STUDENTS' PERCEPTIONS OF THEIR ACADEMIC ADVISEMENT AT MICHIGAN STATE UNIVERSITY

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ABSTRACT

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The purpose of this study was to examine the unique characteristics of five selected academic advising programs at Michigan State University. The study attempted to identify those characteristics which are unique factors contributing to a program which will be satisfactory to students.

The procedure was to tentatively identify those factors which seemed to be unique to each program. This was accomplished by means of interviews with administrators and/or academic advisors from each college. The result of this tentative identification was formulated into five testable hypotheses. A questionnaire was constructed to measure the satisfaction of a sample of students from the five programs with various aspects of their academic advising programs.

A representative sample was selected from each of the five selected academic advising groups. The instrument

was administered to the entire sample. Four hundred and one (80.2 per cent) of the 500 questionnaires mailed to the sample were returned in usable form.

The statistical tool used to analyze the data was analysis of variance employing the method of profile analysis. To test the significance of difference on each variable, a one-way analysis of variance was performed. The Dunnett's method of post-hoc comparison was employed to test the significance of difference between a particular program and other four programs on a particular variable which was hypothesized as unique to each college.

Major Findings

The students from the University College expressed significantly higher satisfaction on the variable of "service to students" than the students from Commege of Arts & Letters, Justin Morrill College, Engineering College, or the students advised by a random sample of the university teaching faculty.

The students from the College of Arts & Letters expressed significantly higher satisfaction on the variable of "rapport" than the students advised by the sample of teaching faculty.

The students from Justin Morrill College expressed significantly higher satisfaction on the variable of "technical help in curriculum planning" than the students from

the College of Arts & Letters or the students advised by teaching faculty sample.

The students from Engineering College expressed significantly higher satisfaction on the variable of "personal help" than the students from the College of Arts & Letters, the students from Justin Morrill College or the students advised by the sample of teaching faculty.

The students advised by teaching faculty sample expressed significantly higher satisfaction on the variable of "advisors' competence in the academic field" than the students from University College, College of Arts & Letters, or Justin Morrill College.

Conclusion

Recognizing the limitations of this study, some general conclusions are presented. A general improvement in the level of satisfaction may be attained by emphasizing all aspects of academic advising, namely, service to students, rapport, technical and personal help, and knowledge of the academic area. This means that an academic advisor should be a "well-rounded" individual who will extent his help to students for whatever need the student may have. This does not mean that the advisor should necessarily be well qualified in all the areas. A minimum quality which may be imperative in every academic advisor is an attitude favorable toward helping students either directly or indirectly.

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CHAPTER I

INTRODUCTION

Statement of the Problem

The effectiveness of academic advising programs constitutes one of the key problems in higher education today. While every department apparently strives to conduct academic advising to accomplish its own desired purposes, the clients' (students') perception of its effectiveness may serve as a very cogent criterion of how well the program of academic advising actually functions. This study attempted to measure such effectiveness through students' perceptions of their own academic advisement.

Academic advisement takes on importance because college students manifest a broad array of individual differences. In addition to variations in physical and intellectual growth, students show a wide range of differences in academic progress and degree of adjustment to the university community. Consequently academic advising becomes a pivotal function in contemporary higher education in the United States and the world at large. DeLisle (1965: 169) defines academic advising as follows:

> [It is] an educational experience, representing both a dynamic, continuing process and a relationship. Thereby, a student and interested, capable members of the staff and faculty are engaged in a common pursuit of the existing resources of the educational institution to the end that the student may realize his educational and career goals according to his unique capabilities.

As student enrollment increases in institutions of higher education, undergraduate students are being assigned to advisors who have unrealistic numbers of advisees. These academic advisors often become mere signers of schedule cards. In past years, some institutions of higher education have recognized the problem and have begun experimenting with a number of different programs. Michigan State University is one of these pioneer institutions. It has introduced different programs in different colleges of the University. Justin Morrill College, for example, uses undergraduate senior students to advise the freshmen; the Engineering College is utilizing doctoral candidates from the College of Education. The University College advising center is staffed by degree-holding wives of faculty members. The College of Arts & Letters has its graduate students as academic advisors. Many other colleges continue to use the more traditional method of a faculty advising system.

These varied programs outwardly appear to be fulfilling their purpose. This study attempted to detect the unique advantages in each of the programs, and provide

constructive and informed suggestions for improvements. The additional insight gained should encourage better academic advising programs which may be more relevant to the individual needs of university students. The results of this study could help to improve each advising program as well as benefit the entire MSU community.

Historical Background

The face-to-face nature of the relationship between an academic advisor and his advisee is deeply rooted in the tradition of Higher Education. Some may have the impression that faculty advising was not a part of early educational development. In fact, there is no foundation for this impression. The history of theories on academic advising is the same as the historical development of Higher Education in general. In the period of 1640 to 1860, it could be said that academic advising existed in the form of personal attention to the students, as clergymen were the advisors and therefore, it is to be assumed, concerned for the general welfare of the students (Good, 1962). In this Colonial period, the faculty member served in a "pastor-teacher-policeman" relationship to the student, which demanded from the professor a combination of "spiritual-instructional-disciplinary" counsel.

Higher Education in the nineteenth century differed from nation to nation: Nationalism was the key word.

The power of organized religion lessened and positive secularism was widely prevelant. In England, colleges and universities of the medieval social class system persisted. In France, there was a disorganized pattern in higher education. On the other hand, Germany was devoted to experimental sciences. Its "sink or swin" philosophy assumed no responsibility for the non-intellectual growth of the student and the academic advisor was solely engaged in the "training of the mind." This trend was easily imitated by American universities following the German model.

At the end of the nineteenth century, the pendulum swung back to "concern for the whole student." By the mid-twentieth century, the reaction to intellectualism materialized to the extent of establishing the student personnel movement and emphasizing general education. In this context, Williamson (1961: 30) clarifies the term "academic advisor" as referring to one assisting students "in meeting the faculty's requirements for graduation and providing optimum learning for the formal content of the curriculum." Mueller (1961: 208) explained this function as a person-to-person contact with individual students and an opportunity to become acquainted with their intellectual and personal qualities by means of written and oral responses, by a constant evaluation of their work, and by conferences about their progress.

This ideal situation has become unattainable in large colleges, especially in certain key departments where major growth has occured. The enlargement of colleges, the multiplication of areas of study, the increased demands upon the professors' time, and other factors have tended to shift the center of attention away from the student. On many campuses academic advising has become more crisis intervention. Faculty advisors became inaccessible. They found it difficult to keep up to date with current course offerings, college regulations and graduation requirements. Their preoccupations were instruction, research and writing. They became more ineffective in assisting students in course selection, program planning and career exploration. It became impossible to advise in any effective way 70 to 100 students, especially when academic advising played such a minor role in the professional development of members of the faculty. As stated by De Lisle (1965: 41), undergraduate life became a mere "disjointed series of unrelated assignments and subsequent examinations" as the breif sessions of academic advising were devoted to "what" and not "why." DeLisle explained this dilemma as follows:

> We can not suppose for long that the skeletal outlines of course numbers and credits with which the catalogue defines any one of the 280 major fields in the university reveals itself with all logic, consistency and relevance to a young man or woman only a term or two out of a secondary school. And even if such

> an illuminating outline could be drawn, the importance to the student of coming to know well one man or woman who not only knows the field but has found it exciting enough to give a lifetime to, can not easily be over estimated.

This apparent dilemma inspired administrators in different universities and departments to re-evaluate their academic advising programs and begin to attack the problems by introducing experimental programs.

Development of Hypotheses and Questionnaire

A review of literature revealed a lack of research relevant to all the various types of academic advising programs similar to those of this study. As a result, the research hypotheses lack the traditional framework of a stable theory. However, as an exploratory study, five hypotheses will be presented in testable form in Chapter 3.

The hypotheses and questionnaire items were formulated on the basis of repeated interviews with academic advisors and administrators in each program. They were asked to spell-out "stated objectives" of each program and its uniqueness. In some cases, some of these objectives overlapped programs. This researcher had to choose those objectives most frequently mentioned as characteristic of the program. The instrument was constructed on these objectives.

The administrators of the University College, where degree holding wives of faculty members were advisors, gave "service to students" as the major objectives of the academic advising programs of that college. Having an open office policy, encouraging frequent advising contact, taking immediate action on problems and having convenient locations were said to be the unique characteristics of the University College advising program.

Similarly, the academic advisors and administrators of the academic advising program in the College of Arts & Letters emphasized the objective and uniqueness of their particular program as informal relations or "rapport" with the advisor. As graduate students were advisors, similarity of academic interest between advisors and advisees was assumed. The advisors seemed to think that there was similarity of life style as well as special concern for advisees as students. The advisors in this college seem to have more informal knowledge of instructors in their major field than other advisors who did not necessarily major in the field of their advisees.

The coordinator of the academic advising program, the Dean, the academic assistants and other administrators in Justin Morrill College, where senior students advised freshmen students, seem to emphasize the aspects of efficient help in selecting courses, maintaining good academic standing by helping in the wise choice of

appropriate courses and effective communications on the level of the advisees.

The Engineering College academic advising program, which utilized doctoral candidates from the College of Education, seemed to emphasize professional full-time commitment of advisors to the area of advising. They seemed to emphasize also the aspect of a wider outlook of advisors on education in general and their knowledge of resources of the university community for effective referrals as the situation may require.

Some professors who were active as academic advisors emphasized as important to advising their professional competence in their academic field which they thought would inspire greater confidence from the part of the advisees. Professional reputation, ability to give guidance in the major field of advisees, professional knowledge of other instructors in their field and knowledge of the subject matter in their field were said to be the unique characteristics of faculty members who advise students.

The Questionnaire

The questionnaire consisted of 27 items. The first item concerned the students' general satisfaction with the academic advisement they had received and the last item concerned their perception of the importance of

having an academic advisor. The other 25 items were constructed from the objectives gathered from the interviews with academic advisors and administrators of each of the five programs studied. Five items were grouped under each of the titles: Service to Students, Informal Relation With My Advisor, Technical Help From My Advisor, Help With Personal Problems and Competence in His Academic Area. Each title corresponded with a stated objective of one of the five programs studied.

The questionnaire used in this study was designed in such a way that the data could be analyzed by a computer. It was printed on an optical scanner scoring sheet which had five choice columns. The students were instructed to mark one column for each of the first 26 items according to the following key:

1. Very satisfactory
2. Satisfactory
3. Adequate
4. Unsatisfactory
5. Very unsatisfactory

The last item, requesting the student's perception of the importance of having an academic advisor, was to be marked according to the following key:

1. Very important
2. Important
3. Uncertain

4. Not very importnat

5. Not at all important

Content validity of the questionnaire was established by letting the professors and/or academic advisors rate each item. The items were then given to a random sample of 50 students who were not again included in the sample selected for the study. The students answered the items without any apparent difficulty. However, they inspired some rearranging and rewording of items in the instrument.

