

LIBRARIES
MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH 48824-1048

This is to certify that the
dissertation entitled

SUCCESS IN GRADUATE SCHOOL: HOW EXEMPLARY ADVISORS
GUIDE THEIR DOCTORAL ADVISEES

presented by

Benita J. Barnes

has been accepted towards fulfillment
of the requirements for the

Ph.D. degree in Educational Administration

Ann E. Austin

Major Professor's Signature

May 12, 2005

Date

PLACE IN RETURN BOX

to remove this checkout from your record.

TO AVOID FINES return on or before date due.

MAY BE RECALLED with earlier due date if requested.

[illegible]

**SUCCESS IN GRADUATE SCHOOL: HOW EXEMPLARY ADVISORS GUIDE
THEIR DOCTORAL ADVISEES**

By

Benita J. Barnes

A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

DOCTOR OF PHILOSOPHY

Department of Education Administration

2005

ABSTRACT

SUCCESS IN GRADUATE SCHOOL: HOW EXEMPLARY ADVISORS GUIDE THEIR DOCTORAL ADVISEES

By

Benita J. Barnes

Doctoral advisors play a critical role in guiding their doctoral advisees. Previous research has identified the many influences that advisors have in the professional development and success of their doctoral advisees. However, virtually no studies have been conducted in an effort to look at advising from the perspective of the advisor. The purpose of this study was to investigate how exemplary advisors (those who have a good track record for graduating their advisees) successfully guide their doctoral advisees through the doctoral degree process. Four bodies of literature informed this study: (1) Advising/mentoring literature laid the foundation for understanding the multiple ways that faculty impact student success; (2) The doctoral student socialization literature clearly identified ways in which advisors can help their advisees be successful; (3) The faculty workload literature provided a framework for understanding the tensions that may exist between various faculty responsibilities; (4) The literature on academic disciplines suggested ways to categorize the disciplines/professions being studied.

Twenty-five advisors from education, social sciences, natural sciences, and the humanities participated in this qualitative study. Findings from this study suggest that exemplary advisors guide their doctoral advisees through the doctoral degree process in four ways. First, they develop a partnership with their advisees. This partnership allows both the advisor and the advisee to be mutually responsible for the success of the

relationship. Second, they employ an ethic of care. Their ability to care about advisees provides a basis from which all other aspects of the relationship can be built and sustained. Third, they make advising a “personal practice.” That is, advising is not a perfunctory activity, but rather a personally engaging one through which advisors are interested in leaving their thumbprints on their advisees and consequently on their professions. Fourth, they are reflective practitioners. Being reflective in their advising practices serves as a barometer through which they can continuously reflect on and learn how to be even better advisors.

The study concludes with implications for doctoral students, faculty advisors, department chairs, and graduate deans, as well as recommendations for future research.

Copyright by
BENITA J. BARNES
2005

DEDICATION

This dissertation is dedicated to my nephews George, III; Jeremy; Geoffrey; and Jordan and to my niece kalila. I wish God's best for each of you and may all of you pursue the desires of your heart.

ACKNOWLEDGEMENTS

Thank you to my Lord and Savior Jesus Christ for giving me the desires of my heart. To my mother, I thank you for all of the precious love and support that you have given me since the day I came into existences. To my sisters, Darrah and Arva, thank you for being the first and the best mentors and role models that I have ever had and for defining for me what a sister is and what a friend is. To my brother, Mishack, thank you for your enthusiasm. It has been your enthusiasm for what I was doing that provided me with the momentum to continue.

Unbeknownst to me, God planted the seed for me to become a scholar a long time ago, but it was only through the hard work of others that the seed was discovered and allowed to grow. I would like to thank Dr. Robert A Rhoads for giving the seed its first sprinkle of water, which started it to grow. I would like to thank Dr. Yevonne R. Smith for consistently toiling the soil and providing the seed with a sufficient amount of nourishment that allowed the seed to sprout. I would like to thank my exemplary advisor, Dr. Ann E. Austin, for harvesting the crop and bring it all to fruition. It is because of the tremendous investment that each one of you made in me that I can now claim my identity as a scholar.

