a student to choose a major field of study in agriculture. Use the following key to respond to each question appropriately.

	Influential	Most Influence	Of Little Influence	No Influence
PEOPLE				
1. Parents	1	2	3	4
2. Relatives other than parents	1	2	3	4
3. High School Teacher (indicate subject)	1	2	3	4
4. Student in the College of Agriculture	1	2	3	4
5. Michigan State College of Agriculture faculty	1	2	3	4

6. University Undergraduate Division No-Preference Advisor	1	2	3	4
7. Michigan State University Admissions Counselor	1	2	3	4
8. High School Counselor	1	2	3	4
9. College advisor other than Agriculture and No-Preference	1	2	3	4
10. Other _____	1	2	3	4

MEDIA/PUBLICATION

1. Michigan State Department Agricultural Catalog	1	2	3	4
2. Michigan State Course Catalog	1	2	3	4
3. Presentation by College of Agriculture Representative	1	2	3	4
4. Presentation by Michigan State Admissions Counselor	1	2	3	4
5. University Open House	1	2	3	4
6. Michigan State University Freshman Orientation	1	2	3	4
7. Other _____	1	2	3	4

Other Courses

1.	High School Agriculture course	1	2	3	4
2.	Agricultural related experience	1	2	3	4
3.	Experience in Agriculture clubs (i.e., 4-H, Future Farmers)	1	2	3	4
4.	College courses	1	2	3	4
5.	Michigan State Placement Services Office	1	2	3	4
6.	Other _____	1	2	3	4

APPENDIX B

APPENDIX B
Student Instruments Used in the Study

March 9, 1989

Dear Agriculture and Natural Resources Student:

I am currently conducting a study on perceptions of the role of University Undergraduate Division academic advising and its influence on a student's choice of major. Enclosed is a questionnaire designed to obtain information on the following: your perceptions about the advisory process; your perceptions about the field of agriculture and natural resources; and finally, your perceptions of other factors including advising which may influence a student to go into the field of agriculture and natural resources.

There will be no consequence to you if you decide to participate or not to participate in the study. Whether or not you choose to complete the questionnaire, please return the enclosed postcard by mail or to the front desk in your residence hall. If your decision is to participate, you will not be obligated to complete the study. Complete anonymity is guaranteed and the study results will be available upon request.

I would appreciate your cooperation in completing the questionnaire and mailing it in the self-addressed envelope provided, or return it to the receptionist's desk in your residence hall. PLEASE RETURN ALL COMPLETED QUESTIONNAIRES BY JUNE 5th. In addition, for your convenience I have scheduled a MEETING in AGRICULTURE HALL ROOM on May 20th at 7 P.M. if you wish to complete the questionnaire at that time. Please be sure to return the postcard separately from the questionnaire in order to assure complete anonymity.

Thank you for your time and cooperation.

Sincerely,

Pamela Bellamy

Date _____

Code No. _____

STUDENT SURVEY

Personal Data

Part I

Please respond to the following questions appropriately.

1. What is your sex?

   a. ( ) Male b. ( ) Female

2. To what age group do you belong?

   a. ( ) Under 18 years of age
   b. ( ) Between 18 and 21 years
   c. ( ) Over 21 years

3. What educational level has your father completed?

   a. ( ) High school diploma d. ( ) Masters degree
   b. ( ) Associates degree e. ( ) Ph.D. degree
   c. ( ) Bachelors degree f. ( ) Other _____

4. What educational level has your mother completed?

   a. ( ) High school diploma d. ( ) Masters degree
   b. ( ) Associates degree e. ( ) Ph.D. degree
   c. ( ) Bachelors degree f. ( ) Other _____

5. Estimate the total population of your permanent place of residence before attending Michigan State University.

   a. ( ) less than 5,000 d. ( ) 100,000 to 500,000
   b. ( ) 5,000 to 50,000 e. ( ) 500,000 to 1 million
   c. ( ) 50,000 to 100,000

6. Please indicate the total credits earned to date.

   a. ( ) 0 - 39 c. ( ) 85 - 129
   b. ( ) 40 - 84 d. ( ) over 130 credits

7. Indicate present student status

   a. ( ) Part-time student (carrying less than 12 credit hours)
   b. ( ) Full time student (12 credits or more)

8. Indicate present overall grade point average

   a. ( ) less than 2.0
   b. ( ) 2.0 - 2.5
   c. ( ) 2.6 - 3.0
   d. ( ) 3.1 - 3.5
   e. ( ) 3.6 or above

9. Were you involved with any agriculturally related clubs during your attendance at Michigan State University?

   a. ( ) Yes
   b. ( ) No

10. When did you decide to pursue a major in the field of agriculture?

   a. ( ) Prior to junior high school
   b. ( ) Junior high school
   c. ( ) Senior high school
   d. ( ) 1st year of college
   e. ( ) 2nd year of college

Part II

This section refers to your contact with the no-preference advisor as well as your interaction with College of Agriculture and Natural Resources personnel. Please respond to each question by checking the appropriate response.

