

AN ABSTRACT OF THE THESIS OF

Lisa M. Bingham for the degree of Master of Science in College Student Services Administration presented on May 1, 2000. Title: Congruence Between Student and Adviser Perceptions of Academic Advising.

Redacted for Privacy

Abstract Approved: _____

David C. Kovac

The purpose of this study was to assess the congruence of perceptions of academic advising between students and advisers.

Seventeen tasks involved in developmental academic advising were identified from a review of current academic advising literature. These criteria became the basis of a questionnaire that asked students whether their adviser fulfilled each task, and whether they were satisfied or dissatisfied overall with advisers.

The same seventeen criteria were listed on a questionnaire distributed to academic advisers. Advisers were asked the degree to which they perceived students desired each advising task.

Adviser and student perceptions were congruent on the majority of advising criteria, but three significant differences arose. Students reported wanting: a) more help setting goals than advisers perceived, b) encouragement in risk taking through different classes and involvement, and c) help with time management and study skills. Academic advisers rated these tasks significantly less important than did students.

Abstract, Continued

Other key discrepancies were between students' indications of academic advising tasks desired and advising tasks received. Help with goal setting again arose as a task desired but with which students did not receive assistance.

Students also reported some tasks lacking that advisers rated as very important. Most advisers considered helping students with decision making to be important. Many students indicated that they are not receiving assistance in this area. Most advisers recognized the importance of remembering students' names. Students agreed that these tasks were important, yet many indicated dissatisfaction with both criteria.

Students are looking to advisers as information sources pertaining to more than their field of study. They want advisers to be familiar with campus resources and different educational options; they also expressed significant dissatisfaction with these tasks, whether satisfied or dissatisfied overall with their advisers.

Prevalent factors inhibiting academic advisers from performing desired tasks were lack of time, heavy workload, and overwhelming numbers of advisees. These may explain students' dissatisfaction with noted advising criteria.

Advisers recognize most student desires, but are too overwhelmed to fulfill advising tasks. Training, communication, and an increased value and recognition of academic advising as a key retention tool are important means of approaching and accomplishing effective advising services.

Congruence Between Student and Adviser Perceptions of Academic Advising

by

Lisa M. Bingham

A THESIS

submitted to

Oregon State University

In partial fulfillment of
the requirements for the
degree of

Master of Science

Presented May 1, 2000
Commencement June 2000

Master of Science thesis of Lisa M. Bingham presented on May 1, 2000

APPROVED:

Redacted for Privacy

Major professor, representing College Student Services Administration

Redacted for Privacy

Chair of College Student Services Administration Program

Redacted for Privacy

Dean of Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

Redacted for Privacy

 Lisa M. Bingham, Author

TABLE OF CONTENTS

	<u>Page</u>
Chapter 1—Introduction.....	1
Statement of the Problem.....	1
History of Academic Advising.....	1
Importance of the Study.....	3
Research Question.....	6
Definition of Terms.....	6
Chapter 2 – Review of the Literature.....	7
Introduction.....	7
Developmental Academic Advising.....	8
Provide Information.....	10
Monitor & Evaluate Progress.....	11
Foster a Relationship.....	12
Listen.....	13
Teach.....	13
Be Available and Approachable.....	15
Holland’s Theory.....	16
Realistic Type.....	18
Investigative Type.....	19
Artistic Type.....	19
Social Type.....	19
Enterprising Type.....	20
Conventional Type.....	20
Consistency and Differentiation.....	21
Congruence.....	22
Subsequent Research.....	23
Summary.....	29

Table of Contents, Continued

Chapter 3 – Methodology.....	30
Introduction.....	30
Considerations of Method.....	31
The Problem.....	31
Purposes of the Study.....	32
Assessment Approach.....	32
The Population.....	33
Instruments.....	34
Pilot Study.....	35
Procedures.....	36
Student Academic Advising Assessment.....	36
Academic Advising Assessment.....	37
Sample.....	38
Methods of Analysis.....	40
Chapter 4—Results and Discussion.....	41
Introduction.....	41
Academic Advising Services Desired.....	41
Services Received.....	45
Satisfied and Dissatisfied Students.....	47
Adviser Perceptions.....	50
Significant Discrepancies in Student/Adviser Responses.....	53
Inhibiting Factors.....	58

Table of Contents, Continued

Demographic Findings.....	62
Academic Advisers.....	62
Students.....	63
Summary.....	64
Chapter 5—Conclusions, Implications, and Recommendations.....	66
Summary.....	66
Conclusions.....	67
Implications.....	68
Training.....	69
Communication.....	69
Mattering.....	70
Recommendations for Future Study.....	71
Bibliography.....	74
Appendices.....	79
Appendix A Student Academic Advising Assessment.....	80
Appendix B Academic Advising Assessment.....	82
Appendix C Cover Letters.....	84
Appendix D Class Rank and Advising Perceptions.....	86
Appendix E Student Satisfaction vs. Student Desires.....	90
Appendix F Student Satisfaction and Tasks Fulfilled.....	94
Appendix G Adviser Responses to Criteria.....	97
Appendix H Adviser vs. Student Responses.....	100
Appendix I Full-time vs. Non Full-time Advisers.....	104
Appendix J Self Perceived Typologies and Perceptions.....	108
Appendix K Differences in Perceptions According to Major.....	112
Appendix L Differences in Perceptions of Minority Students.....	117
Appendix M Student Responses to Criteria.....	121

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Class Standing of Student Respondents.....	39
2. Academic Major of Respondents by College In Descending Order of Frequency.....	39
3. Rank Order of Student Answers to Advising Criteria-Mean, Standard Error of Measurement, Standard Deviation....	42
4. Advising Services Desired Compared with Services Received, as Reported by Student Respondents.....	46
5. Dissatisfied Students (N=61) Top Advising Tasks Desired Compared to Reception of Task (Percentage of N).....	48
6. Advising Criteria with a Mean Between 4.0 and 4.32 and Significant Dissatisfaction Rates by Percent (Dissatisfied Students)....	49
7. Advising Criteria with Less Than 70% Satisfaction Among Satisfied Students and More Than 4.0 Mean.....	50
8. Comparison of Ranking of Criteria by Students and Advisers.....	52
9. Most Significant Discrepancies Between Student and Advisers Responses.....	54
10. Academic Adviser-Identified Factors Inhibiting Adviser Ability to Fulfill Tasks.....	59

Congruence Between Student and Adviser Perceptions of Academic Advising

Chapter 1 -- Introduction

Statement of the Problem

The purpose of this study was to investigate the congruence of attributes and priorities of academic advisers with the needs of advisees. The goal was to determine whether the perceptions of academic advisers regarding student needs are consistent with students' expressed desires/needs, and whether advisers possess characteristics associated with the provision of developmental advising services. Previous studies (Crockett, 1982; Carstensen & Silberhorn, 1979, Crockett & Levitz, 1984) have assessed students' and administrators perceptions of advising, but none have addressed the self-perceptions or personality make-up of academic advisers themselves. The instruments used in this study were a student survey created from a review of current literature on effective academic advising, as well as an assessment of advisers' self-perceptions regarding their priorities and vocational personalities based on the theories of John L. Holland.

History of Academic Advising

Academic advising has existed since higher learning was established, and has evolved and grown in significance. The seventeenth century saw the dawn of American higher education as colonial-era colleges arose. These institutions were similar to one another in curricular and social makeup: all attendees were upper

class white males and they all received the same broad education in the arts, sciences, and literature. Students all lived in dormitories on campus, and the faculty lived with them. Faculty members were not only instructors; they were mentors, advisers, and examples to the students with whom they resided (Goetz, 1996; Brubacher & Rudy, 1997; Ender, Winston, & Miller, 1982).

Several factors led to vast changes in the original system of American Colleges and Universities. German influence, with its subsequent focus on research, initiated an evolution of the role of faculty. The introduction of the elective system led to the differentiation between majors. With the latter factor, higher education became a veritable jungle to be negotiated, and the importance of effective advising increased significantly. As faculty were forced to focus on research in order to maintain their positions as instructors, the focus on assisting students through the curriculum was all but lost (Goetz, 1996; Levine, 1978; Brubacher & Rudy, 1997; Ender, Winston, & Miller, 1982).

Another important component in the development and history of advising was the industrial revolution and the consequent need to educate a significantly larger and more diverse population (Ender, Winston, & Miller, 1982; Goetz, 1996; Habley, 1984). Different needs and issues arose outside as well as inside the college classroom as a result of these new factors.

Now on the brink of the twenty-first century, faculty still carry the bulk of advising responsibilities in public research institutions across America. However, their capabilities in this area are often deficient due to a lack of time, knowledge,

and motivation to guide today's student through his or her education (Crockett & Levitz, 1984; Ender, Winston, & Miller, 1982; Goldenberg & Permuth, 1995).

In 1984, Crockett and Levitz reported that only 64 percent of institutions were including academic advising as a "condition of employment" for faculty. They further reported that "Only a limited number of institutions (11 percent) are employing any type of selection process in determining those faculty members qualified to advise. Such a system most likely results in the use of some advisers with little interest or skill...In approximately one half the institutions, more than 75 percent of the faculty have major undergraduate advising responsibilities" (p. 46).

Regardless of the fact that academic advising has been identified as a key factor in student success and retention (Crockett & Levitz, 1984; Winston, 1996; Greenwood, 1984), faculty are still offered little or no incentives or training to successfully advise students through their entire education. In 1984, only 26 percent of institutions surveyed by Crockett & Levitz reported regularly scheduled academic advising inservice workshops on campus. Sixty-two percent reported having no formal system of recognition for quality academic advising.

Importance of the Study

A current study of academic advising is important because it will focus on the advising needs of today's student, as well as the ability of advisers to accommodate these needs. Roger B. Winston Jr. (1996) observes, "There is probably no student affairs division in the country that has sufficient counseling and academic advising

staff to address the plethora of student needs, wants, and legitimate expectations for assistance” (p.335).

Consider the following anecdotal information, gathered at Oregon State University (Individual Interviews, 1999):

- A. A student enters the office of the faculty member assigned to advise her. This is her second visit to this faculty member, the first having been less than two months prior. The faculty member has no file to remember the student’s first visit. He asks if this is her first visit to his office. The remainder of the visit proceeds as follows: The student hands the adviser her proposed schedule of classes; he asks, “Are these the classes you need to take?” She says she “thinks so,” the adviser signs the schedule, and excuses the student from his office.
- B. A faculty member is compelled to do extra advising during a freshman orientation program. He begins advising a student, and has to exit his office early in the session to consult with the receptionist. His question: Which of the classes listed in the Fall term schedule he is holding are offered in the Fall?
- C. A departmental chair describes how faculty intentionally advise students poorly in order to be rewarded with more time for research. The stronger incentives lie with being a poor adviser, and a good adviser is punished with a large onslaught of students seeking his/her time, thus compromising his/her tenure pursuit.

- D. Two tenure candidates in a large college on campus are denied tenure, regardless of the fact that they considered by students and support staff to be the most available and helpful academic advisers in the department.

At this same mid-sized, land grant research institution, a survey of recent alumni is taken every two years to inquire whether they are satisfied or dissatisfied with academic advising. In 1997, the last time the survey was distributed, 70 percent of graduates reported being satisfied with advising (they gave a 4 on a scale of 1-5). Twenty percent, however, marked the extreme opposite end of the scale, claiming to be extremely dissatisfied with advising (indicating a rating of 1 on the same scale). This seems like a reasonably good ratio of satisfied/dissatisfied students until one considers the following: This is acquired from a sample of students who actually graduated. In some academic colleges on the Oregon State University campus, the dissatisfaction rate—even of graduates—exceeded 30% in 1997 (Burns; personal interview; 1999).

Poor advising is named as the number one reason students drop out of their higher education pursuits (Winston, 1996; Greenwood, 1984). The aforementioned university has a graduation rate of 62 percent over the last six years (Burns, 1999). While the other 38 percent may not have dropped completely out of school, they have not continued their enrollment for some reason. No recent comprehensive knowledge exists of the perceptions or advising needs of currently enrolled students.

Research Question

Are perceptions of academic advising consistent among students and academic advisers regarding what services should be offered, and do advisers possess certain innate capabilities to provide services students need?

Definition of Terms

Academic Advising: “An activity provided by colleges and universities to help students identify and develop suitable programs of study” (Goetz, 1996, p. 88).

Developmental Academic Advising: “Stimulates and supports students in their quest for an enriched quality of life...a systematic process based on a close student-adviser relationship intended to aid students in achieving educational and personal goals through utilization of the full range of institutional and community resources” (Ender, Winston, & Miller, 1982, p.8).

Holland hexagon model: “A hexagon model in which the distances between types are inversely proportional to the theoretical relationships between them” (Holland, 1973, p. 5).

Typologies (Personality types): “A model against which we can measure the real person...the product of a characteristic interaction between a variety of cultural and personal forces...a person’s interests and competencies create a particular personal disposition that leads him to think, perceive, and act in special ways”(Holland, 1973, p.2).

Chapter 2 – Review of the Literature

Introduction

Administrators of higher education have been aware for decades that academic advising is a key process in the success and retention of college students (Ender, Winston, & Miller, 1982; Garland, 1985; Greenwood, 1984; V. Gordon, 1992; Tarter & Miller, 1995). The research institution of today offers a vast variety of majors, as well as hundreds of options for general education courses to be considered. While the variety in higher education is exciting, it is also daunting for today's student to negotiate the academic jungle created by this variety. Policies abound of which the student must be aware, and an awareness of one's progress is sometimes difficult to maintain. This is not to mention the difficulty of choosing amongst these various options of learning. Yet despite awareness of the importance of academic advising, quality seems to be missing in many institutions. Poor academic advising has been cited as a leading reason students drop out of college (Astin 1975; Garland, 1985). Ender, Winston and Miller stated in 1982 that advising was "piecemeal, haphazard, and perfunctory," and that "...many, if not most, advising programs are not working, and are highlighted by student dissatisfaction."(p. 10).

Many reasons have been identified for poor advising; poor training and lack of incentives are commonly discussed (Ender, Winston, & Miller, 1982; Crockett, 1982; Brown & Sanstead, 1982; Greenwood, 1984). There seems to be a role conflict in many universities regarding who is responsible for advising (Ender,

Winston, & Miller, 1982; Crockett, 1982). As officials continue to examine the reasons behind poor advising, many students continue to receive little or no guidance—or worse, incorrect information—as they strive to advance their education. It has been mentioned that student retention is affected by academic advising, but as Brown and Sanstead (1982) express, measuring the effectiveness of an advising program based solely upon student success and retention is like measuring the happiness of a marriage based on the number of years together and the number of children produced. There are several other relevant factors in either situation. The effective way to rate academic advising is to ask the consumer; in this case, the student.

This brings our question to the forefront: Are perceptions of academic advising consistent among advisers and students regarding what should be offered, and do advisers possess the innate capabilities to provide services students need? In order to assess these factors, a variety of information must be gathered.

1. Current literature must be examined.
2. Common characteristics of “good” developmental academic advising must be identified.
3. An assessment tool must be administered utilizing perspectives from current authorities that work in the field of academic advising.

Developmental Academic Advising

In discussing developmental academic advising, a working definition of the term should be adopted; this is included in the “Definitions” section of this text.

Further literature supports this definition: “Ideally, academic advisement focuses attention upon the totality of students’ interaction with the higher education enterprise, not simply upon their course of study” (Miller & McAffrey, 1982, p. 19). “Teaching and proper guidance go hand in hand. For one to be effective, the other must be operative” (Gordon, 1963, p. 39). “...assist with environmental obstacles that may cause them to leave college” (Astin, 1975, p.153).

“Developmental advising both stimulates and supports students in their quest for an enriched quality of life; it is a systematic process based on a close student-advisor relationship intended to aid students in achieving educational and personal goals through the utilization of the full range of institutional and community resources” (Ender, Winston, & Miller, 1982, p. 8).

There is agreement that advising systems must be tailored according to feedback from students at each individual institution (Ender, Winston, & Miller, 1982; Crockett & Levitz, 1984). Several common characteristics of an effective adviser have been discussed. By studying the ideas of several authorities on advising, a composite description of the ideal developmental academic adviser may be created. Six prevalent characteristics emerge. These six responsibilities are identified and further discussed below.

The six general criteria of academic advising are as follows:

- Provide Information
- Assess Progress
- Teach

- Foster a Relationship
- Listen
- Be Available and Approachable

Provide Information

An adviser is often one of few faculty/staff members with whom a student has an opportunity to meet with one-on-one (Ender, Winston, & Miller, 1982; Kuh, 1997). Providing accurate information is key to the adviser assisting the student. A vital body of knowledge that an adviser should be able to transfer to the student is academic information, which may include: credit requirements for graduation, course offerings that progress a student toward graduation, general education requirements which might best benefit the student, and more.

Institutional regulations and procedures must also be passed on to the student as issues arise, such as: dropping or adding of courses, withdrawals, late registration, and application for graduation. Some policies are idiosyncratic across colleges. For instance, many majors require that certain general education courses be taken as part of the major requirements, while some require that no courses within the major be taken as general education. It is the adviser's job to possess current knowledge of all such policies and inform the student (Crockett & Levitz, 1984; Ender, Winston, & Miller, 1982; Kitchen 1995; Goetz, 1996).

An adviser should also be familiar with and be able to provide the student with educational options such as various fields of study, along with information about the student's alternatives. (Ender, Winston, & Miller, 1982). Astin (1975)

notes that advisers are also integral in assisting transfer students with “inherent problems” often associated with this process.

Providing information may also involve referring the student to a number of valuable campus resources, such as career counseling, psychological services (if available), cultural centers, financial aid, tutoring facilities, student involvement opportunities, and many other campus resources that are key to developing the “whole student” (Astin, 1975; Crockett & Levitz, 1984; Ender, Winston, & Miller, 1982; Habley, 1984).

The above aspects of information distribution cannot be possible unless the adviser has an ongoing commitment to maintain current knowledge regarding resources, policies, and educational options. Much of the information referenced is fluid; offices may change titles and locations, academic policies are ever changing, and programs offered sometimes vary from year to year. Without training and regular maintenance, an adviser will not be able to fulfill the Providing Information aspect of their job (Ender, Winston, & Miller, 1982; Crockett & Levitz, 1984).

Monitor & Evaluate Progress

One integral part of the advising process is the maintenance of academic records and progress, as well as the communication of this information to the student (Ender, Winston, & Miller, 1982; Kuh, 1997). Many advisers spend the bulk of their appointments discussing a student’s progress, as it is a key piece of information to provide (Crockett & Levitz, 1984).

While assessing a student's academic progress is a part of providing information, it may be a more complex function. Advisers often have the autonomy to evaluate transfer classes for institutional credit, as well as approving substitutions in other graduation requirements (Ender, Winston, & Miller, 1982). Intimate knowledge of the curriculum is a must in order to fulfill this duty. Like other academic information, requirements vary and change with each passing year: a requirement that applied to a 1997 freshman may not apply to a 1999 freshman. Regular evaluation of progress is especially important in cases such as athletic eligibility and financial aid requirements of satisfactory academic progress. However, it is important for every student to know they are on the right academic track.

Foster a Relationship

College students have indicated a desire for a personal relationship with their adviser (Crockett, 1982; Levine & Cureton, 1998). Ender, Winston, & Miller (1982) posit that one main advising responsibility is to become a caring, supportive mentor and role model. Gordon (1992; Butler, 1995) states that one role of an adviser is to help the student with their personal and social concerns. In encouraging faculty and staff to spend more time "socializing" with students, Greenwood (1984) observes that "it is apparent that the quality of students' experiences with faculty and staff has a positive influence on both academic achievement and general intellectual growth and competence" (p. 66).

Listen

Ender, Winston, & Miller (1982) also say that an advisor should “listen, watch, feel, inquire, respect”(p.12). They encourage the adviser to communicate to the student an interest beyond their coursework. In responding to Gordon’s (1992) admonition to assist students with personal and social concerns, the key is to listen first in order to clarify what these concerns are. Gordon (1984) also notes that: “While students must be responsible for making the decisions, advisors can provide a great deal of support...and act as a sounding board for any decisions the students make” (p. 138). Astin (1975) says advisers should “be alert to certain patterns of behavior strongly related to attrition” (p.153). This may be achieved by asking how a student is feeling, then listening closely to responses.

Teach

The teaching aspect of developmental academic advising has the greatest support from current advisers, and is most widely discussed in terms of a variety of applications. Teaching is an entirely different function than providing information, as will be illustrated. Gordon states that “instructors teach content, but advisers need to teach a process” (p. 31).

While communicating academic policy is a part of providing information, a teaching component of this task involves helping students to understand the basis for policy, and discussing how it applies to each of them individually (Gordon, 1992; Goldenberg & Permuth, 1995).

Miller & McAffrey (1982; Thomas & Chickering, 1984) suggest that advisers, in addition to possessing a base of knowledge about student development theory, strive to make students aware of their developmental stages as they experience them. They also discuss helping students with their ethical development, and clarification of their values. Further, Miller and McAffrey suggest providing enough support for students to feel safe taking risks through classes, social situations, and activities that are new to them (Goetz, 1996; Greenwood, 1984; Kuh, 1997). Teaching is also involved when assisting students in making decisions, exploring and clarifying values, and developing problem solving skills (Gordon, 1992; Ender, Winston, & Miller, 1984; Thomas & Chickering, 1984). “If advisers wish to assist students in moving to a more advanced position, they should resist the temptation to provide students with a quick and easy answer”(Miller & McAffrey, 1982, p. 29).