I would like to thank my dissertation committee Dr. Steve Weiland, Dr. Roger Baldwin and Dr. Karen Klomprens for their support and encouragement throughout the dissertation process.

I owe a debt of gratitude to a number of people who have supported me in a variety of ways since I started this process. They include: Drs. Lee June, Suzanne Wilson, Patricia Enos, Marilyn Amey, Edward Wolfe, and John Dirkx. I pray that

God will bless each of you for the contributions that you have made to my success. To my MAC buddies, Dr. Cass Book and Dr. Carol Ames, thank you for all of your “locker room” advice, encouragement and support.

I also owe a debt of gratitude to Dr. Linda Chard, Dr. Jodie Galosy, and Dr. Courtney Bell who all accompanied me on this journey and who made the whole process a lot more fun. To Dr. Kim Vander Linden, thank you for all of your editorial assistances and for your moral support. To Magda Martinez, Jose Melendez, Shenita Brokenburr, Joyce Piert, and Jessie Barber, I thank you all for your authentic friendship and your unwavering support.

TABLE OF CONTENTS

LIST OF TABLES	x
LIST OF FIGURES	xi
CHAPTER 1: INTRODUCTION	
Background of the Problem	1
Problem Statement	4
Purpose of Study	5
Theoretical Framework	5
Research Questions	8
Definition of Terms	11
Significance of the Study	12
Doctoral Advising in the Current Context of Higher Education	13
CHAPTER 2: REVIEW OF THE LITERATURE	
Introduction	14
Graduate Student Advising and Mentoring	15
Advisor's Impact on Degree Completion	15
Nature and Quality of Advisor-Advisee Relationship	16
Role(s) and Characteristics of Faculty Advisors	17
Types of Advisor-Advisee Relationships	17
Gender Related Advising Relationships	21
Mentoring in Advisor –Advisee Relationships	23
Doctoral Student Socialization	26
Models of the Doctoral Student Socialization Process	27
Race and Gender Issues in the Doctoral Student Socialization Process	28
Moral and Ethical Concerns of Doctoral Students' Socialization	29
Faculty Workload	31
Academic Disciplines	33
Summary of the Literature	35
CHAPTER 3: RESEARCH METHODOLOGY	
Research Epistemology	37
Research Methodology	39
Research Method	40
Selection of the Participants	41
Study Participants	43
Pilot Interviews	43
Interviews	45
Data Analysis	48
Role of Researcher	50
Research Integrity	51

CHAPTER 4: FINDINGS

Research Question 1: How do exemplary advisors understand and believe they enact their advising role?	54
Responsibilities	55
Functions they perform	77
Types of Relationships they Develop	86
Behaviors and Characteristics they Exhibit	92
Summary of Research Question 1	99
Research Question 2: What factors influence how exemplary advisors advise?	101
Summary of Research Question 2	110
Research Question 3: What expectations do exemplary advisors have of their doctoral advisees and what do they think their advisees expect of them?	111
Summary of Research Question 3	124
Research Question 4: How do exemplary advisor balance their role as advisor amidst all of their other faculty roles and responsibilities?	127
Summary of Research Question 4	135
Research Question 5: How do the advising practices of exemplary advisors vary depending on the disciplinary context?	136
Their Legacy	142

CHAPTER 5: SUMMARY, DISCUSSION, AND IMPLICATIONS

Summary of Findings	146
Discussion	152
Implications	163
Recommendations for Doctoral Students	163
Recommendations for Doctoral Advisors	165
Recommendations for Department Chairs	166
Recommendations for Graduate Deans	167
Limitations	168
Recommendations for Future Research	169
Conclusions	170

APPENDICES

Appendix A: Selected Departments	173
Appendix B: Initial Invitation Letter	174
Appendix C: Follow-up (e-mail) Letter	175
Appendix D: Consent Form	176
Appendix E: Interview Protocol	178

REFERENCES	180
------------------	-----

LIST OF TABLES

3.1	Demographic characteristics of participants.....	44
4.1	Responsibilities advisors feel they have to their advisees	56
4.2	Functions advisors perform.....	78
4.3	Types of advisor/advisee relationships	87
4.4	Behaviors and characteristics.....	93
4.5	Factors that influence how exemplary advisors advisee.....	102
4.6	What advisors expect from their advisees	112
4.7	What advisors think their advisess expect of them.....	121
4.8	How advisors balance their advising role	129