Operational Definitions

Some key terms used in the hypotheses and throughout the study are defined in order to facilitate the clarity of this presentation.

Service to Students means an emphasis on convenience to advisees in terms of office hours, office locations and conducive atmosphere in the academic advising program.

Rapport, in this research, means that there exists an informal relationship where both the advisors and advisees have common grounds such as majoring in the same field and having similar interests as students.

Technical Help in Curriculum Planning means that the advisors are primarily concerned with the course selection, dissemination of information on different courses and regulations and registration routines.

Personal Help means that the advisors seem to be professionally inclined to help the students not only in academic matters, but also in personal matters. This attitude is expressed through their personal concern, attitude towards personal problems and knowledge of the resources of the compus community for referrals if and when referrals are needed for psychological, religious, social and all other personal needs.

Field Competence means that the advisor has very high proficiency in the major field of the advisees, which primarily inspires confidence in his advice on academic matters.

Questions Related to Hypotheses

It is assumed that there are certain principal factors in each academic advising program that contribute most to the satisfaction of the advisees. Another assumption is that different factors contribute to the satisfaction in different programs. The predominant factors in each program will probably be the same as the factors that have been uniquely built into the program. Therefore, some questions emerge as follows:

1. What are the contributing factors for student satisfaction with a particular academic advising program?

2. Do students see any problems in any program? If so, how do they suggest that these be solved?
3. How can these advising programs be improved to make them more beneficial to students?

These open-ended questions were incorporated as part of the instrument used in this study.

Scope and Limitations of the Study

Due to the nature of this study, certain limitations should be identified which may have a direct bearing on the implications that are derived from the results of this investigation. Any conclusions that may be made from this study should be interpreted in the light of these limitations:

1. Because the students in the sample were already enrolled in specified programs and because they were not tested previously for their attitude towards academic advising, the findings will be relevant only to each program and may not be generalized to other programs of academic advising.
2. All programs in the study are in the process of reconsideration and betterment. For this reason, there is no assurance that the students

sampled at this time will be representative of the future programs in those colleges.

3. The study is limited by the factors inherent in the use of any questionnaires. These factors include the difficulties in establishing the reliability and validity of the instrument, the difficulties in securing complete cooperation of the sample selected, and the bias and frame of reference of the respondents.

Despite the limitations listed above, the results of this investigation should provide valuable information to those responsible for the administration of academic advising programs, as well as provide a degree of understanding about the satisfaction or dissatisfaction of students in the various programs.

General comments sought from the students were used to make meaningful recommendations to each department. These may lead to possible alterations and improvements in the several programs. In summary, the study should give a somewhat general picture of various MSU academic advising programs, as well as suggest meaningful leads to betterment of academic advising programs in other similar institutions.

CHAPTER II

REVIEW OF RELATED LITERATURE

The following review summarizes earlier studies which have some bearing on this thesis. This material is representative of the work which has been done in the areas of faculty advising, student-to-student counseling and other means of improving academic advising contact with students. At the end of the section is a summary of the implications of prior research for the present study.

The Faculty in Academic Advising

General Studies:

Hardee (1959: 294) conducted a survey on 218 colleges in the United States and all of these institutions responded that faculty members in their institutions conducted academic counseling. This study was mainly concerned with the exploration of various counseling activities of faculty members who performed duties beyond academic counseling. However, the study pointed out some persistent problems in programs of faculty advising such as administrative problems, heavy academic loads, the avalanche of paper work, the extent of advising and depth

of faculty counseling (1959: 105). The study also reported that 181 respondents replied favorably to questions regarding programs in their institutions. Fifty-eight institutions reported that students participate in academic advising (1959: 296).

Jamerich (1955) from Coe College, Cedar Rapids, Iowa, undertook a study of thirty selected colleges with regard to their academic advising responsibilities. About a fifth of the colleges retain responsibilities of academic advising under the Dean of the college. Another fifth indicated that the Dean of the college and one of several other members of faculty or administration carry the responsibility.

Robertson (1958) personally visited twenty colleges and universities to find out the basic philosophy of the academic advising programs of each institution. He concluded that "these programs run the gamut of full faculty participation in the advisory process to no active faculty participation at all." He asked many questions to administrators, faculty and students. Some of the questions were as follows:

> Should there be an organized academic advising program? What are the major aims of a college advising program? Should academic advising be mandatory? Who should be an academic advisor? What role do professional counselors have in the academic advising program? How can a sound working relationship be established between the professional agencies and the academic advising program?

He observed that in spite of general "non-concern," there were still a number of teachers on every campus who willingly give time and thoughtful concern to their students--"time that is usually unrecognized, unrewarded and unsung."

In 1966, Tully and Grit (1968) directed a study of academic advising at Florida State University, the University of Florida and the University of South Florida. Data were collected from both faculty members and students. In each institution, as shown by entires on advisor logs and by responses from the students, the topics of course selection, future educational goals, career planning and adding or dropping courses were discussed more than 80 per cent of interview time. They predict that "promotion in rank, recognition among colleagues and increases in salary will prevail in shaping faculty attitudes toward advisement." They concluded that the utilization of alloted advisors varied markedly from institution to institution.

DeLisle (1965) conducted research on undergraduate academic advising. She administered a questionnaire to 5411 students at Michigan State University. She found statistically significant differences in the response pattern of the student sample according to college affiliation.

> The profile of students affiliated with the more professionally oriented colleges shows them entering the university with . . . more certainty of specific outcomes from academic advising than is characteristic of students affiliated with other colleges of the University. Specifically, they are inclined to expect that: (1) the academic advisor will be the same person throughout the college year; (2) help will be available in the clarification of their educational plans and career goals; (3) the academic advisor will be knowledgeable about the entire curricular resources of Michigan State University to help them plan a balanced program; (4) other supplementary resources of the University will be suggested to them for additional help, if they need it; and (5) help will be available for improvement of the academic record, if necessary. Moreover, students affiliated with the professionally oriented colleges found, to a greater degree than students from the other colleges, that their expectations were fulfilled. Their reaction indicated greater satisfaction and a more favorable attitude toward academic advising, based on their experiences after arriving on the university campus (p. 145).

As a result of a survey conducted on Liberal Arts Colleges of 22 major universities, Tinsely (1955) recommends that some existing conditions be bettered. Notable among these conditions are the "assigning of more advisees than an advisor can work with adequately, failure to lighten other responsibilities so that there may be more time for advising work or to provide increased remuneration, stress upon the academic phase of the students' life to the partial exclusion of other aspects that comprise the total personality, . . . and lack of any advising training program."

Keill (1957) administered a check list and a sentence completion form to a sample of 200 students who

were assigned to 42 counselors at Brooklyn College, New York. Fifty-five per cent of the respondents expressed a preference for drop-in, unscheduled appointments. More than half of the sample believed that the main function of the counselor revolved around program planning. Yet ten per cent believed their counselor did not know enough about the college, its resources and the curriculum for them to have faith in him.

Peterson (1968) conducted research in American Lutheran colleges to determine the basic nature of the student personnel programs and to make a comparative analysis of the differences in perceptions of the scope and quality of the existing student personnel services by the basic student personnel staff, faculty members and students. Regarding academic advising, he made the following observations:

> The greatest criticism of the academic advisement program centered on the 'haphazard' academic counseling the students had experienced as beginning freshmen. Students felt that they had been given considerable misinformation concerning course work and major selection as well as procedures to be followed. Some of the faculty expressed a desire to have more information about their advisees. There was also some need expressed for an advisement handbook to supplement information provided in the college catalog. This would be of particular assistance to new faculty members (p. 47).

Morehead and Johnson (1964) studied 226 male electrical engineering freshmen at North Carolina State

University who were exposed to different faculty advising programs.

Forty-eight students were randomly selected for the experimental group which had a more systematic advising program; the remaining 178 comprized the control group which had the regular advising program. Both groups were alike at the beginning of the experiment in regard to means and variances of age, predicted grade point average and five personality variables as measured by the Minnesota Personality Scale. All were enrolled in the same subjects during the study.

The experimental group was scheduled eight advisement meetings during the year: twice each semester in groups and twice each semester individually. Group meetings were concerned with instruction and advice in effective study habits, study schedules and class participation, and discussion and casual conversation. Individual conferences gave the students an opportunity to discuss academic progress and plans.

The advisement program for the control group consisted of meeting with the students in groups once during orientation week to give help in course scheduling, reviewing midterm grade status, and discussing the need for consultation with the advisor on individual problems. These conferences were optional.

The data accumulated confirmed the hypothesis that the mean grade point average of the experimental group would be higher than that of the control group at the end of the freshman year and spring term. There was no significant difference in the proportion of high achievers. The data tended to indicate that the higher grade point average for the experimental group was not facilitated by the intensive faculty advising program or by professional counseling, but by a systematic program that any interested faculty member could conduct with this number of advisees by devoting approximately 50 hours a year to group meetings and individual conferences.

One aspect of faculty advising which major authors consistently mention is the accessibility of advisors by their advisees. Dilly (1967) conducted research on 42 faculty members representing 11 departments at the University of Wisconsin. Each week, the research team attempted to contact a random sample of faculty members. At the end of six weeks, it was found that of 42 with whom contact was attempted, 20 were accessible and 22 were not. The accessibility was defined by the research as follows:

> A faculty member was classified accessible if (1) his name and office number appeared on a building directory, (2) his office could be physically located and was identifiable, (3) his office hours were posted on the door or the appropriate secretary had instructions as to how and when a contact could be made, and (4) he was present in his office during the posted office hours or during the time the secretary said he

> was available, at the time and during the particular week the contact was attempted (p. 282).

Koile (1955) undertook research to develop an instrument to aid in identifying college teachers interested in academic advising. He administered a 90-item Professional Activity Inventory for College Teachers to 500 colleges in 25 states. The sample included 290 institutions with counseling teachers and 210 with non-counseling teachers. A scoring system based upon the logic of discriminant analysis was highly effective in discriminating between faculty who were interested in engaging in counseling activities and those who tended to have little or no interest in this work.

A study by Cummer (1961) concluded that students' satisfaction was correlated to the extent of interest of faculty in academic advising. Students at Florida State University counseled by faculty advisors with high interest in counseling showed significantly more satisfaction as measured by their responses to a faculty advisement scale of 22 items than did students counseled by faculty members with limited interest in advising.