A major teaching role that an adviser may fulfill is that of a role model, “willing to disclose their values, beliefs, successes, and failures and show by personal example how to cope with major life decisions” (Miller & McAffrey, 1982, p. 24). Ender, Winston and Miller say that, especially with faculty advisers, “their ability to be role models for students is paramount to the success of the developmental advising process” (1982, p. 11).

While many campuses have career centers to assist students in making choices, the academic adviser is usually the first point of contact when a student has a question related to careers. Career centers are valuable resources; however,

an adviser may (and should) have special knowledge about the particular field in which they advise, and should be prepared to share that knowledge with students in helping them make decisions about career paths to pursue (Greenwood, 1984; Gordon, 1992).

Some authorities describe the importance of helping students in the goal setting process (Gordon, Miller & McAffery, 1982; Ender, Winston, & Miller, 1982; Barr & Keating, 1985; Kitchen, 1995; Tarter & Miller, 1995). As part of this process, one could challenge students to identify and consider their own strengths and weaknesses. In their 1984 survey, Crockett and Levitz found that “advising programs are less successful in helping students to formulate life goals, increase self-understanding and self-acceptance, and develop decision-making skills” (p. 38). Study skills and time management are other issues that will arise in advising. An adviser should be prepared to educate the student to be effective in both areas (Ender, Winston, & Miller, 1982).

Be Available and Approachable

In student surveys, the most frequently cited characteristics of a good adviser were availability and accessibility (Crockett, 1982). Students expressed a desire to have a conversation with their adviser the same day they contacted them with questions, whether this was by telephone or in person (Gordon, 1992).

Holland's Theory

This study bases its discussion of academic advisers' innate character traits upon Holland's theory of vocational choice. This theory discusses personality types as they relate to vocational choice and behavior. It was originally developed by John L. Holland in 1959, and has since been the center of numerous studies. The following is a discussion of Holland's theory, and a review of subsequent research.

In reading the characteristics of the ideal developmental adviser, the question arises: are we addressing what an effective adviser must DO, or what an effective adviser must BE? Several aspects of advising are attainable through training, such as the provision of accurate and current information regarding academic policy. But is it possible that many advisers do not possess personalities consistent with the tasks they are asked to fulfill in this role?

Faculty members, for instance, account for a large percentage of advising, especially with students in advanced academic standing (Crockett & Levitz, 1984). A professor who is proficient in his/her field has spent a significant number of years gaining that proficiency. In the modern research institution, "Publish or perish" is the commonly proclaimed idiom. Academic achievement is prized. The possibility exists that individuals who choose this intellectual vocation may not possess tendencies toward the nurturing relationships proposed by Virginia Gordon and her colleagues.

John Holland built his theory upon his experiences as a vocational counselor in the 1940's and 50's (Evans, Forney, Guido-DiBrito, 1998; Holland 1966). Myers-Briggs personality type indicators had been developed over a decade prior, and Holland had studied and used various interest inventories, but few observations had been made (and none proven) that interests are directly correlated with personality types (Holland 1966). Holland's studies led to several observations that are pertinent to this study. His theory identifies six basic personality types that are consistent across personal, social, and vocational pursuits.

Holland based his theory upon the following assumptions:

1. The choice of a vocation is an expression of personality.
2. The members of a vocation have similar personalities and similar histories of personal development.
3. Because people in a vocational group have similar personalities, they will respond to many situations and problems in similar ways, and they will create characteristic interpersonal environments.
4. Vocational satisfaction, stability, and achievement depend on the *congruency* between one's personality and the environment in which one works.
5. In our culture, most persons can be categorized as one of six types—Realistic, Intellectual, Social, Conventional, Enterprising, and Artistic.
6. People search for environments and vocations that will permit them to exercise their skills and abilities, to express their attitudes and values, to take on agreeable problems and roles, and to avoid disagreeable ones (Holland, 1966, pp. 2-9).

In other words, if a person loves Botany and wants to study and research Botany, he or she may choose the field of Botany because of an inclination toward scientific research, not a desire to help other people learn.

Holland acknowledged that, though most individuals show strong inclinations toward one of the six types, it is ludicrous to believe that a person

belongs only in one. He proposed that the most prominent tendencies compose a person's type, and that a combination of types may make up an individual's personality pattern.

"Each type is a product of a characteristic interaction between a variety of cultural and personal forces, including peers, parents, social class, culture, and physical environment...Out of this experience a person learns to prefer some activities as opposed to others...Finally, a person's interests and competencies create a particular personal disposition that leads him to think, perceive, and act in special ways" (Holland, 1973, p. 2).

This developed type builds the foundation for one's principles, attitudes, lifestyle, and choice of career. The following is a summary of Holland's personality types, according to his most recent research (Holland, 1985):

Realistic Type

The Realistic model type shows preference toward concrete rather than abstract tasks; has strong physical motor coordination abilities; is aggressive; possesses less strong interpersonal and verbal skills; enjoys "systematic manipulation of objects, tools, machines, animals"(Holland p.19). The Realistic type is not fond of educational or human-relations activities; they perceive themselves as having strengths mechanically and athletically. Other descriptors Holland employs for Realistic types include: conforming, frank, hard-headed, materialistic, self-effacing, inflexible, thrifty, uninsightful, and uninvolved (p. 19).

Investigative Type

The Investigative type exhibits a preference for systematic observation and investigation of “physical, biological, and cultural phenomena in order to understand and control such phenomena”(p.20). They do not enjoy social, persuasive, or repetitive occupations; they perceive themselves as intellectual, especially in mathematics and scientific arenas. Other words used to describe the Investigative type are: cautious, pessimistic, reserved, unassuming, and unpopular (p.20).

Artistic Type

The Artistic type enjoys unstructured and ambiguous activities that lead to the creation of art forms. They tend to dislike activities that are systematic or precise. These preferences lead to the development of competencies in theatre, music, art, and spoken and written language. They value aesthetics, and see themselves as talented, unique, and disorganized. Other words Holland uses to describe Artistic types include: complicated, emotional, independent, impulsive, sensitive, and open (p. 21).

Social Type

The Social type shows a preference for working with others to guide, instruct, develop, or cure. They have an aversion to machinery and tools, and strengths in educating others. Social types perceive themselves as liking to help other people. Other words Holland uses to describe Social types include:

ascendant, cooperative, patient, idealistic, empathetic, persuasive, responsible, tactful, and warm. According to my assessment of current scholarly materials on developmental academic advising, it appears that the effective adviser should possess the bulk of their strengths and tendencies inside the realm of the Social typology.

Enterprising Type

The Enterprising type prefers activities that are goal and acquisition oriented, especially involving economic gain. They are leaders with strong persuasive and interpersonal skills, and their dislikes include scientific, systematic, or observational pursuits. Enterprising types see themselves as confident, aggressive, and popular, and also value political aspirations and achievement. Some other words Holland uses to describe the Enterprising type are: adventurous, domineering, exhibitionistic, excitement-seeking, flirtatious, optimistic, and talkative (p. 21).

Conventional Type

The Conventional type exhibits a preference for methodical, orderly, efficient activities involving the manipulation of data. Some examples of Conventional type activities might include record keeping, filing, organizing data (numerical and written) systematically, and operating data processing machines (p. 22). Conventional types dislike ambiguity or lack of organization, which means that they do not tend toward artistic competencies. They perceive themselves as

conforming, organized, and destined for clerical occupations, and place value on commercial achievement. Other words Holland uses to describe the Conventional type include: careful, defensive, inflexible, inhibited, obedient, persistent, prudish, thrifty, and unimaginative (p. 23).

Consistency and Differentiation

While acknowledging that individuals may possess attributes from several typologies, Holland places the strongest value upon the two types one exhibits most strongly in completing the Vocational Personality Inventory or the Self Directed Search (Holland, 1985, p. 26). A person's top ranking type tendencies may share common characteristics; for instance, a Social-Enterprising typology pattern has some common traits from both types: extroverted, ambitious, and agreeable. When one's top two types share similar characteristics, Holland describes that person's vocational personality as *Consistent*.

One may, however, exhibit strengths in two types which have nothing in common; in fact, they may appear as opposites. For instance, a Conventional-Artistic type can be considered inconsistent because it involves one type that is structured and conforming, and one that is ambiguous and original (Holland, 1985).

Differentiation of one's personality pattern describes a numerical value that represents the difference between that person's top-ranking and lowest ranking type. Two individuals may exhibit the same ranking of types, but their Differentiation may be very dissimilar.

Congruence

Congruence, in Holland's terms, simply refers to the similarity between one's type and one's environment. A Conventional type working as an accounting clerk, for instance, demonstrates congruence, and an Investigative type working as a door-to-door vacuum salesman demonstrates incongruence (Holland, 1985). The more Congruence between one's vocational personality and one's environment, the more likely that job satisfaction, stability, and vocational achievement will occur.

Holland proved the validity of his theory in 1966 with an empirical study of over 12,000 college students from 31 colleges and universities across the United States. After assigning each academic major into one combination of the six vocational personality types with one type showing dominant, Holland grouped students into type categories according to their choice of major. Students were then administered a Vocational Personality Inventory. The results of the inventories consistently matched the already assigned types according to major and interests (Holland, 1966; Holland, 1968).

In another study conducted in 1969, Holland found that 79% of men tested and 93% of women tested had vocational aspirations consistent with the results of their Vocational Personality Inventories. This study also proved that "...there are at least six kinds of people. There may be more, but not fewer"(p. 3).

In 1968 Holland further developed his theory of vocational personalities as a result of additional studies that provided validation; this caused him to publish a revised classification. He administered the same VPI test from his 1966 study to an

additional 12,345 men and 7,968 women, then assimilated the results with the 1966 study results. As a result of this study, the *Holland Hexagon Model* was created.

The Hexagon Model is based on the premise that some vocational personality types are more closely associated with others (recall Consistency). The types that are connected by the lines on the hexagon tend to be manifested concurrently in individuals, and the types farther away tend to have less common occurrences within one person.

Thus, a Realistic type will be more likely to exhibit Intellectual or Conventional tendencies, a Social type will be likely to exhibit Enterprising or Artistic but less likely to show Realistic tendencies, and so forth. The Hexagon Model led to Holland adopting the term “Calculus,” which refers to the fact that “the distances between the types...are inversely proportional to the theoretical relationships between them...In this way, the internal relationships...are defined and organized by a single geometric model” (p. 5).

Subsequent Research

Since it first emerged in 1959, Holland’s theory has been tested extensively and used broadly. Researchers have praised the theory as arguably the most valid in vocational personality research (Gottfredson, 1999; Campbell & Borgen, 1999; Reardon & Lenz, 1999; Rayman & Atanasoff, 1999; Borgen, 1991). Campbell & Borgen (1999) note that due to “the enormous impact of Holland’s ideas since the publication of his theory 40 years ago...Holland’s impact on vocational psychology...is unsurpassed” (p. 97). This observation is further illustrated by

Gottfredson (1999), who states that the first edition of Holland's (1973) book, *Making Vocational Choices: A Theory of Careers*, was cited more than 260 times between 1973 and 1980. "For comparison, the typical article published in a journal in 1973 received 5.7 citations between 1973 and 1976" (p. 25). Gottfredson further notes that "by the year of his formal retirement, works of which Holland was the primary author had been cited at least 699 times in English language journals and an additional 26 times in foreign language journals..."(p. 25).

Holland's theory has been tested in European countries (Nordvik, 1991), in Non-Western Cultures (Khan, 1990), and across genders (Betz, 1996). Industrial workers (Muchinsky, 1999), business managers (Maurer & Tarulli, 1999), librarians (Scherdin, 1992), and many other vocational populations have been subjects of study using Holland's theory. An exhaustive search revealed no tests on academic advisers; a possible reason for the lack of research is that academic advising has not existed as an independent vocation until recently (Gordon, 1992).

There are, however, two studies that are particularly relevant to research on academic advisers: one involving faculty members in higher education, the second involving teachers in general.

The first study examines perceptions and goals of college faculty members, who are often required to advise students. In 1982, J.C. Smart compared faculty priorities with individual members' placement into Holland's types to see if they are consistent within each type. He also studies whether priorities differ in various types of institutions of higher learning (i.e. private, public, small, large, etc.)

according to the nature of those institutions. While Smart based his research on faculty priorities inside the classroom, the same priorities would be pertinent in an advising situation, and many factors mentioned are consistent with the discussion which appeared earlier in this proposal regarding characteristics of an effective developmental adviser.

Smart based his study upon previous research that indicated “that broad discipline-based differences...were related to an underlying selective recruitment process of distinctive personality types into academic disciplines...”(p.180; Kelly & Hart, 1971, p. 351; Lipset & Ladd, 1971). He found that college faculty represent the full spectrum of Holland’s vocational personality types, and that all six types exist across different institutions. One of Smart’s subsequent objectives was to determine whether “faculty members in the six personality-oriented environments proposed by Holland attached different levels of importance to alternative undergraduate teaching goals”(p.181).

Smart identified three families of goals that a faculty member might prioritize. The first family, identified in Smart’s article as “Factor 1” (p. 183), closely resembles the earlier description of current goals of developmental academic advising in this review. Factor 1 is labeled, “character development,” and includes such goals as helping students to develop emotionally, introspectively, and morally; preparing students to enter society; providing critical evaluation tools; and “preparing students for family living”(p. 183).

Factor 2 was described by Smart as “Intellectual development”. This included assisting students in the development of critical thinking, research, and creative skills. Intellectual development also encompassed preparation for post-baccalaureate studies, as well as motivation for independent learning while pursuing an undergraduate education.

Factor 3 in Smart’s study of faculty priorities involved “Vocational development”(p. 183). Faculty who placed high scores on goals such as career preparation and provision of competent employees to the work force showed value toward vocational development. These same individuals placed little or no value on fostering in students an appreciation for the study of liberal arts.

The results of Smart’s study were as follows:

Faculty members who exhibited Holland’s Social and Artistic typologies placed the highest value on character development, while the Realistic and Investigative faculty considered it the lowest priority.

Realistic and Conventional types placed the greatest value on vocational development, while Artistic and Social types placed little or no value on preparation of students for the work force.

Artistic types demonstrated the greatest value on intellectual development. Conventional types indicated the least value on intellectual development.

Smart noted two other important results of his study: “Not only were there statistically significant differences among the six academic environments...” but they were “in general conformity with the order of psychological resemblance

defined by the hexagonal model”(p. 186). In other words, note that the placement of the types according to priorities on Smart’s Figure 3 is consistent with the placement of the types on Holland’s original hexagon model. Smart further explains that the priorities of faculty belonging to identical vocational personality types stayed consistent across different types of institutions.

This study is relevant to this study because a faculty member’s teaching style is likely to carry over into his or her advising style. Again the question arises: Are perceptions of academic advising consistent among faculty (advisers) and students regarding what should be offered, and do advisers possess certain innate capabilities to provide services students need?

David Chapman and Sigrid Hutcheson performed a study on attrition from teaching careers that focused on elementary and secondary education teachers. Working from the basis that Holland provided in 1973 that elementary and secondary teachers are mainly Social, Artistic, and Enterprising types, Chapman and Hutcheson provided teachers and ex-teachers with a list of competencies, and asked them to rate their strengths in each competency (1982). Teachers who remained in the teaching field exhibited confidence in Social competencies as described by Holland (1973). Those who left teaching indicated greater strengths in primarily Investigative competencies, such as interpreting data, analyzing, and writing effectively.

This indicates that individuals who value the analysis and interpretation of large amounts of data do not necessarily value teaching that data to others. People

who value writing effectively may not value sharing their writing. Professors at research institutions have achieved their current status as Ph.D.s by placing a large value on analysis and interpretation of data, and by producing large amounts of writing that supply that data in meaningful ways to others. If teaching is a largely important component of advising (as earlier defined), do all advisers possess innate capabilities and desires to accommodate that component?

A third study discusses values and priorities in terms of vocational personalities. In 1983, Deakin and Blank performed a study in which they combined Holland's Vocational Preference Inventory (VPI) with Super's Work Values Inventory (WVI) to determine whether values were consistent within each of the six vocational personalities, and whether values differ across vocational personalities. Their sample consisted of 250 college freshmen and seniors.

The results of their study confirmed that differences in values do exist between different types, and that consistency does exist within vocational personalities. Most significant to my research is the result that Social types valued altruism highest, while Realistic and Investigative types ranked altruism low on their list of values. If altruism may be simply defined as helping people, then it is a significant value for an effective adviser to possess, according to the earlier definition of academic advising.

Majors who tested into Realistic personality types in Deakin and Blank's study were Wildlife/Fisheries and Geography. Majors who tested into Investigative personality types were Biology, Chemistry, Mathematics, and Physics. If Realistic

and Investigative types tend to place little value on altruism, perhaps it is difficult for them to assist students in negotiating their academic careers, especially if incentives are low.

This study investigated attributes and priorities (or values) of academic advisers and their congruence with advisee needs and desires.

Summary

Academic advising has evolved as higher education has become more complex and student needs more diverse. The current approach calls for Developmental Academic Advising, a process in which the adviser and student may develop a personal relationship outside the classroom. Six distinct attributes of *Developmental Academic Advising* emerge from a review of the literature: Listen, Teach, Evaluate, Provide Information, and Foster a Relationship. Advisers are expected to be mentors and role models, to know their advisees, and to be aware of and assist in their development.

Holland's Vocational Personality Theory indicates that not all individuals with academic advising responsibilities may be inclined toward the kinds of tasks described in defining developmental academic advising.

This study was designed to assess the congruence between adviser and student perceptions of academic advising; it presents the criteria outlined above and ask both groups the value of each criterion. Further, this study will identify trends and implications for future research regarding personality types and how they may factor into the provision of comprehensive academic advising services.

Chapter 3 – Methodology

Introduction

The primary goal of this study was to evaluate student and adviser perceptions of the academic advising role, and to assess the congruence between the overall perceptions of the two groups. A secondary goal was to assess potential trends within certain perceived vocational personality types in advisers.

Two instruments were developed for this purpose. First, the Student Academic Advising Assessment (Appendix A) includes demographics questions such as the student's academic major and class level, and lists seventeen academic advising tasks that may be performed by an adviser. Respondents are asked to rate the degree to which they agree each task should be fulfilled by their advisers. The Student Academic Advising Assessment also asks students whether each task is currently being fulfilled by their advisers. A second instrument, the Academic Advising Assessment (Appendix B) asks demographic questions of advisers such as the college in which they advise and their primary responsibility. It then lists the same seventeen criteria, preceded by the question, "What do students want?" The same Likert-style rating scale is utilized with the seventeen criteria on both instruments.

In the *Handbook of Academic Advising* (1992), Virginia Gordon posits that "Since students are the prime recipients of direct advising contacts, they are in a position to express their reactions to these contacts" (p. 160). Lechtrek (1987)

discusses the potential for student bias in evaluating advisers. Because of this, he indicates that individuals with little knowledge of what is involved in advising should not have the opportunity to evaluate it. Many others, however, support Gordon's views (Neale, Sidoreko, 1988, Crockett, 1988, Winston & Sandor, 1984). Despite possible limitations, the direct recipients of a service should have a voice in evaluating that service.

Thomas and Chickering (1984) state that, if advisers expect to be truly successful, "they need to be keenly aware of how they perceive and are perceived by others, namely their students. We assert that advisors, concerned with facilitating the optimal personal development of each student, will be...aware of their strengths, weaknesses, values, and interpersonal relationships..."(p. 111). This study was designed to assess adviser/advisee relationships.

Considerations of Method

The Problem

As discussed in the introductory section of this study, informal interviews with students indicated that many are dissatisfied with advising on campus at Oregon State University. They also identified that academic advising is a key component to undergraduate student retention and advising. While an often cited component of dissatisfaction was the communication of inaccurate information, students often also made statements such as, "She doesn't even know or remember my name," or, "He is always in such a hurry to get me out of his office, he doesn't

take time to get to know me.” The problem, then, was whether academic adviser and student perceptions and expectations of advising had significant discrepancies between the groups. A secondary consideration was whether those perceptions were affected by variables within each population, such as class level and major or primary responsibility and personality type.

Purposes of the Study

This study had three goals:

1. To assess congruence between adviser and student perceptions of academic advising tasks.
2. To identify factors within the student sample that affect academic advising desires, such as class level, major (again may coincide with the role of personality types), and satisfaction/dissatisfaction.
3. To identify factors within the adviser sample that may affect their perceptions of student advising desires, such as primary job responsibility, level of education, and college in which they advise, as well as trends within self-perceived personality types.

Assessment Approach

A quantitative surveying method was identified as the best means of assessing student and adviser perceptions of advising needs. The selection of the quantitative approach was determined mainly by time limitations and the size of the population. The problem was a vague idea that students were dissatisfied with

advising services. The nature and scope of the dissatisfaction needed to be verified with a larger number of students. Looking at a small group of students in greater depth may not have yielded accurate results, as many different colleges on the Oregon State University campus employ different advising models. Thus, a broad assessment across the whole student population was deemed most appropriate for this study.