1. Indicate the number of times you have sought assistance from a university undergraduate no-preference advisor during your attendance at Michigan State University.

   a. ( ) More than 10 times
   b. ( ) 6 to 10 times
   c. ( ) 1 to 5 times
   d. ( ) No contact

2. If you have had contact with a undergraduate division advisor, what was the nature of the contact? (Check all that apply).

   a. ( ) Career assistance counseling
   b. ( ) Class scheduling
   c. ( ) Academic/below 2.0 Conference
   d. ( ) Summer Guest Status
   e. ( ) Drop/Add
   f. ( ) Other _____

3. Under what circumstances did you first gain knowledge of an undergraduate division no-preference advisor?

   a. ( ) Freshman year
   b. ( ) Referral from another university

c. ( ) Brochure or Newsletters
d. ( ) Fellow Student
e. ( ) Letter from the university undergraduate division
f. ( ) Other (Please specify) _____

4. When was your first contact with an advisor in the university undergraduate division?

a. ( ) Prior to freshman year - Academic Orientation Program
b. ( ) Freshman year
c. ( ) Sophomore year
d. ( ) Other (Please specify) _____

5. How often have you had contact with faculty or advisors from the College of Agriculture in the past year?

a. ( ) More than 5 times
b. ( ) 3 to 5 times
c. ( ) Less than 5 times
d. ( ) No contact

6. How were you referred to the College of Agriculture?

a. ( ) Referral from the university undergraduate division
b. ( ) During freshman orientation
c. ( ) Referral from a student in agriculture
d. ( ) Through a Michigan State schedule book
e. ( ) Other (Please specify) _____

7. How would you characterize the level of assistance given to you from the College of Agriculture?

a. ( ) Most helpful
b. ( ) Helpful
c. ( ) Of little help
d. ( ) No help

Part III

This section refers to your perception of the field of agriculture. Please respond to the following questions appropriately.

1. How would you characterize the social standing you feel is associated with a career in agriculture?

a. ( ) High prestige
b. ( ) Average prestige
c. ( ) Low prestige
d. ( ) No prestige

2. Please indicate which of the following most closely represents your opinion about the field of agriculture.

   a. ( ) Agriculture is a growing industry
   b. ( ) Agriculture is neither growing nor declining
   c. ( ) Agriculture is a declining field
   d. ( ) Never thought about it enough to develop a real opinion

3. Please indicate the potential you feel an agricultural career offers for making money.

   a. ( ) High potential for making money
   b. ( ) Some potential for making money
   c. ( ) Little potential for making money
   d. ( ) No potential for making money

4. Which of the following most closely represents your opinion about the career opportunities in the field of agriculture?

   a. ( ) The career opportunities in agriculture are growing
   b. ( ) The career opportunities in agriculture remain stable or have not changed.
   c. ( ) Career opportunities in agriculture are declining.

5. Indicate which of the following closely represents your feeling about one's chance for advancement in an agricultural career.

   a. ( ) Agricultural careers offer greater opportunities for advancements than do most other career areas
   b. ( ) Agricultural careers offer as much advancement than do most career areas
   c. ( ) Agricultural careers offer less opportunity for advancement then most career areas
   d. ( ) Agricultural careers offer no opportunities for advancements

6. Which of the following closely represents your opinions on students who choose agriculture as a curricula choice?

   a. ( ) High achieving student
   b. ( ) An average achieving student
   c. ( ) Marginal achieving student
   d. ( ) Low achieving student

7. Please indicate which of the following most closely represents your opinion about the field of agriculture.

   a. ( ) Agriculture is a growing industry
   b. ( ) Agriculture is neither growing nor declining
   c. ( ) Agriculture is a declining field
   d. ( ) Never thought about it enough to develop a real opinion

Part IV

This section refers to a wide variety of functions which may be included in the role of the no-preference academic advisor. The statements will assess the degree of importance the no-preference advisor's function has as it relates to your needs.

Use the following key to indicate the value in which you would place the following variables.

	Very Important	Important	Of Little Importance	Not Important
1. Academic advising from a university undergraduate advisor is an important educational service	1	2	3	4
2. Academic advising should contribute to individualizing and personalizing educational goals within a university environment.	1	2	3	4
3. Academic advising should assist the student in self-assessment.	1	2	3	4
4. Academic advising should assist the student towards a better clarification of values and goals.	1	2	3	4

5. Academic advising should assist students to grow in judgments and decision making.	1	2	3	4
6. Academic advising should assist students in choosing from a variety of majors available at Michigan State University.	1	2	3	4
7. The relationship established between the advisor and student should be one of genuineness, honesty, and competence.	1	2	3	4
8. Academic advising should help in the personal academic adjustment to the university community.	1	2	3	4

Part V

Please indicate those factors which you feel would influence you to choose agriculture as a field of study. Circle number of your response.

PEOPLE	Most Influential	Influential	Of Little Influence	No Influence
1. Parents	1	2	3	4
2. Relatives other than parents	1	2	3	4
3. High school teacher	1	2	3	4
4. Student in the College of Agriculture	1	2	3	4
5. College of Agriculture MSU Faculty Member	1	2	3	4

6. University Undergraduate Division No-Preference Advisor (MSU)	1	2	3	4
7. An admissions counselor at MSU	1	2	3	4
8. High school counselor	1	2	3	4
9. MSU College advisor other than no-preference or Agriculture advisor	1	2	3	4
10. Other (Please specify) _____	1	2	3	4

MEDIA/PUBLICATIONS

1. Michigan State College of Agriculture Brochure	1	2	3	4
2. Michigan State Course Catalog	1	2	3	4
3. Presentation by College of Agriculture Representative	1	2	3	4
4. Presentation by Michigan State Admissions Counselor	1	2	3	4
5. University Open House	1	2	3	4
6. Michigan State Freshmen Orientation	1	2	3	4
7. Other (Please specify) _____	1	2	3	4

OTHER AREAS

1. High School Agriculture Courses	1	2	3	4
2. Agricultural Employment Experience	1	2	3	4
3. Experience in Agriculture Clubs, (i.e., 4-H, Future Farmers)	1	2	3	4
4. College Agriculture Courses	1	2	3	4
5. Michigan State Placement Service Office Bulletin	1	2	3	4
6. Other (Please specify) _____	1	2	3	4

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