Released Time and/or Extra Pay for Faculty Advising:

During the academic years 1964-65 and 1965-66, six Macalester faculty members were given released time from part of their teaching assignment. In an experiment,

120 freshmen students were randomly assigned, 10 men and 10 women to each of those faculty members who were released from one of the three courses they would ordinarily have taught. Rossmann (1968) examined the effect on these students comparing the remaining 400 freshmen whose faculty advisors had a full teaching load. The investigator looked for the differences in the rate of retension, grade point average, level of aspiration, satisfaction with college, and perception of the campus. The results indicated that the students in the experimental group were more satisfied with their faculty advisors and were more likely to discuss course planning, career planning and study problems with their advisors. There was a slightly higher retention rate among women in the experimental group. However, there were no significant differences between the groups with regard to grade point average, level of aspiration, satisfaction with college and perception of the campus. One of the counclusions of the previously cited study by Jamrich (1955) was that the most desirable area of tangible institutional recognition for faculty advisors was in terms of a decrease in teaching load. Faculty members expressed the opinion that where their time was already limited, extra financial remuneration would not create that time.

An experiment was conducted on the effect of extra pay for faculty counseling. Fahsbender (1969)

examined the effect on students who were assigned to 11 faculty members with extra pay for advising duties. He concluded that students seeking help on educational matters preferred those faculty advisors who were given extra pay. The students wanted an adult helper who was available, expert in his field and concerned with the individual.

Computer-Assisted Academic Advising

Some colleges attempted to improve the effectiveness of academic advising by using the latest available means. Juola and others (1968) evaluated the possibility of using computer-assisted procedures for identifying and assisting students who are on academic probation. The computer identified students who appeared to have enrollments which were deemed unwise for the critical quarter of academic probation. These students were contacted by their prospective advisors to suggest possible changes in enrollment. The students who did not appear for the interview provided a comparison group. Prior to the experiment, both groups were essentially similar in their cumulative grade point average. This experiment resulted in a significantly higher grade point average for the "enrollment change group" than the "no-show group." The study illustrated that computer technology can be applied to the problems of helping individual students in areas

which have generally been regarded as accessible only through individual efforts of an academic advisor.

McCracken and Penick (1969) described the academic advising at the United States Air Force Academy as a system which attempted to utilize computer assisted data on each cadet for effective advising. They expressed satisfaction with the program.

Cogswell and Estavan (1965) reported that models of "educational planning interviews" were made with computer programming and computer controlled equipment. This automated interview was programmed to review student progress, acknowledge comments from the students, react to student plans in their academic career and help the student plan a meaningful schedule. The automated systems were tested to assess the validity of the model by comparing the computer responses with the human advisors' responses on a new sample of 20 students from the same population. The study indicated that automated procedures may have great potential value in academic counseling.

Tragasser (1968) reported that the University of Tennessee Medical Units utilize electronic power typing equipment to ease and automate the entire preadmission process. The magnetic tape device enables them to machine produce "personalized" correspondence with and documents about each student admitted and make them available to the

professional advisors. This service of up-to-date documents increases the effectiveness of an advisor.

Student-to-Student Counseling

College students turn naturally to their peers with their problems and concerns. A student as a junior counselor reaches many of his fellows whom the professional counselor seldom sees, and he aids in detecting many needs and problems that might remain hidden from faculty and staff members. In a university community, students give advice to other students and they seek and take advice from other students. It would seem logical to utilize this source of information by systematically selecting and training capable upperclassmen to work with first and second year students in an advisement capacity. This special selection process increases the validity of information transmitted by these students. It is assumed that the students doing the advising profit from the leadership experience. With this reasoning, some institutions of higher education have attempted to utilize students to advise students.

A survey completed by Hardee and Powell (1959) in 1956, revealed that 147 out of 218 colleges employed "students-counseling-students" procedures. As they pointed out, the students were primarily used to initiate the incoming students to the university community and not

involved with their subsequent adjustment to the academic community. However, in more recent years, some researchers report that there are institutions utilizing students for academic counseling.

A survey of student-counselor utilization at four-year institutions of higher learning made by Brown and Zunker (1966) reported that 67 per cent of those institutions used undergraduate student-counselors to assist in the guidance of freshmen. Most of these student-counselors were assigned to duties in dormitories and new student orientations. However, more than 10 per cent of the institutions reported the use of student-counselors in the areas of subject matter tutoring, study habit counseling and other academic advising. Eighty-four per cent of the institutions rated effectiveness of student counselors as positive. The authors observed a trend toward increased use of student counselors. They pointed out that this was the most expandable and least expensive guidance resource available to institutions of higher education.

Wharton and others (1966) reported an evaluation of the student assistance program in Allegheny College. They used volunteers from among responsible juniors and seniors to assist faculty in counseling students. Faculty who wanted assistants expressed their preference for particular volunteers and they were assigned according to the preference of the faculty. The volunteers were given

special instruction on academic requirements, course sequence suggested by various departments and other general instructions. In the first year, 28 of the 52 faculty had requested student assistants. But in the following year the number had grown to 38 of the 54 advisors concerned, an increase from 56 per cent to 70 per cent. In the third year, 49 of the 62 advisors of freshmen (79 per cent) chose student assistants. There was unanimous agreement on the part of all concerned that the program should be continued.

Brown (1965) reported that Southwest Texas State College employed 12 student academic counselors who were selected by an eight step screening process and trained for their function. Brown evaluated their counseling effectiveness by research on a sample of 216 students (108 males and 108 females) from the 670 full-time freshmen entering the Southwest Texas State College in fall 1960. Students in the control group (uncounseled) were individually matched with those in the experimental (counseled) sample on sex, high school quarter rank, high school size, scholastic ability, and study orientation. Six upperclassmen, three males and three females, were randomly assigned as counselors to same-sex counselees. The test-retest differential for counseled freshmen was significantly higher on measures of study behavior.

Counseled freshmen earned grades averaging one-half letter grade and 8.3 quality points higher during the first semester. He concluded as follows:

> The student academic counselors were successful in communicating information about effective study skills. . . . Peer delivered information and advice frequently received readier acceptance by the typical 18-year-old than did the counsel given by teachers and parents. College freshmen were willing to accept and use peer delivered guidance because of its giving more realistic advice. The guidance offered by student counselors gained greater acceptance by freshmen because the student counselors "speak the same language and share the same problems."

Similar findings have been reported in an evaluation study of entering students advised by upperclassmen at Justin Morrill College of Michigan State University (Chathaparampil and Neil, 1970). A survey type questionnaire with open-ended questions was administered to a random sample of sixty freshmen students, 30 males and 30 females. This study revealed that a high per cent of students show confidence in their student advisors. The data also indicated that a significant portion of the sample sought help from their student counselors for almost all types of help in academic matters.

Implications of Prior Research for the Present Study

In this chapter an effort has been made to bring into focus those reports from the literature which provided the background and impetus for this research. The

literature revealed that some attention has been given to academic advising. According to the literature, several techniques and approaches have been used to improve academic advising. However, some of the general studies (Hardee, 1966; and Brown, 1966) show that these are inadequate. The effective advising program is still an end to be sought after by almost all the institutions of higher education.

To the knowledge of this researcher, there has been no research reported on graduate students advising undergraduates in their major, faculty wives advising undergraduate students or advanced graduate students advising students in a different major. It seems that Michigan State University may be rendering a unique service to students in these areas. It is in this context that this researcher attempted to evaluate these programs in terms of student satisfaction. This study, which involved five different programs, should be helpful in disseminating information on the practical aspects of implementing innovative programs of academic advising in other institutions of higher education.

In Chapter III, the design and methodology of the study will be discussed in depth.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Chapter III presents a discussion of the methods and procedures which were followed in conducting the present study. This chapter is concerned with the population, composition of the sample, administration of the instrument used in the study, the method of collecting data, testable hypotheses and the procedures used for analyzing the data.

Population

The population of this study consisted of : (1) all freshmen and sophomore students enrolled in Justin Morrill College, (2) University College and (3) Engineering College, (4) all freshmen and sophomore students advised by graduate student advisors in the College of Arts & Letters, and (5) all freshmen and sophomore students advised by teaching faculty members at Michigan State University. The enrollment of the students and the status of the academic advisors were varified for spring term, 1970.

University College

A no-preference student at Michigan State University, that is, generally one without a declared major or upper college affiliation, was advised under the direction of the Student Affairs Office of the University College. This office supervised the advising of these students and maintained advising centers with staff members available for student conferences. To make the services of the Student Affairs Office readily accessible to students, branches were located in several areas of the campus. The central office was located in 170 Bessey Hall. The other offices were:

109 Brody Hall for students living in the Brody Complex;

245 West Fee Hall for students living in Fee, Akers, Holmes, McDonel and Hubbard Halls;

S-33 Wonders Hall for students living in Wonders, Case, Holden and Wilson Halls.

There were a total of 35 full-time advisors for the estimated 5,000 students included under the University College advising system spring term, 1970.

College of Arts & Letters

In the College of Arts & Letters, advanced graduate students were advising undergraduate students in their major, in the fields of English, Music, History and

Interdisciplinary. All of these graduate student-advisors were appointed on a part-time basis.

The graduate student-advisors were located in different areas of the campus to facilitate their access by their undergraduate advisees. Their main office was situated in 201 Berkey Hall, in the Office of Student Affairs. Other offices were located in the same buildings as the office of the major field of concentration.

The academic advisors' schedules were such that at least one of them was available at all offices at all time during regular campus office hours. Even though students could drop in any time to talk to the advisors, they were encouraged, for the sake of efficiency and convenience, to schedule appointments.

Justin Morrill College

All freshmen entering Justin Morrill College had upperclassmen from Justin Morrill College as their academic advisors. These advisors, called academic assistants, advise the students until they reach junior standing or declare a field of concentration--whichever should occur first--at which time they select a Justin Morrill College faculty advisor.

In the spring term of 1970, there were 480 Justin Morrill College students advised by academic assistants. There were 13 academic assistants during this term. They

were assigned randomly to students. In all cases, if a student preferred a particular academic assistant, he or she could change accordingly. The academic assistants were selected on the basis of ratings by six faculty members, including the Assistant Dean, and six students, including four present academic assistants. It was recommended that as many directors of academic programs as possible be included in the group of the six faculty members, since they advise fields of concentration. From interviews with a few faculty members and academic assistants, it seemed that they agreed on some general criteria for the selection of academic assistants such as interest, knowledge of college and university academic information, demonstrated competence to relate with students, etc. Some of those persons interviewed thought that demonstrated academic ability should also be a criterion. However, each of the twelve members of the selection committee rated the applicants according to his own criteria.