LIST OF FIGURES

1.1	Conceptual diagram for mapping the research questions	9
4.1	How exemplary advisors understand and believe they enact their role as advisor.....	100
4.2	Factors that influence how exemplary advisors advise.....	110
4.3	Expectations that advisors have of their advisees and what they think their advisees expect of them	125
4.4	How exemplary advisors balance their role as advisor.....	135

CHAPTER 1

INTRODUCTION

Background of the Problem

In April 2000, a host of educators, practitioners, and scholars convened in Seattle, Washington, to attend *The Re-envisioning the Ph.D.* conference. This conference provided a forum for a national conversation to take place about doctoral education. Assessing the status and quality of graduate education in the United States has become a central concern for many entities—foundations, government agencies, businesses and industry, universities, accrediting agencies, and educational associations—over the last decade. Nowhere is this more evident than in the number of reports and national studies (Golde & Dore, 2000; Lovitts, 2001; National Association of Graduate-Professional Students, 2001; Nyquist & Woodford, 2000) conducted recently in an attempt to understand the various student experiences, outcomes of doctoral education, and ways in which doctoral education may need to be systematically reformed or re-envisioned to meet the societal needs of the twenty-first century.

As a part of the *Re-envisioning the Ph.D.* project, Nyquist and her colleagues assembled information from several hundred interviews, numerous focus groups, and over four hundred articles and other documents to identify the concerns of various stakeholders about doctoral education. The stakeholders included employers, higher education institutions, business and industry, government agencies, foundations, educational associations, and doctoral students. According to the monograph, doctoral students reported seven major concerns: 1) unclear expectations for faculty academic careers; 2) concern about the quality of faculty life; 3) the narrow definition of

professional work; 4) the lack of quality mentoring and support from faculty; 5) disappointment with the direction provided by mentors; 6) threats to graduate funding; and 7) the desire to situate their learning in the context of the global economy.

One stream of research that has gained national attention because of concerns unearthed during the *Re-envisioning the Ph.D.* project focuses on the purposes and outcomes of doctoral training. Golde and Dore (2000) conducted a national study that included 27 institutions, 11 arts and sciences disciplines, and 4,000 respondents. The intent of their study was to gain insight into how doctoral students perceive their graduate education, particularly as it relates to the purpose, the content, and the various processes that are part and parcel to the doctoral school experience. Golde and Dore discovered that doctoral students are not trained for the jobs they want, nor are they trained for the jobs they eventually fill. More specifically, doctoral students are primarily trained to do academic research, however, most academic jobs are at liberal arts or comprehensive universities where the primary focus is on teaching rather than research.

Secondly, Golde and Dore discovered that many doctoral students want more breadth from their doctoral experience particularly as it relates to taking courses outside of their discipline. In addition, according to Golde and Dore, doctoral students generally do not understand the process of doctoral education. Many students reported that they do not have a clear understanding of certain aspects of the doctoral degree process such as advisor expectations, time to degree, and how to obtain research funding.

The National Association of Graduate-Professional Students (NAGPS) (2000) also conducted a national study that sought to understand students' experiences during their graduate degree. The NAGPS study included over 32,000 doctoral students and

newly minted Ph.D.'s. Findings from this study suggest that graduate students are satisfied with their graduate school experience in general and would recommend their program to others. However, similar to the Golde and Dore (2000) study, the NAGPS study found that students were not as informed about issues such as program degree completion rates, the types of employment previous graduates obtained, and whether or not a Ph.D. was essential to their career interests.

Nyquist, Austin, Sprague, and Wulff (1999), conducted a four-year longitudinal study using in-depth interviews to understand how graduate students develop as teachers and scholars. Participants in their study identified several concerns about graduate education. First, there is not a comprehensive system in place to teach them how to teach. Second, they did not receive enough feedback and mentoring. Third, they had a limited understanding of other career possibilities. Finally, they did not have reasonable expectations about the realities of faculty work.