The Population

A combination of Cluster Sampling and Stratified Sampling methods was utilized to collect student data. Cluster sampling is defined by Terenzini and Upcraft as “used when the sampling unit is not an individual but rather a naturally occurring group of individuals” (p.88), such as students in a randomly selected General Education classroom. Stratified sampling was used in collecting data from students of color. Statistically, minority students are underrepresented in the Oregon State University community, so students of color were deliberately over-sampled in order to get adequate representation from their perspectives.

Since the adviser sample was collected after the student data, efforts were made to get responses from the same colleges from which the student respondents had come, though a few responses were collected from non-college specific units such as the Educational Opportunities Program and the International Education program. Thus, the adviser sample was mostly stratified.

Instruments

In creating an instrument, an extensive literature review was first conducted to assess criteria for effective academic advising. Seventeen tasks were identified as important to successful academic advising in the literature. The questions on the surveys were taken directly from that literature review.

While criteria for academic advising were collected from a number of sources, one source that tied many of these together was a NACADA publication (1989) that describes the following criteria upon which an adviser or advising program may be evaluated:

- 1). Assists in student self-understanding (i.e. values clarification, skills, and abilities)
- 2). Assists students in creation and evaluation of goals (major and career as they relate to interests, skills, and abilities)
- 3). Assists students in building education strategies consistent with life objectives (this includes educational and career alternatives, and selection of courses relative to consideration of these alternatives).
- 4). Assists students in developing decision making abilities.
- 5). Provides accurate information about academic policies and graduation requirements.
- 6). Provides accurate references to campus and community resources that may assist the student.
- 7). Assists the student in evaluating progress toward educational goals.

- 8). Communicates information regarding students to the appropriate colleges or academic departments, or to the institution.

NACADA recommends that advisers receive regular feedback on their effectiveness in regard to the above criteria. The first three criteria, in fact, are identified as the first steps in O'Banion's (1972) model of academic advising, which is often attributed as the foundation for the concept of academic advising. While the above eight criteria do not include all developmental academic advising tasks discovered in the literature review, they did serve as a foundation for the initial formulation of a list of tasks.

Pilot Study

A pilot study was conducted on the student and adviser instruments to assess the clarity of the questions. Twenty-eight undergraduate students from various majors, backgrounds, and class levels were administered the original draft of the Student Academic Advising Assessment. Each was encouraged to write thoughts and impressions on the instrument, then to discuss them upon completion of the instrument. As a result of the pilot study, some logistical changes were made. It was noted that most people in the pilot study were more inclined to assign a higher number when they strongly agreed with a statement, so the Likert-scale type answer model was rearranged with 5 indicating "Strongly Agree," and 1 indicating "Strongly Disagree."

Ten student affairs professionals and faculty participated in the initial pilot study of the Academic Advising Assessment. They too were encouraged to make

comments and discuss suggestions upon completion of the surveys. Based upon their feedback, changes were made in the wording of the study. Asking for descriptions of a “good” academic adviser was perceived to have a tendency to create defensive feelings in individuals with advising responsibilities. The wording was changed to more accurately reflect the mission of the study—What do students want? This reduced the possibility of advisers and faculty feeling that they are identified as either “good” or “bad” advisers.

Procedures

Student Academic Advising Assessment

A variety of distribution and gathering methods were employed in the data collection. A booth was arranged in the Student Union building on campus with a sign asking students to stop and complete a survey about academic advising. While effective for subjective discussion, the surveying booth gained a relatively low yield. Nine hours of this method produced thirty completed surveys. Perhaps the low yield was a result of many students passing through the building between classes who didn’t feel that they had time to stop and complete a survey.

In the stratified sampling phase of data collection, some Student Affairs professionals on campus were accessed as supervisors of students from vast and varied academic majors. Three Residence Hall Directors distributed the surveys to their building staffs. These staff consisted of 30 individuals in all class levels and several different colleges. The Coordinator of campus Cultural Centers was also

asked to distribute the questionnaires to her student workers. These students also come from a variety of majors, and this method was valuable in ensuring a significant number of minority students were represented in the data collection. This effort yielded 30 responses.

Next, faculty were enlisted to assist in the cluster sampling phase of the student data collection. Two instructors of mid-sized general education courses agreed to allow the surveys to be described, distributed, and collected during class time. This yielded the remaining results in the sample. The faculty members were randomly selected, but several instructors were asked before these two agreed. Part of the description of the project was intended to give students a clear understanding that, although this was being done during class time, participation in the study was purely voluntary. Names or other specific identifying criteria were not requested, thus making certain the anonymity of all the subjects in the study.

Academic Advising Assessment

Methods of collection with faculty and advisers were also varied. Administrators on campus were contacted to find meetings or forums in which advisers would be gathering and participation might be requested. Two gatherings were identified for Cluster sampling: a campus-wide academic advising meeting, and a campus-wide academic advising workshop. Description and distribution of the questionnaire were agenda items at both gatherings. Again, participants were informed that their efforts were purely voluntary and greatly appreciated. These efforts yielded a total of 29 surveys returned.

Stratified sampling methods were then discussed with department heads and head advisers who indicated that the most effective means of data collection with faculty and advisers might be electronically. The application for study of human subjects was amended and resubmitted to the Institutional Review Board to indicate that the balance of the study would be conducted via email. Upon approval, the cover letter was re-drafted to include a confidentiality disclaimer, should they choose to respond via email (see Attached Cover Letter, Appendix C). The email survey yielded 62 responses for a total of 91 adviser respondents.

Sample

Two hundred, thirty-one surveys were collected from a convenience sample of the Oregon State University general student population. Respondents were limited to OSU students who were over age eighteen. The purpose of keeping the sample this general was to see if there are any overall trends in student desires in relation to academic advising that may be communicated to the institution as a whole. The goal was also to identify trends within colleges and implications for future research on the academic advising models within those colleges.

The advising criteria were examined based on class level and academic major of the respondent. These were identified as potential variables that may affect perceptions of academic advising. Student respondents came from four class levels. While the frequency and percentages of Junior and Senior level respondents was generally representative of OSU's student population, Freshmen were slightly underrepresented and Sophomores were slightly over-represented (See Table 1).

Table 1

Class Standing of Student Respondents

Class Standing	Frequency (N)	Percentage	University-Wide Frequency	University Percentage
Freshman	47	20.3	3762	30%
Sophomore	72	31.2	2591	20.6%
Junior	59	25.5	2760	22%
Senior	53	22.9	3438	27.4%
Did not respond	1	.4		
TOTAL N	231	100%	12,551	100%

Student respondents were also asked to identify their academic major in order to assess whether differences exist between academic advising desires in different colleges at Oregon State University. Table Two illustrates the distribution of respondents among academic colleges on campus as compared with the distribution of students university-wide.

Table 2

Academic Major of Respondents by College
In Descending Order of Frequency

College	Frequency (N)	Percentage	University-wide Frequency	University Percentage
Liberal Arts	78	33.6	2438	19.4
Engineering	37	15.9	2732	21.8
Home Economics	26	11.2	895	7.1
Science	25	10.8	1938	15.4
Business	20	8.6	1694	13.5
Health & Human Performance	15	6.5	844	6.7
Agricultural Science	13	5.6	1098	8.7
Undecided	10	4.3	203	1.6
Forestry	6	2.6	386	3.1
Pharmacy	2	.9	323	2.6

The Academic Advising Assessment was distributed to faculty and advisers after the completion of the student data collection. The goal was to solicit responses from advisers in the colleges with which the student respondents were affiliated. Congruence could be better assessed when examining responses of individuals more likely to be in an adviser/advisee relationship.

Primary job responsibilities were identified as factors that may affect an adviser's perceptions of academic advising. Within the adviser sample, 31.87 percent indicated that academic advising is their main area of responsibility. The other 68.13 percent of respondents indicated that academic advising is not their primary responsibility. Teaching, research, and administration were identified as other responsibilities.

Methods of Analysis

Data were entered into an Excel spreadsheet. This file was then translated into a system file for SPSS (Statistical Package for the Social Sciences), version 9.0. Data were further analyzed using this program. The 5 percent confidence interval was used.

Chapter 4 – Results and Discussion

Introduction

The initial purpose of this exploratory study was to assess congruence of perceptions of academic advisers and students regarding academic advising services. Factors that may affect those perceptions, such as demographic variables and perceived personality types, were also examined.

The goal of this chapter is to identify and discuss significant findings as they relate to the initial purpose of the study. The central discussion will involve four important aspects of the results:

- Academic advising services desired by students
- Academic advising services received by students
- The role of student satisfaction in perceptions of advising
- Adviser perceptions as they relate to student desires and delivery of services
- The effects of demographic variables on perceptions within each group

Academic Advising Services Desired

Students were asked to rate the level to which they agreed that each of seventeen tasks should be fulfilled by an academic adviser during an advising visit. A rating of “5” indicates that students strongly agree, and a rating of “1” indicates that they strongly disagree that this task should be fulfilled. Table 3 illustrates student answers in terms of frequencies, ranking them according to mean.

Table 3

Rank Order of Student Answers to Advising Criteria
Mean, Standard Error of Measurement, Standard Deviation

Question	Advising Criteria	M	SE	SD
2.	Provide accurate information on graduation requirements	4.7	.05	.66
5.	Help accurately evaluate progress toward graduation	4.69	.05	.70
16.	Available and Accessible when needed	4.61	.05	.7
1.	Provide accurate information on academic policies	4.57	.05	.70
4.	Provide guidance on where to seek different educational options	4.46	.05	.80
17.	Remember Student's Name and repeats it during session	4.31	.06	.95
12.	Help students make important decisions in major and career	4.3	.06	.88
8.	Listen closely to questions and concerns, whether they are academic, professional, or personal	4.25	.06	.91
13.	Help student set goals	4.05	.07	.98
3.	Provide accurate information on where to seek campus resources	4	.07	1.02
11.	Encourage risk taking through different classes, involvement, social situations	3.67	.07	1.04
10.	Act as a role model	3.5	.08	1.14
15.	Teach student time management and study skills	3.27	.08	1.25
6.	Ask about personal or social concerns/issues	3.17	.08	1.24
7.	Tell about his/her hobbies, life outside work	3.06	.08	1.14
9.	Help student to clarify values and ethics	3.03	.08	1.21
13.	Help student make important decisions in personal/social life	2.58	.08	1.17

The advising criteria for which students expressed the strongest desire are mainly aspects of the Providing Information function of academic advising, especially regarding graduation requirements and progress. Evaluation and Availability also rank highly. The least desired advising criteria (according to Mean) are features of the Teaching and Fostering a Relationship functions as described in Chapter Two.

In 1998, Levine and Cureton performed a comprehensive analysis on the college student of the 90's. When examining attitudes toward academics, the authors found results that may explain some findings in the Student Academic Advising Assessment. Especially valuable is a quote from one Georgia Tech student: "Academics are a means to an end. There is no emphasis on learning for its own sake" (p. 115).

Levine and Cureton's 1993 study showed that students are very interested in job security, and 75 percent want and expect to be financially well off. "Although they don't believe a college education provides a money-back guarantee of future success, they feel it is not possible to obtain a good job without one, much less a lucrative or prestigious job" (Levine & Cureton, p. 115). In fact, Fifty-seven percent of students surveyed believe that increasing one's earning power is the greatest benefit of a college education. Thirty-seven percent indicated that they would drop out of college if they felt it wasn't helping their chances to earn more money (p. 116). In a 1996 study, 77 percent of first year students indicated that their chief purpose for being in college was to get a better job.

When asked in informal interviews the purpose of their academic adviser, many students answered, “The main purpose of my adviser is to get me out of here in as little time as possible.” Students see education more as a means to an end rather than as a process of growth. This rings true across all class levels. First year students placed equally high value on advising criteria related to graduation as did Senior students for whom graduation may be more imminent (See Appendix D).

Levine and Cureton’s observations are consistent with the findings of this study: students are seeking primarily to graduate, and a secondary benefit may be learning.

The focus on job and career development is so prevalent that more college students are employed at least part time while in college. According to Levine and Cureton, students “don’t work their way through college; rather, they work college into their lives” (p. 118). They further posit that “The notion of college as a place to luxuriate in close friendships and lose oneself in philosophic reflection is a relic of a bygone era” (p. 118).

Students’ top four important advising criteria are all associated with getting out of school. They want to be made aware of graduation requirements; they want help evaluating their progress toward graduation; they want their advisers to be available when questions regarding graduation or policy arise, and they want to be knowledgeable on academic policies that are relevant to their progress toward graduation.

The importance of clarifying one's values and goals as a part of their college experience has decreased significantly among student priorities. In 1969, 71 percent of undergraduates felt that formulating values and goals was a process essential to their higher education experience (Levine & Cureton, 1998). Only about one third of respondents to the Student Academic Advising Assessment agreed or strongly agreed that they wanted assistance with values clarification from their advisers. The ranking by students of the "Help clarify values and ethics" advising criteria is consistent with the idea that the majority do not consider values clarification a component of their undergraduate experience, although they may be seeking this clarification through other sources (peers, student organizations, church groups, etc).

Services Received

A follow-up question was placed below each of the seventeen academic advising criteria to find out if the respondents' advisers did or did not perform each service. Table 4 illustrates student responses.

The two most significant discrepancies between services desired and services received overall are in criteria number 3 and 4: Provide information on educational options, and provide information on campus resources. The services with the smallest discrepancies between desire and satisfaction are criteria 2, 5, and 16: Provide accurate information regarding graduation requirements, help accurately evaluate progress toward graduation, and be available and accessible. No criteria match in student satisfaction and student desire (See Appendix E).

Table 4

Advising Services Desired Compared with Services Received,
as Reported by Student Respondents

Question	Advising Criteria	Students who want service	Students who get service	Students who do not get service
2.	Provide accurate information on Graduation requirements	92.4%	71.5%	17%
5.	Help accurately evaluate progress toward graduation	92.5%	65.8%	22.1%
16.	Available and Accessible when needed	93.6%	71.3%	17.3%
1.	Provide accurate information on academic policies	90.5%	58.5%	24.1%
4.	Provide guidance on where to seek different educational options	86.7%	42.7%	36.2%
17.	Remember Student's Name and repeat it during session	80.4%	55%	31.5%
12.	Help students make important decisions in major and career	82.2%	49.7%	29.6%
8.	Listen closely to questions and concerns, whether they are academic or other	81.6%	55.3%	26.9%
14.	Help student set goals	75%	46.7%	35.5%
3.	Provide accurate information on where to seek campus resources	65.3%	31.2%	38.7%
11.	Encourage risk taking through different classes, involvement, social situations	56.1%	35.4%	38.9%
10.	Act as a role model	46.2%	41%	29%
15.	Teach student time management and study skills	40.7%	12.7%	61.4%
6.	Ask about personal or social concerns/issues	39.7%	23.9%	58.9%
7.	Tell about his/her hobbies, life outside work	31.5%	23.7%	57.6%
9.	Help student to clarify values and ethics	32.5%	17.1%	49.2%
13.	Help student make important decisions in personal/social life	18.1%	9%	65.3%

The discrepancies between services desired and services received in items 3 and 4 reinforce an often discussed fact about college students. Regardless of whether they have declared a major, students are still aware of and considering their choices from the moment they enter an institution. While in high school, many students have had little or no exposure to some areas of study offered at institutions of higher education. In 1988, Gordon reported estimates that over 75 percent of students change their major at least once during their college career (p. 139). In these cases, an adviser with concrete knowledge of where and how to refer a student who is considering a change in their academic direction is most valuable.

Satisfied and Dissatisfied Students

Nearly a third of students indicated that they are dissatisfied with their academic advisers, while 70.4 percent indicated satisfaction overall. Students who indicated they were satisfied or dissatisfied with their academic advising overall did not differ in how they responded to the advising criteria in terms of desired services (Appendix E).

When asked about whether their advisers provided the 17 services, those that were dissatisfied responded differently than those who were satisfied (Appendix F). As might be guessed, those who were dissatisfied tended to perceive that they received services less often than those who were satisfied.

Dissatisfied students (N=61) expressed significant dissatisfaction with nearly every criterion. Table 5 illustrates the tasks dissatisfied students most desire, compared with the percentage who claim they are receiving these services.

Table 5

Dissatisfied Students (N=61) Top Advising Tasks Desired (M, 5 meaning strongly desired), Compared to Reception of Task (Percentage of N)

Advising Task	Level of desire (M)	Do Not Receive This Service	Do Receive This Service	Do Not Know
5. Help accurately evaluate progress toward graduation	4.69	51.7%	27.6%	20.7%
2. Provide information on graduation requirements	4.64	31.0%	44.8%	24.1%
1. Provide information on academic policies	4.50	44.6%	32.1%	23.2%
4. Provide information on where to seek educational options	4.46	58.9%	14.3%	26.8%
16. Be available and accessible when needed.	4.46	39.7%	41.4%	19.0%

The greatest dissatisfaction in the highest rated services occurred in tasks 5, help accurately evaluate progress toward graduation, and 4, provide guidance on where to seek different educational options (dissatisfaction on task 4 is consistent with overall student dissatisfaction). The largest percentage of students who indicated their adviser did fulfill a desired task was still less than half in item 2, provide accurate information regarding graduation requirements.

Upon further investigation, another level of criteria was discovered that had high ranking means (4.0-4.31), yet significantly higher levels of dissatisfaction than the above named criteria. Table 6 illustrates these criteria.

Criteria 12, 14, and 17 had the largest dissatisfaction of any criteria with a Mean of 4 or higher on the level of desire in students. The greatest student

dissatisfaction centers around the Teaching and Fostering a Relationship functions of academic advising as described in Chapter 2.

Table 6
Advising Criteria with a Mean between 4.0 and 4.32 and Significant Dissatisfaction Rates by Percentage (Dissatisfied Students)

Advising Task	Level of Desire	Do Not Receive This Service	Do Receive This Service	Do Not Know
14. Help the student set goals	4.05	67.9%	10.7%	21.4%
17. Remember student's name and repeat it during session	4.31	66.1%	19.6%	14.3%
12. Help the student make decisions in major & career	4.30	63.2%	19.3%	17.5%
8. Listen closely to concerns and questions; academic or other	4.25	61.8%	18.2%	20.0%
3. Provide accurate info on where to seek campus resources.	4.0	58.9%	12.5%	28.6%

As stated, dissatisfied students were not the only ones who indicated that their advisers may not be fulfilling their most desired academic advising tasks. Even students who expressed satisfaction indicated some discrepancies between level of desire for tasks and level of service actually provided them.

Five advising criteria that ranked high in student desire had 70 percent or fewer satisfied students indicate they are receiving these services (See Table 7).

Table 7

Advising Criteria With Less Than 70% Satisfaction Among Satisfied Students and More Than 4.0 Mean (5 indicates highest level of desire)

Advising Task	Level of Desire	Receive this Service	Do Not Receive This Service	Do Not Know
8. Listen closely to concerns and questions, academic or other	4.31	69.7%	13.4%	16.9%
1. Provides accurate information on academic policy	4.58	69.1%	15.8%	15.1%
17. Remembers student's name and repeats it	4.34	68.8%	18.1%	13.2%
12. Help the student make career & major decisions	4.31	62.0%	16.2%	21.8%
14. Help the student set goals	4.08	61.0%	22.7%	16.3%

Questions 12 and 14 stand out as high-ranking criteria in terms of student desire that had less than two-thirds of *satisfied* students indicate they are receiving these services. Recall that tasks 12, 14, and 17 also have the highest dissatisfaction amongst *dissatisfied* students.

Adviser Perceptions

Student respondents indicated a strong preference for those advising tasks that would progress them most swiftly toward graduation. They placed low importance on values clarification and involvement in personal issues. Students indicated overall dissatisfaction with some advising criteria that were rated highly. Among these were assistance with goal setting and decision making, as well as having the adviser know the student's name.

Frequency Analyses were performed on the answers given by academic advisers to the same 17 criteria examined with students. Appendix G illustrates the Means, Standard Errors of Measurement, and Standard Deviations of responses. As with students, advisers were most comfortable assigning higher values to aspects of advising associated with Providing Information and Being Available.

While some criteria in the adviser responses did have a slightly more even distribution of answers, the frequencies of responses seemed much more concentrated in relation to the mean (See Appendix G). Advisers seemed to lean more toward unanimity in their responses than students.

Table 8 illustrates that students and advisers perceive the majority of the advising criteria similarly. Advisers indicated most disagreement with functions that fall under the Foster a Relationship and Teach categories as discussed in the Literature review section of this study, as did students. Providing information, assessing progress, and listening to the student placed much higher in the ranking of means and standard errors of measurement. The perception that a focus on graduation is prevalent among students was consistent among adviser respondents as well.