The academic assistant was in a salaried position. He was given an office with one or two other academic assistants. In addition, he was given other facilities including a desk, telephone, access to duplicating machines and other college facilities. He was directly responsible to the Assistant Dean and was expected to maintain a minimum of 10 office hours per week.

Engineering College

All academic advising in the College of Engineering was coordinated by its Office of Student Affairs, where a centralized record-keeping system was maintained for all undergraduate and graduate students. Members of the professional advising staff had all had training in guidance and counseling or student personnel services. All of these individuals had some previous experience working with students at either the high school or college level. All were doctoral candidates in the College of Education, had 12-month appointments and carried the rank of Instructors. All had some assignment in addition to their advising load such as Director of the Summer High School Engineering Institute, advisor to the Spartan Engineering Magazine, coordinator of the Junior Engineering Technical Society, or liasion for the Engineering Opportunity Program.

All advisors were assigned a specific group of advisees by the Office of Student Affairs. At the time of this study there were five professional advisors for the freshmen and sophomores of the Engineering College. Two of these advisors were advising all freshmen, regardless of their major interest in the field of engineering. One advisor was in charge of all sophomore students in mechanical engineering. Another advisor was in charge of all sophomore students in electrical engineering. The

fifth advisor was in charge of all other sophomore students, excluding mechanical and electrical engineering majors. Juniors and seniors in engineering and all students in Honors College were advised by the members of the teaching faculty.

Students Advised by Teaching Faculty

There are several colleges at Michigan State University where teaching faculty members are the academic advisors to students. The population for this study included also these freshmen and sophomore students advised by teaching faculty members at Michigan State University.

These faculty members are responsible for advising students who are assigned to them. The students who need academic advisement make appointments convenient to both parties. The duties of academic advising is considered one of the responsibilities normally associated with faculty appointment.

Sample

A random sample of 100 students from each program was selected by means of a random table from the student list of each program. The randomization of the sample was stratified by the number of advisors or by the number of geographical locations of the various programs. The

sample from the faculty advising program was not restricted by these criteria.

As there were four geographical headquarters of the University College academic advising program, random samples of 25 students were drawn from each location. Engineering College had appointed five academic advisors in four divisions. Random samples of 20 students were drawn from the three divisions with one advisor and a random sample of 40 students was drawn from the division which had two advisors. Similarly, in the College of Arts and Sciences, random samples of 20 students were drawn from three lists, English, Music and History, and 40 students from the list of the Interdisciplinary major. There were 13 academic advisors in Justin Morrill College and random samples of eight students were drawn from each of the 13 lists. Four students were randomly eliminated from the selected sample of 104 to equalize the size of the sample with other samples. A random sample of 100 students (freshmen and sophomores) who were advised by teaching faculty members at Michigan State University was drawn by computer in the registrar's office of the University. The students who were not advised by teaching faculty were automatically excluded from being selected for this sample. This method of selection safeguarded against including students already selected for the other samples in this study.

Thus a stratified random sample of 500 freshmen and sophomore students was selected for the study.

Administration of Instrument

After construction of the questionnaire as described in Chapter I, the questionnaires were mailed to the sample on May 21, 1970. The cover letter was signed by both the researcher and by the Director of Evaluation Services at Michigan State University. Forty-four per cent of the sample returned the questionnaire by June 5, 1970. A second set of questionnaires and a personal letter signed by the researcher was sent out to the students who had not yet returned the completed questionnaire. By June 18, a total of 73 per cent of the sample had returned the completed questionnaire. Third letters and telephone contacts were attempted for the remaining students, and those who could be reached were requested to return the questionnaire as soon as possible. In the event they needed additional copies of the questionnaire, they were mailed promptly. A return at least surpassing the level of 75 per cent was sought. The final results showed a return of 80 per cent from the University College group, 67 per cent from the College of Arts & Letters, 89 per cent from Justin Morrill College, 83 per cent from the Engineering College and 82 per cent from the faculty

advised group. For the group as a whole, this resulted in a total return of 80.2 per cent.

Testable Hypotheses

The bases for the hypotheses for this study were presented in Chapter I. To briefly recall them again, it was noted that the variable "service to students" was derived from statements asserted by administrators of the University College; "rapport with the advisor" was stated as the special emphasis of the academic advising program in the College of Arts & Letters; efficient help and effective communication seemed to be emphasized by those interviewed from Justin Morrill College; professional commitment of advisors, a broad outlook on education, and knowledge of the university community's resources were stressed as the major emphases of the advising program in the Engineering College; and professional competence was emphasized by those professors interviewed who were active as academic advisors.

Keeping in mind that this is essentially an exploratory investigation, it is considered necessary to define more clearly the direction of the investigation. Consequently, taking care to avoid the null form, the following hypotheses were used as guidelines for the study:

H-1 Students in University College will score significantly higher on the variable "service to students" than will the other four groups.

H-2 Students in the College of Arts & Letters will score significantly higher on the variable "rapport" than will the other four groups.

H-3 Students in Justin Morrill College will score significantly higher on the variable "technical help in curriculum planning" than will the other four groups.

H-4 Students in the Engineering College will score significantly higher on the variable "personal help" than will the other four groups.

H-5 Students advised by the faculty will score significantly higher on the variable "field competence" than will the other four groups.

Data Analysis Procedure

Scoring and analyzing the data were facilitated by using the IBM 6107, an Optical Scanner Scoring Sheet on which the questionnaire was printed. The scoring sheet had 5 choice columns. The students marked one column for each of the 27 items according to the keys given. The returned questionnaires were marked with group identification, after verifying the names on the questionnaires with the sample lists, in a specified row of the optical scanner scoring sheet.

The responses of the students and all identifying information were transmitted by the IBM Optical Scanner (IBM 1230) onto punched cards so that the data could be processed and analyzed by the CDC 3600 CD and CDC 6500 computors. The data were analyzed within each college and across all colleges. The analysis of the data will be treated in Chapter IV.

CHAPTER IV

ANALYSIS OF THE DATA

This chapter reports the analysis of the data collected from five academic advising programs at Michigan State University. Previous chapters have provided an introduction to these five programs. Findings of each of these programs are presented separately and combined in this chapter. No attempt will be made here to draw conclusions or make substrative inferences about the data since those topics are treated in some detail in Chapter V.

Introduction to the Descriptive Data

Each of the items in the instrument was rated by the subjects on a five point Likert-type scale. The scale contained five categories of satisfaction ranged on a continuum from 1 to 5. A score of 1 was assigned to "very unsatisfactory" and a score of 5 was assigned to "very satisfactory," so that a high score indicated a high degree of satisfaction. The questionnaire, though descriptive in nature, permitted quantification of the data for appropriate statistical analyses.

The relation of individual items to the sub-scale which included them was determined by product-moment correlations. For example, the sub-scale, "service to students" had high correlation with each of its items, namely, two through six inclusive. Since the coefficients of correlation were similar, an equal weight was given to all items in the questionnaire. Table 4.1 summarizes the result of correlating subscales with their corresponding items in the questionnaire.[1]

The mean satisfaction score for each variable was derived from combining scores on five individual items in the variable and dividing by the number of respondents.

The mean scores of each variable for students advised by the five methods are presented in Table 4.2.

Table 4.1. Product Moment Correlation of the Subscales with their Corresponding Items.

Subscales	Corresponding Items[1]				
	1	2	3	4	5
Service to Students (items 2-6)	.7008	.7370	.6358	.7889	.6708
Rapport (items 7-11)	.8010	.8246	.7788	.8434	.7684
Technical Help (items 12-16)	.8609	.8265	.7872	.7525	.8056
Personal Help (items 17-21)	.8462	.8384	.8526	.8234	.8000
Competence in Academic Field (items 22-26)	.7913	.8716	.7976	.8415	.8610

[1]See Appendix.

Table 4.2. Mean Satisfaction Score of Each of the Five Variables for All Five Academic Advising Programs (Range 1 through 5).

Variables	University College	Arts & Letters	Justin Morrill	Engineering College	Teaching Faculty
Service to Students	3.53	2.73	2.97	3.18	2.69
Rapport	2.70	2.91	2.81	2.94	2.52
Technical Help From Advisors	2.59	2.16	2.78	2.67	2.18
Help in Personal Problems	2.90	2.43	2.56	3.11	2.23
Competence in Academic Field	2.64	2.61	2.42	2.98	3.09
Number of Sample	80	67	89	83	82

Descriptive Data

Descriptive information about the five different academic advising programs was provided from the responses of the sample selected from all the five programs. The findings for each variable are presented in tabular form showing the frequency and percentage of respondents from each college. All tables give a column for summary data on the entire sample for easier comparison. The nearest whole per cent is used in all tabular presentations.

The following tables give frequency and percentage for each level of satisfaction. For each item, responses of "very satisfactory" and "satisfactory" were combined, as were responses for "very unsatisfactory" and "unsatisfactory." For the purposes of this research, the response of "adequate" denoted a neutral position which indicated neither satisfaction nor dissatisfaction.

Service to Students

The frequency and percentage of the responses on this variable indicated whether in general students were satisfied with the services of the academic advising programs in the selected colleges, especially with regard to the availability of the advisors, the speed with which the advisors acted on their behalf and the convenience of the location of the advisors' offices. The following table indicates that 31 per cent of the total student

sample expressed satisfaction, 44 per cent considered their advising program adequate, and 25 per cent were dissatisfied.

Table 4.3. A Comparison of Five Academic Advising Programs with the Percentage and Frequency of Satisfaction, Adequacy, and Dissatisfaction on the Variable of Service to Students.

Advising Programs	Total	Satisfactory		Adequate		Unsatisfactory	
	N	f	%	f	%	f	%
University College	80	43	54	33	41	4	5
Arts & Letters	67	15	22	24	36	28	42
Justin Morrill	89	25	28	37	42	27	30
Engineering College	83	26	31	47	57	10	12
Teaching Faculty	82	16	20	34	41	32	39
Total	401	125	31	175	44	101	25

Rapport of Advisors with Their Advisees

The frequency and percentage of the responses on the variable "rapport" indicated whether students were satisfied with the informal nature of their advising; whether they saw any similarities in the academic interest and life style of themselves and their advisors; whether they were satisfied with the concern of their advisors

for them as students; and whether they were satisfied with their advisor's informal knowledge of their instructors. Table 4.4 shows the frequency and percentage in the categories of satisfaction, adequacy and dissatisfaction on this variable. The data presented in Table 4.4 indicate that the percentage of unsatisfied students was over 10 per cent higher than that of satisfied students.