Given the documented concerns and challenges to graduate education, it is not surprising that 50% of students who begin degrees fail to persist and complete their degrees (Bowen & Rudenstine, 1992). Lovitts (2001) conducted a study to determine the causes of persistently high attrition rates from doctoral programs. Based on 816 survey responses from degree completers and non-completers, as well as interviews with several constituents (non-completers, faculty, and directors of graduate programs), Lovitts discovered that few differences exist in the academic quality of graduate degree completers and non-completers. Rather, the difference appears to be in what happens to students during the program and not what they bring to their programs. Lovitts also found that doctoral students who fail to complete their degrees are less integrated into the

professional and social aspects of their departments as compared to students who do complete.

These studies suggest that doctoral students need to be better informed about processes, made aware of career options inside and outside of academe, and given the opportunity to gain insight into the work life of an academician. A fundamental question that arises from the literature is: how do advisors guide doctoral students through the doctoral degree process in ways that will allow them to develop as scholars, scientists, researchers, and teachers?

Problem Statement

The primary purpose of doctoral education is to produce scholars, scientists, researchers, and teachers (Hartnett & Katz, 1977). Therefore, the way in which doctoral students are supported, trained, and groomed during the doctoral degree process is critical to the continuance and the quality of the academy as well as to industry, government agencies, and the private sector. A key player in the academy with responsibility for guiding doctoral students through the process is the faculty advisor (Baird, 1995; Bargar & Mayo-Chamberlain, 1983; Weidman, Twale, & Stein, 2001). Faculty members are the gatekeepers to the scholarly professions and they prepare the next generation of scholars. Previous research provides convincing evidence that faculty advisors have a major influence on how and what doctoral students learn about the formal and informal rules of their department, how they learn to understand their discipline or profession, how they are socialized as teachers, researchers, and practitioners, and their immediate postdoctoral career opportunities (Austin, 2002; Barger & Mayo-Chamberlain, 1983; Baird, 1995; Golde, 2001; Golde & Dore, 2000; Girves & Wemmerus, 1988; Lovitts & Nelson, 2000;

Schwartz, 1997; Tenenbaum, Crosby, & Gliner, 2001; Valadez, 1998).

In addition to the role of advisor, faculty members are also expected to fulfill a plethora of other roles such as teacher, researcher, and university citizen (Gmelch, Wilke, & Lovrich, 1986). These multiple roles are often valued and rewarded differently in the tenure and promotion process. Based on the current reward structures at most research extensive universities, where the majority of the doctoral students who enter the academy as professors are trained, advising activities are not rewarded as highly as other activities such as research and scholarship (Fairweather, 1996; Lucas & Murray, 2002; Ward, 2003). Consequently, many faculties may assign a lower priority to their advising responsibilities as compared to other responsibilities. This differentiation in reward structures begs the question of how advisors guide doctoral students through the doctoral degree process in ways that will allow them to be successful during the process as well as after they have graduated. The current study addresses this question.

Purpose of Study

The literature on doctoral education clearly establishes that advisors play a significant role in helping their doctoral students be successful. However, both the doctoral education literature and the faculty workload literature are virtually silent on what it is that advisors do in their role as advisor to help their advisees be successful. This study fills that gap by examining how exemplary advisors (those who have a good track record for graduating their advisees) successfully guide their doctoral advisees through the doctoral degree process.

Theoretical Framework

In essence, this study is about understanding the role of doctoral advisors from the

doctoral advisors' perspective. Thus, it is being informed by the literature on role theory. Role theory is often used as an umbrella term to encompass other theoretical perspectives that are concerned with understanding important features of social life and social phenomenon. The five most common perspectives in role theory include functional theory, symbolic interactionist theory, structural theory, organizational theory, and cognitive theory (Biddle, 1986). Role theory is derived from social psychology and has been influenced by disciplines such as psychology, sociology, and anthropology. Role theory has a body of knowledge that is grounded in research on occupational groups, such as roles of educators, medical personnel, business executives, and military officers. Role theory has also provided a perspective for discussing and studying deviancy. Many studies conducted on juvenile delinquents, prisoners, drug addicts, and alcoholics have utilized role theory perspectives. Studies looking at social institutions such as marriage, family, and the church have also employed role theory (Thomas & Biddle, 1966).

