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ADVISORS' KNOWLEDGE OF REQUIREMENTS FOR ADMISSION TO THE PHYSICAL THERAPY PROGRAM AT GRAND VALLEY STATE UNIVERSITY

By

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THESIS

Submitted to the Physical Therapy Program at Grand Valley State University
Allendale, Michigan in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN PHYSICAL THERAPY

1999

THESIS COMMITTEE APPROVAL:

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ABSTRACT

The purpose of the study was to identify the accuracy and extent of knowledge among G.V.S.U. academic advisors and the sources used to obtain information regarding the physical therapy (P.T.) admission process. Surveys were distributed to 45 advisors of pre-P.T. students. Nineteen surveys were returned and six respondents were chosen for an interview. Interpretations of the data were made using a qualitative coding system.

The authors found the advisors were inaccurate in their knowledge of the weighting of G.P.A. and interview and the role that physical appearance and leadership plays in the admission process. Advisors were accurate in the number of observational hours, letters of recommendation, and choice of major. The authors found the best source of information for advising pre-P.T. students is the course catalog, and the advisors refer pre-P. T. students to members of the P.T. faculty for further information.

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TABLE OF CONTENTS

		Page
ABSTRAC	Т	i
ACKNOW	LEDGEMENTS	i
CHAPTER		
1.	INTRODUCTION	1
-		
	Background to the Problem	1
	Problem Statement	3
	Research Questions	3
	Purpose	
	Significance of the Problem	
2.	REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK.	5
	Introduction to Literature Review	5
	Common Delivery Systems of Academic Advising	5
	Goals of Academic Advising	8
	Levels of Advising	9
	Ways to Maximize Academic Advising	11
	Grand Valley State University's Advising Program	14
	Qualitative Research	
	Trustworthiness	
	Implications for the Study	
3.	METHODOLOGY	22
	Design	22
	Study Site and Participants	22
	Equipment and Instruments.	
	Trustworthiness	
	Procedures	
4.	RESULTS	26
	Tasky imag of Data Analysis	26
	Techniques of Data Analysis	
	Survey Participants	
	Survey Results Interview Participants	
	Interview Participants Interview Results	
	Primary Admission Requirements	
	I IIIIIII V AMIIII SOOTII INGUUII CHICIIIS	

Admission Recommendations	37
Advising Issues	
5. DISCUSSION AND IMPLICATIONS	49
Discussion of Findings	49
Suggestions/ Recommendations	57
Limitations	
Suggestions for Research / Modifications	61
Conclusion / Summary	
REFERENCES	64
APPENDIX A – Survey Cover Letter	66
APPENDIX B – Survey	67
APPENDIX C – Reminder Letter	
APPENDIX D – Interview Consent Form	
APPENDIX E – Interview Questions	72

CHAPTER 1

INTRODUCTION

Background to Problem

A record is broken each fall on the campus of Grand Valley State University (G.V.S.U.). The number of students enrolled at this school continues to climb. The Master of Science Degree in Physical Therapy (P.T.) is one of the programs attracting students to this growing school. Since the beginning of the P.T. program in 1983, many students have experienced its application or admission process. The admissions process is very competitive with approximately two to three hundred people applying for one of the sixty openings each year.

The competitive atmosphere surrounding the admission process creates many questions for the applicants. Each applicant looks for credible sources to answer his or her questions and help to ease anxiety about successfully completing the admission process. The sources of information used by students interested in applying to the P.T. program (pre-P.T. students) include "advisors, P.T. faculty, health science professors, and other students who are applying" (Randolph & Wieber, 1997). Randolph & Wieber (1997) conducted a study exploring Grand Valley State University's pre-P.T. students' knowledge of the admission process. In the study, fifteen of the 20 subjects who answered the survey indicated that G.V.S.U.'s academic advisors provided them with a minimal amount of information, or they did not use their advisor as a source of information. The advisors who seemed to know little about the P.T. admission process,

according to the subjects, were "new" to the university. The few subjects who stated their advisor was knowledgeable about the admission requirement had an advisor who was directly involved in the admission process.

Academic advising at G.V.S.U. utilizes teaching faculty (professors) in each academic division, an Academic Resource Center (A.R.C.), and an Office of Academic Support (O.A.S.) to advise its students. The A.R.C. provides academic advising to underprivileged or underprepared, minority, and undecided students at G.V.S.U. The O.A.S. provides academic advising and career counseling to students with disabilities. Students are not assigned a faculty advisor until a major is declared. Undecided students may receive advising at the A.R.C. until this declaration is made. After a major is declared, the A.R.C. is responsible for sending the student's name to the respective department. The department assigns a faculty advisor and contacts the student with this assignment. After the student is assigned to his or her faculty advisor, the student is responsible for initiating the advising process.

According to the Council for Advancement of Standards for Student
Services/Developmental Programs (1990), academic advisors are provided to students to
help the student understand the choices that are available to him or her. The primary
purpose of the advisor is to assist with educational plans and career goals. One of the
advisor's responsibilities is to provide information regarding programs available at the
institution. If providing information regarding programs is the responsibility of the
advisors, ensuring that advisors have accurate information relative to the P.T. application
and admission process is important. Reports are not available at G.V.S.U. regarding the

knowledge advisors have concerning the admission process or the methods advisors use to obtain information to advise pre-P.T. students.

Problem Statement

The problem is that pre-P.T. students seem to receive only a minimal amount of information about the P.T. admission process from many of the advisors at G.V.S.U. Since advisors are responsible for providing information about the P.T. program, we wanted to identify how much the advisor knows about the admission process. To determine the knowledge base of the advisor regarding this process, we explored the knowledge of those advisors that pre-P.T. students are most likely to be assigned. These advisors include the faculty of health science, biology, biomedical sciences, and biopsychology departments. We also included counselors in the Academic Resource Center and the Office of Academic Support who may also be giving out information to pre-P.T. students.

Research Questions

The following questions will be explored in our study: what knowledge do G.V.S.U. advisors have regarding the P.T. admission process? Where do the advisors receive their information? How accurate is this information? How do advisors update their information? How do advisors interpret the information they receive?

Purpose

The purpose of this study is to identify the accuracy and extent of knowledge among G.V.S.U. academic advisors regarding the P.T. program admission requirements, and also to learn the methods the advisors use to develop and update their information regarding this process.

Significance of the Problem

G.V.S.U. provides academic advisors to students to aid the student in making proper career and academic choices. Advisors are a source of information pre-P.T. students can utilize and therefore, discovering the P.T. admission knowledge of these advisors is important. The results of this study will be significant to the P.T. department at G.V.S.U. With the information from this study, P.T. faculty can evaluate publications for the public and communications to other departments. Results from our study will not be generalizable to other P.T. programs because we are only studying those advisors at G.V.S.U. However, results from our study may encourage other programs and universities to evaluate their own method of advising. The Occupational Therapy and Physician's Assistant Programs at G.V.S.U. are relatively new to the institution and therefore, information about these programs is new to the advisors. This study may encourage these programs, and other programs at this university, to discover the advisors' knowledge base of each particular admission process and take appropriate action.

The results of this study will also be significant to the P.T. profession. If well-qualified pre-P.T. students are not being provided with accurate information, these students may turn away from the application process, or the lack of accurate information may hinder the ability to successfully complete the admission process. In addition to this, students need accurate information about what the profession entails in order to make an informed career choice. The profession will not have the opportunity to benefit from these students who may turn to other professions or graduate programs. Ensuring well-qualified students are given the proper information is important to the profession.

CHAPTER 2

REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

Introduction to the Literature Review

In the review of literature, articles were found that discussed various advising programs. Most of the articles addressed university advising in a general sense. There was one article that was specific to health science advising. References that were written in the 1970's discussed general concepts which advisors still use today. These articles were included in the literature review. This literature review will include a) common delivery systems of advising, b) goals of academic advising, c) levels of advising, d) ways to maximize academic advising, e) trustworthiness of qualitative research, f) implications for the study.

Common Delivery Systems of Academic Advising

Advising can be organized many different ways. Seven common ways that advising can be delivered are: a) the faculty-only model, b) the supplementary advising model, c) the split advising model, d) the dual advising model, e) the total intake model, f) the satellite model, and g) the self-contained model (Habley, 1988).

The faculty-only model is the primary model for delivery of academic advising. The student's undergraduate field of study determines the advisor assignment. Undecided students are assigned to faculty members in the liberal arts, other faculty who have fewer advisees assigned to them, or faculty who volunteer to advise undecided students. The

model may employ an advising coordinator but generally the supervision of faculty advising is delegated to the individual academic subunit (Habley, 1988).

The supplementary advising model features an academic advising office but still uses faculty members as advisors. The advising office serves as a place for developing, maintaining and updating advising information, implementing advisor training and providing a source of referral for advisement. The office has no jurisdiction for monitoring or approving academic transactions; this is the responsibility of the student's faculty advisor (Habley, 1988).

In the split advising model, the initial advising of students is split between faculty members in academic subunits and the staff of an advising office. The advising office has original jurisdiction for monitoring or approving academic transactions for a specified group, like undecided or underprepared students. The faculty in academic subunits maintain jurisdiction over the remainder of the students. Commonly, different advising offices are responsible for undecided, underprepared and nontraditional students with one existing for student athletes. In addition the advising office can serve as a clearinghouse for information and as a referral resource to students assigned to advisors in the academic subunits. However, the office has no jurisdiction in the approval of academic transactions for those students assigned to advisors in the academic subunits (Habley, 1988).

In the dual advising model the responsibility of advising each student is shared between the advising office and faculty members. The advising office provides information related to the general education requirements, policies and registration. The faculty member provides advising related to the student's major. Personnel in the

advising office are usually responsible for students who are undecided as to which major they will choose (Habley, 1988).

The advising office is initially responsible for all student advising in the total intake model. The advising office has jurisdiction in the approval of all advising transactions until a set of institutionally predetermined conditions has been met. The conditions may be a time limit, such as completion of the first semester, or a more complex set of conditions may be in place. The model has three variations as to the responsibilities given to the advising office: 1) the development of curriculum and the administration of instruction, 2) the development and enforcement of academic policies, and 3) the provision of advising services. The advising office in this model is usually headed by a director (dean) who is charged with the responsibilities that entail each of the possible variations of this model (Habley, 1988).

The satellite model features advising offices contained and controlled by each academic subunit. The satellite advising offices provide advising for all students whose majors fall within their particular subunit and undecided students are advised by an office designed to meet their particular needs. Generally, the person in charge of this particular satellite is given the responsibility for coordinating the campus advising system and providing advisor support (Habley, 1988).

In the self-contained model all academic advising from orientation through departure from the institution, takes place in a centralized unit. The centralized unit is directed by a dean who supervises all advising functions that take place on campus (Habley, 1988).

Goals of Academic Advising

The following goals for advising programs have been established by the American College Testing (A.C.T) and the National Academic Advising Association (N.A.C.A.D.A.). The goals were used in the <u>A.C.T. National Survey's</u> (1987) subsection on goal achievement. Respondents from two and four-year universities were asked to evaluate their current advising services based on these advising goals (Habley, 1988).