Table 4.4. A Comparison of Five Academic Advising Programs with the Percentage and Frequency Distribution of Satisfaction, Adequacy or Dissatisfaction on the Variable of Rapport of Advisors with Their Advisees.

Advising Programs	Total	Satisfactory		Adequate		Unsatisfactory	
	N	f	%	f	%	f	%
University College	80	16	20	34	43	30	27
Arts & Letters	67	19	27	27	40	21	31
Justin Morrill	89	21	24	34	38	34	38
Engineering College	83	19	23	45	54	19	23
Teaching Faculty	82	15	18	32	39	35	43
Total	401	90	22	172	43	139	35

Satisfaction of Students with the Amoung of Technical Help from Advisors

The level of satisfaction with the amount of technical help was indicated by the three levels of

satisfaction, adequacy or dissatisfaction. Technical help referred to help in selection of a particular course or a particular section of a course. This measure also included the advisor's ability to communicate with the student as well as the specific help rendered to improve the grade point average and to understand the structure of a course.

Table 4.5. A Comparison of Five Academic Advising Programs with the Percentage and Frequency Distribution of Satisfaction, Adequacy or Dissatisfaction on the Variable of Technical Help.

Advising Programs	Total	Satisfactory		Adequate		Unsatisfactory	
	N	f	%	f	%	f	%
University College	80	15	19	27	34	38	47
Arts & Letters	67	4	6	23	34	40	60
Justin Morrill	89	24	27	29	33	36	40
Engineering College	83	15	18	32	39	36	43
Teaching Faculty	82	6	7	28	34	46	59
Total	401	64	16	139	35	198	49

Help with Personal Problems

Students in the sample were asked to indicate their level of satisfaction with this particular aspect of the advisor-advisee relationship. The frequency and

percentage of the responses on this variable indicated whether the students were satisfied with the personal concern shown by their advisors in counseling them; whether they were satisfied with the professional training the advisors seemed to have; how satisfied they were with the attitude of their advisors towards their personal problems; the advisors' knowledge of the resources of the academic community for referrals and their outlook on education without restriction to any major field. The percentage and frequency distribution of satisfaction, adequacy or dissatisfaction for the above mentioned variable of help in personal problems is included in Table 4.6.

Table 4.6. A Comparison of Five Academic Advising Programs with the Percentage and Frequency Distribution of Satisfaction, Adequacy or Dissatisfaction on the Variable of Help with Personal Problems.

Advising Programs	Total	Satisfactory		Adequate		Unsatisfactory	
	N	f	%	f	%	f	%
University College	80	23	29	32	40	25	31
Arts & Letters	67	14	21	18	27	35	52
Justin Morrill	89	17	19	33	37	39	44
Engineering College	83	27	33	39	47	17	20
Teaching Faculty	82	10	12	24	29	48	59
Total	401	91	23	146	36	164	41

Advisors' Competence in Academic Field

The frequency and percentage of the responses on this variable indicated whether the students were satisfied with the professional reputation of their advisors, their ability to guide the students in their major, their professional acquaintance with instructors and their knowledge of the subject matter in the major field. These data also indicated the levels of satisfaction with regard to the amount of confidence inspired by their advice. Table 4.7 presents the percentage and frequency distribution of satisfaction, adequacy or dissatisfaction with the variable of advisors' competence in the academic field.

Table 4.7. A Comparison of Five Academic Advising Programs with the Percentage and Frequency Distribution of Satisfaction, Adequacy or Dissatisfaction on the Variable of Advisors' Competence in Academic Field.

Advising Programs	Total	Satisfactory		Adequate		Unsatisfactory	
	N	f	%	f	%	f	%
University College	80	13	16	38	48	29	36
Arts & Letters	67	17	25	20	30	30	45
Justin Morrill	89	15	17	25	28	49	55
Engineering College	83	23	28	37	44	23	28
Teaching Faculty	82	29	35	31	38	22	27
Total	401	97	24	151	38	153	38

Statistical Analyses

Analysis of Variance

The testing of the hypotheses was performed in two steps. The first step was to test whether there were significant overall differences between groups. To perform this test, the data were submitted to an analysis of variance with repeated measures design, as discussed by Greenhouse and Geisser (1959). This approach enables the researcher to analyze a group of observations, a battery of test scores or a set of items on the same individuals by use of analysis of variance. Their technique employs a conservative F-test, and is subject to violation of statistical assumptions normally associated with analysis of profile data. Variables need not be independent of each other, but they must have equal correlations with each other. Furthermore, variables need not be normally distributed or have equal variances. Generally, the Greenhouse and Geisser method is used for analyzing quantitative, non-categorical profile data. The questionnaire used in this study was of that nature.

The analysis was performed on the CDC 3600 computer using a program adapted by Wright and Porter of the Office of Research Consultation at Michigan State University. The routine was designed to perform calculations necessary

for any repeated measures design such as those employed in profile analysis.

Results of the profile analysis of variance indicated that the F value for group difference was significant at or less than alpha = .01 level. Results are presented in the following table (Table 4.8).

Table 4.8. Profile Analysis of Variance on General Data.

Source	SS	df	MS	F
Groups	1654.434	4	413.609	5.227*
Subjects by Groups	31329.926	396	79.116	
Repeated Measures	1603.390	4	400.847	52.604*
Variables by Groups	1966.233	16	122.90	16.127*
Variables by Subjects Within Groups	12065.178	1584	7.617	
Total	48619.160	2004		

*Significant at the .01 level of confidence or beyond.

The above data from the overall profile analysis of variance indicated that the satisfaction of advising depended on the particular colleges (groups) and the particular manner (variable) of advising. It was concluded that there apparently were significant differences among the five groups and among the five variables. Post-hoc

comparisons were carried out to locate points of difference. There are various methods of post-hoc comparisons which could have been done directly from the profile analysis data. However, clarification of the different stages of analysis and step-by-step testing of individual hypotheses seemed desirable for the particular type of hypothesis this study attempted to test.

Post-hoc Comparisons in Data

Having tested for the overall significance of difference, the data were subjected to one-way analysis of variance prior to testing individual hypotheses. Given a significant F statistic, the next task was to explore the data to find the sources of these effects and to explain their meaning. Post-hoc comparisons are one means of partitioning the sums of squares making up a significant F-test to determine which linear combination of means contributed most to the significance of the F-test (Hays, 1963; 483-485).

There are a number of methods that have been devised for testing the significance of post-hoc comparisons (Tukey, Scheffé and Dunnett). Tukey's procedure based on the studentized range and Scheffé's procedure based on the F-distribution enable the experimenter to make any number of comparisons among a set of sample means with the assurance that the probability of all confidence statements

being correct will be equal to or greater than a specified value. When the experimenter only wishes to make comparisons between one of the means and each of the others, as in the case when one of the means represents a control, use of the Tukey or Scheffé procedure would result in confidence limits which are wider than necessary.

However, the method attributed to Dunnett (Kirk, 1968) has advantages of simplicity, application to groups of unequal sizes, suitability for any comparison and narrower confidence limits for the p comparisons $\bar{X}_i - \bar{X}_o$ than either the Tukey or the Scheffé procedure. This is a multiple decision procedure for comparing several experimental categories with a control group.

As in other statistical techniques, for a measurement to be valid, certain assumptions must be applicable. Dunnett (1955) summarized them as follows:

> We make assumptions usually made in the analysis of variance, namely that the X_{ij} are independent and normally distributed with common variance σ^2 and means m_i. We assume also that there is available an estimate S^2 of σ^2, independent of the $\bar{X}_i$, which is based on n degrees of freedom.
>
> $$S^2 = \sum_{i=0}^{p} \sum_{j=1}^{N_i} (X_{ij} - X_i)^{2/n}$$
>
> where $n = (\sum_{i=0}^{p} N_i) - (p + 1)$

The calculation in this research was to obtain separate confidence limits for each variable. Data

presented in Table 4.2 and a one-way analysis of variance were the sources of data for the calculations. The difference d' that a comparison must exceed in order to be declared significant according to Dunnett's test is given by:

$$d' = tD_{\alpha/2jk,v} \sqrt{2(MS_{error})/N}$$

where $tD_{\alpha/2jk,v}$ is the two-tailed value obtained from Dunnett's table.

Dunnett's table is used for k = number of treatment levels, including the control, and v = degrees of freedom associated with MS_{error}. For the data in the present study, k = 5 and v = 401. The value of tD according to Table D (Kirk, 1968; p. 535) for a two-tailed test at .05 level of significance is 2.44. The critical difference d' for a comparison is given as:

$$d' = tD_{.05/2;5,401} \sqrt{MS_w \sum_{j=1}^{J} c_j^2/n_j}$$

Where

$$tD = c_j(\bar{X}_j) + c_j(\bar{X}_j) \sqrt{MS_{error}(1/n_j + 1/n_j,)}$$

If the observed difference is greater than the computed confidence interval (d'), the comparison is declared to be significant.

Testing of Individual Hypotheses

As indicated in Chapter 3, the hypotheses tested in this study were formulated on the basis of interviews with administrators and/or academic advisors of each program studied. Each program emphasized various aspects of advising. Those aspects emphasized in each of the five programs and the tests on the hypotheses derived from them are presented next.

University College and Service to Students

H-1 Students in University College will score significantly higher on the variable "service to students" than will the other four groups.

Table 4.2 reported that the mean scores of University College on the variable "service to students" was 3.53. The analysis of variance for the variable "service to students" is given in Table 4.9.

Since the F value was significant beyond the .01 level, it was concluded that the five groups differed significantly on their satisfaction with the "service to students" aspect of the academic advising program.

The next step was the actual computation of post-hoc comparisons to point out the location of the indicated difference. Table 4.10 presents the results of post-hoc

Table 4.9. One-way Analysis of Variance for the Variable "Service to Students."

Source of Variance	Sum of Squares	df	Mean Square	F Statistic
Between Programs	39.1214	4	9.7803	16.014*
Within Programs	241.8512	396	0.6107	
Total	280.9726	400		

*Significant at the .01 level of confidence or beyond.

comparisons performed in order to test significance between University College and each of the other four groups.

Table 4.10. Post-hoc Contrasts: Hypothesis 1.

Groups Compared	Mean Scores	Observed Difference	Confidence Intervals	Sig.
University College & Arts & Letters	3.53 2.72	.80	± .32	.05
University College & Justin Morrill	3.53 2.97	.56	± .29	.05
University College & Engineering College	3.53 3.18	.35	± .29	.05
University College & Teaching Faculty	3.53 2.69	.84	± .30	.05

The reported confidence interval in Table 4.10 showed that the computed difference between University College program and the other four programs was never greater than the observed difference. Thus it was concluded that the University College program significantly differed from the other four programs in student satisfaction of the academic advising services.