Table 8

Comparison of Ranking of Criteria by Students and Advisers

Advising Criterion	Student M	Student Rank	Adviser Rank	Adviser M
2. Provide accurate information on graduation requirements	4.7	1	1	4.87
5. Help evaluate progress toward graduation	4.69	2	3	4.66
16. Available and accessible when needed	4.61	3	4	4.61
1. Provide accurate information on academic policies	4.57	4	2	4.66
4. Guidance on where to seek information on education options	4.46	5	8	4.04
17. Remember student's name and repeat it	4.31	6	6	4.15
12. Help student make decisions in major and career	4.3	7	7	4.10
8. Listen closely to concerns and questions, academic or other	4.25	8	5	4.24
15. Help the student set goals	4.05	9	11	3.33
3. Accurate information on where to seek campus resources	4.0	10	9	3.84
11. Encourage risk taking through different classes, involvement	3.67	11	13	2.93
10. Act as a role model	3.5	12	10	3.52
16. Teach student time management and study skills	3.27	13	15	2.66
6. Ask about personal or social concerns/issues	3.17	14	12	2.99
7. Tell about hobbies, life outside work	3.06	15	16	2.52
9. Help student clarify values and ethics	3.03	16	14	2.72
13. Help student make important decisions in personal/social life	2.58	17	17	2.52

Significant Discrepancies in Student/Adviser Responses

Results of statistical analyses comparing student and adviser responses are reported in Appendix H. Three significant discrepancies were noted among students' identified desires and advisers' identification of student desires.

Item 11 (Encourage risk taking through different classes, involvement, social settings) was one that had different responses from advisers and students ($t(312)=5.80, p=.00$). Over half of students agreed or strongly agreed that they would like advisers to encourage them to expand their horizons, but advisers tended to be neutral on this criterion. Nine percent of students disagreed or strongly disagreed, with the remaining 35 percent indicating that they are neutral. A third of advisers agreed or strongly agreed to the same criteria, and 31.9 percent disagreed or strongly disagreed.

While over 40 percent of students agreed that having their advisers teach them time management and study skills was important to them, only 21.7 percent of advisers indicated that they thought teaching time management and study skills is important to students ($t(314)=4.13, p=.00$).

Students are more interested in having advisers help them set goals than advisers may perceive ($t(314)=5.86, p=.00$). Seventy five percent of students agreed or strongly agreed that this criterion was important, while only 50 percent of advisers agreed or strongly agreed. Nearly nineteen percent of advisers disagreed or strongly disagreed that this task is important to students, while less than 6

percent of students disagreed or strongly disagreed that they want assistance from their advisers in setting goals.

Table 9
Most Significant Differences Between Student and Adviser Responses

Advising Task	% of Advisers Who:		% of Students Who:	
	<u>Agreed (4 or 5)</u>		<u>Agreed (4 or 5)</u>	
	<u>Disagreed (1 or 2)</u>		<u>Disagreed (1 or 2)</u>	
11. Encourage risk taking through different classes, involvement	31.9%	31.9%	56.1%	9.0%
14. Help student set goals	50.0%	18.5%	75.0%	5.8%
15. Teach time management and study skills	21.7%	49.0%	40.7%	25.9%

Advising task number fourteen, Help the student set goals, arose repeatedly as a difference between students and advisers. It had the highest rate of dissatisfaction (67.9 percent) amid dissatisfied students of all the advising criteria. In fact, criterion number fourteen had the highest rate of dissatisfaction among satisfied students: nearly twenty three percent indicated that their adviser does not fulfill this task. This is consistent with advisers' perceptions; most advisers gave neutral answers ($M=3.33$) regarding whether students want help with setting goals.

Virginia Gordon states that as a general rule, advisers "do have an obligation to help students clarify their values and set goals that may relate to career and life planning" (1992, p. 84). While students aren't as interested in

having advisers assist them in values clarification, the results of this study clearly indicate that most are seeking assistance in goal setting.

Charles Schroeder said that the majority of students today need more “direct, concrete experience, moderate to high degrees of structure, and a linear approach to learning. They value the practical and immediate, and the focus of their perception is primarily on the physical world.” Seventy five percent of faculty, on the other hand, “are stimulated by the realm of concepts, ideas, and abstractions, and assume that students, like themselves, need a high degree of autonomy in their work” (p. 25). The result is frustration and interpretation by faculty that students are deficient, when in fact the correct interpretation may be just differences in learning style. These style discrepancies may well translate into the advising relationships. Criterion number 14, “Help the student set goals,” consistently arose as a factor that had differing perceptions among students and advisers. Students place a higher value on setting goals. A significant percentage of students indicated that they are not receiving help in goal setting from their advisers. Advisers may be taking a “hands off” approach of listening well, but not guiding as deliberately as today’s students may need.

Criterion 12 (Help the student make important decisions in major and career) is also noted as one that students receive significantly less help with than they would desire. Unlike goal setting, this task is rated as important by advisers: Almost 80 percent agreed or strongly agreed that this is important, while only 6.5 percent disagreed or strongly disagreed. Yet less than half (49.7%) of the total

student sample indicated that their advisers fulfill this task. This may also be a direct result of the discrepancy between learning styles of faculty/advisers and students as described by Schroeder (1993).

Student satisfaction with advising criterion number 17 is also not consistent with advisers' rating of this criterion. Frequency analysis shows that over 80 percent of advisers agree or strongly agree that remembering a student's name is important in an advising relationship. A little over *one percent* disagree that this is important. Students as well feel this criterion is important in advising: 80.4 percent agree or strongly agree that they would like their adviser to remember their name, while about five percent disagree that this is important.

However, advising criterion 17 is another advising component that satisfied as well as dissatisfied students do not feel is being fulfilled. Over Sixty-six percent of dissatisfied students and nearly one fifth of satisfied students indicate that their adviser does not remember their name. Kuh (1997) notes that many services that make academic advising better do not require more time or resources, just more attention; remembering a student's name appears to be a prime example of Kuh's discussion.

Fifty-three percent of faculty at four-year schools feel less comfortable with students today than in the past (Levine & Cureton 1998, p. 128). This may account for the strong disagreement on the advisers' side to academic advising tasks such as helping the student clarify values and ethics, discussing personal life with them

(adviser's or student's), or making an effort to discuss time management and study skills with them.

However, many outside factors play key roles in a student's academic life. One adviser respondent noted: "A student might make an appointment with the intent to discuss academic options and progress, when they actually come in and discuss divorce, abuse, death, etc. Academia and its challenges are inextricably intertwined! Whereas their (and our) intent is NOT to discuss personal problems, it can't be ignored as a huge and pivotal secondary concern."

Kuh (1997) speaks of studies that have proven empirically the increased academic success of students who live in residence halls with academic themes. He discusses a number of studies that show students who live in fraternity or sorority houses have lower grades overall as well as lower cognitive gains. "Advisers tend to view such nonacademic decisions as a student's prerogative, even though academic success and membership in certain social groups are empirically linked. What should advisers suggest to students thinking about joining such groups?" (p. 10).

Kuh also discusses advisers playing a role in advising students on employment opportunities. He further suggests encouraging students in attending campus and community cultural events, proactively initiating contact with faculty outside the classroom, getting to know other students with different backgrounds, and using knowledge gained in class in applied experiences such as job interviews.

If an adviser is not willing or able to have these types of discussions with a student, it is important that they have a good knowledge base of someone who can help the student with personal decisions that affect academic life.

Students in this study are asking advisers to be generalists, with knowledge of campus resources. In his 1997 article, Kuh posits that an adviser may be the only representative of the institution with whom the student has contact outside of the classroom. Levine and Cureton (1998) state that more students are living off campus, which greatly reduces their contact with potential mentors and their knowledge of campus resources.

Inhibiting Factors

Advisers were asked, “What are some factors that may inhibit your ability to fulfill the above named tasks?” Eighty-one advisers responded, many with several answers. The most prevalent response by a significant margin was lack of time and heavy workload. Along the same track, being assigned overwhelming numbers of advisees was also identified as a significant inhibitor to effectively meet students’ advising desires. Only 4 percent of respondents indicated that they had nothing inhibiting their abilities to fulfill students’ advising desires.

While advisers are saying they don’t have time to fulfill all student desires because of a heavy work load, the greatest degree of satisfaction (71.3 percent) expressed by students in a significant advising task was expressed regarding task number 16, “Available and Accessible when needed” (See Table 4).

Table 10

Academic Adviser-Identified Factors Inhibiting Adviser Ability to Fulfill Tasks

Factors Inhibiting Adviser Ability to Fulfill Tasks	Percentage of Respondents
Time and Workload	78%
Too Many Advisees	36%
Student Apathy/Irresponsibility	12%
Lack of Training	11%
Lack of Incentives/Rewards	6%
Other	6%
No Inhibiting Factors	4%

As advisers indicate that lack of time is a major inhibiting factor in delivering advising services, some are neutral or resistant about the idea of communicating campus resources and educational options to students (35.8 percent and 23.1 percent, respectively). Many students identify these two tasks as lacking in their advising services (38.7 percent and 36.2 percent). In the long run, however, there is value in taking extra time to educate oneself on campus resources and educational options. It has been said that academic and personal issues are inextricably intertwined; in the event that the personal issues surface in discussion of the academic, knowledge of resources will assist the adviser in helping the student most quickly and efficiently.

Kuh (1997) states: "This is not to say that advisers must do more or work harder. Simply adding tasks will not have the desired student-learning effects. The key is deciding what responsibilities advisers must give up so that they can focus on activities that are more important to student success and institutional productivity." (p. 10). The way to identify these essential tasks, Kuh says, is to

examine academic advising within the context of student development, which is often ignored in creating advising models and strategies.

In 1989, Schlossberg, Lynch, and Chickering discussed the concept of “Mattering” as originally developed by sociologist Morris Rosenberg in 1981 in terms of students at an institution of higher learning. The basic premise of this theory is that people are more apt to stay in environments and succeed in environments in which they feel they matter. Five aspects of mattering are discussed (p. 22):

Attention--The most fundamental aspect of mattering is the feeling that one is noticed, and has the full interest of another person. An adviser knowing and using an advisee’s name and academic history may be elements of attention.

Importance--Asking the student what he or she would like from an adviser is key. Then, doing their best to provide those services or refer the student to someone who can is an example of showing the student their importance. These services may include helping the student set goals and make decisions. Making oneself available also communicates to the student that he or she is important.

Dependence--Mattering focuses on others’ dependence upon the student. In truth, advisers and faculty would not exist if students did not exist. Communicating campus resources developed solely to assist students would help the student to feel he or she is a significant part of the institution.

Ego-extension--The feeling that others are proud of our accomplishments makes us feel we matter. Assistance and encouragement with goal setting and risk taking leads students to feel advisers are invested in their accomplishments.

Appreciation--A student who feels that others are pleased with what they do will feel that they matter. Attentive assistance with evaluating progress toward graduation will help the student feel recognized and appreciated.

The results of this study point more to the theory of Mattering than to Vocational Personalities. While student desires focused mainly on outcomes and graduation, they also expressed a preference to be known and appreciated by their advisers. When asked whether any characteristics were missing from the list of seventeen criteria, 34 percent of students used the words, "Caring," "Kind," or "Compassionate."

Mattering is important with advisers as well as with students. While the focus is improving, academic advising is still not valued equivalent to its importance. Training is offered, but not mandated. Advisers are assigned huge numbers of advisees, which tells them that fifteen to twenty-minute advising sessions must be all that are needed. Incentives and rewards are not a part of academic advising for faculty. Good advising is sometimes identified as a criterion for earning tenure, but many advisers perceive that it is not. Advisers will reflect the attitudes of the institution, if only because lack of time allows them no other option. Glennen (1995) notes, "It has been found that administrative support for advising does indeed affect student satisfaction – especially when administrators

communicate to the campus that advising is a high priority and that time spent advising students is a positive investment..." (p. 13).

Demographic Findings

Few significant results were discovered in relation to demographic variables in the student and adviser groups.

Academic Advisers

The most important results within the adviser sample stemmed from the examination of perceptions of full-time advisers compared with faculty for whom advising is a peripheral responsibility (Appendix I). Respondents who reported that academic advising is their primary area of responsibility made up 31.87 percent of the sample. The other 68.13 percent indicated that advising is only one of many responsibilities. Only three individuals from that 68.13 percent indicated that teaching classes was not among their responsibilities.

Two significant differences were identified through a *t*-test. Full-time advisers place a much higher value on the identification and communication of campus resources ($t(88)=-5, p=.00$). Full-time advisers also perceive the value of assistance in decision making significantly higher ($t(88)=-2.28, p=.03$).

Considering that these are two services many students want and are not receiving, these differences are key in considering implications for policy and personnel.

In an attempt to identify trends in vocational personality types as they related to adviser perceptions, academic advisers were asked to identify their most dominant personality types (See Academic Advising Assessment, Appendix B).

Results from this inquiry were inconclusive. While self-identified Social types did seem more comfortable with the idea of self-disclosure (See Appendix J, Number Seven), this was the only difference, and not a task desired by most students. While the idea of personality types as a factor influencing advising styles is still compelling, the results were inconclusive in identifying trends. This is disappointing, but would be an excellent topic of future research.

Students

Two demographic variables showed differences within the student sample. First year students placed less value on their adviser knowing their name ($F(3, 214)=4.497, p=.004$) than did any other class level. This may be because most first year students at Oregon State University are coming directly from a high school environment where every significant teacher and administrator does know their name. We value most what we do not have; perhaps first year students have yet to experience sitting in an appointment with someone who is supposed to be invested in their future, yet does not know their first name. Sophomores place a much more significant value ($M=4.38$) upon this advising criterion.

The three largest colleges in terms of respondents were compared to see whether they had different desires in advising services. It was thought that perhaps differences in advising perceptions within certain majors would be consistent with Holland's Vocational Personality Theory. While there were three discrepancies, they were inconsistent, and no trends were identified (See Appendix K).

Comparative analyses were performed to assess whether students of color expressed different academic advising desires than did the rest of the student sample (See Appendix L). Again, only one slight discrepancy arose: ethnic minority students had less interest in their adviser communicating campus resources to them than did the rest of the sample ($t(220)=-2.72, p=.007$). This may be because the Minority Education Offices and Cultural Centers on campus are so visible and so proactive about contacting and supporting students of color. They may not need their adviser to communicate support resources to them because they have already been in contact with those resources.

Summary

From the time they enter college, students' goals are focused on outcomes. They want to graduate, and they want their advisers to help them; this is their priority. While provision of accurate information and availability are highly desired characteristics, students also value the feeling that they matter to their advisers. Students would like their adviser to know their name; they would like help setting goals and making decisions; they would like to know of their options. Many feel they are not receiving these services.

While the literature indicates that values clarification is important in advising, students do not desire assistance with this. They do not expect their adviser to counsel them on personal issues, but they would like their adviser to be knowledgeable about where to send them, should they need counseling.

Advisers are aware of students' focus on graduation and their need for easy access to an academic information source. They are not as aware that students want help with goal setting and decision making, and that students look to them for information on campus resources and educational options. Advisers feel that they do not have sufficient time to provide students with all they need, and that their assigned numbers of advisees are overwhelming.

George Kuh (1997) states that "an early task in the advising relationship is to clarify expectations" (p.9). He notes that students have very defined reasons for coming to college: they want to get a better job, to make more money, and to gain prestige in the fields they've chosen. While they are familiar with their expected outcomes, students do not have such concrete expectations of what will happen once they enter college. They are not familiar with the process involved.

Chapter 5 – Conclusions, Implications, and Recommendations

Summary

Academic advising has existed as long as colleges and universities have existed, and has changed as the nature of higher education has changed over time. With an increasingly complex curriculum and an increasingly diverse student body, the demands on academic advisers have grown. The time and effort advisers are allowed by most institutions to invest in advising, however, is minimal at best.

Faculty still carry the bulk of advising responsibilities in institutions across the nation. They are expected to teach, research, and advise effectively in order to secure and maintain tenure. Conditions of employment and tenure, however, more often include the former two and leave out advising. As a result, although academic advising is identified as a key component of student satisfaction and retention, little attention is paid to the delivery of quality academic advising services. Administrators have identified academic advising as one of the most important, yet most overlooked, student services on campus today.

Theorists have indicated that student development must be taken into account when advising the student, and that deliberate attention must be paid to six key functions of developmental academic advising: Teach, Listen, Foster a Relationship, Evaluate, Provide Information, and Be Available and Approachable.

The purpose of this study was to evaluate perceptions of academic advising from the student's as well as from the adviser's perspective, then to compare and contrast the two. Differences in perceptions were sought based on several

variables: class level and academic major and minority status in students, and primary responsibility in advisers. Satisfaction was assessed and examined as a factor affecting perceptions of advising. Quantitative surveying methods were utilized to compare overall perceptions between advisers and students.

The questions guiding the research were: (a) What do students want from their academic advisers, and what advising tasks are perceived by advisers to be most important? (b) What factors play a role in affecting perceptions of academic advising, both from the students' and from the advisers' perspectives? This could include demographic variables or perceived personality types.

Conclusions

Through the development and distribution of a questionnaire that listed and asked for value ratings of seventeen advising criteria, statistical analyses of adviser and student perceptions of academic advising were achieved. Especially important were discrepancies between adviser and student perceptions, and student reporting of services received as well as services desired.

Student ratings of the advising criteria were consistent with theorists' understanding of the modern college student. They were most concerned with outcomes-based advising criteria that would assist directly in progress toward graduation. The importance placed on values clarification and involvement in personal issues was low.

While students and advisers seemed to agree on the majority of advising criteria, students reported a general lack of services in advising areas they had

identified as important. The overall communication of educational options and campus resources were two criteria many students indicated they desired but were not getting. Assistance with goal setting and decision making were also identified as factors that students desired, but many were lacking services in these areas as well.

Academic advisers indicated that lack of time was their primary concern in providing effective academic advising services. They recognized the value that students placed on some tasks that were not being fulfilled, such as help with making academic decisions and remembering the student's name. A lack of time and overwhelming numbers of advisees were identified as reasons these tasks could not be fulfilled.

Some of the criteria that students had indicated dissatisfaction with were criteria that advisers did not realize were of value to students. For instance, assistance with goal setting was not identified by advisers as a key criterion in student advising desires, when in fact it was identified as one task that was important to students and not being fulfilled.

Implications

Academic advising has become an increasingly complex task as the curriculum has broadened and the student population has further diversified. In fact, academic advising has arguably become a vocation itself. While diagnostic imaging is a facet of the medical field, doctors don't administer X-rays or ultrasounds; technicians specially trained in this complex process step in and do it.

Why are faculty asked to advise students when to effectively do so requires an abundance of knowledge with which faculty have not been prepared?

The results of this study hardly point to current advisers as being deficient. One cannot be expected to perform effectively if one is not given tools to do so. The results suggest that institutional policy has not made room for a service that is integral to the educational process of everyone who walks onto campus. Key policy adjustments must be considered if advisers are to be able to meet students' expressed academic advising needs and desires.

Training

Everyone involved in the guidance of students through their higher education endeavors should have knowledge applicable to that guidance. Student development theories should be learned and referenced often. Advisers should have access to and comprehensive knowledge of campus resources as well as educational options. Ever-changing academic policies should be communicated. Campus-wide definitions and missions of academic advising should be adopted, and each aspect of the mission should be deliberately instilled into a mandatory training program.

Communication

Collaboration is key in the success of any service as broad and far-reaching as academic advising. Personal and academic concerns are inextricably intertwined; advisers should have access to and regular communication with

entities on campus able to help with both. Acquaintances should be made with admissions, registrars, and orientation offices, as well as with counseling and student health services, as well as with student activities and career services. The seamless provision of student services will help the education process come full circle for students, and confusion and disorientation or disenchantment will less likely occur.

Mattering

In order for students to feel they matter to an institution, their needs and desires should be met by representatives of that institution. There is a direct correlation between time spent with faculty and administrators outside the classroom and a student's success and retention inside the classroom. When that contact includes factors such as appreciation, attention, and recognition, students recognize that faculty and advisers are there to help and support them.

Academic advising should also matter to institutions of higher learning. As long as faculty are involved in advising, tangible rewards and incentives should be presented to motivate quality advising. Good advising and student contact outside the classroom should be considered in awarding tenure to faculty members. Training and ongoing development in academic advising should be concrete expectations for everyone involved.

New student orientation programs should implement a discussion of academic advising and its purposes into an informational program. While one advising delivery system would not work universally, students across campus are

asking for some common elements to be in place, including the communication of policy and requirements and the availability of advisers. Other less clearly expected criteria could be outlined as possibilities in advising, and the student and adviser should be encouraged to communicate and set clear expectations from the beginning. One simple way an adviser can assess what an advisee is looking for in a session is to begin by asking, "What can I do for you today?"

Recommendations for Future Study

This study discussed the idea of academic advising as a complex and involved vocation for which training and investment are key. Many results were interesting and provide concrete direction for improving the delivery of academic advising services across campus. Other results, however, indicated potential for further study in many directions.

While the results of the vocational personality piece of the study were inconclusive, several subjective comments were written on the surveys that further indicate that personality type may well play a role in perceptions of advising. Though not statistically significant, several faculty members who identified themselves as Investigative tended to place the blame for poor advising on students. They indicated that apathy and lack of preparation on the part of students prevented good advising on their part. Many advisers who identified as Social included the word, "Caring" when asked to identify other characteristics of an adviser. They also seemed to be more interested in the idea of communicating and utilizing campus resources to assist students.

While no particular academic college or department at Oregon State University stood out in terms of student dissatisfaction, some student comments identified that some advising delivery systems on campus work better than others. Many students are not fond of group advising, and they would like continuity in their relationships with advisers. A closer comparative evaluation of two specific delivery systems would be valuable in the future. While no one advising structure can work universally, there may be many that are really not working and are highlighted by student dissatisfaction.