- Assisting students in self-understanding and self-acceptance (value clarification, understanding abilities, interests, and limitations.)
- Assisting students in their consideration of life goals by relating
 interests, skills, abilities, and values to careers, the world of work, and
 the nature and purpose of higher education.
- Assisting students in developing an educational plan consistent with life goals and objectives (alternative courses of action, alternate career considerations, and selection of courses)
- 4. Assisting students in developing decision-making skills.
- Providing accurate information about institutional policies, procedures, resources, and programs.
- 6. Making referrals to other institutional or community support services.
- Assisting students in evaluation or reevaluation of progress toward established goals and educational plans.
- Providing information to students about the institution, colleges, and/or academic departments.

The surveys from the A.C.T. and N.A.C.A.D.A. were given to administrators of university academic advising systems. The respondents documented the type of academic advising model that they used based on the seven organizational models described by Habley, (1988). The respondents were asked to rate their advising systems in accomplishing the eight N.A.C.A.D.A. goals for academic advising. The results show the universities using self-contained and total intake models to self-rate the highest for achieving the goals that were set by the N.A.C.A.D.A.. Universities using the faculty-only model rated themselves the lowest of the seven models in achieving the goals. The survey revealed that the faculty advisor, utilized in the faculty-only and split models is the most common delivery of academic advising. However the advising models utilizing the faculty advisor were given the lowest ratings in meeting the N.A.C.A.D.A. goals for academic advising, as ranked by administrators of university academic advising systems. The academic advising center and "professional" academic advisors were given higher ratings based on meeting N.A.C.A.D.A. goals (Habley, 1988).

Levels of Advising

There are four levels of academic advising discussed by Thomas Grites (1978): a) primary, b) professional, c) personal and d) programmatic. These different levels of academic advising can be utilized to accomplish the goals that the university or academic advisor deem appropriate.

The primary level of advising, as described by Thomas Grites (1978) is basic advising involving discussion of graduation requirements, registration procedures, and specific course selection. Grites suggests students would be best suited to fulfill this role. Peer advising has also been proven successful because students as advisors are motivated

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and well-trained. The secretarial staff is also a good resource for this level of advising.

The use of faculty members for this level would not be appropriately utilizing their expertise. Instead, faculty should be involved in advising at the professional level.

Advising at the professional level involves guiding students in relation to graduate school requirements and the rationale for such requirements in the curriculum. The advisor also helps with selection of graduate and professional schools, the choice of electives in order to enhance the student's required curriculum, the choice of a major, and with career development. Faculty members are the only personnel that possess the expertise that this type of advising requires. Most students, secretaries, and other staff at the university do not possess the expertise or knowledge necessary for advising at the professional level (Grites, 1978).

The next level of advising is called personal advising. This level involves discussion of personal adjustments to college, emotional issues in a student's life, and other related matters. Advising of this type is most appropriately given by a counselor instead of an academic advisor. If personal issues are brought up with an academic advisor, the student should be referred to a counselor or a psychologist so all of the problems a student is facing are addressed. Personal issues should not be ignored and the academic advisor is not properly trained to deal with these issues (Grites, 1978).

The last level of advising is the programmatic level. This level involves cocurricular activities that involve the student in experiential learning programs, student government, residence halls, tutoring, etc. Any of the previously mentioned personnel (staff, secretarial staff, and students) would be appropriate for this type of advising. These experiences can lead to many future opportunities for the student (Grites, 1978). These levels of advising are helpful in organizing the different types of advising.

The author suggests how to best utilize each staff member at the university so that the abilities of each person can be maximized. In addition, staff members are performing the level of advising for which they are best suited.

Ways to Maximize Academic Advising

The process of academic advising can be improved by performing an evaluation of the current advising system. A review of the literature finds the evaluation of academic advisors to be lacking in the majority of college institutions. Byrd (1995), in the keynote address at the 1994 N.A.C.A.D.A. convention, reports that she has "yet to see any academic department assess the effectiveness of faculty advising." Reward or recognition of good academic advising is an even less common practice.

A report presented by Crockett (1988) reviewed a survey in which institutions were asked to consider both the current effectiveness and progress made in a five- year span of 11 organizational and administrative variables of academic advising, including evaluation and recognition/reward. Evaluation and recognition/reward were ranked tenth and eleventh respectively in terms of effectiveness. These same two elements were ranked ninth and tenth in terms of improvement during the five years. Crockett emphasizes that commitment and support from the administration is key to developing an effective evaluation and reward program to academic advising. Administrators can be attracted to this concept with documentation that academic advising is a powerful tool which can improve student retention and quality of education. He states that a lack of support exists from the faculty to the evaluation process. The lack of support stems from the advisors' performance being rated by students and given to their supervisors for

review. However, the students' evaluation of advisor performance gives administrators ideas and solutions to solve these problems. Crockett suggests the student evaluations be more formative instead of summative. The summative evaluation asks questions about past performance, ability or competence. The results are given to a superior and can be used to determine personnel decisions, pay or promotion. The formative evaluation is used for self-development and contains suggestions for future performance with strengths and weaknesses. The results are for the advisor and are not given to a superior. Instead, the results are used to guide future advising.

Tukey (1996) advises the adaptation of a systems perspective toward improving academic advising. The focus is on the processes and functional relationships that influence the participants from the administration to the student. The systems view for improvement of academic advising is different from that given by Crockett (1988). Crockett presents an "organization view" in which information is directed in a top-down format. Tukey promotes the "empowerment" of students using a feedforward and feedback flow of information. The feedback allows students to be active participants of the system rather than customers and advisors feel less threatened by student evaluations. Crockett reports on the resistance academic advisors have toward student evaluation of their performance. Critics challenge that advising, like teaching, is hard to measure because a set of criteria for advising is hard to define. Crockett and Tukey both agree that the easiest way to measure the effectiveness of advising is a formative evaluation that the advisor could use to enhance future performance.

The interaction between student and advisor is a subject addressed by Bertram (1996). Bertram's focus is on the decisions a student must make and the challenge this

presents to students. Choosing a major may demand wisdom and insight that a young student has not yet obtained. The author recommends the advisor give less advice to the student. He proposes the advisor examine the student's questions closely and try to find out what the students are really asking. Questions addressed to the student can help him/her think more critically and lead to a better decision-making process. Advisors are encouraged to find the context of the question and look into the student's background. Advisors should seek informal student contact outside of the formal setting or in class discussions where higher level thinking can take place.

The idea that students need to develop critical thinking is supported by Looney (1988), who reports a shift from students majoring in liberal arts to majors in computer science and business. This shift suggests the students prefer application over theory and are more interested in career based instruction and advising. The premise that students prefer application over theory indicates that many students need to be challenged or directed in understanding the subjective and objective nature of decision making.

Looney identifies four of the top problems with academic advising. The problems are: 1) accessibility and availability of advisors, 2) lack of timely and accurate information, 3) too many students per advisor, and 4) advisors lack of concern for the student. In order to improve advising, these four problems need to be evaluated and addressed. Research indicates that academic advisors and sometimes the advising systems have not been evaluated as to their effectiveness and their meeting of the university goals (Arndt, 1977; Habley,1988).

The administration can help maximize academic advising by stressing to the faculty the importance of advising. Evaluation of academic advisors can help emphasize

the importance of advising and enhance the advisors' performance. Evaluation of the academic advising system is necessary to identify the problem areas within the system. Finally, the academic advisor can serve a valued role in the development of students' career path and critical thinking skills.

Grand Valley State University's Advising Program

The information contained in this section is based upon informal conversations with Jane Toot (Nov. 17, 1997), Director of the School of Health Professions, John Miko (Nov. 10, 1997), Director of Academic Resource Center and John Capodilupo, Professor of Biomedical and Health Science.

The G.V.S.U. academic advising system resembles the split advising model described by Habley (1988). The system utilizes an Academic Resource Center (A.R.C.), the Office of Academic Support (O.A.S.) and the teaching faculty to advise its students. The A.R.C. functions as a "clearinghouse for information and as a referral source to assign students to advisors in the academic subunits or departments" (Habley, 1988). Within the A.R.C., is the federally funded Educational Support Program (E.S.P.) that provides academic advisors and/or peer mentors to first generation or low-income college students. The federally funded EXCEL program for minority students is also located in the A.R.C. EXCEL provides academic and career advising for minority students in all majors at the A.R.C.

The Office of Academic Support (O.A.S.) provides academic and career advising to students with disabilities. The students served by O.A.S. can receive academic guidance at any time during their enrollment to ensure completion of degree requirements.

Students counseled by O.A.S. can also receive advising from an assigned faculty advisor specific to their major.

The A.R.C. and O.A.S. provide academic advising for underprivileged, underprepared, minority, disabled, and undecided students at G.V.S.U. All students at G.V.S.U. are originally under the jurisdiction of the A.R.C. until the student decides on a major. The undecided student may receive advising from the A.R.C. until a major is declared. Once a student declares a major, the A.R.C. sends the student's name to the department of the declared major. The specified department then assigns a faculty advisor to that student.

The A.R.C. is also responsible for orientation on academic advising to new instructors, and "refresher courses" to all instructors in the form of seminars. The orientations for academic advising usually take place in the summer and all the new instructors to G.V.S.U. are encouraged to attend. The "refresher courses/seminars" on academic advising are held at different times during the year and all academic advisors are invited to attend. The sources noted above report that these "refresher seminars" are poorly attended. The orientation of new instructors to academic advising at G.V.S.U., however, are usually well attended.

Grand Valley State University's School of Health Sciences also includes a peer advising program in which trained students advise fellow students. Open hours are held where students can come on a walk-in basis to have questions answered by fellow students. These students are informed of requirements for graduation and requirements for admission to graduate programs related to health science. These peer advisors are not "official" advisors and do not take the place of the faculty advisor that a student is

assigned. The health science advisors have many students that they are expected to advise each semester and the use of peer advisors can lessen this burden.

The literature reveals a lack of evaluation of the academic advising process and systems. Evaluation of academic advisors is also noticeably absent. G.V.S.U. is not unlike many other four-year public universities in the United States. The evaluation of academic advising is given a low priority or is completely non-existent, as noted previously by Byrd (1995).

Grand Valley State University, like so many other universities, also has no system in place to reward "good/exceptional" advising. The only form of faculty advisor evaluation is done by the advisor's peers during review for tenure. Part of the review for tenure is a written form that contains many items, among them is an unspecific question that is worded "advisor to student relation." Those peers answering this question may have difficulty forming a response since there is no questionnaire or evaluation given to the students advised by academic advisors. Evaluation is a starting point toward improving academic advising at colleges, including G. V. S. U.

Qualitative Research

Qualitative research is a non-experimental form of research because it does not control or manipulate variables. Qualitative research is a descriptive or exploratory form of research, utilizing interviews or observation for data collection. This type of research is most appropriate when a researcher wants to explore common themes or attitudes in a specific context. It is most effectively used when the investigator seeks to describe people's perceptions of their own environment. For those subjects who have not been studied previously, qualitative research can be effective in discovering

hypotheses to investigate rather than beginning with a hypothesis to be tested as in quantitative research (Portney & Watkins, 1993).