College of Arts & Letters and Rapport

H-2 Students in the College of Arts & Letters will score significantly higher on the variable of "rapport" than the other four groups.

Data reported in Table 4.2 showed that the College of Arts & Letters program had a mean score of 2.91 on the variable of "rapport" or informal relations of advisors to their advisees. A one-way analysis of variance, as shown in Table 4.11, tested whether this score was significantly different from mean scores of the other advising programs.

Having tested the F value for significance, the next test was to locate the differences. Dunnett's method of post-hoc comparisons was employed for this purpose. Table 4.12 presents the result of the calculations done according to Dunnett's post-hoc comparisons.

Table 4.11. Analysis of Variance on the Variable "Rapport."

Source of Variance	Sum of Squares	df	Mean Square	F Statistic
Between Colleges	10.5484	4	2.6371	2.9959*
Within Colleges	352.0980	396	0.8891	
Total	362.6464	400		

*Significant at .05 level of confidence or beyond.

Table 4.12. Post-hoc Contrasts: Hypothesis 2.

Groups Compared	Mean Scores	Observed Difference	Confidence Intervals	Sig.
Arts & Letters & University College	2.91 2.70	.21	± .70	NS
Arts & Letters & Justin Morrill	2.91 2.81	.10	± .37	NS
Arts & Letters & Engineering College	2.91 2.94	.03	± .37	NS
Arts & Letters & Teaching Faculty	2.91 2.52	.39	± .37	.05

The data indicated that the difference between the College of Arts and Letters program and the students advised by teaching faculty was statistically significant as to the level of satisfaction with the aspect of informal relation of academic advisors with their advisees. On this particular aspect, other advising groups failed to indicate any statistically significant differences, although the F-value from the analysis of variance was statistically different on the variable "rapport." Since the F-ratio for the groups was significant, an interpretation of these data might be that the groups were different, but they were not significantly different from the College of Arts & Letters. Deviation from this generalization appeared only when the College of Arts & Letters was compared with the group advised by teaching faculty. This result conflicted with Hypothesis 2 which stated that the College of Arts & Letters program would have a significantly higher score on the variable "rapport" than the other four advising programs.

Justin Morrill College and Technical Help in Curriculum Planning

H-3 Students in Justin Morrill College will score significantly higher on the variable of "technical help in curriculum planning" than the other four groups.

Observation of Table 4.2 indicated that the mean score of 2.78 was numerically higher than the mean scores indicated for each of the other advising programs. The profile analysis indicated that there was an overall difference between means. The result of the one-way analysis to test whether there was a significant difference between colleges with regard to this particular variable of technical help in curriculum planning is presented below (Table 4.13).

Table 4.13. Analysis of Variance on the Variable "Technical Help in Curriculum Planning."

Source of Variance	Sum of Squares	df	Mean Square	F Statistic
Between Colleges	30.0125	4	7.5031	8.6994*
Within Colleges	341.5464	396	0.8625	
Total	371.5589	400		

*Significant at .01 level of confidence or beyond.

The above table showed that the F value was such to indicate significant differences between advising groups on the variable of satisfaction with technical help in curriculum planning. The following post-hoc calculations (Table 4.14) attempted to show whether there was significant difference when Justin Morrill College advising

program was compared individually with the other four groups.

Table 4.14. Post-hoc Contrasts: Hypothesis 3.

Groups Compared	Mean Scores	Observed Difference	Confidence Intervals	Sig.
Justin Morrill & University College	2.78 2.59	.19	± .34	NS
Justin Morrill & Arts & Letters	2.78 2.16	.62	± .36	.05
Justin Morrill & Engineering College	2.78 2.67	.11	± .34	NS
Justin Morrill & Teaching Faculty	2.78 2.23	.55	± .34	.05

The above results indicated that two out of four academic advising programs differed significantly from the academic advising program at Justin Morrill College on the variable of satisfaction with the technical help in curriculum planning. The observed data showed that student responses from Justin Morrill College had a significantly higher mean score than the student responses from College of Arts and Letters and the group advised by teaching faculty. However, the result did not show statistical difference between Justin Morrill College responses and University College or Engineering College responses. Thus, the differences mentioned in Hypothesis

3 failed to be statistically significant in all its comparisons.

Engineering College and Personal Help

H-4 Students in the Engineering College will score significantly higher on the variable "personal help" than will the other four groups.

Student responses from the Engineering College and responses from the other colleges were compared by a one-way analysis of variance with regard to the variable "personal help." The following table presents the result of the analysis of variance and the level of significance.

Table 4.15. Analysis of Variance on the Variable "Personal Help."

Source of Variance	Sum of Squares	df	Mean Square	F Statistic
Between Colleges	40.6134	4	10.1533	10.2916*
Within Colleges	390.6792	396	0.9866	
Total	431.2926	400		

*Significant at .01 confidence level or beyond.

As indicated above, the F test was significant and the next step was to subject the data to the post-hoc

comparisons. The result of the post-hoc comparisons were as follows:

Table 4.16. Post-hoc Contrasts: Hypothesis 4.

Groups Compared	Mean Scores	Observed Difference	Confidence Intervals	Sig.
Engineering College & University College	3.11 2.90	.21	± .38	NS
Engineering College & Arts & Letters	3.11 2.43	.68	± .39	.05
Engineering College & Justin Morrill	3.11 2.56	.55	± .37	.05
Engineering College & Teaching Faculty	3.11 2.23	.88	± .37	.05

The above table of post-hoc comparisons indicates that, with the exception of the contrast between student opinion in Engineering College and University College, all other contrasts involving student responses from the College of Arts & Letters, Justin Morrill College, and students advised by teaching faculty were significant. Table 4.2 indicated that the Engineering College program had a higher mean score than all the other programs on the "personal help" variable. However, Table 4.16 showed only three of those mean scores to be significantly different from the Engineering College program score.

Students Advised by Teaching Faculty and Competence in Academic Field

H-5 Students advised by the teaching faculty will score significantly higher on the variable of "field competence" than the other four groups.

Table 4.2 indicated that the students advised by teaching faculty had a higher score than those advised by non-teaching personnel on the variable of satisfaction with the advisors' competence in the academic field. The profile analysis indicated that the groups were different on all variables. The following one-way analysis of variance indicates the significance of the differences with regard to the variable of satisfaction with the advisors' competence in the academic field (Table 4.17).

Table 4.17. Analysis of Variance on the Variable "Competence in Academic Field."

Source of Variance	Sum of Squares	df	Mean Squares	F Statistic
Between Colleges	25.6746	4	6.4186	6.2479*
Within Colleges	406.8254	396	1.0273	
Total	432.5000	400		

*Significant at .01 confidence level or beyond.

The results of this analysis of variance indicated that the responses of the group advised by teaching faculty was significantly different from responses of the other groups. Although the significance of difference has been tested, it was the function of this study to locate the significant difference by comparing the group advised by teaching faculty and test the significance of difference against each of the other four groups. Thus the post-hoc comparisons were calculated and presented in the following table (Table 4.18).

Table 4.18. Post-hoc Contrasts: Hypothesis 5.

Groups Compared	Mean Scores	Observed Difference	Confidence Intervals	Sig.
Teaching Faculty & University College	3.09 2.64	.45	± .39	.05
Teaching Faculty & Arts & Letters	3.09 2.61	.48	± .41	.05
Teaching Faculty & Justin Morrill	3.09 2.42	.67	± .38	.05
Teaching Faculty & Engineering College	3.09 2.98	.11	± .39	NS

The above table shows that three out of four comparisons were significant. The analysis revealed that responses of the group advised by teaching faculty was significantly different from student responses in

University College, the College of Arts and Letters and Justin Morrill College on the variable of competence in the field. However, there was no significant difference between the satisfaction level of those advised by teaching faculty and that of students from the Engineering College.

Analyses of the Open-ended Questions and Comments

Analyses of the open-ended questions are presented in the order of most to least frequently mentioned comments. The open-ended questions were formulated to detect any possible problems and to suggest solutions to them. The questions were as follows:

> Are there any problems in the academic advising program in your departments? If so, what are they? What are your suggestions for possible solutions to these problems or improvements in the program?

Comments and Suggestions from the Students of University College

Forty-one per cent of the sample from University College returned the open-ended questions with comments. The most frequently mentioned comment was that they were unhappy with the lack of personal concern. The next most frequently mentioned problem was that the advisors were not helpful in deciding their major, in refering them to

appropriate departments, in informing them on general university requirements and about transfer credits.

The suggestions from the students are presented as follows: The lack of personal interest might be avoided if the student were encouraged to choose one advisor and see him for several consecutive visits. This might generate personal interest from the advisor and the advisee would not have to repeat all the background information every time he came to the office for consultation. Some students from the University College thought that their advisors should be given more information about various departments in the university community.

Comments and Suggestions from the Students of the College of Arts & Letters

Fifty-five students from the College of Arts & Letters returned the open-ended questionnaire with some comments. The predominant complaint was that there was not a sufficient number of advisors to the proportion of students. Most students were discouraged from seeking advice because of the long waiting lines, especially during the week of registration. Another most frequently commented item was that many courses were required by both the university and by individual departments, which provided no freedom for individual selections. Thus some students were of the opinion that, in special cases, an

advisor should have the power to waive a required course.

A summary of suggestions are as follows: It seemed that one or two general sessions at the beginning of each term for all students advised in the major would eliminate the necessity of seeking the advisors for routine matters. In these sessions the students might be informed about the nature of the advising program and about the nature of general requirements. It was hoped that this type of general information session might eliminate some of the long waiting lines.

Comments and Suggestions from the Students of Justin Morrill College

There were 49 students from Justin Morrill College who returned the open-ended questionnaire with comments. Even though the questions were directed towards possible problems, a good per cent of those who returned the questionnaire commented that "they were proud of the academic assistant program and were happy with the program." There were some students who answered the questionnaire in terms of the problems they perceived. The most frequently mentioned complaint was that the students were not sure whether their academic assistants were well informed about the university community.

Some students felt that the academic assistants should be better informed or qualified to act as a referral agent on such matters as residency requirments, draft questions, vocational counseling, unwanted pregnancy, university-wide courses, etc. They seemed to suggest an on-going training program, possibly carrying some college credit, for the academic assistants.