Informal conversations with students and some comments written on questionnaires indicated that students are using their peers to a much greater degree than they use faculty to advise them into classes and educational paths. The use of peer advising, formal or informal, would be an intriguing topic of study for the future.

The greatest discrepancy between the literature and the responses from the surveys seemed to be in the advising task of "Help student to clarify values and ethics." Several authorities cited this task as a foundation to assisting the student further, and as a beginning for the student in making decisions about major and career paths. Students and advisers, however, agreed that values clarification should not play a role in academic advising. An interesting study, then, would seek to identify to whom students are looking for assistance with values and ethics clarification during their formative college years.

An additional suggestion for future study could seek to identify optimal numbers of advisees in relation to adviser workloads. Advisers are saying they have too much work and too many advisees to spend adequate time and get to know them. The question may be asked whether there is an ideal balance of workload and advisees, and how much time is adequate to spend in an advising session.

Technology may play a key role in providing many advising tasks students identified as most important. Providing information functions, for instance, may be completely covered by a computer, thus freeing more time for advisers and students to discuss future goals and aspirations, or to fulfill other student needs. Further research in technological responses to advising and the effectiveness of those responses may yield important information to academic advising as a vocation.

Bibliography

- Astin, A.W. (1975). *Preventing students from dropping out*. San Francisco, California: Jossey-Bass.
- Barr, M.J., Keating, L.A., & Associates (1985). *Developing effective student services programs: Systematic approaches for practitioners*. San Francisco, California: Jossey-Bass.
- Beatty, J.D., & Standing, R. (1995). Academic advising and orientation. In R.E. Glennen & F.N. Vowell (Eds.) *Academic advising as a comprehensive campus process* (pp. 95-99). Provo: BYU Press.
- Betz, N.E. (1996). The relationships of self-efficacy for the holland themes to gender, occupational group membership, and vocational interests. *Journal of counseling psychology*, 43, 90-98.
- Borgen, F.H. (1991). Megatrends and milestones in vocational behavior: A 20 year counseling psychology perspective. *Journal of Vocational Behavior*, 39, 263-290.
- Brown, R.D., Sanstead, M.J. (1982). Using evaluation to make decisions about academic advising programs. *New directions for student services: developmental approaches to academic advising*. 17, 55-66.
- Brubacher, J.S., & Rudy, R. (1997). *Higher education in transition: fourth edition*. New Brunswick: Transaction Publishers.
- Butler, E.R. (1995). "Counseling and advising: A continuum of services." In R.E. Glennen & F.N. Vowell (Eds.) *Academic advising as a comprehensive campus process* (pp. 107-114). Provo: BYU Press
- Campbell, D.P., & Borgen, F.H. (1999). Holland's theory and the development of interest inventories. *Journal of vocational behavior*, 55, 86-101.
- Carsensten, D.J., & Silberhorn, C.A. (1979). *A national survey of academic advising, final report*. Iowa City: American College Testing Program.
- Chapman, D.W., & Hutcheson, S.M. (1982). Attrition from teaching careers: a discriminant analysis. *American educational research journal*, 19, 93-105.

- Crockett, D.S. (1982). Academic Advising Delivery Systems. In Winston, Enders, Miller, (Eds.) *New directions for student services: Developmental Approaches to academic advising*. 17, pp. 39-54.
- Crockett, D.S. (1986). *Advising skills, techniques, and resources*. Iowa City, IA: American College Testing Program
- Crockett, D.S., & Levitz, R. (1984). Current advising practices in colleges and universities. In R.B. Winston, Jr., T.K. Miller, S.C. Ender, T.J. Grites & Associates (Eds.), *Developmental Academic Advising* (pp. 35-63). San Francisco: Jossey-Bass.
- Ender, S.C., Winston, R.B., Miller, T.K. (1982). Academic advising as student development. *New Directions for Student Services: Developmental Approaches to Academic Advising*. 17, 3-18.
- Evans, N.J., Forney, D.S., & Guido-DiBrito, F. (1998). *Student development in college*. San Francisco: Jossey-Bass.
- Glennen, R.E. (1995). Obtaining presidential support for academic advising. In Glennen & F.N. Vowell (Eds.) *Academic advising as a comprehensive campus process* (pp. 11-14). Provo: BYU Press.
- Goldenberg, D.H., & Permuth, S. B. (1995). Faculty affairs. In Glennen & Vowell (Eds.) *Academic advising as a comprehensive campus process* (pp. 15-18). Provo: BYU Press.
- Goetz, J.J. (1996). Academic Advising. In A.L. Rentz & Associates (Eds.) *Student affairs practice in higher education* (pp. 88-107). Springfield: Charles C. Thomas.
- Gordon, V.N. (1988). Educational planning: Helping students make decisions. In Winston, Miller, Ender, Grites, & Associates (Eds.) *Developmental Academic Advising* (pp. 123-146). San Francisco: Jossey-Bass.
- Gordon, V. (1992). *Handbook of academic advising*. Westport, Connecticut: Greenwood Press.
- Gordon, R.E., & Gordon, K. (1963). *The blight on the ivy*. London: Prentice-Hall.
- Gottfredson, G.D. (1999). John L. Holland's contributions to vocational psychology: A review and evaluation. *Journal of vocational behavior*, 55, 15-40.

- Greenwood, J.D. (1984). Academic advising and institutional goals: a president's perspective. In Winston, Miller, Ender, Grites, & Associates (Eds.) *Developmental Academic Advising* (pp. 64-88). San Francisco: Jossey-Bass.
- Habley, W.R. (1984). Integrating academic advising and career planning. In Winston, Miller, Ender, Grites, & Associates (Eds.) *Developmental Academic Advising* (pp. 147-172). San Francisco: Jossey-Bass.
- Holland, J.L. (1966). A psychological classification scheme for vocations and major fields. *Journal of counseling psychology*, 13, 278-288.
- Holland, J.L. (1968). Explorations of a theory of vocational choice: A longitudinal study using a sample of typical college students. *Journal of applied psychology*, 52, 1-37.
- Holland, J.L. (1973). *Making vocational choices: a theory of careers*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Holland, J.L. (1985). *Making vocational choices: a theory of vocational personalities*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Kelly, R., & Hart, B.D. (1971). Role preferences of faculty in different age groups and academic disciplines. *Sociology of education*, 44, 351-357.
- Khan, S.B. (1990). A study of the validity of holland's theory in a non-western culture. *Journal of vocational behavior*, 36, 132-146.
- Kitchen, J.R. (1995). The role of student affairs in fostering academic advising for underprepared students. In R.E. Glennen & F.N. Vowell (Eds.) *Academic advising as a comprehensive campus process* (pp. 133-139). Provo: BYU Press.
- Kuh, G.D. (1997). The student learning agenda: Implications for academic advisors. *NACADA Journal*, 17, 7-12.
- Lechtrek, R. (1987). College faculty evaluation by students: An opportunity for bias. *College Student Journal*, 21, 297-299.
- Levine, A., & Cureton, J.S. (1998). *When hope and fear collide*. San Francisco: Jossey-Bass.
- Levine, A. (1978). *Handbook of undergraduate curriculum*. San Francisco: Jossey-Bass.

- Lipset, S.M., & Ladd, E.C. (1971). The divided professoriate. *Change*, 3, 54-60.
- Mauer, T.J., & Tarulli, B.A. (1999). Managerial work, job analysis, and holland's RIASEC vocational environmental dimensions. *Journal of Vocational Behavior*, 55, 365-381.
- Miller, T.K., & McAffrey, S.S. (1982). Student Development Theory: Foundations for academic advising. *New directions for student services: Developmental approaches to academic advising*, 17, 19-38.
- Muchinsky, P.M. (1999). Applications of holland's theory in industrial and organizational settings. *Journal of vocational behavior*, 55, 127-135.
- National Academic Advising Association (1989). *Task Force on Assessment*. Newark: National Academic Advising Association, University of Delaware.
- Neale, A., & Sidorenko, C. (1988). Student evaluation: A model for improving advising services. *NACADA Journal*, 8, 72-82.
- Nordvik, H. (1991). Work activity and career goals in holland's and schein's theories of vocational personalities and career anchors. *Journal of vocational behavior*, 38, 165-178.
- O'Banion, T. (1972). An academic advising model. *Junior college journal*, 42, 62-69.
- Ramos, B. (1993). Evaluation, recognition, and reward of academic advising. *New directions for community colleges—Academic advising: Organizing and delivering services for student success*, 82, 63-74.
- Rayman, J., & Atanasoff, L. (1999). Holland's theory and career intervention: The power of the hexagon. *Journal of vocational behavior*, 55, 114-126.
- Reardon, R.C., and Lenz, J.G. (1999). Holland's theory and career assessment. *Journal of vocational behavior*, 55, 102-113.
- Schlossberg, N.K., Lynch, A.Q., & Chickering, A.W. (1989). *Improving Higher Education Environment for Adults*. San Francisco: Jossey-Bass.
- Schroeder C.C. (1993). New Students, New Learning Styles. *Change*, 25, 21-26.
- Smart, J.C. (1985). Holland environments as reinforcement systems. *Research in higher education*, 23, 279-292.

- Smart, J.C. (1982). Faculty teaching goals: a test of holland's theory. *Journal of educational psychology*, 74, 180-188.
- Tarter, B.J., & Miller, M.A. (1995). Transfer admissions and advising: The invisible link. In R.E. Glennen & F.N. Vowell, (Eds.) *Academic advising as a comprehensive campus process*. Provo: BYU Press
- Terenzini, P. T., & Upcraft, M. L. (1996). Using Quantitative Methods. In Upcraft, M. L. & Schuh, J. H., (Eds.) *Assessment in Student Affairs*. (pp. 84-109). San Francisco: Jossey Bass.
- Thomas, R.D., & Chickering, A.W. (1984). Foundations for academic advising. In Winston, Miller, Ender, Grites, & Associates (Eds.) *Developmental Academic Advising* (pp. 89-121). San Francisco: Jossey-Bass.
- Upcraft, M. L., & Schuh, J.H. (1996). *Assessment in Student Affairs*. San Francisco, Jossey-Bass.
- Winston, R.B. (1996). Counseling and advising. In Komives, S.R., Woodard Jr., D.B., and Associates (Eds.) *Student services: a handbook for the profession, third edition*. (pp. 335-360). San Francisco: Jossey-Bass.
- Winston, R.B., & Sandor, J.A. (1985). Developmental academic advising: What do students want? *NACADA Journal*, 4, 5-13.

APPENDICES

Appendix A—Student Academic Advising Assessment

Student Academic Advising Assessment

1. Class Standing (Circle One): Freshman Sophomore Junior Senior

2. Your Major: _____

What do you want from your academic adviser?

The following are several tasks that an adviser may fulfill. First respond whether you expect an adviser to fulfill each task, then indicate whether your adviser fulfills each task. If you **strongly agree**, circle a 5 in the row following the statement. If you **strongly disagree**, circle a 1. If you do not know or are indifferent, circle a 3.

- | | | | | |
|-------------------|-------|---------|---------------|----------------------|
| Strongly
Agree | Agree | Neutral | Dis-
agree | Strongly
Disagree |
| ↓ | ↓ | ↓ | ↓ | ↓ |
1. Provide accurate information regarding academic policies
(add/drop, satisfactory/unsatisfactory, deadlines, etc.)
 I want my adviser to do this. 5 4 3 2 1
 My adviser does this. ☐Yes ☐No ☐N/A – don't know
 2. Provide accurate information regarding graduation requirements
(number of credits, Baccalaureate core, departmental requirements, etc.).
 I want my adviser to do this. 5 4 3 2 1
 My adviser does this. ☐Yes ☐No ☐N/A – don't know
 3. Provide accurate information regarding where to seek campus resources
(Career center, University Counseling and Psychological Services,
Math tutoring lab, Student Health Center, etc.).
 I want my adviser to do this. 5 4 3 2 1
 My adviser does this. ☐Yes ☐No ☐N/A – don't know
 4. Provide guidance on where to seek information regarding different educational
options (graduate programs, other majors available, etc.)
 I want my adviser to do this. 5 4 3 2 1
 My adviser does this. ☐Yes ☐No ☐N/A- don't know
 5. Help accurately evaluate my progress toward graduation—
how many credits fulfilled in each requirement, how many left.
 I want my adviser to do this. 5 4 3 2 1
 My adviser does this. ☐Yes ☐No ☐N/A – don't know
 6. Ask about my personal or social concerns/issues.
 I want my adviser to do this. 5 4 3 2 1
 My adviser does this. ☐Yes ☐No ☐N/A – don't know
 7. Tell about his/her hobbies, life outside work.
 I want my adviser to do this. 5 4 3 2 1
 My adviser does this. ☐Yes ☐No ☐N/A-don't know
 8. Listen closely to my concerns and questions, whether they are
academic, professional, or personal.
 I want my adviser to do this. 5 4 3 2 1
 My adviser does this. ☐Yes ☐No ☐N/A-don't know
 9. Help me to clarify values and ethics.
 I want my adviser to do this. 5 4 3 2 1
 My adviser does this. ☐Yes ☐No ☐N/A-don't know

10. Act as a role model.
- | | | | | | |
|-----------------------------------|--|-------|---------|----------|-------------------|
| | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| I want my adviser to do this. | 5 | 4 | 3 | 2 | 1 |
| I see my adviser as a role model. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A-don't know | | | | |
11. Encourage risk taking through different classes, involvement, social situations.
- | | | | | | |
|-------------------------------|--|---|---|---|---|
| I want my adviser to do this. | 5 | 4 | 3 | 2 | 1 |
| My adviser does this. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A-don't know | | | | |
12. Help me make important decisions in major and career choice.
- | | | | | | |
|-------------------------------|--|---|---|---|---|
| I want my adviser to do this. | 5 | 4 | 3 | 2 | 1 |
| My adviser does this. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A-don't know | | | | |
13. Help me make important decisions in personal and/or social life.
- | | | | | | |
|-------------------------------|--|---|---|---|---|
| I want my adviser to do this. | 5 | 4 | 3 | 2 | 1 |
| My adviser does this. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A-don't know | | | | |
14. Help me to set goals.
- | | | | | | |
|-------------------------------|--|---|---|---|---|
| I want my adviser to do this. | 5 | 4 | 3 | 2 | 1 |
| My adviser does this. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A-don't know | | | | |
15. Teach me time management and study skills.
- | | | | | | |
|-------------------------------|--|---|---|---|---|
| I want my adviser to do this. | 5 | 4 | 3 | 2 | 1 |
| My adviser does this. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A-don't know | | | | |
16. Is available and accessible when needed.
- | | | | | | |
|-------------------------------|--|---|---|---|---|
| I want my adviser to do this. | 5 | 4 | 3 | 2 | 1 |
| My adviser does this. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A-don't know | | | | |
17. Remembers my name, and repeats it during advising session.
- | | | | | | |
|-------------------------------|--|---|---|---|---|
| I want my adviser to do this. | 5 | 4 | 3 | 2 | 1 |
| My adviser does this. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A-don't know | | | | |
18. Of the above 17 traits of a good academic adviser, what are the five most important?
1. _____ 4. _____
2. _____ 5. _____
3. _____
19. What are some other desirable characteristics of an academic adviser that haven't been mentioned?
-
20. Does your adviser possess these traits? _____
21. How many times have you met with your adviser (total)? _____
22. How many times per term do you see your adviser? _____
23. What is the primary reason you visit your adviser (circle as many as apply):
- | | |
|---|--|
| a. To get my PIN. | d. To get forms signed or in academic emergencies. |
| b. To share academic and/or personal successes. | e. To seek advice on academic issues. |
| c. To talk about non-academic issues. | f. Other _____ |
24. Overall, are you satisfied or dissatisfied with your academic adviser (circle one)? Satisfied Dissatisfied
- Any answers above you would like to explain further? _____
-

©Thank you for taking time to complete this survey! ☺

Appendix B—Academic Advising Assessment

Academic Advising Assessment

Please complete the following.

1. Department in which you advise: _____
2. Highest degree earned and field of study: _____
3. Your Academic Rank (circle one): Professor Associate Professor Assistant Professor Other _____
4. Your major responsibility(circle one): Teaching Advising Other

What do students want? The following are several tasks that an adviser may fulfill. Please indicate whether you feel students want an adviser to fulfill each task.

	Strongly Agree	Agree	Neutral	Dis- agree	Strongly Disagree
STUDENTS WANT AN ACADEMIC ADVISER TO:					
1. Provide accurate information regarding academic policies (add/drop, satisfactory/unsatisfactory, deadlines, etc.)	5	4	3	2	1
2. Provide accurate information regarding graduation requirements (number of credits, Baccalaureate core, departmental requirements, etc.)	5	4	3	2	1
3. Provide accurate information regarding where to seek campus resources (Career center, University Counseling and Psychological Services, Math tutoring lab, Student Health Center, etc.)	5	4	3	2	1
4. Provide guidance on where to seek information regarding different educational options (graduate programs, other majors available, etc.)	5	4	3	2	1
5. Help accurately evaluate progress toward graduation— how many credits fulfilled in each requirement, how many left.	5	4	3	2	1
6. Ask about personal or social concerns/issues.	5	4	3	2	1
7. Tell about his/her hobbies, life outside work.	5	4	3	2	1
8. Listen closely to concerns and questions, whether they are academic, professional, or personal.	5	4	3	2	1
9. Help the student to clarify values and ethics.	5	4	3	2	1
10. Act as a role model.	5	4	3	2	1
11. Encourage risk taking through different classes, involvement, social situations.	5	4	3	2	1
12. Help the student make important decisions in major and career choice.	5	4	3	2	1
13. Help the student make important decisions in personal and/or social life.	5	4	3	2	1
14. Help the student set goals.	5	4	3	2	1

15. Teach time management and study skills. 5 4 3 2 1

16. Be available and accessible when needed. 5 4 3 2 1

17. Remember student's name, and repeat it during advising session. 5 4 3 2 1

18. Of the above 17 tasks of an academic adviser, what are the five most important?

1. _____ 4. _____

2. _____ 5. _____

3. _____

19. What are some characteristics of a good academic adviser that haven't been mentioned?

20. What are some factors that may inhibit your ability to fulfill the above named tasks? _____

21. The following are brief descriptions of six vocational personality types, as discussed in John L. Holland's theory of vocational personalities. Please circle the description that you feel comes closest to describing the most dominant features of your personality. This is by no means considered a personality test, just a rough indicator of your self-perceptions. While more than one type may describe you, please indicate only the one that describes some of your most dominant characteristics.

REALISTIC: Prefers concrete rather than abstract tasks; possesses strong physical motor coordination abilities (mechanical and athletic); is aggressive; possesses less strong interpersonal and verbal skills; enjoys systematic manipulation of objects, tools, and machines. Prefers non-social situations.

INVESTIGATIVE: Prefers systematic observation and investigation of physical, biological, and cultural phenomena; does not enjoy persuasive, repetitive, or social occupations; perceives self as intellectual, rational, and independent.

ARTISTIC: Prefers unstructured activities that lead to the creation of art forms; dislikes systematic and precise activities; sees self as talented, unique, and disorganized; does not mind ambiguity.

SOCIAL: Prefers working with others to guide, instruct, develop, or cure; has aversion to machinery and tools; perceives strengths in helping and teaching others; persuasive, responsible, tactful, and warm.

ENTERPRISING: Prefers activities that are goal and acquisition oriented, especially involving economic gain; leader with strong persuasive and interpersonal skills; dislikes scientific, systematic, or observational activities; confident and aggressive.

CONVENTIONAL: Prefers methodical, orderly, efficient activities involving the manipulation of data; dislikes ambiguity and lack of organization; perceives self as organized, persistent; enjoys organizing data and keeping records.

Thank you for taking time to complete this survey!

Appendix C—Cover Letters

Dear Student,

Academic advising can be your greatest help or your biggest pain as a college student. Here at Oregon State University, you are required to see an adviser every so often in order to register. Some advisers are great—some are not. The experts have identified what makes a good academic adviser, but students have rarely been asked what they want out of advising.

I am asking your help as a student in identifying what you want from your academic adviser. I would appreciate if you would take about 15 minutes to complete the attached questionnaire and return it to me. Your responses, along with others, will be combined and used for statistical summaries only. Your participation in this study is voluntary and you may refuse to answer any question.

The answers you provide will be kept strictly confidential, and you will remain anonymous aside from identifying your major.

If you have any questions or follow-up comments about this survey, please contact me at 713-5131. If I am unavailable at the time of your call, please leave me a message and I will call you back.

Thanks in advance for your help!

Sincerely,

Lisa Bingham
Graduate Student
College Student Services Administration

Dear Adviser:

Recent studies have shown that academic advising is a vital element in a student's survival of higher education in today's institution. Quality advising can mean the difference between a student persisting in his or her chosen field, or dropping out of school altogether. But who or what defines quality advising?

I am asking your help as a faculty member whose responsibilities include advising in determining which characteristics you feel students desire most in an academic adviser. I would greatly appreciate if you would take ten minutes and complete the following questionnaire, then return it via campus mail, or via email. Your responses, together with others, will be combined and used for statistical summaries only. Your participation in this study is voluntary and you may refuse to answer any question. Only a small sample of advisers will receive this questionnaire, so your participation is vital to this study.