Trustworthiness must be demonstrated for the information obtained during qualitative research to be meaningful. Where quantitative researchers use reliability and validity to enhance their study, qualitative researchers must use other methods. These methods will be discussed in the following section.

Trustworthiness

Trustworthiness in qualitative research involves four criteria: credibility, transferability, dependability, and confirmability. These four criteria are related to internal validity, external validity, reliability, and objectivity respectively. Naturalistic, or qualitative, research addresses trustworthiness in a very different way than conventional, or quantitative, research does (Lincoln & Guba, 1985). These changes in criteria are necessary because of the vast difference in the design and purpose of the two forms of research.

The first criteria, credibility, ensures that what the study reveals is actually true for the subjects and context involved. There are many techniques that may be used to enhance credibility including prolonged engagement, persistent observation, triangulation, peer debriefing, negative case analysis, referential adequacy, and member checking (Lincoln & Guba, 1985).

When studying a certain population or group, spending enough time with the group is important to understand the context being studied. Prolonged engagement is the act of spending time in the setting the subjects exist so that the researchers better understand the context in which they are studying. Prolonged engagement also tests for

misinformation or distortion by the researcher or by the respondents, and it is also useful in building trust. After the researcher spends time with the subjects, the subjects will more likely participate in the study without fear of hidden agendas of the researcher or who the researcher works for (Lincoln & Guba, 1985).

The purpose of persistent observation is to render the inquirer open to multiple influences. Identifying important characteristics in the context of the study that are most relevant to the problem is another goal of persistent observation. The observations that are relevant to the problem are separated from the details that are unrelated. The investigator must be able to tell the difference between the details that are important and those that are not (Lincoln & Guba, 1985).

A third method of gaining credibility is triangulation. "Triangulation is the use of multiple methods to document phenomena" (Portney & Watkins, 1993). There are three types of triangulation including triangulation of sources, investigators, and methods. The use of meeting minutes and audiotapes increase credibility by triangulation of sources. The information in these documents can then be confirmed by another person.

Information interpreted from interviews will be discounted unless there is documentation. Triangulation of investigators involves multiple researchers interpreting the data collected to reduce bias. In qualitative research, interviewing is best done as a group, instead of each researcher interviewing individually. This is true because differences in the way a specific researcher interacts with a subject may affect the answers received. Interviewing in groups also keeps individual members of the group honest, which also adds credibility. Triangulation of methods utilizes the collection of data in two or more different ways to improve the credibility of the information received. An example of this

is using a survey to collect data and then also using interviews or observation (Lincoln & Guba, 1985).

Peer debriefing is the process of "acting out" the intended inquiry process to a peer who is not involved in the research. This is done so that the details of the process can be worked out. These details may not have been discovered by the researchers alone. This peer plays the devil's advocate by inquiring about researchers' biases, their meanings, and the basis on which the subject is being explored, further demonstrating credibility of the study (Lincoln & Guba, 1985).

Negative case analysis is continually changing or amending the original hypothesis as new data is collected, so that all of the data fit the final hypothesis. This reduces the number of outliers who do not fit the hypothesis to zero. This method enhances the credibility of the study (Lincoln & Guba, 1985).

Referential adequacy is the use of recording materials (videotapes, audiotapes, etc.) to document raw data so that data can be reviewed later for further interpretation.

This data can then be re-examined if individual researchers are interpreting the information differently. This method also improves reliability (Lincoln & Guba, 1985).

Member checking is the testing of data, analytic categories, interpretations, and conclusions with the subjects that participated in the study. This gives the participants an opportunity to react to the interpretations of the researchers by indicating whether or not their statements were understood correctly. This method also gives the respondent another opportunity to expand on or clarify thoughts and ideas to communicate at the time of the interview. This technique is crucial to demonstrate credibility (Lincoln & Guba, 1985).

Transferability in naturalistic research is essentially impossible. Instead of organizing the study so that results are generalizable, the investigators must give a thick description from which readers of the study can determine for themselves if applying the results to another situation would be appropriate. Thick description includes the relevant details necessary to represent the subjects and context of a study in order to allow others to replicate the study if desired (Lincoln & Guba, 1985).

Dependability of a study, or consistency of a qualitative study, looks at whether or not the findings of an inquiry would be repeated with similar respondents in a similar context. A way to insure dependability is by using an inquiry audit. This audit is metaphorically based on a fiscal audit. During the research project, the researchers record their methods of inquiry. Later, auditors come in to examine the accuracy of the records and the process in which they were recorded. This audit can also be used to establish confirmability (Lincoln & Guba, 1985). Typically, a person who has questions about how the research was conducted would review the audit trail. Others who would review such notes might include the members of the research group, or committee persons.

Confirmability, or neutrality in a qualitative study, is representative of the truthfulness of the findings of an inquiry. More specifically, it is a measure of the degree to which the researcher's personal biases, motivations, interests, or perspectives had an affect on the findings (Lincoln & Guba, 1985). Confirmability is achieved by utilizing various methods previously discussed including triangulation, member checks, thick description, and referential adequacy.

Implications for the Study

A previous study done by Randolph and Wieber (1997) suggested that students were not getting information from their advisors about admission requirements for the physical therapy program at G. V. S. U. Some of the students believed that the advisor assigned to them did not know the information that the student was requesting. These students looked elsewhere for the information. Other students believed that the information that was gained from the advisors was incorrect and conflicting with other sources. This research takes the Randolph & Wieber study a step further to investigate the knowledge of advisors regarding admission into the physical therapy program. The review of literature suggested that advising programs be reviewed, goals be set, and incentives be in place to insure adequate academic advising at any institution. This study will evaluate one area of the academic advising system at G. V. S. U., as suggested by past researchers.

CHAPTER 3

METHODOLOGY

Design

Qualitative methodology, a type of descriptive research, was used to carry out this study. A descriptive research study was chosen because it is "designed to gather information about conditions, attitudes, or characteristics of individuals or groups of individuals." (Portney & Watkins, 1993). The researchers were trying to discover the knowledge and beliefs of the advising staff about the P.T. admissions process at G.V.S.U. The qualitative methodology was best for this purpose because it emphasizes "an understanding of human experience, exploring the nature of people's transaction with themselves, others and their surroundings" (Portney & Watkins, 1993).

Study Site and Participants

Participant selection was purposeful, chosen from the field of professors who advise pre-P.T. students at G.V.S.U. Our main source for participants was the pool of professors advising for academic degree programs highly recommended to students wishing to apply to the P.T. program. These baccalaureate programs include biomedical and health sciences, biology, and biopsychology. We also included advisors in the Academic Resource Center (A.R.C.) and the Office of Academic Support (O.A.S.). These advisors may have interaction with students who do not seek information from their faculty advisor or students applying from other institutions.

Equipment and Instruments

Because this was a qualitative study, a survey (Appendix B) and interview (Appendix E) were the instruments used. Questions for our survey were adapted, with permission, from a previous survey conducted by Randolph and Wieber (1997). The questions were altered to be relevant for this study. The survey addressed different areas of the admission process. Advisors were questioned about the information known regarding the admission process, how confident they felt about the accuracy of the information they had, and where the information was received.

Following analysis of the data collected from our survey, a small sample of subjects who responded to the survey were interviewed. The interview was used to expand on data already obtained and to clarify responses of participants. Questions for the interview process were created based on the responses to the survey.

Trustworthiness

Trustworthiness was shown through triangulation of sources and investigators, member checks, and referential adequacy. A literature review, a survey, and an interview were used to demonstrate triangulation of sources. The data from the survey was analyzed by all three of the researchers. Interviewing was conducted with all three researchers present. This method allowed the data to be interpreted by three different people. After the interviews took place, all three investigators analyzed the transcribed data from the interviews. The investigators individually coded the data and identified common themes found among the responses, demonstrating triangulation of investigators, and at a later time compared these findings as a group.

The interview was also used to perform member checks. Participants in the interview were given the opportunity to clarify thoughts and ideas, and also the chance to react to interpretations made by the researchers. The interviews were audiotaped to increase the accuracy of the data and to confirm the responses of the participants at a later time, if necessary. Recording the interview with audiotape improved the reliability of the data received by utilizing the method of referential adequacy. If future researchers wish to examine our methods of data collection, this may be done by reviewing the transcribed data from the audiotapes.

Procedures

After approval by the Human Subject Review Board at G.V.S.U., participants were chosen by obtaining lists of all advisors in the School of Biomedical and Health Sciences, the Department of Biology, those advisors in the Department of Psychology who advise biopsychology majors, and also the counselors from A.R.C. and O.A.S. The participants were sent a cover letter (Appendix A) and a survey (Appendix B) to complete and return to us. Consent to participate in the study was given by completing the survey. Participants were asked to complete the survey in two weeks. A reminder (Appendix C) to complete the survey was sent to the participants during the second week. The responses to the survey were analyzed to develop interview questions from the common themes found throughout the survey.

Individual interviews were performed with a small number of participants who demonstrated interest in participating in the interview by providing his or her name on the survey. The participants were divided into two groups: advisors who provided accurate information regarding the admission process on the survey and those advisors who did

not provide accurate information. Three participants were interviewed from the members who provided the most accurate information and three participants were interviewed from those members who provided the most inaccurate information. The participants were not informed of the group to which he or she belonged. Each participant gave informed consent (Appendix D) before the interview was conducted.

All three researchers were present for the interview, and the interview was audiotaped. The audiotapes were transcribed by an outside source to enable the researchers to confirm responses. The audiotapes were coded in order to insure the interviewee's names and identity remained confidential. The interview (Appendix E) had a structured format with questions prepared prior to the interview process. The interview was overt, hence the participants knew they were being interviewed, knew the purpose of the interview, and knew the use of the information obtained from them. The researchers took brief notes as the interview was being conducted in order to confirm responses which were made and as a reminder to have the participant elaborate on unclear answers.

The interview was used to expand on questions in the survey. It was also a method to clarify existing themes and concepts presented in the survey. Before the interview process, the interview questions were presented to three non-participating advisors to determine the clarity of the questions. The interview was also an opportunity for the researchers to perform member checks. A portion of the interview was used to confirm participant's responses, summarize what was said, and determine if the developing themes accurately reflect the data gathered from the participants.

CHAPTER 4

RESULTS

Techniques of Data Analysis

Data was analyzed using a process of coding and content analysis. The data collected during this coding and content analysis process, according to Portney and Watkins (1993), is "categorized in a systematic way to uncover patterns or themes and to extract meaning from the mass of information that is available." As the data was collected, the researchers coded the data to identify major themes.

Each researcher initially reviewed the responses to the survey and independently coded the data to identify developing themes. After this individualized process, the researchers came together as a group and discussed each of their findings. Common themes found among the researchers were combined and themes that were not common among all of the researchers were discussed until a consensus was reached. All themes were documented in meeting minutes. This time was also used to develop interview questions that would elaborate on the themes found with the survey responses.