Comments and Suggestions from the Students of the Engineering College

There were 41 per cent of the sample from the Engineering College who returned completed open-ended questions. The most frequently mentioned comment was that the advisors should be more informed about the structure and content of courses, especially of those that were required for graduation. Some students preferred that the advisors be more informed about the engineering opportunities upon graduation. There were few students who commented about the difficulty of getting immediate appointments and inconvenient locations of the advisors' offices. They suggested that the advisors be encouraged to know more about the courses in the engineering fields.

Comments and Suggestions from the Students Advised by Teaching Faculty

Fifty-five students from the group advised by teaching faculty returned the open-ended questionnaires

with some comments. The most frequently mentioned comment was that they have never met their advisors for the purpose of academic advising except for signing schedule cards or for dropping or adding courses. The second most frequent comment was that their advisors did not seem to want or like advising enough to show any concern for the students. An equal number of the sample commented that the advisors were unfamiliar with areas outside of their special field.

The major recommendation was that the teaching faculty might be given released time to spend on advising and to get to know the university community. Thus, they might be able to give more convenient office times and show concern for their advisees.

Summary

This chapter has presented a summary of the statistics and the results of the statistical analyses performed on the data collected for the study. Profile analysis and analysis of variance on each of the five variables indicated that the groups were significantly different on all variables. The method of Dunnett post-hoc comparisons attempted to test the significance of each group with the other groups on specified variables.

The testing of the first hypothesis indicated that the University College program received

significantly higher scores on the variable "service to students" than all other college programs studied. Testing of the remaining hypotheses indicated certain differences as significant and some other differences as not significant. The following is a summary of the statistical results:

1. The students from University College expressed significantly higher satisfaction on the variable "service to students" than the students from the College of Arts & Letters, Justin Morrill College, Engineering College or the students advised by the teaching faculty.
2. The students from the College of Arts & Letters expressed significantly higher satisfaction on the variable "rapport" than the students advised by teaching faculty.
3. The students from Justin Morrill College expressed significantly higher satisfaction on the variable "technical help in curriculum planning" than the students from the College of Arts & Letters or the students advised by teaching faculty.
4. The students from Engineering College expressed significantly higher satisfaction on the variable "personal help" than the students from the College of Arts & Letters, the students from Justin

Morrill College or the students advised by teaching faculty.

5. The students advised by teaching faculty expressed significantly higher satisfaction on the variable "competence in the academic field" than the students from University College, the College of Arts & Letters or Justin Morrill College.

CHAPTER V

SUMMARY AND IMPLICATIONS

This chapter presents an overview of the research reported. It includes four sections. They are: (1) a summary of the study, (2) findings based on analyses of data obtained from the test instrument, (3) implications for further research and (4) recommendations.

A Summary of the Study

The purpose of this study was to examine the unique characteristics of five selected academic advising programs at Michigan State University. The study attempted to identify those characteristics which were unique factors contributing to an academic advising program which would be satisfactory to students.

The procedure was to tentatively identify those factors which seemed to be unique to each program. This was accomplished by means of interviews with administrators and/or academic advisors from each college. The result of this tentative identification was formulated into five testable hypotheses. A questionnaire was constructed to measure the satisfaction of a sample of

students from the five programs with various aspects of their academic advising programs.

A representative sample was selected from each of the five selected academic advising groups. A locally developed instrument was administered to the entire sample. Four hundred and one (80.2 per cent) of the 500 questionnaires mailed were returned in usable form.

The statistical tool used to analyze the overall data was analysis of variance employing the method of profile analysis suggested by Greenhouse and Geisser (1959). To test the significance of the difference on each variable, a one-way analysis of variance was performed. Dunnett's method of post-hoc comparison was employed to test the significance of difference between a particular program and the other four programs on a particular variable which was hypothesized as unique to that college.

Findings

Five hypotheses were tested with the data collected for the study. All hypotheses were tested by considering the statistical difference of group mean data for the five student groups included in the study.

Hypothesis 1

The first hypothesis considered the satisfaction mean score of students from University College on the

variable "service to students." In comparison with the satisfaction mean scores of students from each of the other four programs, the University College advising program was rated significantly higher on the variable "service to students."

The finding suggested that, on the variable "service to students," the students in University College were more satisfied with their academic advising program than students from the other groups. It implied that the academic advising program of University College had a characteristic which was different from the other four academic advising programs. This characteristic was the same quality the administrators of the program claimed to be unique. This study appeared to support the administrators' claim that the "service to students" aspect was more emphasized in the academic advising program of the University College than in the other four programs compared.

Hypothesis 2

Table 4.11 showed that the F-value of the analysis of variance was significant at .05 level or beyond for the variable "rapport." The result from the post-hoc comparisons showed that the satisfaction score expressed by the students from the College of Arts & Letters was significantly higher than the satisfaction score expressed by the students who were being advised by the teaching faculty.

This was the only group which showed any significant difference on this variable. This implied that the students advised by teaching faculty were less satisfied with the rapport between themselves and their advisors than the group advised by the graduate assistants in the College of Arts & Letters.

Hypothesis 3

It was hypothesized that the students in Justin Morrill College would score significantly higher on the variable "technical help in curriculum planning" than the other four groups. However, the statistical analyses revealed that only the students from College of Arts & Letters and students advised by teaching faculty rated the satisfaction level on this variable as significantly lower than Justin Morrill College. Individual comparisons failed to show that responses from Justin Morrill College students were significantly higher on this variable than University College and Engineering College responses. These results implied that the students advised by upperclassmen at Justin Morrill College were more satisfied with the technical help they received than were the students advised by graduate assistants at the College of Arts & Letters or those students advised by the teaching faculty. However, the satisfaction of students from University College and Engineering College was not

statistically different from that of Justin Morrill College students on this variable.

Hypothesis 4

The tested hypothesis stated that the students in the Engineering College would score significantly higher on the variable "personal help" than the students experiencing the other four academic advising programs compared.

Data reported in Table 4.2 showed that the students in the Engineering College had a mean score of 3.11 on this variable and mean student responses from all other colleges tested had lower than the above score .

The F test revealed that the five groups differed significantly at alpha ≥ .01 on the variable "personal help." However, Dunnett's test to locate the significance of difference resulted in the conclusion that there were no significant differences between the mean score of the Engineering College students and that of University College students on this particular variable. The above hypothesis was not rejected for all three of the other comparisons. Thus, the results indicated that the students in the Engineering College scored significantly higher on the variable "personal help" than the students in Arts & Letters, Justin Morrill College, and the students advised by the teaching faculty. The uniqueness of "personal help" to the Engineering College program was

made obvious when it was compared with the College of Arts & Letters, Justin Morrill College or students advised by teaching faculty.

Hypothesis 5

It was hypothesized that the students advised by the sample of teaching faculty would score significantly higher on the variable "field competence" than the other four groups compared. Observation of Table 4.2 indicated students advised by teaching faculty had a higher score than student responses from all other colleges. An analysis of variance confirmed that these groups were significantly different on the variable of "field competence." The results of post-hoc comparisons showed that the mean satisfaction score of those students advised by teaching faculty was significantly higher than the mean satisfaction score of those students in University College, Arts & Letters and Justin Morrill College. Thus for these data the stated hypothesis was valid only when responses from the above mentioned three colleges were compared with the faculty advised group. On the other hand, when the mean satisfaction score of the faculty advised group was compared with the mean satisfaction score of Engineering College students, there was no significant difference in mean score.

Implications for Further Research

Recommendations for additional investigation of academic advising programs are presented. Included are the topics of sample selection, controlled model and experimental model, and the timing of the survey.

Sample Selection

It would be valuable to replicate this study by administering the instrument to larger samples from the same colleges. This would provide a more reliable check for the instrument as well as additional evidence of how students perceive the academic advising programs.

Controlled and Experimental Model

For comparisons across variables and across programs, it is suggested that the students may be randomly assigned to each program . When subjects are randomly assigned to various groups the various groups are considered statistically equal. Any difference that may be observed will be due to sampling error, which is measured in probabilistic terms in hypothesis testing. Any difference found in the groups after the treatment can then be more reliably attributed to individual programs.

The Timing of the Survey

The return of the questionnaire would have been much more complete if the questionnaires were sent out in the beginning of the spring term. There would have been enough time to send follow-up letters and to conduct other follow-up procedures before the students left for summer vacation.

Recommendations

Based on the data obtained in this study and information acquired from the open-ended questions, these recommendations are presented:

The mean satisfaction score for the entire sample was 2.74 out of a possible 5. It seems to indicate that all the five programs should strive for greater satisfaction of students through their individual academic advising programs.

University College

Advising in University College can become a very demanding responsibility by the fact that no-preference students would appear to need more advising in their choice of academic major. The major usually defines the life goals of the individual students. The advisor to no-preference students should primarily be a person who can help these students in making wise choices of their

major fields. Consequently, the position of an academic advisor in University College requires that the advisor be more knowledgeable in dealing with counseling techniques.

Some specific recommendations are that the advisors be encouraged to show more personal interest in the students. This interest may be generated if the entire student body of University College is contacted through a personal letter from the advisors. Each advisor could contact a certain number of students at least by an introductory letter explaining that he is interested in them. This does not mean that he should be specifically assigned to a student. The most important factor is the initial contact with which the advisors make themselves available to students.

Another recommendation is to increase coordination of University College with other colleges of the university. In that way, a student may be referred to a specific individual in a particular field to provide an opportunity to talk to a few people in a department before he chooses his major field.

It appears that the wives of faculty members are good choices for the position of advisors because they are likely to be dependable for their service, year after year. The more years an advisor is associated with the University College, the more knowledgeable she becomes

about the various departments of the university. Thus she becomes more able to inform students about different departments of the university.

However, the best choice for this position seems to be a full-time professional counselor, who can help students choose their major and plan their academic future through personal counseling. Because of the no-preference nature of the student body, personal counseling becomes a major function of the academic advisors at University College. These students need help not only in planning one year of studies, but will demand help from the advisor in choosing a meaningful life goal, a relevant major to that life goal and an academic plan in his field of choice. It is difficult to separate emotional and social problems from academic ones because one is often the cause of the other. It is necessary for advisors to be prepared to deal with the whole person. In this context, student personnel administrators who are knowledgeable in personal counseling as well as in college life seem to be better qualified for academic advising at University College.