The answers you provide are strictly confidential and special precautions have been established to protect the confidentiality of your responses in my study. I can guarantee that your identity will not be revealed at any point in my report, and I will delete any returned emails with answers to the included questionnaire after I have collected the relevant data. Due to the nature of email, and the unlikely potential for routing errors or server account storage, I cannot unconditionally guarantee that your answers will be read only by me. If you are willing to assume this slight risk and reply to my questionnaire via email, please do so. Otherwise, please print the questionnaire and send your responses on hard copy to me via campus mail at: Lisa Bingham – McNary Service Center. Once your responses have been tallied, your questionnaire will be destroyed. If you would like a hard copy sent to you by campus mail, please respond to this email with your request—I recognize the structure of the survey may be compromised by the email process.

If you have any questions about the survey, please contact me at (541)713-5131. Please leave a message on my voice mail if I am unavailable at the time of your call, and I will call you.

Thank you for your help.

Sincerely,

-Lisa Bingham
Graduate Student
College Student Services Administration

Appendix D—Class Level and Adviser Perceptions

Descriptive Analyses

	Class Level	N	M	SD
Q1	Freshman	46	4.46	.721
	Sophomore	68	4.60	.694
	Junior	57	4.60	.728
	Senior	49	4.57	.677
	Total	220	4.56	.703
Q2	Freshman	47	4.60	.742
	Sophomore	70	4.66	.740
	Junior	58	4.74	.637
	Senior	49	4.80	.456
	Total	224	4.70	.661
Q3	Freshman	47	4.00	.956
	Sophomore	68	3.94	1.13
	Junior	57	3.93	1.05
	Senior	49	4.12	.904
	Total	221	3.99	1.02
Q4	Freshman	47	4.28	.772
	Sophomore	69	4.48	.868
	Junior	58	4.52	.800
	Senior	50	4.52	.707
	Total	224	4.46	.797
Q5	Freshman	47	4.49	.856
	Sophomore	69	4.74	.656
	Junior	58	4.72	.643
	Senior	50	4.72	.607
	Total	224	4.68	.692
Q6	Freshman	47	2.75	1.15
	Sophomore	70	3.20	1.19
	Junior	59	3.34	1.24
	Senior	50	3.32	1.33
	Total	226	3.17	1.24
Q7	Freshman	45	2.78	1.17
	Sophomore	71	3.07	1.18
	Junior	59	3.19	1.11
	Senior	49	3.12	1.11
	Total	224	3.05	1.14
Q8	Freshman	46	3.98	1.09
	Sophomore	70	4.31	.843
	Junior	58	4.36	.693

	Senior	48	4.27	1.03
	Total	222	4.25	.911
Q9	Freshman	45	2.87	1.31
	Sophomore	69	2.94	1.22
	Junior	57	3.18	1.07
	Senior	50	3.12	1.29
	Total	221	3.03	1.22
Q10	Freshman	44	3.34	1.22
	Sophomore	68	3.56	1.06
	Junior	58	3.60	1.11
	Senior	50	3.42	1.21
	Total	220	3.50	1.14
Q11	Freshman	44	3.55	1.09
	Sophomore	69	3.58	1.04
	Junior	59	3.75	1.03
	Senior	50	3.80	1.01
	Total	222	3.67	1.04
Q12	Freshman	45	4.18	1.05
	Sophomore	71	4.31	.855
	Junior	59	4.29	.832
	Senior	48	4.38	.789
	Total	223	4.29	.875
Q13	Freshman	43	2.49	1.24
	Sophomore	69	2.44	1.09
	Junior	58	2.55	1.16
	Senior	49	2.88	1.14
	Total	219	2.58	1.18
Q14	Freshman	45	3.98	.941
	Sophomore	71	4.04	.963
	Junior	58	4.12	.938
	Senior	49	4.00	1.12
	Total	223	4.04	.983
Q15	Freshman	44	3.34	1.16
	Sophomore	71	3.25	1.27
	Junior	59	3.20	1.19
	Senior	49	3.28	1.41
	Total	223	3.27	1.26
Q16	Freshman	45	4.44	.893
	Sophomore	67	4.58	.781
	Junior	57	4.67	.546
	Senior	49	4.74	.491
	Total	218	4.61	.698
Q17	Freshman	44	3.86	1.09
	Sophomore	69	4.38	.842

	Junior	57	4.51	.782
	Senior	48	4.38	1.02
	Total	218	4.31	.947

		Sum of Squares	Df	Mean Square	F	P
Q1	Between Groups	.697	3	.232	.467	.705
	Within Groups	107.41	216	.497		
	Total	108.11	219			
Q2	Between Groups	1.19	3	.396	.905	.440
	Within Groups	96.17	220	.437		
	Total	97.36	223			
Q3	Between Groups	1.23	3	.411	.390	.760
	Within Groups	228.75	217	1.05		
	Total	229.98	220			
Q4	Between Groups	1.97	3	.656	1.04	.378
	Within Groups	139.58	220	.634		
	Total	141.55	223			
Q5	Between Groups	2.14	3	.714	1.50	.215
	Within Groups	104.72	220	.476		
	Total	106.86	223			
Q6	Between Groups	11.37	3	3.79	2.52	.059
	Within Groups	334.24	222	1.51		
	Total	345.61	225			
Q7	Between Groups	4.72	3	1.57	1.21	.308
	Within Groups	286.64	220	1.30		
	Total	291.36	223			
Q8	Between Groups	4.43	3	1.48	1.80	.148
	Within Groups	178.94	218	.821		
	Total	183.37	221			
Q9	Between Groups	3.34	3	1.11	.750	.523
	Within Groups	322.49	217	1.49		
	Total	325.84	220			
Q10	Between Groups	2.29	3	.762	.586	.625
	Within Groups	280.71	216	1.30		
	Total	283.00	219			
Q11	Between Groups	2.43	3	.809	.751	.523
	Within Groups	234.91	218	1.08		
	Total	237.33	221			
Q12	Between Groups	.941	3	.314	.406	.749
	Within Groups	169.11	219	.772		
	Total	170.05	222			

Q13	Between Groups	6.20	3	2.07	1.50	.215
	Within Groups	295.31	215	1.37		
	Total	301.51	218			
Q14	Between Groups	.631	3	.210	.215	.886
	Within Groups	214.01	219	.977		
	Total	214.64	222			
Q15	Between Groups	.508	3	.169	.106	.956
	Within Groups	348.88	219	1.59		
	Total	349.39	222			
Q16	Between Groups	2.23	3	.743	1.54	.206
	Within Groups	103.63	214	.484		
	Total	105.86	217			
Q17	Between Groups	11.53	3	3.84	4.50	.004
	Within Groups	182.88	214	.855		
	Total	194.41	217			

Posthoc Test, Q17

A1		N	Subset for alpha = .05		
			1	2	
Tukey HSD	Freshmen	44	3.864		
	Seniors	48			4.38
	Sophomores	69			4.38
	Juniors	57			4.51
	Sig.		1.00		.879

Appendix E--Student Satisfaction vs. Student Desires

Independent Samples Test

		t-test for Equality of Means		
			95% Confidence Interval of the Difference	
		Std. Error Difference	Lower	Upper
Q1	Equal Variances Assumed	.111	-.295	.144
	Equal Variances Not Assumed	.117	-.308	.157
Q2	Equal Variances Assumed	.104	-.282	.127
	Equal Variances Not Assumed	.110	-.296	.141
Q3	Equal Variances Assumed	.162	-.103	.536
	Equal Variances Not Assumed	.169	-.119	.552
Q4	Equal Variances Assumed	.125	-.198	.296
	Equal Variances Not Assumed	.135	-.220	.318
Q5	Equal Variances Assumed	.101	-.221	.178
	Equal Variances Not Assumed	.109	-.238	.195
Q6	Equal Variances Assumed	.189	-.186	.559
	Equal Variances Not Assumed	.196	-.201	.575
Q7	Equal Variances Assumed	.174	-.232	.455
	Equal Variances Not Assumed	.181	-.242	.470
Q8	Equal Variances Assumed	.138	-.415	.130
	Equal Variances Not Assumed	.147	-.434	.150
Q9	Equal Variances Assumed	.185	-.395	.333
	Equal Variances Not Assumed	.189	-.405	.344
Q10	Equal Variances Assumed	.173	-.478	.204
	Equal Variances Not Assumed	.172	-.478	.203
Q11	Equal Variances Assumed	.154	-.468	.140
	Equal Variances Not Assumed	.161	-.484	.155
Q12	Equal Variances Assumed	.136	-.280	.256
	Equal Variances Not Assumed	.151	-.312	.288
Q13	Equal Variances Assumed	.178	-.460	.242
	Equal Variances Not Assumed	.180	-.466	.248
Q14	Equal Variances Assumed	.145	-.247	.325
	Equal Variances Not Assumed	.145	-.249	.326
Q15	Equal Variances Assumed	.190	-.266	.484
	Equal Variances Not Assumed	.195	-.278	.495
Q16	Equal Variances Assumed	.109	-.434	-.006
	Equal Variances Not Assumed	.134	-.487	.047
Q17	Equal Variances Assumed	.146	-.267	.308
	Equal Variances Not Assumed	.150	-.278	.317

Satisfied vs. Dissatisfied

t- test for Equality of Means

	t	(t)df	p	Mean Difference
Q1 Equal Variances Assumed	-.680	195	.497	-.076
Equal Variances Not Assumed	-.644	95.23	.521	-.076
Q2 Equal Variances Assumed	-.747	197	.456	-.077
Equal Variances Not Assumed	-.703	96.08	.484	-.077
Q3 Equal Variances Assumed	1.34	196	.183	.217
Equal Variances Not Assumed	1.28	97.21	.204	.217
Q4 Equal Variances Assumed	.392	198	.696	.049
Equal Variances Not Assumed	.362	92.82	.718	.049
Q5 Equal Variances Assumed	-.213	198	.831	-.022
Equal Variances Not Assumed	-.198	91.57	.843	-.022
Q6 Equal Variances Assumed	.989	199	.324	.187
Equal Variances Not Assumed	.956	103.3	.341	.187
Q7 Equal Variances Assumed	.640	197	.523	.111
Equal Variances Not Assumed	.617	103.3	.539	.111
Q8 Equal Variances Assumed	-1.03	195	.305	-.142
Equal Variances Not Assumed	-.967	96.1	.336	-.142
Q9 Equal Variances Assumed	-.167	194	.867	-.031
Equal Variances Not Assumed	-.163	107.0	.870	-.031
Q10 Equal Variances Assumed	-.795	196	.428	-.137
Equal Variances Not Assumed	-.799	110.8	.426	-.137
Q11 Equal Variances Assumed	-1.07	198	.288	-.164
Equal Variances Not Assumed	-1.02	101.4	.310	-.164
Q12 Equal Variances Assumed	-.089	199	.929	-.012
Equal Variances Not Assumed	-.080	89.90	.937	-.012
Q13 Equal Variances Assumed	-.612	195	.541	-.109
Equal Variances Not Assumed	-.606	110.1	.546	-.109
Q14 Equal Variances Assumed	.266	199	.790	.039
Equal Variances Not Assumed	.267	111.5	.790	.039
Q15 Equal Variances Assumed	.572	199	.568	.109
Equal Variances Not Assumed	.558	105.7	.578	.109
Q16 Equal Variances Assumed	-2.03	194	.044	-.220
Equal Variances Not Assumed	-1.64	72.3	.104	-.220
Q17 Equal Variances Assumed	.138	194	.890	.020
Equal Variances Not Assumed	.135	103.9	.893	.020

Satisfied/Dissatisfied

		N	M	SD
Q1	Satisfied	58	4.5	.778
	Dissatisfied	139	4.58	.681
Q2	Satisfied	59	4.64	.737
	Dissatisfied	140	4.72	.635
Q3	Satisfied	58	4.14	1.12
	Dissatisfied	140	3.92	1.00
Q4	Satisfied	59	4.48	.916
	Dissatisfied	141	4.43	.758
Q5	Satisfied	58	4.69	.730
	Dissatisfied	142	4.71	.614
Q6	Satisfied	60	3.35	1.30
	Dissatisfied	141	3.16	1.19
Q7	Satisfied	60	3.18	1.20
	Dissatisfied	139	3.07	1.09
Q8	Satisfied	59	4.17	.985
	Dissatisfied	138	4.31	.844
Q9	Satisfied	60	3.05	1.24
	Dissatisfied	136	3.08	1.17
Q10	Satisfied	59	3.42	1.10
	Dissatisfied	139	3.56	1.12
Q11	Satisfied	60	3.60	1.08
	Dissatisfied	140	3.76	.964
Q12	Satisfied	60	4.30	1.05
	Dissatisfied	141	4.31	.803
Q13	Satisfied	60	2.53	1.17
	Dissatisfied	137	2.64	1.14
Q14	Satisfied	60	4.12	.940
	Dissatisfied	141	4.08	.942
Q15	Satisfied	60	3.35	1.29
	Dissatisfied	141	3.24	1.21
Q16	Satisfied	57	4.46	.946
	Dissatisfied	139	4.68	.555
Q17	Satisfied	59	4.36	.978
	Dissatisfied	137	3.34	.918

Independent Samples Test
Satisfied/Dissatisfied

Levene's Test for Equality of Variances				Levene's Test for Equality of Variances			
		F	Sig.			F	Sig.
Q1	Equal Variances Assumed	2.11	.148	Q10	Equal Variances Assumed	.138	.710
Q2	Equal Variances Assumed	1.70	.194	Q11	Equal Variances Assumed	.779	.378
Q3	Equal Variances Assumed	.839	.361	Q12	Equal Variances Assumed	2.72	.100
Q4	Equal Variances Assumed	.598	.440	Q13	Equal Variances Assumed	.094	.760
Q5	Equal Variances Assumed	.276	.600	Q14	Equal Variances Assumed	.102	.750
Q6	Equal Variances Assumed	2.23	.137	Q15	Equal Variances Assumed	1.09	.297
Q7	Equal Variances Assumed	.669	.414	Q16	Equal Variances Assumed	19.99	.000
Q8	Equal Variances Assumed	3.01	.085	Q17	Equal Variances Assumed	.060	.807
Q9	Equal Variances Assumed	.091	.763				

Appendix F—Student Satisfaction and Tasks Fulfilled

Crosstabs

			Satisfied	Dissatisfied	Total
Q1	Yes	N	96	18	114
		%	<u>69.1</u>	<u>32.1</u>	<u>58.5</u>
	Don't Know	N	21	13	34
		%	<u>15.1</u>	<u>23.2</u>	<u>17.4</u>
	No	N	22	25	47
		%	<u>15.8</u>	<u>44.6</u>	<u>24.1</u>
	Total N		139	56	195
Q2	Yes	N	117	26	143
		%	<u>82.4</u>	<u>44.8</u>	<u>71.5</u>
	Don't Know	N	9	14	23
		%	<u>6.3</u>	<u>24.1</u>	<u>11.5</u>
	No	N	16	18	34
		%	<u>11.3</u>	<u>31.0</u>	<u>17.0</u>
	Total		142	58	200
Q3	Yes	N	55	7	62
		%	<u>38.5</u>	<u>12.5</u>	<u>31.2</u>
	Don't Know	N	44	16	60
		%	<u>30.8</u>	<u>28.6</u>	<u>30.2</u>
	No	N	44	33	77
		%	<u>30.8</u>	<u>58.9</u>	<u>38.7</u>
	Total		143	56	199
Q4	Yes	N	77	8	85
		%	<u>53.8</u>	<u>14.3</u>	<u>42.7</u>
	Don't Know	N	27	15	42
		%	<u>18.9</u>	<u>26.8</u>	<u>21.1</u>
	No	N	39	33	72
		%	<u>27.3</u>	<u>58.9</u>	<u>36.2</u>
	Total		143	56	199
Q5	Yes	N	115	16	131
		%	<u>81.6</u>	<u>27.6</u>	<u>65.8</u>
	Don't Know	N	12	12	24
		%	<u>8.5</u>	<u>20.7</u>	<u>12.1</u>
	No	N	14	30	44
		%	<u>9.9</u>	<u>51.7</u>	<u>22.1</u>
	Total		141	58	199
Q6	Yes	N	46	1	47
		%	<u>32.6</u>	<u>1.8</u>	<u>23.9</u>
	Don't Know	N	26	8	34

		%	<u>18.4</u>	<u>14.3</u>	<u>17.3</u>
	No	N	69	47	116
		%	<u>48.9</u>	<u>83.9</u>	<u>58.9</u>
	Total		141	56	197
Q7	Yes	N	42	5	47
		%	<u>29.6</u>	<u>8.9</u>	<u>23.7</u>
	Don't Know	N	25	12	37
		%	<u>17.6</u>	<u>21.4</u>	<u>18.7</u>
	No	N	75	39	114
		%	<u>52.8</u>	<u>69.6</u>	<u>57.6</u>
	Total		142	56	198
Q8	Yes	N	99	10	109
		%	<u>69.7</u>	<u>18.2</u>	<u>55.3</u>
	Don't Know	N	24	11	35
		%	<u>16.9</u>	<u>20</u>	<u>17.8</u>
	No	N	19	34	53
		%	<u>13.4</u>	<u>61.8</u>	<u>26.9</u>
	Total		142	55	197
Q9	Yes	N	30	4	34
		%	<u>21</u>	<u>7.1</u>	<u>17.1</u>
	Don't Know	N	49	18	67
		%	<u>34.3</u>	<u>32.1</u>	<u>33.7</u>
	No	N	64	34	98
		%	<u>44.8</u>	<u>60.7</u>	<u>49.2</u>
	Total		143	56	199
Q10	Yes	N	76	6	82
		%	<u>52.8</u>	<u>10.7</u>	<u>41</u>
	Don't Know	N	40	20	60
		%	<u>27.8</u>	<u>35.7</u>	<u>30</u>
	No	N	28	30	58
		%	<u>19.4</u>	<u>53.6</u>	<u>29</u>
	Total		144	56	200
Q11	Yes	N	60	10	70
		%	<u>42.3</u>	<u>17.9</u>	<u>35.4</u>
	Don't Know	N	36	15	51
		%	<u>25.4</u>	<u>26.8</u>	<u>25.8</u>
	No	N	46	31	77
		%	<u>32.4</u>	<u>55.4</u>	<u>38.9</u>
	Total		142	56	198
Q12	Yes	N	88	11	99
		%	<u>62</u>	<u>19.3</u>	<u>49.7</u>
	Don't Know	N	31	10	41
		%	<u>21.8</u>	<u>17.5</u>	<u>20.6</u>
	No	N	23	36	59

		<u>%</u>	<u>16.2</u>	<u>63.2</u>	<u>29.6</u>
	Total		142	57	199
Q13	Yes	N	18		18
		<u>%</u>	<u>12.6</u>		<u>9</u>
	Don't Know	N	35	16	51
		<u>%</u>	<u>24.5</u>	<u>28.6</u>	<u>25.6</u>
	No	N	90	40	130
		<u>%</u>	<u>62.9</u>	<u>71.4</u>	<u>65.3</u>
	Total		143	56	199
Q14	Yes	N	86	6	92
		<u>%</u>	<u>61</u>	<u>10.7</u>	<u>46.7</u>
	Don't Know	N	23	12	35
		<u>%</u>	<u>16.3</u>	<u>21.4</u>	<u>17.8</u>
	No	N	32	38	70
		<u>%</u>	<u>22.7</u>	<u>67.9</u>	<u>35.5</u>
	Total		141	56	197
Q15	Yes	N	22	3	25
		<u>%</u>	<u>15.6</u>	<u>5.4</u>	<u>12.7</u>
	Don't Know	N	36	15	51
		<u>%</u>	<u>25.5</u>	<u>26.8</u>	<u>25.9</u>
	No	N	83	38	121
		<u>%</u>	<u>58.9</u>	<u>67.9</u>	<u>61.4</u>
	Total		141	56	197
Q16	Yes	N	120	24	144
		<u>%</u>	<u>83.3</u>	<u>41.4</u>	<u>71.3</u>
	Don't Know	N	12	11	23
		<u>%</u>	<u>8.3</u>	<u>19.0</u>	<u>11.4</u>
	No	N	12	23	35
		<u>%</u>	<u>8.3</u>	<u>39.7</u>	<u>17.3</u>
	Total		144	58	202
Q17	Yes	N	99	11	110
		<u>%</u>	<u>68.8</u>	<u>19.6</u>	<u>55</u>
	Don't Know	N	19	8	27
		<u>%</u>	<u>13.2</u>	<u>14.3</u>	<u>13.5</u>
	No	N	26	37	63
		<u>%</u>	<u>18.1</u>	<u>66.1</u>	<u>31.5</u>
	Total		144	56	200