The data gathered from the interview process was analyzed in a similar manner. Each researcher independently analyzed the transcribed material from the audiotaped interview to develop new themes and expand on common themes found with the survey responses. After this initial process, the three researchers discussed their findings as a group. Common themes were expanded upon and new themes were identified. The researchers discussed the accuracy of their interpretations by analyzing the participant's

responses to the questions developed for member checks. The themes resulting from this process were documented in the minutes of the meeting.

Document Review

As stated previously, the survey questions were adapted, with permission, from a previous study by Randolph and Wieber (1997); however, the researchers reviewed the university catalogs and brochures prior to writing the survey and again before analyzing the data to ensure familiarity with the admission and application requirements. The university catalog (1998-1999) states the minimum grade point average (G.P.A.) needed by the student to be considered for admission is a 3.0. Furthermore the 3.0 G.P.A. is needed in the pre-professional course requirements and in the last sixty hours of course work. The brochure goes on further to state, "Students with a minimum 3.25 G.P.A. will be the most competitive."

A second criterion for admission stated by the catalog is communication and interpersonal skills. The student is required to participate in an on-site interview and essay writing activity. The student is also required to submit two recommendations with the application and one must be from a licensed physical therapist. The catalog and brochure state a minimum requirement of fifty hours of observational experience in physical therapy. The experience may be paid or on a volunteer basis. The catalog also recommends obtaining experience in a variety of physical therapy settings. Additional activities are also a recommendation found in the catalog. Activities such as educational, professional, leadership, scholarly, and volunteer are valued in the admission process. A final criterion for admission is that the student must be able to perform all of the technical standards of the physical therapy program. The researchers focused on the above criteria

and recommendations that were found in the documents while developing the survey and the interview questions.

Survey Participants

Surveys were sent to forty-five advisors in the biomedical and health sciences, biology, and biopsychology departments, and also to advisors in the O.A.S. and A.R.C. Nineteen completed surveys were returned to the researchers. The authors of these surveys became the participants of this study. Eight surveys were returned from the biomedical and health sciences department, five surveys were returned from the biology department, and six surveys were returned from the advisors of the academic resource center. Surveys were not received from advisors of the biopsychology department and the office of academic support.

Survey Results

The surveys were analyzed to develop categories and common themes. These overall categories were used to organize the interview questions. The categories that were developed from the survey data were academic achievement, requirements, personal characteristics, other activities, and sources of information. Themes were placed into the appropriate category. In order to clarify and ensure the accuracy of these common themes, interview questions were developed. Unique responses by the participants were also used to develop interview questions. The researchers wanted to know if other advisors agreed or disagreed with the unique response even though they may not have mentioned a similar response on the survey.

One category was entitled academic achievement. This category refers to the academic achievement of the pre-P.T. student. One major theme arising from the

analysis of the survey data that was placed in this category was the importance of G.P.A. in the selection process. Ten out of nineteen subjects believed that at least a 3.5 G.P.A. was needed to be competitive. The documents state that a 3.25 G.P.A. would be competitive. Seven out of nineteen subjects stated a G.P.A. greater than 3.5 was needed to be competitive. The respondents also gave G.P.A. a higher importance in the selection process compared to the interview portion of the process. Seven out of nineteen participants stated G.P.A. counted for 50 percent or more in the overall application process, with one of the participants saying the percentage was "high." Seven out of the nineteen advisors were not sure of the percentage that G.P.A. counted in the overall selection process. One participant stated the interview counted for 50 percent in the overall application process and another participant stated it was counted "heavily." Eight out the nineteen participants stated the interview counted for 30 percent or less, and seven out of the nineteen participants were unsure of the percentage that the interview counted. Multiple interview questions were developed to determine if this was an accurate theme.

The researchers also noted one other area related to academic achievement that was mentioned by the respondents. This area was the role of research experience and if this type of experience would be an advantage to the student. Two respondents stated research experience would be an advantage to the pre-P.T. student. These two responses were used to develop interview questions that would expand on the role of research.

The second category was requirements. This category refers to requirements needed to complete an application to the P.T. program. Pre-P.T. students are required to have observational hours and letters of recommendation for the P.T. application process. These two themes were placed in this category.

Fifty hours of observational experience in a physical therapy setting are required. These hours may be paid or completed on a volunteer basis. Participants were asked, "What is the minimum number of volunteer hours required, prior to applying for the P.T. program?" Ten of the nineteen respondents were accurate stating fifty hours. One participant stated sixty hours and three others stated 100 hours was the minimum requirement. Four respondents were unsure of the minimum requirement. The researchers realized the question was unclear because of the use of "volunteer hours" in the question. Questions were written for the interview using the phrase "volunteer or observational hours" in order to clarify the question.

A student needs to submit two letters of recommendation with his or her application to the P.T. program. The majority of the respondents, ten out of nineteen, were accurate when stating a licensed P.T. is qualified to write one of the letters of recommendation for the pre-P.T. student. Numerous answers were listed for the second person that would be qualified. Answers such as faculty advisor, faculty member, coach, employer, medical professional, and a person who has interacted with the student in a major way were given. An interview question was developed to determine who was most appropriate to write the second letter of recommendation.

A third category was personal characteristics of the student and a theme that developed through analyzing the data was the importance of communication and interviewing skills in the P.T. admission process. Three out of nineteen respondents listed good interview skills as being important, and one respondent stated the student being involved in roles that required communication was important. The researchers

developed interview questions to expand on the role of verbal and written communication in the selection process.

The respondents also listed the roles of responsibility and leadership as types of extracurricular activities that may increase a student's chances for admission into the P.T. program. Ten out of nineteen participants felt these types of activities were an advantage. An interview question was developed to promote discussion of this topic.

After analyzing the responses to the survey questions, the researchers also noted other areas the advisors felt might play a role in a student's successful application. One respondent mentioned persistence with reapplying would be an advantage for the student. Another respondent stated the barriers overcome by the student to reach the goal of applying to the P.T. program would be an advantage. Interview questions were developed under the personal characteristics category to expand upon these two thoughts.

The fourth category entitled "other activities" was developed for two reasons. The responses of the survey and the recommended additional activities in the catalog led to the development of this category. An interest in the profession and an interest in health care were noted by the respondents as a factor in the success of students in the selection process. Seven out of nineteen participants noted experience in health care as an activity that may increase a student's chances for admission into the P.T. program. One respondent noted work related to physical therapy would enhance a student's chances for admission. A participant said a physical therapist assistant who was actively working would have an advantage in the P.T. admission process. Interview questions were developed to clarify how important the advisor felt these roles were to the student's chances of admission into the P.T. program.

The respondents also mentioned roles in student government as an advantage to the student applying to the P.T. program. The researchers believed participation in student government would be related to leadership roles, but to discover if this was true, a specific interview question was developed and placed in the other activities category.

Another activity that may play a role in the admission process was athletics and physical fitness. Four out of the nineteen respondents mentioned athletics or physical fitness as being an advantage. Two out of nineteen respondents mentioned fitness when asked if there was anything that was not addressed in the previous questions on the survey that would enhance a student's chances for admission. To clarify the advisors' thoughts on this topic an interview question was developed.

The final category developed from the survey data was sources of information. The category refers to the sources of information the undergraduate advisors use to advise students. The participants were asked to indicate the sources from which they received information regarding admission into the P.T. program. Fifteen out of the nineteen respondents gave brochures/course catalog a "2" or "3" rating. A "2" rating indicates the advisor obtained a fair amount of information from the source, and a "3" rating indicates it as a major source of information. The respondents indicated a minimal to fair amount of information was also obtained from the university admission personnel, other advisors, pre-P.T. students, students in the P.T. program, and the P.T. department. The P.T. department was given a "2" by three of nineteen respondents and a "1" by seven out of nineteen respondents. A rating of "1" indicates a minimal amount of information was obtained from the source. The researchers developed interview questions to further clarify the advisors' sources of information.

When asked to indicate the sources from which the advisor received information, one respondent stated on the survey, "P.T. faculty don't bother." The researchers interpreted that statement to mean the P.T. department does not communicate well with the undergraduate advisors. An interview question was developed to determine if this interpretation was accurate. However, the question that was developed was related to the P.T. department's communication of changes in requirements, therefore, this question was placed under the requirements category for organizational purposes during the interview process.

Interview Participants

Following the survey portion of the study, the participants were divided into two groups: advisors who provided accurate information regarding the admission process on the survey and those advisors who did not provide accurate information. Six participants were interviewed, three of these participants were from the members who provided the most accurate information and three of these participants were from those members who provided the most inaccurate information. The participants were not informed of the group to which he or she belonged.

The accurate group consisted of one advisor from the biomedical and health sciences department, one advisor from the biology department, and one advisor from A.R.C. One participant in this group had two "summers" of advising experience at G.V.S.U. The other two participants had approximately 15 years of experience advising at G.V.S.U.

The inaccurate group consisted of one advisor from the biomedical and health sciences department, one advisor from the biology department, and one advisor from

A.R.C. One participant had 5 years of advising experience at G.V.S.U. The second participant had 20 years of advising experience at G.V.S.U., and the third participant had greater than 25 years of advising experience at G.V.S.U. The researchers have withheld further demographic information in order to keep the identity of the participants confidential.

Interview Results

Three main categories were identified during the development of themes from the interview data. These three categories differ from those categories that were developed from our survey data. As questions were answered throughout the interviews, themes were clarified and new themes emerged from the additional data that was collected. These new and revised themes were then placed into three new categories. These categories include primary admission requirements, admission recommendations, and advising issues.

The primary admission requirements category refers to the essential aspects that are required to apply to the physical therapy program and includes themes regarding the importance of grade point average, experience in health care, and letters of recommendation. The second category, admission recommendations, includes extracurricular activities that may enhance a student's application. The interviewees' perceptions about leadership roles, the role of research in a student's application, communication skills, the role of physical fitness, the role of challenges and barriers, and the benefit of certain personal qualities are included. The final category, advising issues, refers to the duties and methods inherent to the role of the advisor. This category

includes advising for a major, advising for a career choice, the influence on repeat applications, and sources of information.

Primary Admission Requirements

The first theme in the primary admission requirements category involves the perception among interviewees about grade point average. Grade point average (G.P.A.) was stated as the single most important aspect in the selection process among all six of the interviewees.

Participant #2 said, "The [admissions] process looks most intently at academic performance."

However, three out of six of the participants expressed that they know G.P.A. is most important, but hope the interview would be equally weighed. Two out of six went on to say they felt the interview should be weighed more heavily than G.P.A. An example of this is expressed in the following quotation by interviewee #3,

I think the G.P.A. is in fact more important [in the selection process] but, in my opinion, the interview ought to be more important because I think that a great deal of what makes a physical therapist highly successful or not has to do with the person's personality, that person's ability to interact with people but that may not be reflected in an exceedingly high G.P.A.

The researchers noted that G.P.A. was regarded as a "filtering process" in the P.T. admission process. Interviewee #1 stated,

Isn't it more of a filtering process? The catalog says everyone has to have a 3.0 . . . right there you've eliminated a lot of people who might interview beautifully.