Role theory is concerned with “a triad of concepts: patterned and characteristic social behaviors, parts of identities that are assumed by social participants, and scripts or expectations for behavior that are understood by all and adhered to by performers” (Biddle, 1986 p.68). Role, in role theory, has been defined as “the set of prescriptions defining what the behavior of a position member should be” (Thomas & Biddle, 1966 p.29). “Role theory presumes that expectations are the major generators of roles, that expectations are learned through experience, and that persons are aware of the expectations they hold. This means that role theory presumes a thoughtful, socially aware human actor” (Biddle, 1986 p.69).

In the interest of studying how exemplary advisors use their “role” as advisor to

successfully guide their doctoral advisees through the doctoral degree process, several key concepts that are embedded in the various perspectives of role theory were useful in helping to formulate the subsidiary research questions. First, to know how a person understands any role that he or she may occupy, one needs to understand how that person perceives and enacts their role. Role perception is concerned with understanding how people perceive what their duties and responsibilities are based on the specific status or title they hold. Similarly, role enactment is concerned with how those perceived roles are “acted” out, put into place, or performed by the person who holds that role (Thomas & Biddle, 1966). In this study, investigating what advisors think their advising role is and learning how they enact those roles becomes key when trying to understand how it is that they perform those roles in a way that successfully guides their advisees through the doctoral degree process.

Second, according to role theory, knowing how the person who occupies a role was socialized into that role needs to be explored. Role socialization is the means through which persons acquire the knowledge, skills, dispositions, and motivations that make it possible for them to perform their role (Stryker & Statham, 1985). Understanding what influences how exemplary advisors think about the advising role and how they learned to perform the advising role becomes essential to understanding how they perform their role.

Third, role theory suggests that in order to understand how people make sense out of a role, one needs to understand the set of expectations associated with that role. The term “role” itself is often used prescriptively, as referring to behaviors that somehow “ought to be” or “should be performed” and the term expectations refer to the standards,

norms, and rules that are held of the person who is performing the role and/or who is being served by that role (Thomas & Biddle, 1966). In this study, not only does the advisor have a role but the advisee also has a role. Therefore, understanding what expectations advisors have of their advisees (in their role as advisee) and understanding what advisors think their advisees think they “ought to be” or “should be doing” becomes critical in understanding how it is that advisors perform their role.

Fourth, role theory suggests that how one is able to balance the multiple roles and responsibilities can become important in understanding how it is that the person is able to perform any given role. Role balance has been defined as “the tendency to become fully engaged in the performance of every role in one’s total role system, to approach every typical role...with an attitude of attentiveness and care” (Marks & MacDermid, 1996, p.421). Understanding how advisors balance or juggle their role as advisor, along with their countless other responsibilities, becomes vital to understanding how it is they can have so many other responsibilities and still be able to successfully guide their advisees through the doctoral degree process.