Appendix G—Adviser Responses to Criteria

Academic Adviser Responses to the 17 Advising Criteria

Advising Task	M	SE	SD
2. Provide accurate information on graduation requirements	4.87	.05	.47
1. Provide accurate information on academic policies	4.66	.06	.60
5. Help accurately evaluate progress toward graduation	4.66	.07	.70
16. Be available and accessible when needed	4.61	.06	.61
8. Listen closely to concerns and questions—academic or other	4.24	.09	.83
17. Remember student's name and repeat it during session	4.15	.08	.80
12. Help student make decisions in major and career	4.10	.10	.95
4. Provide guidance on where to seek educational options	4.04	.08	.80
3. Provide accurate information on campus resources	3.84	.09	.84
10. Act as a role model	3.52	.10	.96
14. Help the student set goals	3.33	.11	1.01
6. Ask about personal or social concerns or issues	2.99	.09	.86
11. Encourage risk taking through different classes, involvement	2.93	.10	.99
9. Help student clarify values and ethics	2.72	.10	.95
15. Teach time management and study skills	2.66	.11	1.04
7. Tell about adviser's life outside work	2.52	.11	1.03
13. Help student make important decisions in personal life	2.52	.10	.98

Frequency Analyses
Adviser Responses

		A1	A2	A3	A4	Q1
N	Valid	91	89	89	90	92
	Missing	1	3	3	2	
Mean		9.26	3.51	5.87	3.31	4.66
Standard Error of Mean		.605	.078	.294	.249	.062
Median		8	4	6	2	5
Standard Deviation		5.77	.740	2.78	2.36	.598

		Q2	Q3	Q4	Q5	Q6
N	Valid	92	92	91	92	92
	Missing			1		
Mean		4.87	3.84	4.04	4.66	2.99
Standard Error of Mean		.049	.088	.084	.073	.089
Median		5	4	4	5	3
Standard Deviation		.474	.842	.802	.700	.858

		Q7	Q8	Q9	Q10	Q11
N	Valid	92	92	92	91	91
	Missing				1	1
Mean		2.52	4.24	2.72	3.52	2.93
Standard Error of Mean		.108	.087	.099	.101	.103
Median		3	4	3	4	3
Standard Deviation		1.03	.83	.953	.959	.987

		Q12	Q13	Q14	Q15	Q16
N	Valid	92	91	92	92	90
	Missing		1			2
Mean		4.10	2.52	3.33	2.65	4.61
Standard Error of Mean		.099	.103	.105	.109	.065
Median		4	2	3.5	3	5
Standard Deviation		.950	.982	1.01	1.04	.612

		Q17	Q21
N	Valid	91	83
	Missing	1	9
Mean		4.15	3.35
Standard Error of Mean		.084	.167
Median		4	4
Standard Deviation		.802	1.53

Appendix H—Adviser vs. Student Responses

Group Statistics			
Type	N	M	SD
Q1 Students	221	4.57	.702
Advisers	92	4.66	.598
Q2 Students	225	4.70	.660
Advisers	92	4.87	.474
Q3 Students	222	4.00	1.02
Advisers	92	3.84	.842
Q4 Students	225	4.46	.796
Advisers	91	4.04	.802
Q5 Students	222	4.68	.691
Advisers	92	4.66	.700
Q6 Students	227	3.12	1.24
Advisers	92	2.99	.858
Q7 Students	225	3.06	1.14
Advisers	92	2.52	1.03
Q8 Students	223	4.25	.909
Advisers	92	4.24	.830
Q9 Students	222	3.03	1.21
Advisers	92	2.72	.953
Q10 Students	221	3.50	1.14
Advisers	91	3.52	.959
Q11 Students	223	3.67	1.04
Advisers	91	2.93	.987
Q12 Students	224	4.30	.875
Advisers	92	4.10	.950
Q13 Students	220	2.58	1.17
Advisers	91	2.52	.982
Q14 Students	224	4.05	.983
Advisers	92	3.33	1.01
Q15 Students	224	3.26	1.25
Advisers	92	2.65	1.04
Q16 Students	219	4.61	.697
Advisers	90	4.61	.612
Q17 Students	219	4.31	.945
Advisers	91	4.15	.802

Independent Samples Test

	t- test for Equality of Means			
	t	(t)df	p	Mean Difference
Q1 Equal Variances Assumed	-1.17	311	.244	-.097
Equal Variances Not Assumed	-1.25	198.2	.214	-.097
Q2 Equal Variances Assumed	-2.27	315	.024	-.172
Equal Variances Not Assumed	-2.60	232.9	.010	-.172
Q3 Equal Variances Assumed	1.31	312	.190	.159
Equal Variances Not Assumed	1.42	204.6	.156	.159
Q4 Equal Variances Assumed	4.18	314	.000	.414
Equal Variances Not Assumed	4.16	165.5	.000	.414
Q5 Equal Variances Assumed	.198	315	.844	.017
Equal Variances Not Assumed	.197	167.2	.844	.017
Q6 Equal Variances Assumed	1.26	317	.207	.178
Equal Variances Not Assumed	1.47	240.2	.143	.178
Q7 Equal Variances Assumed	3.90	315	.000	.536
Equal Variances Not Assumed	4.07	186	.000	.536
Q8 Equal Variances Assumed	.068	313	.946	.008
Equal Variances Not Assumed	.071	184.7	.944	.008
Q9 Equal Variances Assumed	2.18	312	.030	.310
Equal Variances Not Assumed	2.41	214.6	.017	.310
Q10 Equal Variances Assumed	-.105	310	.917	-.014
Equal Variances Not Assumed	-.113	197.6	.911	-.014
Q11 Equal Variances Assumed	5.80	312	.000	.739
Equal Variances Not Assumed	5.93	175.2	.000	.739
Q12 Equal Variances Assumed	1.77	314	.077	.197
Equal Variances Not Assumed	1.71	157.6	.089	.197
Q13 Equal Variances Assumed	.435	309	.664	.061
Equal Variances Not Assumed	.468	199.3	.640	.061
Q14 Equal Variances Assumed	5.86	314	.000	.719
Equal Variances Not Assumed	5.80	165.9	.000	.719
Q15 Equal Variances Assumed	4.13	314	.000	.611
Equal Variances Not Assumed	4.46	201.9	.000	.611
Q16 Equal Variances Assumed	.009	307	.993	.001
Equal Variances Not Assumed	.010	187.4	.992	.001
Q17 Equal Variances Assumed	1.39	308	.167	.157
Equal Variances Not Assumed	1.48	196.9	.139	.157

Levene's Test
Advisers vs. Students

Levene's Test for Equality of <u>Variances</u>				Levene's Test for Equality of <u>Variances</u>			
		F	Sig.			F	Sig.
Q1	Equal Variances Assumed	4.25	.040	Q10	Equal Variances Assumed	4.31	.039
Q2	Equal Variances Assumed	19.35	.000	Q11	Equal Variances Assumed	1.49	.223
Q3	Equal Variances Assumed	5.27	.022	Q12	Equal Variances Assumed	.141	.708
Q4	Equal Variances Assumed	2.02	.157	Q13	Equal Variances Assumed	2.64	.105
Q5	Equal Variances Assumed	.144	.704	Q14	Equal Variances Assumed	1.41	.236
Q6	Equal Variances Assumed	18.28	.000	Q15	Equal Variances Assumed	3.77	.053
Q7	Equal Variances Assumed	.155	.694	Q16	Equal Variances Assumed	.293	.589
Q8	Equal Variances Assumed	1.34	.247	Q17	Equal Variances Assumed	5.88	.016
Q9	Equal Variances Assumed	2.19	.140				

		t-test for Equality of Means		
			95% Confidence Interval of the Difference	
		Std. Error Difference	Lower	Upper
Q1	Equal Variances Assumed	.084	-.262	.067
	Equal Variances Not Assumed	.078	-.252	.057
Q2	Equal Variances Assumed	.076	-.321	-.023
	Equal Variances Not Assumed	.066	-.302	-.415
Q3	Equal Variances Assumed	.121	-.079	.396
	Equal Variances Not Assumed	.111	-.612	.378
Q4	Equal Variances Assumed	.099	.219	.609
	Equal Variances Not Assumed	.099	.218	.610
Q5	Equal Variances Assumed	.085	-.152	.186
	Equal Variances Not Assumed	.086	-.153	.187
Q6	Equal Variances Assumed	.141	-.099	.456
	Equal Variances Not Assumed	.121	-.061	.417
Q7	Equal Variances Assumed	.138	.265	.807
	Equal Variances Not Assumed	.132	.276	.796
Q8	Equal Variances Assumed	.110	-.209	.224
	Equal Variances Not Assumed	.106	-.201	.216
Q9	Equal Variances Assumed	.142	.030	.589
	Equal Variances Not Assumed	.129	.056	.563
Q10	Equal Variances Assumed	.136	-.281	.253
	Equal Variances Not Assumed	.126	-.263	.235
Q11	Equal Variances Assumed	.127	.488	.989
	Equal Variances Not Assumed	.125	.493	.984
Q12	Equal Variances Assumed	.111	-.022	.415
	Equal Variances Not Assumed	.115	-.030	.424
Q13	Equal Variances Assumed	.140	-.214	.336
	Equal Variances Not Assumed	.130	-.195	.317
Q14	Equal Variances Assumed	.123	.477	.960
	Equal Variances Not Assumed	.124	.474	.963
Q15	Equal Variances Assumed	.148	.320	.902
	Equal Variances Not Assumed	.137	.341	.882
Q16	Equal Variances Assumed	.084	-.165	.167
	Equal Variances Not Assumed	.080	-.157	.158
Q17	Equal Variances Assumed	.113	-.066	.379
	Equal Variances Not Assumed	.106	-.052	.365

Appendix I—Full-Time vs. Non Full-Time Advisers

T-Test Group Statistics

Task	Advising Status	N	M	SD	SE
Q1	Full-time	61	4.64	.606	.078
	Non-Full-time	29	4.79	.491	.091
Q2	Full Time	61	4.87	.499	.064
	Non Full-Time	29	4.86	.441	.082
Q3	Full Time	61	3.59	.761	.098
	Non Full-Time	29	4.41	.682	.127
Q4	Full Time	60	4.00	.781	.101
	Non Full Time	29	4.17	.759	.141
Q5	Full Time	61	4.62	.756	.097
	Non Full Time	29	4.76	.577	.107
Q6	Full Time	61	3.00	.816	.105
	Non Full Time	29	3.07	.884	.164
Q7	Full Time	61	2.39	1.07	.137
	Non Full Time	29	2.86	.875	.163
Q8	Full Time	61	4.16	.898	.115
	Non Full Time	29	4.41	.682	.127
Q9	Full Time	61	2.62	.986	.126
	Non Full Time	29	2.97	.865	.161
Q10	Full Time	60	3.55	.982	.127
	Non Full Time	29	3.55	.870	.161
Q11	Full Time	60	2.78	1.03	.133
	Non Full Time	29	3.21	.861	.160
Q12	Full Time	61	3.93	1.05	.134
	Non Full Time	29	4.41	.628	.117
Q13	Full Time	60	2.40	1.01	.131
	Non Full Time	29	2.79	.902	.167
Q14	Full Time	61	3.25	1.08	.138
	Non Full Time	29	3.59	.780	.145
Q15	Full Time	61	2.53	1.03	.131
	Non Full Time	29	2.90	1.05	.194
Q16	Full Time	59	4.54	.597	.078
	Non Full Time	29	4.76	.636	.118
Q17	Full Time	60	4.18	.725	.094
	Non Full Time	29	4.21	.774	.144

Independent Samples Tests (Full-Time versus Non Full-Time)

		Levene's Test for Equality of Variances				Levene's Test for Equality of Variances	
		F	Sig.			F	Sig.
Q1	Equal Variances Assumed	4.94	.029	Q10	Equal Variances Assumed	1.33	.251
Q2	Equal Variances Assumed	.005	.944	Q11	Equal Variances Assumed	.966	.328
Q3	Equal Variances Assumed	.460	.499	Q12	Equal Variances Assumed	2.71	.103
Q4	Equal Variances Assumed	.001	.972	Q13	Equal Variances Assumed	1.41	.238
Q5	Equal Variances Assumed	2.57	.113	Q14	Equal Variances Assumed	2.80	.098
Q6	Equal Variances Assumed	.892	.347	Q15	Equal Variances Assumed	.009	.925
Q7	Equal Variances Assumed	5.11	.026	Q16	Equal Variances Assumed	3.46	.066
Q8	Equal Variances Assumed	.487	.487	Q17	Equal Variances Assumed	.409	.524
Q9	Equal Variances Assumed	2.04	.156				

Full-Time vs Non Full-Time

	t- test for Equality of Means			
	t	(t)df=	p=	Mean Difference
Q1 Equal Variances Assumed	-1.19	88	.237	-.154
Equal Variances Not Assumed	-1.28	66.88	.204	-.154
Q2 Equal Variances Assumed	.062	88	.950	.007
Equal Variances Not Assumed	.065	61.79	.948	.007
Q3 Equal Variances Assumed	-4.96	88	.000	-.824
Equal Variances Not Assumed	-5.15	60.97	.000	-.824
Q4 Equal Variances Assumed	-.985	87	.327	-.172
Equal Variances Not Assumed	-.995	56.91	.324	-.172
Q5 Equal Variances Assumed	-.854	88	.395	-.136
Equal Variances Not Assumed	-.940	70.52	.351	-.136
Q6 Equal Variances Assumed	-.365	88	.716	-.069
Equal Variances Not Assumed	-.354	51.39	.724	-.069
Q7 Equal Variances Assumed	-2.05	88	.043	-.469
Equal Variances Not Assumed	-2.21	66.25	.031	-.469
Q8 Equal Variances Assumed	-1.33	88	.188	-.250
Equal Variances Not Assumed	-1.46	70.71	.149	-.250
Q9 Equal Variances Assumed	-1.60	88	.113	-.343
Equal Variances Not Assumed	-1.68	62.18	.099	-.343
Q10 Equal Variances Assumed	-.008	87	.994	-.002
Equal Variances Not Assumed	-.008	61.96	.993	-.002
Q11 Equal Variances Assumed	-1.92	87	.058	-.424
Equal Variances Not Assumed	-2.04	65.11	.045	-.424
Q12 Equal Variances Assumed	-2.28	88	.025	-.479
Equal Variances Not Assumed	-2.70	83.15	.008	-.479
Q13 Equal Variances Assumed	-1.78	87	.079	-.393
Equal Variances Not Assumed	-1.86	61.63	.069	-.393
Q14 Equal Variances Assumed	-1.52	88	.131	-.340
Equal Variances Not Assumed	-1.70	73.44	.093	-.340
Q15 Equal Variances Assumed	-1.60	88	.114	-.372
Equal Variances Not Assumed	-1.59	54.16	.119	-.372
Q16 Equal Variances Assumed	-1.56	86	.121	-.216
Equal Variances Not Assumed	-1.53	52.73	.132	-.216
Q17 Equal Variances Assumed	-.141	87	.888	-.024
Equal Variances Not Assumed	-.137	52.32	.891	-.024

Full-Time vs. Non Full-Time

		t-test for Equality of Means		
			95% Confidence Interval of the Difference	
		Std. Error Difference	Lower	Upper
Q1	Equal Variances Assumed	.129	-.410	.103
	Equal Variances Not Assumed	.120	-.393	.085
Q2	Equal Variances Assumed	.109	-.209	.223
	Equal Variances Not Assumed	.104	-.201	.214
Q3	Equal Variances Assumed	.166	-1.15	-.493
	Equal Variances Not Assumed	.160	-1.14	-.504
Q4	Equal Variances Assumed	.175	-.520	.176
	Equal Variances Not Assumed	.173	-.520	.175
Q5	Equal Variances Assumed	.159	-.451	.180
	Equal Variances Not Assumed	.144	-.424	.152
Q6	Equal Variances Assumed	.189	-.445	.307
	Equal Variances Not Assumed	.195	-.459	.322
Q7	Equal Variances Assumed	.228	-.922	-.015
	Equal Variances Not Assumed	.212	-.893	-.044
Q8	Equal Variances Assumed	.188	-.624	.125
	Equal Variances Not Assumed	.171	-.591	.091
Q9	Equal Variances Assumed	.214	-.768	.083
	Equal Variances Not Assumed	.204	-.751	.066
Q10	Equal Variances Assumed	.214	-.427	.424
	Equal Variances Not Assumed	.205	-.412	.409
Q11	Equal Variances Assumed	.221	-.862	.015
	Equal Variances Not Assumed	.208	-.838	-.009
Q12	Equal Variances Assumed	.211	-.898	-.061
	Equal Variances Not Assumed	.178	-.833	-.126
Q13	Equal Variances Assumed	.221	-.833	.046
	Equal Variances Not Assumed	.212	-.818	.031
Q14	Equal Variances Assumed	.223	-.784	.104
	Equal Variances Not Assumed	.200	-.738	.058
Q15	Equal Variances Assumed	.233	-.835	.091
	Equal Variances Not Assumed	.235	-.842	.098
Q16	Equal Variances Assumed	.138	-.491	.059
	Equal Variances Not Assumed	.141	-.500	.067
Q17	Equal Variances Assumed	.168	-.357	.309
	Equal Variances Not Assumed	.171	-.368	.320

Appendix J—Self Perceived Typologies and Perceptions

Social vs. Investigative—Group Statistics

		N	M	SD
Q1	Social	30	4.87	.346
	Investigative	20	4.55	.686
Q2	Social	30	4.97	.183
	Investigative	20	4.95	.224
Q3	Social	30	4.00	.830
	Investigative	20	3.70	.733
Q4	Social	29	4.03	.778
	Investigative	20	4.10	.718
Q5	Social	30	4.87	.434
	Investigative	20	4.45	.945
Q6	Social	30	3.07	.785
	Investigative	20	2.75	1.02
Q7	Social	30	2.70	1.02
	Investigative	20	2.05	.999
Q8	Social	30	4.30	.750
	Investigative	20	4.35	.587
Q9	Social	30	2.87	.819
	Investigative	20	2.55	.887
Q10	Social	30	3.67	.844
	Investigative	20	3.35	1.14
Q11	Social	30	3.20	.761
	Investigative	20	2.85	1.04
Q12	Social	30	4.07	.868
	Investigative	20	4.30	.801
Q13	Social	30	2.63	.999
	Investigative	19	2.16	.898
Q14	Social	30	3.63	.809
	Investigative	20	3.15	1.14
Q15	Social	30	2.50	.974
	Investigative	20	2.95	.999
Q16	Social	30	4.63	.669
	Investigative	20	4.70	.470
Q17	Social	30	4.27	.785
	Investigative	20	4.05	1.05

Perceived Personality Types
Independent Samples Tests

		t-test for Equality of Means		
			95% Confidence Interval of the Difference	
		Std. Error Difference	Lower	Upper
Q1	Equal Variances Assumed	.147	.021	.612
	Equal Variances Not Assumed	.166	-.025	.658
Q2	Equal Variances Assumed	.058	-.099	.133
	Equal Variances Not Assumed	.060	-.105	.139
Q3	Equal Variances Assumed	.229	-.160	.760
	Equal Variances Not Assumed	.223	-.150	.750
Q4	Equal Variances Assumed	.219	-.507	.376
	Equal Variances Not Assumed	.216	-.501	.370
Q5	Equal Variances Assumed	.197	.020	.813
	Equal Variances Not Assumed	.226	-.049	.882
Q6	Equal Variances Assumed	.256	-.197	.830
	Equal Variances Not Assumed	.269	-.231	.864
Q7	Equal Variances Assumed	.292	.062	1.24
	Equal Variances Not Assumed	.291	.062	1.24
Q8	Equal Variances Assumed	.199	-.450	.350
	Equal Variances Not Assumed	.190	-.432	.332
Q9	Equal Variances Assumed	.244	-.175	.808
	Equal Variances Not Assumed	.248	-.186	.819
Q10	Equal Variances Assumed	.280	-.247	.880
	Equal Variances Not Assumed	.297	-.288	.922
Q11	Equal Variances Assumed	.255	-.162	.862
	Equal Variances Not Assumed	.271	-.202	.902
Q12	Equal Variances Assumed	.243	-.722	.256
	Equal Variances Not Assumed	.239	-.716	.249
Q13	Equal Variances Assumed	.282	-.092	1.04
	Equal Variances Not Assumed	.275	-.080	1.03
Q14	Equal Variances Assumed	.275	-.069	1.04
	Equal Variances Not Assumed	.294	-.116	1.08
Q15	Equal Variances Assumed	.284	-1.02	.121
	Equal Variances Not Assumed	.285	-1.03	.127
Q16	Equal Variances Assumed	.173	-.414	.280
	Equal Variances Not Assumed	.161	-.391	.257
Q17	Equal Variances Assumed	.260	-.305	.739
	Equal Variances Not Assumed	.275	-.343	.776

Perceived Personality Types continued

		Levene's Test for Equality of Variances				Levene's Test for Equality of Variances	
		F	Sig.			F	Sig.
Q1	Equal Variances Assumed	18.17	.000	Q10	Equal Variances Assumed	3.04	.088
Q2	Equal Variances Assumed	.334	.566	Q11	Equal Variances Assumed	3.49	.068
Q3	Equal Variances Assumed	.342	.562	Q12	Equal Variances Assumed	.275	.602
Q4	Equal Variances Assumed	.002	.962	Q13	Equal Variances Assumed	.835	.365
Q5	Equal Variances Assumed	18.32	.000	Q14	Equal Variances Assumed	4.21	.046
Q6	Equal Variances Assumed	1.38	.246	Q15	Equal Variances Assumed	.045	.832
Q7	Equal Variances Assumed	.046	.831	Q16	Equal Variances Assumed	.875	.354
Q8	Equal Variances Assumed	2.21	.144	Q17	Equal Variances Assumed	.249	.620
Q9	Equal Variances Assumed	.739	.394				