College of Arts & Letters

As indicated by the long waiting lines, the advisement centers at the College of Arts & Letters definitely need more personnel to meet the increased need of

the students in matters of academic advising. The graduate students from the same major are in a better position to give realistic information about their major field than any other type of advisor. But for the advisors to be effective in this aspect, they should be graduates from the same institution, from the same departments and currently majoring in the same fields as their advisees. It would be desirable that these advisors be selected with the above specifications on a competitive basis. The selection should be based on the above basic requirements and also their general attitude toward helping students and their ability to interact effectively with students and faculty in their departments. By reason of their being students, it may be unrealistic to expect personal commitment to advising because they are still students and are more responsible to their own studies than to their part-time job. This problem may be remedied by hiring post-master's students (doctoral candidates) on a full-time basis. They may have a wider knowledge of many departments and are presumed to be more "mature" in dealing with students. Full-time commitment would bring a more reliable source of advisement and their own studies would be only a part-time endeavor.

The structure of course requirements demands also that the advisors be knowledgeable about major departments. It could be facilitated if the advisors know at

least one person from each department to whom they could personally refer students who show some interest in a specified department. An on-going program of advisors' training and visiting different major departments might facilitate the understanding of different major departments. A small library of course descriptions, required courses for specified departments and general requirements at the College of Arts & Letters and at the University level, a handbook compiled specifically for the advisors and a list of campus personnel that may be useful for referrals may be helpful to the advisement centers of the College of Arts & Letters.

Justin Morrill College

The study indicated that Academic Assistants lacked some of the general information on course content, rules and regulations. It seems that the problem could be alleviated by a comprehensive advising handbook and better communication with the faculty of Justin Morrill College and with the faculty of the entire university.

Another area which needs to be emphasized is better advisor-relations between the Academic Assistants and their advisees. This aspect could be improved in many ways:

1. Publications of personal data sheets on all Academic Assistants would assist the students in choosing

their advisors. Even when assigned randomly, the students would have a basis for acquaintance with the newly assigned Academic Assistants if they were supplied with the vita sheets of their advisors.

2. Publication of frequently needed names and telephone numbers relevant to Justin Morrill College advising--similar to that found in the schedule of courses published by Michigan State University--would assist Academic Assistants in making immediate referrals.
3. Encouraging all Academic Assistants to send personal letters at the beginning of each term to all their advisees, stating their new office hours and encouraging the students to come and visit with them at least once a term would facilitate initial contact. In cases when a student does not show up, a follow-up telephone call could be made.
4. Encouraging the Academic Assistants to make their office hours more relevant to the students' needs would encourage students to seek advice. It is recommended that the overlap of office hours among Academic Assistants sharing the same office be minimized as well as office hours among the five different offices. For the student seeking

academic advice, this would maximize the possibility of his obtaining advice when he wanted it, despite the fact that it might not be from his assigned advisor.

5. Encouraging the Academic Assistants to work as a pool with more cross-referrals would give students faster and possibly better solutions to problems.
6. Implementation of an effective working plan with others similarly serving the student body, e.g. Resident Assistants and faculty members, would give the Academic Assistants greater opportunity for personal service to students. This corss-referral system would help everyone spend his time more efficiently and effectively in helping students and also relieve everyone from having to deal with matters not in his area.

Engineering College

The Engineering College academic advising program seems to be rendering a very needed service to the students in engineering. The clear cut demands of the engineering field with a "sink or swim" philosophy has been remedied by the presence of student personnel people who are presumably able to counsel the students personally. However, a major problem of this program is that the

student personnel people are not familiar with the field of engineering.

It would be helpful if these advisors could invite one or two graduate students from each of the fields of engineering for an orientation session with their advisees. These graduate students could explain the general requirements in their specified field and later be resource persons for referrals if and when a student has more specific questions concerning his major.

Another means of improving the program would be to help the advisors familiarize themselves with handbooks and literature from various areas of engineering and make specified information on a particular major freely available to their advisees. The advisors should read such booklets in such a way that they would be able to interpret basic requirements to their advisees.

The advisors also should feel free to refer students to a specified faculty member so that the students are advised specifically for the field in which they need advising.

Teaching Faculty Advising

The study seems to indicate a lack of commitment on the part of the teaching faculty to the advisement of undergraduate students. Students' responses indicated

that faculty members do not have either enough time or enough enthusiasm for academic advising.

The problem may be remedied by assigning academic advising duties only to those teaching faculty members who request this aspect of student contact. These advisors should be encouraged to make initial contact with their students either by a personal letter or by a personal telephone contact. This would give the students the impression that their advisors are concerned about them. This would also generate confidence in their advising so that they will seek their advice whenever it is needed. Those advisors who accept advising duties should be given released time to perform their duties with specified office hours. They should be given more secretarial help to arrange student appointments and keep accurate student files on each advisee.

Another alternative to the above problem of non-concern is to appoint graduate students as full-time advisors. However, the selection of these graduate students should be based on their personal qualification; such as, their interest in academic advising, their ability to recognize personal needs of individual students and their "maturity" in making appropriate referrals to the relevant departments and personnel in the university community.

The above recommendations on all five programs seem to emphasize all aspects of academic advising,

especially, service to students, rapport, technical and personal help, and knowledge of the academic area. This means that an academic advisor should be a "well-rounded" individual who will extend his help to students for whatever need the student may have. This does not mean that the advisor should necessarily be well qualified in all the areas. A minimum quality which may be imperative in every academic advisor is an attitude favorable toward helping students either directly or indirectly.

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APPENDIX

Form Letters and Questionnaire Used in This Study

QUESTIONNAIRE

NAME
Last First Middle

IDENTIFICATION NUMBER

Please evaluate following items according to the following key:

1. Very Satisfactory
2. Satisfactory
3. Adequate
4. Unsatisfactory
5. Very unsatisfactory(never happens)

1) My experience with the academic advising program in my college is..1.

Service to students

2) The general philosophy of rendering service to students is..... 2.
3) The availability of my adivsor is..... 3.
4) Requiring my advisor's signature on my schedule card for registration ..... 4.
5) The speed with which my advisor acts on my behalf is ..... 5.
6) The convenience of the location of the advisor's office is ..... 6.

Informal Relation With My Advisor

7) His informal nature of advising is ..... 7.
8) The similarity of his academic interest to mine is ..... 8.
9) The similarity of his life style to that of mine is ..... 9.
10) His concern for me as a student is ..... 10.
11) His informal knowledge about my instructors is ..... 11.

Technical Help From My Advisor

12) His help in selecting my courses is ..... 12.
13) His help in the choosing a section of a course is..... 13.
14) His ability to communicate on my level is..... 14.
15) His help in improving my grade point average is..... 15.
16) His knowledge of specific course structure is..... 16.

Help With Personal Problems

17) The personal concern he shows in counseling me is..... 17.
18) His professional training in helping students is..... 18.
19) His attitude towards my personal problems is..... 19.
20) His knowledge of the resources of MSU (for referals) is..... 20.
21) His wider outlook on education (not restricted to my major) is... 21.

Competence in His Academic Area

22) His professional reputation is..... 22.
23) His ability to guide me in my major is..... 23.
24) The confidence inspired by his advice is..... 24.
25) His professional knowledge of my instructors is..... 25.
26) His knowledge of the subject matter in my major is..... 26.
27) How important, do you think it is for you to have an academic advisor?
1. Very important
2. Important
3. Uncertain
4. Not very important
5. Not at all important 27.

PLEASE COMMENT ON THE ENCLOSED ADDITIONAL SHEET

WRITTEN COMMENTS

ARE THERE ANY PROBLEMS IN THE ACADEMIC ADVISING PROGRAM IN YOUR DEPARTMENT? IF SO, WHAT ARE THEY?

WHAT ARE YOUR SUGGESTIONS FOR POSSIBLE SOLUTIONS TO THESE PROBLEMS OR IMPROVEMENTS IN THE PROGRAM?

WE APPRECIATE VERY MUCH YOUR COOPERATION. PLEASE RETURN THE COMPLETED QUESTIONNAIRE AND THIS SHEET BY CAMPUS MAIL AT YOUR EARLIEST CONVENIENCE. THANK YOU.

MICHIGAN STATE UNIVERSITY EAST LANSING, MICHIGAN 48823

UNIVERSITY COLLEGE, OFFICE OF EVALUATION SERVICES,
202 SOUTH KEDZIE HALL

May 21, 1970

Dear Student:

Your name has been randomly selected for an evaluation of the academic advising program at Michigan State University. Enclosed is a brief questionnaire which can be completed in a very few minutes. This questionnaire is designed to assist in evaluating and improving the academic advising program. It is not designed to evaluate your academic advisor. Your name and student number are requested for purposes of follow-up and relating to other data. Each individual questionnaire will remain completely confidential and will not be seen by any person other than the researcher.

We hope you will assist us by answering each question completely. We welcome your general comments on problems of academic advising program in your college and your suggestions for possible solutions and improvements to the program.

We appreciate your cooperation and ask that you use the enclosed self-addressed and stamped return envelope to return the questionnaire through the U.S. Mail or through the campus mail. We solicit your cooperation in returning the completed questionnaire within one week.

Thank you for your assistance.

Sincerely,

Joseph K. Chattaparampil

Joseph Chataparampil
Project Director
and
Dr. Willard G. Warrington
Director: Evaluation Services

Willard G. Warrington

MICHIGAN STATE UNIVERSITY East Lansing Michigan 48823

University College Office of Evaluation Services
202 South Kedzie Hall

June 5, 1970

Dear Student:

I have not received your completed questionnaire as yet. It may be in the mail and if so, please disregard this letter. If not, please complete the enclosed copy and return it as soon as possible. Your response is very important to the success of this research project and the time and effort you take will be greatly appreciated.

I would prefer that you use campus mail to return the questionnaire. However, please feel free to use U.S. Mail and I will pay the postage due. I am in great need of your completed questionnaire for the successful completion of my thesis. Since I have selected a very small sample size for the study, I am in need of a return nearly to one hundred percent. Please help me complete my thesis by returning the enclosed questionnaire. Thank you very much for your valuable time and assistance.

Sincerely,

Joseph Chathaparampil

Joseph Chathaparampil
Project Director
Research in Academic Advising

MICHIGAN STATE UNIVERSITY EAST LANSING, MICHIGAN 48823

UNIVERSITY COLLEGE, OFFICE OF EVALUATION SERVICES
202 SOUTH KEDZIE HALL

June 18, 1970

Dear Student:

I am sorry to disturb you for the third time, but I need your completed answers as soon as possible.

If you have had no contact with an academic advisor, please mark the fifth choice--never happened--for the first question and send the answer sheet back to me.

If you are a student in Justin Morrill College, please answer the questions substituting the work Academic Assistant for the term Academic advisor.

Please help me complete my thesis by returning the enclosed questionnaire. Thank you very much for your valuable time and assistance.

Sincerely,

Joseph Chathaparampil
Graduate Assistant
Evaluation Services