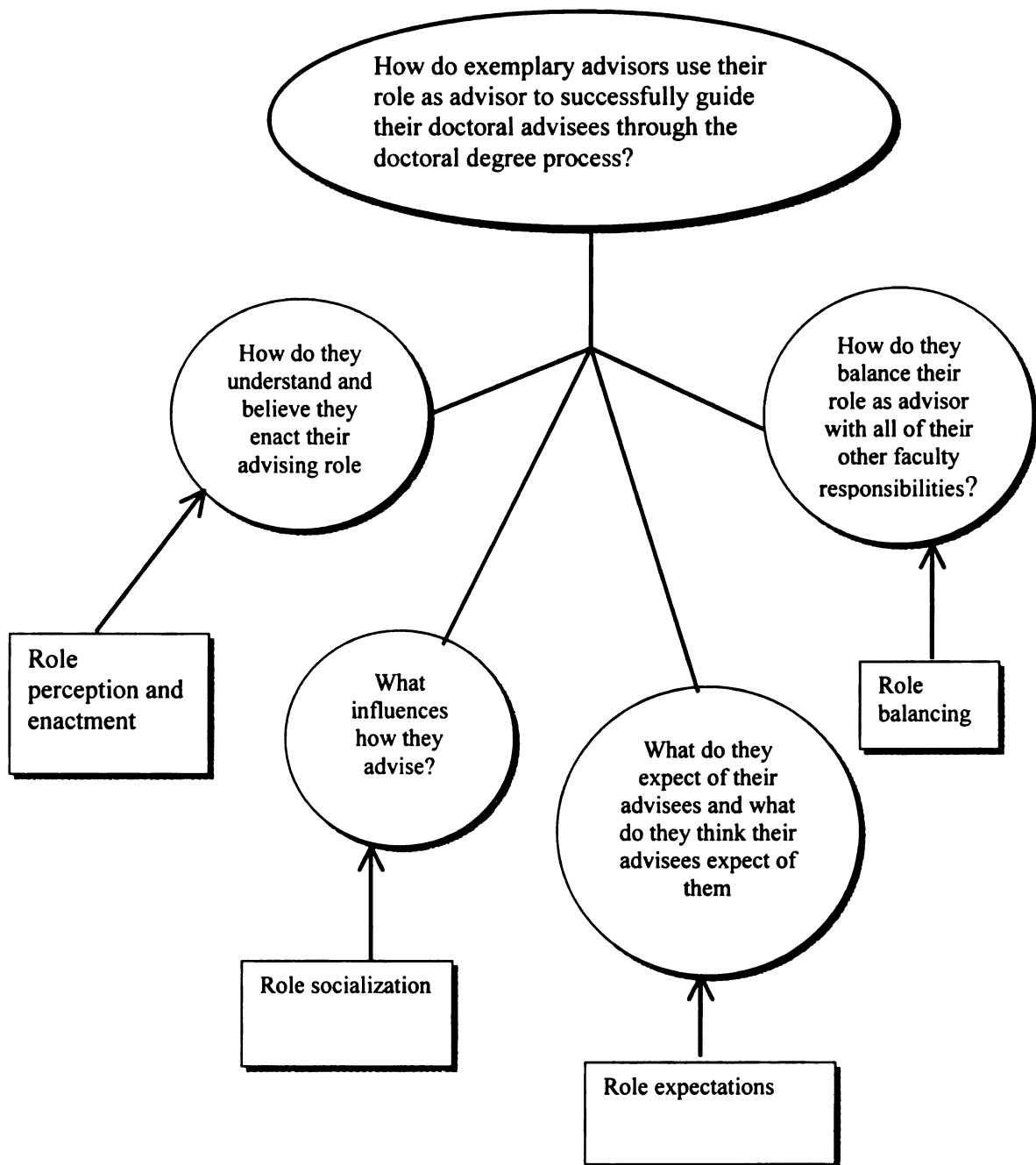
In sum, several key concepts were borrowed from role theory in order to develop a set of research questions addressing the overarching research question that undergirds this study, which is, how do exemplary advisors use their role as advisor to successfully guide their doctoral advisees through the doctoral degree process.

Research Questions

Figure 1.1 is the conceptual diagram that maps the research questions for this study. As the figure illustrates, the overarching question for this study is: how do exemplary advisors use their role as advisor to successfully guide their doctoral advisees

through the doctoral degree process?

Figure 1.1: Conceptual diagram for mapping the research questions



The five subsidiary questions guiding this study are:

1. How do exemplary advisors understand and believe they enact their advising role? This question is guided by role theory's assertion that in order to understand what a "role" constitutes, one needs to know how the person who holds that role understands the meaning of the role, as well as how he or she enacts that role. Hence, this question was intended to explore how faculty advisors conceptualize and perform their role as an advisor.

2. What factors influence how exemplary advisors advise? This question is being guided by role theory's premise that in order to understand how people perform their role, one needs to understand how they were taught or socialized to perform that role. Therefore, this question was intended to explore what influences the practices they employ as advisors. Put another way, how is it that advisors come to advise the way that they do?

3. What expectations do exemplary advisors have of their doctoral advisees and what do they think their advisees expect from them? This question is guided by role theory's premise that in order to understand how someone makes sense of their role, one needs to understand the expectations that are associated with that role. This two-prong question probes the standards, norms, and rules that advisors have for their advisees as well as what standards, norms, and rules they think their advisees have of them.