So grade point kicks in closer to the beginning of the process and the interview

now is a finer filter that is used . . . there's an elimination process and the interview comes later.

The second area that is included in the admission requirements category is the importance of experience in health care. Most of the participants rated volunteer and/or observational hours as being five out of five in importance because of the requirement listed in the catalog. In addition to this, four out of six advisors stated that there would be an advantage to a student who observed beyond the requirement of fifty hours.

Interviewee #4 stated, "We feel [working in the physical therapy field is] a very good way for people to tell whether they're going to be a good fit for this career . . ."

Another interviewee stated, "[I would rate volunteer/observational experience a] four, at least . . . it demonstrates to the admission committee your commitment and it also demonstrates that the student has had on site experience in a physical therapy setting and understands a little bit better what physical therapists do."

Interviewee #5 replied,

I think [having performed over fifty hours of observation hours] is a slight advantage — certainly I think there's a perception on the part of the people making this decision that this person is really dedicated. I think it's certainly an advantage to the person doing it because of the growth potential in those extra hours. I think those volunteer hours are important.

The last area of themes included in the admission requirements category includes participants' ideas about who is the most appropriate author for the second letter of recommendation. The importance of knowing the student well continually emerged.

One participant stated, "Somebody in the academic environment who knows the student well."

Letters of recommendation could also be written by people that the student worked with or volunteered under.

Interviewee #6 stated, "[Working as a P.T. tech or a P.T. aide] would help with the letters of recommendation primarily."

Admission Recommendations

The first area included in the admission recommendations category pertains to the importance of leadership. The catalog suggests that students applying to the physical therapy program participate in extracurricular activities including those that demonstrate leadership. Advisors were asked about the importance of leadership roles and if these roles would provide an advantage in the admissions process. Leadership roles were perceived as being advantageous based on answers written on returned surveys. However, when asked about leadership roles during the interview, a very different response was observed. Five out of six of the participants rated leadership roles and student government of little importance in the selection process.

Interviewee #2 said, "I don't think that leadership per se is the most important. I would far rather have somebody getting into the program who had the ability to work with others at whatever level, whatever goal."

The second area of themes included in the admission recommendations category involves the role of research. Two questions in the interview were related to the advantage that performing research might play in the admission process. Five out of the

six interview subjects believed presenting at Student Scholarship Day would be an advantage to the pre-P.T. student in the P.T. admission process.

Interviewee #4 stated, "I would certainly hope they would [have an advantage]."
Participant #6 answered, "I think that could have an advantage."

Interviewee #3 stated, "... that's something the admission committee does look at favorably because they've convinced themselves that this is something they should be responding to in a positive way."

Interviewee #5 answered, "I would advise any student regardless of desire and major or program to be involved in research."

Along with research being stated as an advantage to a candidate, three out of the six participants also mentioned research as an opportunity for personal growth.

Advisor #4 stated, "I would think in their development as a thinker and a scientist and scholar, they definitely would [have an advantage]."

As stated above, the majority of interviewees believed presenting at Student Scholarship

Day would be an advantage; however, three out of six of the interviewees did not
recommend students perform research only to enhance their application. They believe
the student should do research only if he or she has an interest in it.

The third area of interest in the admission recommendations category is communication skills. Good communication skills as a necessary aspect for success in the P.T. admission process was a common theme among all six of the interviewees.

Interviewee #1 stated, "I would think this is an important part in succeeding. You have to be able to interview."

Interviewee #3 replied, "I agree and I think it's because you, the student who has applied, has to sell himself or herself to the admissions committee"

Interviewee #4 stated, "[The P.T. program] is a very selective program and certainly seems like communication skills are a definite part of that."

Interviewee #5 answered, "...communication skills are the most essential skills of our time..."

Interpersonal or people skills were also a theme the researchers found. Four out of the six interviewees reported that applicants with good people skills have an advantage in the selection process.

Interviewee #2 stated,

... I like to see people getting a Biology major or a Psychology major, Sociology major. In the early days some of the better P.T... who came out of those earlier times were people with Biopsychology, Psychology, Sociology undergraduate degrees and they didn't come in with a huge G.P.A. but they could sit down and get anybody to do anything. They could explain it well, they could get patients to cooperate—they had person skills—people skills and then they knew where in the book to look up what they needed.

Interviewee #3 stated, "... I think that a great deal of what makes a physical therapist highly successful or not has to do with the person's personality, that person's ability to interact with people"

The six interviewees' also felt written communication was an important aspect of communication skills. They felt it was important for filling out the application material, performing well in classes, and for the handwritten essay.

Interviewee #2 stated, "[Students] need to be able to communicate as part of the courses they are taking in the program. They need to communicate with each other, they need to communicate with faculty and at the end of the day, three years later, they need to be able to communicate with health professionals. Since a number of us do put a written component on our examinations, good communication becomes a little more important."

The fourth area of interest in the admission recommendations category involves the importance of physical fitness in the application process. The interviewees were asked to give their reaction to the following statement: An applicant who participates in collegiate athletics or who appears physically fit will be more successful or have an advantage in the P.T. selection process. Five out of the six participants agreed with this statement. Interviewee #3 stated,

I agree. I think the committee is going to be looking for people who are aware of the importance of being physically fit and the importance of maintaining a lifestyle that is healthy, and somebody who comes across with that appearance or has participated, has shown that they are.

Interviewee #1 answered, "Since strength is a factor, I would think at least subconsciously it would affect the interviewers."

Interviewee #5 also stated, "Absolutely because they've been working in P.T.—people who get in for years—you know all the jokes about the cloning—cookie cutter. That is what the perception is."

The fifth area of interest among the admission recommendations category is the role that challenges or barriers have on the admission process. The participants were asked, "Suppose an applicant has faced certain challenges/barriers, such as physical,

emotional, or academic, would he or she have an advantage in the P.T. admission process?" Two out of the six interviewees felt that overcoming a physical barrier or challenge could be an advantage to the student. Interviewee #5 stated, "Physical challenges, with everything else being equal, grade point, interview and everything else being equal, it might be. Probably would be."

And participant #5 goes on further to add, "I think [giving the student an advantage] would be validating to the profession because that's what you do."

However, three of the interviewees did not believe overcoming a challenge of any kind is an advantage.

Interviewee #6 stated, "I don't think [overcoming barriers/challenges is] necessary [to have an advantage]."

Interviewee #4 stated, "... I don't think in the P.T. selection process... that you're going to get unfair competition or people given an unfair advantage."

The final area of interest in the admission recommendations category is the presence of positive personal characteristics. The interviewees expressed that certain students with personal qualities may have an advantage in the admission process. One quality pointed out was commitment or dedication.

Interviewee #3 stated, "... [volunteer hours] demonstrates to the admission committee your commitment."

Interviewee #5 said, "I think those volunteer hours are important.... commitment to the profession."

Compassion is a second quality that was believed to be an advantage to the pre-P.T. student.

Interviewee #3 stated, "... [the student] can be someone who isn't out there, the leader of the pack, but somebody who is skilled and compassionate."

Advising Issues

The first area of interest in the advising issues category concerns the majors which are most appropriate for a pre-P.T. student to declare. One of the goals for advisors, according to Habley (1978) is to assist students in choosing a major. Advisors who participated in the interview process were asked which undergraduate majors were most appropriate for pre-physical therapy students. The majority of the participants recommended health science or biomedical sciences as the most appropriate major for a pre-P.T. student. Three out of six of the interviewees expressed that these two majors were most compatible with the pre-physical therapy course requirements.

Interviewee #2 stated, "The health science major is probably the major that is most compatible with the pre-P.T. requirements. The biomedical sciences is the second most compatible with the pre-P.T. requirements.

The participants also noted that the health science degree had limited options for students who were not admitted to the physical therapy program, whereas a biomedical sciences major provided options for the student to continue on with graduate school or medical school.

Interviewee #5 stated, "Health science is the closest fit...biomedical science is...in my personal opinion, the better [major] because if you don't get into P.T. you can go to medical school."

Other majors were also listed as appropriate including biology, chemistry, physical education, psychology, and biopsychology, and the advisors noted different methods of advising pre-P.T. students regarding their alternatives.

Participant #4 stated, "I tell students that I don't think that you have to do Biomedical Pre-professional to get in. I think you can go different routes."

Participant #2 stated, "I try to make them aware of all the alternatives because I think a lot of people who come to G.V.S.U. are pushed, advised towards health science/biomedical sciences . . . if you go with a specific degree you're looking at 150 credits instead of 135, in order to get the degree and all the pre-P.T. requirements."

When advising students on their choice of major, three out of six of the advisors interviewed reported reviewing past course work as an important factor. Interviewee #4 stated,

I spend a lot of time trying to find out how they arrived at their decision because that would make an impact on my advising them. High school science background is very important, regardless of their high school G.P.A.; I want to know the quality of the science classes they had in high school. Without the good science background they will not be able to compete so we need to talk about that. Students with a good science background, I'm pushing right away to have them shadow someone and make sure this is a good match.

Interviewee #1 stated, "I would want to know what they had taken up to that point," when advising for choice of major.

Interviewee #6 advises students by reviewing course work "that they had previously to see if they would be able to make the jump to the next level."

The second area of interest in the advising issues category is advising for a career choice. The interviewees reported that advising students about their career choice was an important part of advising.

Participant #2 stated, "I like to keep people's options open," and goes on further to state that successful advising is, "... not how many people you can get in this or that program, it's the fact that you can help them go in an appropriate direction."

Participant #4 stated,

I am becoming increasingly aware of physical therapy assistant (P.T.A.) as a career choice . . . I'm making students more aware that it is a possible career avenue for them . . . because some students are not well qualified for the highly selective nature of the program but might be more successful in a P.T.A. program and I think the employment picture is even better.

Participant #3 replied,

More than talking about specific requirements, I think [successful advising] is more in discussing with the student some of the realities of what's involved in being in this profession and being successful as a student . . . Hearing their concerns and questions and being able to listen . . . and I think that can be the most productive I think they need to talk about it and understand they are dealing with people Psychology, the need to be able to assess what the patient is doing or how they are reacting and then modify your behavior.

Participant #6 talked about one student; "I made sure that they looked a lot more closely at their career goals before they went on that long road."

The majority of participants interviewed mentioned that they want their pre-P.T. students to have "a Plan B." Identifying "Plan B" and encouraging a "Plan B" is important to the majority of the advisors. Interviewee #1 stated,

I would suggest to [students] that a Health Science major is less well recognized outside of Grand Valley than the more traditional majors and should they not get into the P.T. program they need to consider what else they might do and sometimes one of the traditional majors has more impact in the job market.

Interviewee #3 stated,

I try to find out how strongly their commitment is to P.T... and if I thought it was somebody who wasn't quite sure, then I would direct them more towards a biology major... I think there are more fallback options available to them in the biology major.

Participant #4 stated, "With anyone I advise I insist that they have a Plan B."

Participant #5 stated, "What are you going to do if you don't get into P.T., then you start hearing what Plan B is . . . Then you know better what to tell that person."