Personality Types continued

	t- test for Equality of Means			
	T	(t)df=	p=	Mean
	Difference			
Q1 Equal Variances Assumed	2.16	48	.036	.317
Equal Variances Not Assumed	1.91	25.50	.068	.317
Q2 Equal Variances Assumed	.289	48	.774	.017
Equal Variances Not Assumed	.277	35.10	.783	.017
Q3 Equal Variances Assumed	1.31	48	.196	.300
Equal Variances Not Assumed	1.34	44.23	.186	.300
Q4 Equal Variances Assumed	-.299	47	.766	-.066
Equal Variances Not Assumed	-.303	43.07	.763	-.066
Q5 Equal Variances Assumed	2.11	48	.040	.417
Equal Variances Not Assumed	1.85	24.41	.077	.417
Q6 Equal Variances Assumed	1.24	48	.221	.317
Equal Variances Not Assumed	1.18	33.55	.248	.317
Q7 Equal Variances Assumed	2.22	48	.031	.650
Equal Variances Not Assumed	2.23	41.53	.031	.650
Q8 Equal Variances Assumed	-.251	48	.803	-.050
Equal Variances Not Assumed	-.264	46.65	.793	-.050
Q9 Equal Variances Assumed	1.30	48	.201	.317
Equal Variances Not Assumed	1.28	38.58	.210	.317
Q10 Equal Variances Assumed	1.13	48	.264	.317
Equal Variances Not Assumed	1.07	32.65	.295	.317
Q11 Equal Variances Assumed	1.37	48	.176	.350
Equal Variances Not Assumed	1.29	32.30	.206	.350
Q12 Equal Variances Assumed	-.959	48	.342	-.233
Equal Variances Not Assumed	-.975	43.09	.335	-.233
Q13 Equal Variances Assumed	1.69	47	.098	.475
Equal Variances Not Assumed	1.73	41.47	.092	.475
Q14 Equal Variances Assumed	1.76	48	.085	.483
Equal Variances Not Assumed	1.64	31.63	.110	.483
Q15 Equal Variances Assumed	-1.59	48	.120	-.450
Equal Variances Not Assumed	-1.58	40.15	.123	-.450
Q16 Equal Variances Assumed	-.386	48	.701	-.067
Equal Variances Not Assumed	-.414	47.82	.681	-.067
Q17 Equal Variances Assumed	.835	48	.408	.217
Equal Variances Not Assumed	.788	32.81	.437	.217

Appendix K—Differences in Perceptions According to Major

Descriptives

					95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
		N	M	SD		
Q1	Engineering	37	4.54	.691	4.31	4.77
	College Liberal Arts	76	4.58	.717	4.42	4.74
	Science	21	4.29	.784	3.93	4.64
	Total	134	4.52	.723	4.40	4.65
Q2	Engineering	37	4.68	.580	4.48	4.87
	College Liberal Arts	76	4.71	.689	4.55	4.87
	Science	24	4.42	.929	4.03	4.81
	Total	137	4.65	.713	4.53	4.77
Q3	Engineering	37	3.35	1.11	2.98	3.72
	College Liberal Arts	76	4.08	1.04	3.84	4.32
	Science	23	4.00	.905	3.61	4.39
	Total	136	3.87	1.08	3.68	4.05
Q4	Engineering	37	4.16	.898	3.86	4.46
	College Liberal Arts	76	4.50	.825	4.31	4.69
	Science	23	4.30	.765	3.97	4.64
	Total	136	4.38	.843	4.23	4.52
Q5	Engineering	37	4.70	.618	4.50	4.91
	College Liberal Arts	78	4.63	.824	4.44	4.81
	Science	24	4.54	.779	4.21	4.87
	Total	139	4.63	.763	4.51	4.76
Q6	Engineering	37	2.81	.995	2.48	3.14
	College Liberal Arts	78	3.15	1.33	2.85	3.45
	Science	22	3.18	1.30	2.61	3.76
	Total	137	3.07	1.24	2.86	3.28
Q7	Engineering	37	2.70	1.18	2.31	3.10
	College Liberal Arts	77	3.00	1.11	2.75	3.25
	Science	23	3.26	1.29	2.70	3.82
	Total	137	2.96	1.17	2.77	3.16
Q8	Engineering	37	4.19	.845	3.91	4.47
	College Liberal Arts	76	4.15	1.07	3.90	4.39
	Science	22	4.27	.985	3.84	4.71
	Total	135	4.18	.992	4.01	4.35
Q9	Engineering	37	2.89	1.10	2.53	3.26
	College Liberal Arts	75	3.03	1.22	2.75	3.31
	Science	21	3.05	1.43	2.40	3.70
	Total	133	2.99	1.22	2.78	3.20

Q10	Engineering	34	3.32	1.17	2.91	3.73
	College Liberal Arts	77	3.49	1.19	3.21	3.75
	Science	22	3.32	.945	2.90	3.74
	Total	133	3.41	1.14	3.22	3.61
Q11	Engineering	33	3.39	1.09	3.01	3.78
	College Liberal Arts	77	3.69	1.08	3.44	3.93
	Science	23	3.78	1.24	3.25	4.32
	Total	133	3.63	1.11	3.44	3.82
Q12	Engineering	34	4.41	.701	4.17	4.66
	College Liberal Arts	78	4.15	.981	3.93	4.38
	Science	23	4.26	.864	3.89	4.64
	Total	135	4.24	.899	4.08	4.39
Q13	Engineering	34	2.15	.958	1.81	2.48
	College Liberal Arts	76	2.59	1.20	2.32	2.87
	Science	21	3.05	.973	2.61	3.49
	Total	131	2.55	1.14	2.35	2.75
Q14	Engineering	33	3.82	.983	3.47	4.17
	College Liberal Arts	78	3.99	1.01	3.76	4.22
	Science	23	4.13	.968	3.71	4.55
	Total	134	3.97	.996	3.80	4.14
Q15	Engineering	34	3.06	1.25	2.62	3.50
	College Liberal Arts	77	3.12	1.28	2.83	3.41
	Science	23	3.52	1.16	3.02	4.03
	Total	134	3.17	1.25	2.96	3.39
Q16	Engineering	33	4.49	.755	4.22	4.75
	College Liberal Arts	77	4.66	.620	4.52	4.80
	Science	23	4.22	1.09	3.75	4.69
	Total	133	4.54	.764	4.41	4.67
Q17	Engineering	33	4.06	.998	3.71	4.42
	College Liberal Arts	75	4.37	.912	4.16	4.58
	Science	23	4.22	1.17	3.71	4.72
	Total	131	4.27	.983	4.10	4.44

ANOVA

		Sum of Squares	Df	Mean Square	F	P
Q1	Between Groups	1.43	2	.716	1.38	.255
	Within Groups	68.00	131	.519		
	Total	69.43	133			
Q2	Between Groups	1.61	2	.805	1.60	.207
	Within Groups	67.57	134	.504		
	Total	69.18	136			
Q3	Between Groups	13.66	2	6.83	6.31	.002
	Within Groups	143.96	133	1.08		
	Total	157.62	135			
Q4	Between Groups	2.98	2	1.49	2.13	.123
	Within Groups	92.90	133	.698		
	Total	95.88	135			
Q5	Between Groups	.382	2	.191	.325	.723
	Within Groups	79.91	136	.588		
	Total	80.29	138			
Q6	Between Groups	3.31	2	1.65	1.07	.346
	Within Groups	207.10	134	1.55		
	Total	210.41	136			
Q7	Between Groups	4.65	2	2.33	1.73	.181
	Within Groups	180.17	134	1.35		
	Total	184.82	136			
Q8	Between Groups	.286	2	.143	.144	.866
	Within Groups	131.45	132	.996		
	Total	131.73	134			
Q9	Between Groups	.526	2	.263	.176	.839
	Within Groups	194.47	130	1.50		
	Total	194.99	132			
Q10	Between Groups	.821	2	.410	.311	.733
	Within Groups	171.44	130	1.32		
	Total	172.26	132			
Q11	Between Groups	2.64	2	1.32	1.07	.346
	Within Groups	160.31	130	1.23		
	Total	162.95	132			
Q12	Between Groups	1.59	2	.795	.983	.377
	Within Groups	106.82	132	.809		
	Total	108.42	134			
Q13	Between Groups	10.86	2	5.43	4.41	.014
	Within Groups	157.57	128	1.23		
	Total	168.43	130			
Q14	Between Groups	1.38	2	.688	.690	.503

	Within Groups	130.51	131	.996		
	Total	131.88	133			
Q15	Between Groups	3.48	2	1.74	1.11	.333
	Within Groups	205.57	131	1.57		
	Total	209.05	133			
Q16	Between Groups	3.65	2	1.82	3.23	.043
	Within Groups	73.38	130	.564		
	Total	77.02	132			
Q17	Between Groups	2.31	2	1.15	1.20	.305
	Within Groups	123.34	128	.964		
	Total	125.65	130			

Homogeneous Subsets

	A2	N	Subset for Alpha=.05	
			1	2
Q1	Tukey HSD	Scien	4.29	
		Engr	4.54	
		CLA	4.58	
		Sig. (p)	.212	
Q2	Tukey HSD	Scien	4.42	
		Engr	4.68	
		CLA	4.71	
		Sig. (p)	.179	
Q3	Tukey HSD	Engr	3.35	
		Scien		4.00
		CLA		4.08
		Sig. (p)	1.00	
Q4	Tukey HSD	Engr	4.16	
		Scien	4.30	
		CLA	4.50	
		Sig. (p)	.201	
Q5	Tukey HSD	Scien	4.54	
		CLA	4.63	
		Engr	4.70	
		Sig. (p)	.640	
Q6	Tukey HSD	Engr	2.81	
		CLA	3.15	
		Scie	3.18	
		Sig. (p)	.423	
Q7	Tukey HSD	Engr	2.70	
		CLA	3.00	
		Scie	3.26	
		Sig. (p)	.103	
Q8	Tukey HSD	CLA	4.15	

		Engr	37	4.19	
		Scie	22	4.27	
		Sig. (p)		.853	
Q9	Tukey HSD	Engr	37	2.89	
		CLA	75	3.03	
		Scie	21	3.05	
		Sig. (p)		.859	
Q10	Tukey HSD	Scien	22	3.32	
		Engr	34	3.32	
		CLA	77	3.48	
		Sig. (p)		.829	
Q11	Tukey HSD	Engr	33	3.39	
		CLA	77	3.69	
		Scie	23	3.78	
		Sig. (p)		.313	
Q12	Tukey HSD	CLA	78	4.15	
		Scien	23	4.26	
		Engr	34	4.41	
		Sig. (p)		.454	
Q13	Tukey HSD	Engr	34	2.15	
		CLA	76	2.59	2.59
		Scie	21		3.05
		Sig. (p)		.231	.215
Q14	Tukey HSD	Engr	33	3.82	
		CLA	78	3.99	
		Scie	23	4.13	
		Sig. (p)		.394	
Q15	Tukey HSD	Engr	34	3.06	
		CLA	77	3.12	
		Scie	23	3.52	
		Sig. (p)		.270	
Q16	Tukey HSD	Scien	23	4.22	
		Engr	33	4.49	4.49
		CLA	77		4.66
		Sig. (p)		.300	.588
Q17	Tukey HSD	Engr	33	4.06	
		CLA	75	4.37	
		Scie	23	4.22	
		Sig. (p)		.383	

Appendix L—Differences in Perceptions of Minority Students

Independent Samples Test				
	t- test for Equality of Means			
	t	(t)df=	p=	Mean Difference
Q1 Equal Variances Assumed	-2.18	219	.030	-.322
Equal Variances Not Assumed	-1.75	27.55	.092	-.322
Q2 Equal Variances Assumed	-2.76	223	.006	-.380
Equal Variances Not Assumed	-1.87	26.19	.073	-.380
Q3 Equal Variances Assumed	-2.72	220	.007	-.581
Equal Variances Not Assumed	-2.40	28.60	.023	-.581
Q4 Equal Variances Assumed	-1.74	223	.084	-.278
Equal Variances Not Assumed	-1.38	31.23	.179	-.278
Q5 Equal Variances Assumed	-2.34	223	.020	-.334
Equal Variances Not Assumed	-1.63	27.52	.115	-.334
Q6 Equal Variances Assumed	-1.08	225	.281	-.274
Equal Variances Not Assumed	-1.02	32.25	.317	-.274
Q7 Equal Variances Assumed	-2.50	223	.013	-.587
Equal Variances Not Assumed	-2.54	32.27	.016	-.587
Q8 Equal Variances Assumed	-1.21	221	.229	-.233
Equal Variances Not Assumed	-1.02	28.04	.317	-.233
Q9 Equal Variances Assumed	.057	220	.955	.015
Equal Variances Not Assumed	.060	31.55	.952	.015
Q10 Equal Variances Assumed	.172	219	.863	.041
Equal Variances Not Assumed	.194	34.85	.847	.041
Q11 Equal Variances Assumed	-.551	221	.582	-.116
Equal Variances Not Assumed	-.554	35.32	.583	-.116
Q12 Equal Variances Assumed	-1.11	222	.267	-.203
Equal Variances Not Assumed	-1.08	31.31	.291	-.203
Q13 Equal Variances Assumed	-.179	218	.858	-.044
Equal Variances Not Assumed	-.201	34.70	.842	-.044
Q14 Equal Variances Assumed	.178	222	.859	.037
Equal Variances Not Assumed	.186	32.84	.854	.037
Q15 Equal Variances Assumed	-.837	222	.403	-.215
Equal Variances Not Assumed	-.846	33.75	.404	-.215
Q16 Equal Variances Assumed	-1.93	217	.055	-.295
Equal Variances Not Assumed	-1.25	23.68	.224	-.295
Q17 Equal Variances Assumed	.125	217	.901	-.026
Equal Variances Not Assumed	.129	29.44	.898	-.026

Students of Color-Independent Samples Test

		Levene's Test for Equality of Variances				Levene's Test for Equality of Variances	
		F	Sig.			F	Sig.
Q1	Equal Variances Assumed	5.82	.017	Q10	Equal Variances Assumed	1.80	.181
Q2	Equal Variances Assumed	18.70	.000	Q11	Equal Variances Assumed	.298	.586
Q3	Equal Variances Assumed	.865	.353	Q12	Equal Variances Assumed	1.51	.220
Q4	Equal Variances Assumed	5.67	.018	Q13	Equal Variances Assumed	1.27	.261
Q5	Equal Variances Assumed	13.73	.000	Q14	Equal Variances Assumed	.621	.432
Q6	Equal Variances Assumed	.159	.691	Q15	Equal Variances Assumed	.765	.383
Q7	Equal Variances Assumed	.145	.704	Q16	Equal Variances Assumed	14.19	.000
Q8	Equal Variances Assumed	1.24	.267	Q17	Equal Variances Assumed	.008	.927
Q9	Equal Variances Assumed	1.01	.315				

Independent Samples Tests—Minority Students

		t-test for Equality of Means		
			95% Confidence Interval of the Difference	
		Std. Error Difference	Lower	Upper
Q1	Equal Variances Assumed	.148	-.613	-.031
	Equal Variances Not Assumed	.184	-.700	.056
Q2	Equal Variances Assumed	.138	-.652	-.108
	Equal Variances Not Assumed	.203	-.798	.038
Q3	Equal Variances Assumed	.214	-1.00	-.159
	Equal Variances Not Assumed	.242	-1.08	-.085
Q4	Equal Variances Assumed	.160	-.593	.037
	Equal Variances Not Assumed	.202	-.690	.134
Q5	Equal Variances Assumed	.143	-.615	-.053
	Equal Variances Not Assumed	.205	-.755	.087
Q6	Equal Variances Assumed	.253	-.774	.225
	Equal Variances Not Assumed	.270	-.824	.275
Q7	Equal Variances Assumed	.235	-1.05	-.123
	Equal Variances Not Assumed	.231	-1.06	-.117
Q8	Equal Variances Assumed	.193	-.613	.147
	Equal Variances Not Assumed	.228	-.701	.235
Q9	Equal Variances Assumed	.258	-.495	.524
	Equal Variances Not Assumed	.243	-.481	.511
Q10	Equal Variances Assumed	.238	-.429	.511
	Equal Variances Not Assumed	.211	-.387	.469
Q11	Equal Variances Assumed	.210	-.530	.298
	Equal Variances Not Assumed	.209	-.540	.309
Q12	Equal Variances Assumed	.182	-.562	.157
	Equal Variances Not Assumed	.189	-.587	.182
Q13	Equal Variances Assumed	.246	-.528	.440
	Equal Variances Not Assumed	.219	-.489	.401
Q14	Equal Variances Assumed	.206	-.369	.442
	Equal Variances Not Assumed	.196	-.363	.436
Q15	Equal Variances Assumed	.257	-.722	.291
	Equal Variances Not Assumed	.254	-.733	.302
Q16	Equal Variances Assumed	.153	-.596	.006
	Equal Variances Not Assumed	.236	-.783	.193
Q17	Equal Variances Assumed	.205	-.378	.430
	Equal Variances Not Assumed	.199	-.381	.433

Group Statistics—Minority Students

		N	M	SD
Q1	Students of Color	25	4.28	.891
	Other Students	196	4.60	.668
Q2	Students of Color	25	4.36	.995
	Other Students	200	4.74	.595
Q3	Students of Color	25	3.48	1.16
	Other Students	197	4.06	.988
Q4	Students of Color	28	4.21	1.03
	Other Students	197	4.49	.753
Q5	Students of Color	26	4.39	1.02
	Other Students	199	4.72	.629
Q6	Students of Color	27	2.93	1.33
	Other Students	200	3.20	1.22
Q7	Students of Color	26	2.54	1.10
	Other Students	199	3.13	1.13
Q8	Students of Color	25	4.04	1.10
	Other Students	198	4.27	.882
Q9	Students of Color	25	3.04	1.14
	Other Students	197	3.03	1.23
Q10	Students of Color	26	3.54	.989
	Other Students	195	3.50	1.16
Q11	Students of Color	28	3.57	1.03
	Other Students	195	3.69	1.04
Q12	Students of Color	26	4.12	.909
	Other Students	198	4.32	.870
Q13	Students of Color	26	2.54	1.03
	Other Students	194	2.58	1.19
Q14	Students of Color	26	4.08	.935
	Other Students	198	4.04	.992
Q15	Students of Color	27	3.07	1.24
	Other Students	197	3.29	1.26
Q16	Students of Color	23	4.35	1.11
	Other Students	196	4.64	.628
Q17	Students of Color	24	4.33	.917
	Other Students	195	4.31	.951

Appendix M—Student Responses to Advising Criteria

Student Responses—Frequency analyses

		A1	A2	Q1	Q2	Q3
N	Valid	231	232	221	225	222
	Missing	1	0	11	7	10
Mean		2.51	8.72	4.57	4.70	4.00
Standard Error of Mean		.07	.324	.047	.044	.069
Median		2.00	8.00	5.00	5	4
Standard Deviation		1.06	4.94	.702	.660	1.02
Minimum		1.0	1.0	2.0	2	1
Maximum		4.0	18.0	5.0	5	5
		Q4	Q5	Q6	Q7	Q8
N	Valid	225	225	227	225	223
	Missing	7	7	5	7	9
Mean		4.46	4.68	3.17	3.06	4.25
Standard Error of Mean		.053	.046	.082	.076	.061
Median		5	5	3	3	4
Standard Deviation		.796	.691	1.24	1.14	.909
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
		Q9	Q10	Q11	Q12	Q13
N	Valid	222	221	223	224	220
	Missing	10	11	9	8	12
Mean		3.03	3.50	3.67	4.30	2.58
Standard Error of Mean		.081	.077	.070	.058	.079
Median		3	3	4	5	3
Standard Deviation		1.21	1.14	1.04	.875	1.17
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
		Q14	Q15	Q16	Q17	Q21
N	Valid	224	224	219	219	203
	Missing	8	8	13	13	29
Mean		4.05	3.26	4.61	4.31	5.12
Standard Error of Mean		.066	.084	.047	.064	.365
Median		4	3	5	5	3
Standard Deviation		.983	1.25	.697	.946	5.20
Minimum		1	1	1	1	0
Maximum		5	5	5	5	30

		Q22	Q23A	Q23B	Q23C	Q23D
N	Valid	199	211	211	211	211
	Missing	33	21	21	21	21
Mean		1.59	1.28	1.79	1.90	1.69
Standard Error of Mean		.126	.035	.028	.021	.032
Median		1	1	2	2	2
Standard Deviation		1.78	.509	.407	.300	.463
Minimum		0	1	1	1	1
Maximum		20	5	2	2	2
		Q23E	Q23F	Q24		
N	Valid	211	211	206		
	Missing	21	21	26		
Mean		1.26	1.90	6.30		
Standard Error of Mean		.030	.021	.032		
Median		1	2	6		
Standard Deviation		.440	.300	.458		
Minimum		1	1	6		
Maximum		2	2	7		