The third area identified among the advising issues category is regarding repeat applications for admission to the P.T. program at G.V.S.U. A second time applicant was looked upon favorably by the interviewees. They felt a second application showed perseverance and this is a positive trait to have.

Interviewee #1 stated, "... a second time application shows perseverance, shows dedication to the cause."

However, five out of the six participants looked upon a third time applicant negatively.

Interviewee #4 stated, "... I think [the selection committee] look at it as somebody's not getting the message."

Interviewee #5 also supported the previous statements by saying, "My guess would be that it is no longer a plus, but now on the downward slope."

The final area in the advising issues category is the source of information that advisors use. The majority of the participants use the course catalog and the P.T. Department when advising pre-P.T. students. They mentioned the catalog as source of information for required courses, letters of recommendation, and number of volunteer hours. The advisors named the P.T. department as a source for discovering how to acquire volunteer hours and more specific information related to the P.T. program or profession.

Interviewee #1 stated, "... there is a requirement listed in the catalog and that if they need more information they should go talk to [a student] who is already in the program."

Interviewee #2 stated, "A lot of us in (this) department have walk-in hours (for advising).

So if you want quick relief you see somebody here."

Participant #4 stated, "catalog is very important . . . Then I would say secondly go to the [P.T.] Department and get up to date information." The advisor encourages students to, "meet with someone in the P.T. office and collect the information themselves."

The respondents were split when asked what is the best source for advising pre-P.T.

students.

Interviewee #5 stated, "Having coffee with [P.T. director]," is the best source of information.

Interviewee #6 stated the best source is "the P.T. Department, if they would do it."

Interviewees #1 and #3 both felt the best source for advising was "the catalog."

Advisor #4 elaborated by stating, "the catalog and I would say that about any field, I think." The current catalog and the "degree analysis from the registrar is key."

The participants also stated the worst sources of information for advising pre-P.T. students. They felt the worst sources of information for advising pre-P.T. students were the student grapevine and some academic advisors.

Interviewee #1 stated, "well certainly the student grapevine is not a good source of information."

Interviewee #2 stated, "There are some great advisors on this campus and they are matched by the number of advising idiots. Some advisors who actually, not intentionally, but through ignorance, mislead students."

Interviewee #6 stated, "[The worst source is] Peers who have no frame of reference at all other than third party information."

The majority of our participants reported they received little communication from the P.T. department in regards to changes or updates in course requirements. This theme was similar to the theme found from the surveys. Seven out of nineteen survey respondents reported that minimal information was received from the P.T. department. The participants were asked to give the researchers their reaction to the following statement: "The P.T. department makes sure that new policies and changes of required courses for the P.T. program are shared with undergraduate advisors."

Participant #1 stated, "I haven't gotten any communication from them [P.T. Department] in years."

Participant #2 stated, "I can't guarantee it is the program itself that is doing [the communication], maybe it's word of mouth." This advisor reported, "very good contacts in the program" and this may be where the information comes from. The advisor also added, "changes don't seem to occur too often."

Interviewee #3 stated, "[P.T. Department doesn't] communicate much with us at all."

Interviewee #4 stated,

[P.T. Department doesn't] send [bulletins or updates] to me, but I participate in the freshmen orientation in the summer and at that time lots of departments hand out updates." The advisor reported that the changes are reflected in the current catalog and this is what advisors and students should reference rather than bulletins and checklists that "quickly get out of date.

In regards to communication from the P.T. department, participant #6 stated, "... [communication] does not happen. In my experience that has not happened."

Some of the participants noted that appointments for students with an advisor in the P.T. department can be difficult to make, therefore obtaining information other than that published in the catalog is difficult.

Interviewee #2 stated, "[it appears] to be very difficult sometimes to actually talk to someone in the P.T. program. Sometimes appointments have to be made three weeks ahead of time."

Interviewee #5 reported, "... as advisors we are not privy to all of [the information on volunteer or observational hours.]"

Interviewee #6 stated the best source of information to Pre-P.T. students is "the P.T. department, if they would do it."

CHAPTER 5

DISCUSSION AND IMPLICATIONS

Discussion of Findings

The purpose of this study was to discover the accuracy and extent of knowledge among G.V.S.U. academic advisors regarding the P.T. program admission requirements, and also to learn the methods the advisors use to develop and update their information regarding this process. The data obtained from the survey and interview were compared to the admission criteria found in university documents, such as the course catalog and P.T. department brochures and information from Dr. John Peck, P.T. Program Director at G.V.S.U. (conversation 2/9/99).

A point system is used to rank applicants for admission into G.V.S.U.'s physical therapy program. The P.T. Program Director could not release information on how points are earned in the P.T. admission process. He could only identify the areas that are considered for points. He kept this point system confidential in order to avoid having students change their life to conform to the "ideal" that the program has set. The P.T. department wants the students participating in the P.T. selection process to be genuine and the student's selection of extracurricular and academic activities to be natural.

The participants were fairly accurate in the category titled primary admission requirements, however one inaccuracy was evident. All of the participants of the interview process were incorrect in their perception that G.P.A. was weighted more

heavily in the selection process than the interview. G.P.A. and interview are actually similar in importance, however the interview is weighted slightly more. The interviewcounts for 40 percent of the overall selection process and G.P.A. counts for 38 percent. Randolph and Wieber (1997) discovered that pre-P. T. students were also inaccurate regarding the weighting of G.P.A. According to this study and the previous study, the importance of G.P.A. in the selection process is a misconception among both the students and the advisors.

The advisors were correct in their knowledge of the minimum amount of volunteer or observational hours that are required. The minimum amount required is 50 hours in a physical therapy setting. Many advisors mentioned the intrinsic benefit of performing additional observation, such as understanding the job and realizing if physical therapy will make a good career fit. The pre-P.T. student does not receive extra points for having greater than the minimum number of hours. The P.T. department believes in the intrinsic value of extra hours and feels the knowledge gained by additional observation will become evident through the interview process, therefore, the advisors were accurate when stating additional observational hours would have an intrinsic value.

The participants were accurate when determining an appropriate author of the second letter of recommendation that is required for the P.T. application. All of the participants reported an author from the academic arena who knows the student well would be appropriate. The information from the university documents and the Director of P.T. supports their responses. However, other authors would also be appropriate, including previous employers.

The second category contains themes regarding additional admission recommendations. The participants were fairly accurate with their knowledge regarding the recommended activities, skills, and qualities for admission into the P.T. program; however, two areas of inaccuracy were noted by the researchers. The majority of the participants rated participating in leadership roles as little benefit to the pre-P.T. student in the selection process. This was inaccurate according to the information obtained by the researchers. Leadership was looked upon favorably in the P.T. admission process, and a student with experience in roles of leadership could be granted more "points."

All interviewees stated that physical appearance or involvement in athletics has an affect on the selection of students for the P.T. program. The respondents believed health and fitness is emphasized and supported by P.T. selection committee. The majority of the interviewees stated that physical appearance has at least a subconscious affect on the selection committee. The Director of the P.T. program reported the department is not looking for anyone involved in athletics or who appears physically fit, however the leadership roles that can be acquired during athletics may be of benefit to the student.

The participants were accurate in other areas of admission recommendations. The majority of interviewees believed that participating in research and Student Scholarship Day would be an advantage in the selection process. The participants were accurate with their beliefs. A student who has exposure to research could have an advantage, however how much this would be an advantage is confidential.

All respondents reported that good communication skills are an important part of succeeding in the selection process. Communication skills are very important in the P.T. admission process. Verbal communication skills are made evident during the interview

process where a student must prove he or she is an effective communicator. The participants also believed written communication skills played a role in a student's success. Many of the participants reported written skills were important in order to fill out the application materials. A portion of the participants showed knowledge of the P.T. selection process by stating the student would have to complete an on-site essay during the admission process.

The interviewees had mixed responses about the advantage students who have overcome physical, emotional, or academic challenges or barriers may have in the P.T. admission process. Some of the interviewees felt students with certain emotional or academic challenges may not be appropriate for a career in P.T., and therefore the student would be at a disadvantage. Two of the interviewees thought that students with certain physical challenges might have a benefit in the selection process. Three others thought that students with physical challenges should not have an advantage or disadvantage. The two interviewers who thought the student might have an advantage were inaccurate according to the information obtained by the researchers, which indicated a student would not be at an advantage by overcoming challenges or barriers. However, certain intrinsic qualities, such as inner strength, could have developed from the process of overcoming a challenge or barrier. The ability to express these qualities could enhance the interview.

The third category was advising issues. This category discussed the participants' sources of information and the participants' advisement of pre-P.T. students regarding undergraduate major and career choice. The advisors reported utilizing the P.T. department and the university catalog as a source to advise pre-P.T. students. Five out

six reported sending pre-P.T. students to the P.T. Department for additional information about the P.T. program requirements, however, some of the participants stated they would appreciate more communication from the P.T. department regarding changes in requirements for admission into the P.T. program. The interviewees also reported using the university catalog to obtain current and correct information regarding the admission requirements.

The interviewees thought that second time applicants would have an advantage in the selection process. They felt a second application demonstrated perseverance, and this was a positive quality, however, the majority of the interviewees thought a third applicant would be at a disadvantage in the selection process. They attached negative qualities to a third application. Only one respondent thought the admission system was weighted to benefit second and third-time applicants. Second and third-time applicants actually have no advantage in the selection process besides the fact that the student may be more familiar and comfortable with the process.

The interviewees were asked the most appropriate undergraduate majors for a pre-P.T. student. They were correct when stating biomedical sciences and health sciences as the most appropriate majors. These two majors and also biology and biopsychology are suggested majors for pre-P.T. students. Some participants would advise a student who is undecided about pursuing a career in physical therapy to choose a more "traditional" major, such as biology. They believed a more traditional degree may have more career options for the student. The participants also discussed the importance of having a plan "B." The advisors felt they played an important role in making the student aware of having a plan "B," and they played a role in advising students about career choice.

The researchers found the accurate group of survey respondents and the inaccurate group to be similar in their interview responses. One group was not more accurate than the other group in the interview, and there was not a significant difference in the information obtained from each group. The researchers expected the accurate interview group to have more correct or accurate answers than the inaccurate interview group. We feel the two groups may have been similar for many reasons. The knowledge these advisors had may not have been accurately reflected by their responses on the survey. The advisors were urged to give a response and elaborate during the interview process, whereas the survey allowed the participant to give a "N/A" response if he or she was not sure of the answer. The participants may have had time to "study" prior to the interview since many of the answers could be found in the university catalog. Finally, we feel the interview questions may have been clearer than the survey questions, therefore more accurate information was received.

This study suggests that the findings of Randolph and Wieber (1997) may be accurate, and undergraduate advisors are not utilized by their assigned advisees. This previous study found that pre-P.T. students underutilized academic advisors. The advisors interviewed in our research were asked to estimate the number of advisees assigned to them and to also estimate the number who actually utilized them for advising. All advisors estimated that less than 50 percent of their assigned advisees come to them for advising. Two of the six participants estimated less than 30 percent of their advisees come to them for advising. Because of the scope of this study, the advisors were not asked to discuss their thoughts and perceptions on the utilization of advisors by the undergraduate students.

Habley (1988) identified eight goals for academic advising programs. These goals can be easily transferred to academic advisors. Most of the goals that Habley described were being addressed by one or more of the advisors at G.V.S.U. that were interviewed.

The first goal that the interviewees addressed was helping students to understand their abilities, interests, and limitations. Many of the interviewees discussed how they advised students by asking the student about his or her interests. They asked this in order to lead the student to choose the best major for him or her. The interviewees also reported they discussed with the student his or her abilities and limitations in regards to certain areas such as science and chemistry.

The second goal the researchers identified as being addressed by the participants was assisting the student in finding alternative courses of action, an alternate career, and selection of college courses. The advisors would mention alternate career options to the student including physical therapist assistant, exercise physiology, and others.

Interviewee #2 said, "I advised a student all the way through school who was totally devoted to P.T. But we also spent a lot of time talking about Exercise Physiology.

Towards the end, going through the P.T. application process, graduate programs in Exercise Physiology came up, and she ended up getting a Ph.D. and never even got into P.T. I consider this a success because we kept the options open and she went in the appropriate direction."

The advisors mentioned guiding students toward appropriate courses to take. Interviewee #1 stated, "[I felt that there was an advising success when I helped by] guiding them into the right courses so they completed the pre-PT program in the smallest amount of time."

The researchers found evidence that the advisors were also assisting students in developing decision-making skills. One advisor guided students when they were freshman and sophomores more intensely than when they became juniors and seniors. Those students were expected to do more for themselves regarding course selection as they advanced in school. In a sense, the advisor attempted to wean the student from advising.

Another goal for advisors is providing accurate information about institutional programs. Advisors at G.V.S.U. that work with students applying to the P.T. program are asked to provide this type of information. The researchers found that the advisors who participated were fairly accurate in their answers to questions regarding the P.T. program.

Making referrals to other institutional or support services was clearly being utilized based on answers given by participants. Many of the advisors interviewed mentioned referring students to people who were more appropriate to answer questions that they were unsure of. For example, many students were referred to the physical therapy program faculty to ask specific questions regarding volunteering. One advisor referred a student to someone who could provide the student with a mock interview to practice for the admission interview.

Various levels of advising were also reported in the literature. Grites (1978) described four levels of advising, including the primary level, the professional level, the personal level, and the programmatic level. All four levels were identified as being performed by the participants of the study.

According to Grites (1978) faculty members should not be used for the most basic advising level which is called the primary level. This level involves such activities as

course selection and graduation requirements. The advisors that were interviewed did participate in this type of advising, but more often, the primary level was used for freshman and sophomores or for people who recently changed majors.

Advising at the professional level was most highly utilized among the participants of the study. This type of advising includes helping with selection of graduate schools, the choice of electives, the choice of major, and career development (Grites, 1978). The participants discussed their role in helping students to choose a major. The advisors are also playing a big role in explaining the options for graduate school, specifically the physical therapy program at G.V.S.U.

Personal advising is the next level of advising reported by Grites (1978).

According to Grites, faculty advisors are not qualified to perform personal advising and should refer students to a counselor if further intervention is needed. Advisors that were interviewed by the researchers reported listening to students when they were nervous or scared, but there was no mention of giving advice to these students.

Programmatic advising is the last level of advising included by Grites (1978). This includes advising students to participate in co-curricular activities. One of our participants mentioned being involved in this type of advising. This person advised students to be involved in a program called Excellence in Student Leadership, which would train the student in leadership skills.

Suggestions/Recommendations

The authors conclude that the following recommendations would be beneficial directly or indirectly to pre-P.T. students, academic advisors, and the P.T. Department at G.V.S.U.

The study demonstrates that academic advisors feel there is little, if any communication from the P.T. Department. The study also shows that the academic advisors had some misunderstandings about the P.T. selection process. The authors recommend that the P.T. Department send out a yearly memo. The memo would contain updated information on required courses, criteria valued in the selection process, changes in the P.T. staff, sources to discover more information about the field, locations/sites for observational hours and other information valuable to advising pre-P.T. student. The P.T. Department can empower the academic advisors with more accurate and current knowledge of the selection process and also the job description for physical therapy. This information would allow advisors to better advise students.

An alternative plan to improve the advising of students would be a walk-in "pre-P.T. advising station." The advising station would be a resource for the P.T. Department and the academic advisors to send all pre-P.T. students. The advising station would be responsible for relaying to students all information related to the P.T. Program. The advisors for the station, which may include trained secretarial staff or students in the P.T. program, could set-up seminars for interested students and have walk-in hours for advising. The academic advisors would not be replaced, but since they are advising for a career that they have little or no experience in, it may be unfair to expect them to advise students about P.T. The advisors would still be responsible for advising students in their chosen major but in regards to P.T. the students would be sent to the "advising station". This would relieve advisors and the P.T. faculty of this task.

Finally, the researchers would like to recommend to the P.T. Department that the information contained in the university documents be expanded to include all the criteria

used to evaluate students during the selection process. The evidence presented in this study and the previous study by Randolph and Wieber (1997) indicate that there is still misinformation about the selection process. Expanding the information in the course catalog would be an easy solution to this problem and would decrease confusion among pre-P.T. students and increase the accuracy of academic advising.

Limitations

This study applied only to Grand Valley State University's P.T. program. Each institution has its own admission process and academic advising system. There are variations in admission and advisory methods and the students attending other schools also vary. For these reasons, our study was not generalizable to other universities and colleges. Our focus was on the P.T. program at G.V.S.U. and was not intended to represent other professional programs at G.V.S.U.

The respondents in our study may not be representative of all advisors at G.V.S.U. This study only included advisors from the biomedical and health sciences, biology, biopsychology, A.R.C., and O.A.S. who are involved in the advising of pre-P.T. students. The limitation of subjects to these groups of advisors may have left out other advisors at G.V.S.U. who advise pre-P.T. students.

Although there was a relatively high return of surveys, our study was limited by the failure to discover the reason for non-returned surveys. The interview process was limited to six interviews. This was a limitation because themes and subthemes may have differed with a larger number of subjects interviewed. Except for one interviewee, the participants for the interview process were a fairly homogeneous group, in regards to having many years of advising experience. A larger group of interviewees may have

provided a variable group in relation to years of experience and the results may have differed.

Reviewing the transcription the researchers realized more consistent follow-up questions could have been addressed to the subjects. For example, the majority of subjects rated leadership qualities as low in importance during the selection process.

Initial subjects mentioned a P.T. must be more of a team player rather than a leader. The researchers could have probed the other subjects who rated leadership as low in importance to determine if they also perceived being a team player as important.

Due to time constraints, the researchers could not ask all pertinent questions about the admission process for the P.T. Program at G.V.S.U. Thus, the full scope of knowledge of the participants in certain areas regarding the P.T. admission requirements went undiscovered in this study.

Participants may have reviewed university documents in anticipation or in preparation for our interview questions. The interviews were usually scheduled at least a week in advance, and a memo was sent to remind the participant of the interview and give a general description of the information the researchers wanted to obtain. One interviewee expressed the temptation to prepare for our interview, and thus the authors realized other participants may have reviewed relevant sources.

A final limitation to this study is the confidential nature of the selection process for entry into G.V.S.U.'s physical therapy program. The exact percentages that some criteria count in the overall selection process is kept confidential by the P.T. department. Although the researchers know the criteria that are important in the P.T. admission process, we do not know the exact role these criteria play. The data collected in this

study can only be compared to the information obtained through university publications and information released by the P.T. Program Director.

Suggestions for Research/Modifications

Throughout the interview process of this study, the majority of the participants mentioned physical and/or mental qualities that a physical therapist should possess. The participants also mentioned the students they advise need to be aware of these qualities and aware of the responsibilities of the P.T. profession. We feel a study investigating and comparing the perceptions of the advisors of pre-P.T. students, of working physical therapists, and of the faculty of the P.T. program regarding important qualities necessary to be a physical therapist would be beneficial. The information gained from this type of study would be beneficial to the undergraduate advisors who are assisting students with choosing a career.

We also suggest further research into the academic and career advising experiences of students at G.V.S.U., especially students in the P.T. program. According to the data obtained in the interview process of this study, the undergraduate advisors feel they play a role in the student's decision-making process of choosing a career. A study to discover how and where a pre-P.T. student received information on careers and the factors affecting their career decision would be important. Discovering who or what plays an important role in this decision process would be beneficial to the proper advising of students.

The conclusions made by Randolph and Wieber (1997) and the information from this study suggest that students underutilize undergraduate advisors at G.V.S.U.

Research discovering students' reasons for underutilizing their advisors would be

beneficial to the advising system at G.V.S.U. Recommendations made by such a study may increase utilization of advisors and increase the effectiveness of the advising system at G.V.S.U.

A participant in the study with involvement in freshman orientation at G.V.S.U. has noticed a steady drop-off the last few years in students interested in physical therapy as a career. A study closely related to the previous one that was suggested would be to investigate the career choices freshman at G.V.S.U. are considering and also the factors influencing their career decision-making process. Discovering if this reported trend is accurate would be interesting along with discovering the reasons for the trend. A follow-up, one and two years later to assess additional factors that have influenced changes in career choice would also be beneficial.

Conclusion/Summary

Our study found that in general, the undergraduate advisors appear to be knowledgeable regarding the P.T. admission process. They are aware of the importance of communication skills, observational hours, participation by the pre-P.T. student in extracurricular activities, and the importance of appropriate authors for letters of recommendation. The advisors are also knowledgeable regarding the importance of G.P.A. and the interview process to a student's chances of succeeding in the selection process, but they showed inaccuracy in the weighting of G.P.A. and interview in the overall process.

The participants also appeared to be aware of their limitations in knowledge of the P.T. admission process. The majority of the advisors that were interviewed stated they would refer a student to outside sources like the P.T. department when necessary.

Through the survey, the researchers found the university catalog was the source where advisors obtained the majority of their information. The other main sources listed in the survey were not mentioned as a source of information during the interviews. The P.T. department was indicated as only a minimal source of information for the advisors in the survey portion of this study, however in the interview portion, the majority of the advisors reported they would refer the student to the P.T. department for additional information. The researchers concluded that the advisors may not personally be using the P.T. department as a major source of information, but the advisors feel the P.T. department is an excellent source of information for pre-P.T. students to utilize.

During the interview process, some of the participants stated they utilized the course catalog to update their information because any changes in requirements would be printed in the catalog. The majority of the participants also reported they did not receive communication regarding these changes from the P.T. department. The researchers conclude that the advisors would like more communication from the P.T. department although the advisors are aware that changes in requirements are placed in the university catalog.

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APPENDIX A

SURVEY COVER LETTER

October 5, 1998

Dear Academic Advisor,

We are three graduate students in the Physical Therapy (P.T.) program at Grand Valley State University (G.V.S.U.). We are requesting your assistance in completing our research project, which is a requirement of the graduate curriculum at G.V.S.U. We have elected to do a study into the academic advising of pre-physical therapy students at G.V.S.U. The project is a follow-up to a survey done in 1996 by G.V.S.U. Physical Therapy students Weiber and Randolph. They surveyed the pre-P.T. student's knowledge of the P.T. program requirements for admission at G.V.S.U. Weiber and Randolph recommended a continuation of their study that would assess the academic advisor's knowledge of the P.T. program admission requirements. We believe research in this area may benefit the P.T. program at G.V.S.U. as well as other programs.

Please complete our enclosed survey, which should take you about 15 minutes. You have been selected to receive this survey because we believe you may be advising pre-P.T. students. Your responses are vital to the completion of our project. You may respond as elaborately as you wish. We consider all information you provide as confidential, and all respondents shall remain anonymous in our written report. By completing the survey and returning it to us, you are providing consent to use the information in our research project.

We also ask that you consider an interview with us. The interview is an opportunity for us to gain additional information for the project that is difficult to obtain through a survey. We would greatly appreciate your assistance in this area of our research. The final results of our project will be shared with you, the faculty, and the department chairs.

Please complete and return the survey by October 23, 1998. If you have any questions, please contact us at one of the addresses below or call Joel at (616) 447-0395; Laura at (616) 559-0191; or Karen Ozga, committee chair, at (616) 895-2679. If you have any questions regarding your rights as subjects, please call Paul Huizenga at the Human Subject Research Review Board of G.V.S.U. at (616) 895-2472.

Thank you for your time.

Laura Irrer Joel Vander Wall Elizabeth Knight

3818 Yorkland Dr. NW #10 1528 Apartment E

Comstock Park, MI 49321 Hidden Creek Circle Dr.

Grand Rapids, MI 49505

APPENDIX B

SURVEY

SURVEY OF ADVISORS' KNOWLEDGE REGARDING REQUIREMENTS FOR ADMISSION TO THE PHYSICAL THERAPY PROGRAM

Please answer all questions to the best of your knowledge.

If you do not know any information pertaining to a question, please write "N/A".

If you do not understand what a question is asking, please indicate in the space provided under the question.

Feel free to elaborate any of your answers.

Thank you for your participation.

1.	Department				
2.	2. May we interview you at a later date? YES NO				
	(If you answered yes, please answer #3-5. If no, you may skip to #6.)				
3.	Name				
4.	Campus Phone Number ()				
6.	Best time to contact you Have you ever been an interviewer in the Physical Therapy (P.T.) admission process Yes No				
7.	What do you consider a competitive grade point average (G.P.A.) a student should obtain for admission into the P.T. program?				
8.	What percentage does G.P.A. count in the overall application for the P.T. program?				
9.	What is the minimum number of volunteer hours required, prior to applying for the P.T. program?				
10	. What percentage does the interview count in the overall application for the P.T. program?				
11	. What types of extra-curricular activities, if any, increase a student's chances for admission into the P.T. program?				

12.	Who is qualified to write a student's let P.T. program?	ter of recommendation for admission into the			
13.	Is there anything that has not been addrewill enhance a student's chances for address of the student's chances for a student's chances fo	essed in the above questions that you believe mission?			
	4. Please indicate the sources from which you have received information regarding admission into the P.T. program. Use the scale on the right to indicate how much information you have obtained from each source:				
	P.T. department/faculty brochures/course catalog University admissions personnel other advisors/faculty Chairperson from your department pre-P.T. students students in the P.T. program	0 = source not used 1 = minimal amount of information obtained 2 = fair amount of information obtained 3 = major source of information			
15.	How confident are you regarding the ac (Please check the appropriate statement				
	<pre>very confident somewhat confident somewhat unconfident very unconfident</pre>				
	ase return the completed survey in the set the campus mail system.	If-addressed envelope by October 23, 1998			
Tha	nk you for your participation!!				

APPENDIX C

REMINDER LETTER

Hi

We hope the Fall Semester of 1998 is going well for you. This note is to remind you of a survey regarding advisor's knowledge of the P.T. admission process that you should have received last week. If you have completed the survey and returned it to us via intercampus mail, we would like to extend our sincere thanks. Your participation in our research project is crucial to our learning experience and to our graduation from G.V.S.U.

If this survey has slipped your mind or gotten lost, not to worry—you still have time to participate. Please help us out by taking the time to complete the survey and return it to us by October 23, 1998. If the survey cannot be located and you want to participate, please contact Joel at (616) 447-0395 or Karen Ozga, committee chair, at (616) 895-2679. We will gladly send you another survey.

Thank you for your time and enjoy the rest of the fall semester.

Sincerely,

Laura Irrer Joel Vander Wall Elizabeth Knight

APPENDIX D

INTERVIEW CONSENT FORM

I understand that this is a study investigating the academic advisor's knowledge of requirements for admission to the physical therapy program at Grand Valley State University (GVSU). I understand that the information gained through this study will be made available to the faculty at GVSU to aid in the advising of pre-physical therapy students.

I also understand that:

- 1. participation in this study will involve an interview of 30 minutes regarding my knowledge of the requirements for admission to the physical therapy program at GVSU.
- 2. I have been selected for participation because I currently advise students planning on apply for admission into the physical therapy program at GVSU.
- 3. it is not anticipated that this study will lead to physical or emotional risk to myself.
- 4. the information I provide will be kept strictly confidential and the data will be coded so that the identification of individual participants will not be possible.
- 5. a summary of the results will be made available upon my request.

I acknowledge that:

"I have been given an opportunity to ask questions regarding this research study, and that these questions have been answered to my satisfaction."

"In giving my consent, I understand that my participation in this study is voluntary and that I may withdraw at any time."

"The investigators, Laura Irrer, Elizabeth Knight and Joel Vander Wall, have my permission to use my responses in research."

"I hereby authorize the investigators to release the information obtained in this study to the PT program at GVSU and academic literature. I understand that I will not be identified by name."

"I have been given the investigator's phone numbers so that I may contact them if I have any questions or concerns. Laura, (616) 559-0191; Elizabeth, (616) 735-1710; Joel, (616) 447-0395; & Karen Ozga, committee chair, (616) 895-2679. I may also contact Paul Huizenga at the Human Subject Research Review Board of G.V.S.U. at (616) 895-2472 with any concerns regarding my rights as a subject.

agree to participate in this study."					
(Witness)	(Date)	(Participant Signature)	(Date)		
I am interested in	receiving a summary o	of the results.			

APPENDIX E

INTERVIEW QUESTIONS

Demographic Questions:

- 1. How many years have you been an advisor at G.V.S.U.?
- 2. How many students do you have as advisees?
- 3. Approximately how many of these students actually come to you for advising?
- 4. What percentage of the students you advise want to pursue a career in PT?

Category: Personal Characteristics

- 1. Many of the advisors who completed our survey felt good communication skills were an important aspect of succeeding in the PT admission process. Do you agree with this and why or why not?
- 2. Please give us your reaction to this statement. Written communication is not an important aspect of the PT admission process.
- 3. On a scale of 1 to 5 (with 1 being the lowest and 5 being the highest amount), rate the importance of a student participating in leadership roles as preparation for the PT application process. (Why?)
- 4. Give us your reaction to this statement. "A person who is applying the third time will be looked upon more favorably in the admission process than a person applying for the first time."
- 5. Suppose an applicant has faced certain challenges/barriers, such as physical, emotional, or academic, would he or she have an advantage in the PT admission process?

Category: Other Activities

- 1. On a scale of 1 to 5 (with 1 being the lowest and 5 being the highest amount), rate the importance of being employed as a PT tech./aide to a pre-PT student's chances of succeeding in the admission process. (Why?)
- 2. Please rate which of the following is more important to a pre-PT student's chances of succeeding in the admission process and give us your rationale: being employed as a nursing aide or being employed in a non-related field.
- 3. On a scale of 1 to 5 (with 1 being the lowest and 5 being the highest amount), rate the importance of volunteer or observational experience to a pre-PT student's chances of succeeding in the admission process. (Why?)

- 4. On a scale of 1 to 5 (with 1 being the lowest and 5 being the highest amount), rate the importance of being involved in student government to a pre-PT student's chances of succeeding in the admission process. (Why?)
- 5. Give us your reaction to this statement. "An applicant who participates in collegiate athletics or who appears physically fit will be more successful/have an advantage in the PT selection process."

Category: Requirements

- 1. Give us your reaction to this statement. "The PT dept. makes sure that new policies and changes of required courses for the PT program are shared with undergraduate advisors."
- 2. A pre-PT student comes to you regarding advising for the PT admission process. He or she wants information on volunteer or observational hours in the PT field. How would you advise this student?
- 3. We would like you to finish the following statement. The benefit of performing additional volunteer hours beyond the minimum requirement of 50 hours is ______
- 4. Two letters of recommendations are needed for admission into the PT program. One letter is required from a licensed PT. For the 2nd letter, who is the best author? Who is the worst author?

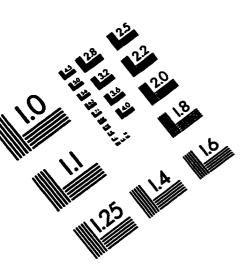
Category: Academic Achievement

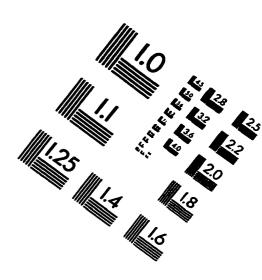
- 1. Please give your reaction to this statement. "A person who applies to the PT program with a 3.0 grade point average will not be considered for an interview."
- 2. We would like you to finish the following statement. The single most important element in the selection process is ______.
- 3. (Optional) Which do you believe is more important in the PT program selection process: the interview process or the student's grade point average? Please give your rationale for this ranking.
- 4. (Optional) Please give your reaction to this statement. "The interview is the single most important element in the selection process."
- 5. A pre-PT student comes to you with questions regarding performing research as a measure to benefit his or her application. What do you tell students in regards to how the role of research affects the application process?
- 6. Give us your reaction to this statement. "A pre-PT student who participates in or presents at student scholarship day will have an advantage in the selection process."

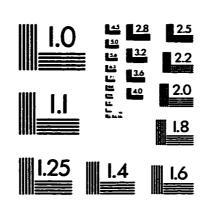
Category: Sources of Information

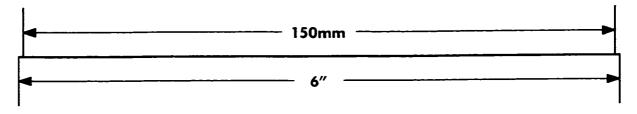
- 1. Tell us of a time when you felt you were successful with the advising of a pre-PT student. What made this time different?
- 2. What is the best source of information for advising pre-PT students? What is the worst source of information for advising pre-PT students?
- 3. What are the most appropriate majors for a pre-PT student?
- 4. A pre-PT student comes to you with questions regarding choosing an appropriate major. What kinds of information would you want from this student? How could or would you help the student in this decision process?

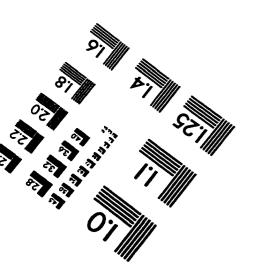
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