4. How do exemplary advisors balance their role as advisor amidst all of their other faculty roles and responsibilities? This question is guided by role theory's premise that in order to understand the role faculty advisors play, that role must be situated in the plethora of other roles expected of faculty members. This question was designed to

explore how exemplary advisors balance their responsibilities as an advisor with all of the other roles and responsibilities of faculty members.

5. How do the advising practices of exemplary advisors vary depending on the disciplinary context? This question was not derived from the literature on role theory, but is being raised based on the need to understand advising roles from a contextual perspective. The literature on disciplines suggest that disciplinary cultures have different norms and values that play a role in how faculty advisors interact and guide their advisees; therefore, this question sought to identify what differences in advising practices, if any, may be related to the nature of the discipline.

Definition of Terms

This study employs several terms that might not have universal meaning or might have different contextual meanings. Terms utilized throughout this study are defined below.

Advising Practices: refers to the habitual or customary actions that an advisor performs when working with his or her doctoral advisees.

Advising Role: refers to the behavior, rights, responsibilities, duties, and obligations associated with one's specific status as an advisor (Hewitt & Hewitt, 1986).

Doctoral Advisee: refers to a student who is enrolled in a doctoral degree program who has been assigned or has selected a faculty member to serve as his or her advisor or dissertation director or dissertation chair.

Doctoral Advisor: refers to a faculty member, who has been assigned to or selected by a doctoral student, who's responsible for communicating basic departmental procedures,

policies, and expectations to the doctoral student (Holland, 1998).

Doctoral Degree Process: refers to the stages or procedures that a doctoral program requires a doctoral student to complete in order for him or her to be conferred the doctorate degree.

Exemplary Advisor: refers to a faculty member who was one of the top ranking producers of doctoral graduates in his or her department over a five-year period (1999-2003).

Faculty Responsibilities: refers to the duties that faculty members are expected to fulfill as a condition of their employment and the status of their role.

Doctoral Student Success: refers to having a favorable or desirable outcome for the student towards the completion of their degree, including successfully completing all degree requirements as well as making appropriate progress towards degree completion.

Significance of the Study

This study makes contributions to both the graduate education literature and the faculty workload literature. Faculty members do not receive any systematic preparation for their advising role. It is believed that how they know how to guide their advisees develops through trial-and-error, student feedback, self-reflection, self-evaluation, and modeling others' behavior – for instance modeling their own doctoral advisor. This study provides useful data for building substantive-level theory to explain how exemplary advisors use their role as advisor to successfully guide their doctoral advisees through the doctoral degree process. In addition, this study provides insight into how exemplary advisors guide their doctoral advisees throughout the doctoral degree process by exploring how they understand and enact their role, what influences how they advise and

what expectations they have of their advisees which can be very useful for doctoral students to know and other understand. Furthermore, this study will also provide much needed data on how faculty who have a track record of completing doctoral students, balance their role as an advisors with all of their other faculty responsibilities.

Doctoral Advising in the Current Context of Higher Education

When investigating an issue in higher education that is as dynamic as doctoral advising, it is critical that the research, as well as the ensuing discussion, is situated in a historical context. Doctoral education—and consequently doctoral advising—is very much influenced by the changing context of higher education.

One way in which advising may look different in the 2000s, as compared to the past, is tied to the academic labor market. Prior to the 1980s, a large demand for faculty existed. Advisors could be confident that students they guided through the doctoral degree process could realistically end up in a faculty position if they so desired. Over the past quarter century the supply and demand for faculty position has become unbalanced with an overproduction of Ph.D.'s and a dearth of faculty positions. Given these circumstances, some faculty members may be less enthusiastic about preparing their doctoral advisees for faculty positions that do not exist.

Doctoral advising may also look different now than it did ten or fifteen years ago because of the changing needs of the professoriate. In order for doctoral students to be adequately and appropriately prepared for the professoriate in the twenty-first century they need to have knowledge, skills, and abilities that were not required of their predecessors (Austin, 2002). Therefore, these new demands may influence how faculty advisors go about guiding their doctoral advisees.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Interest in academic advising in higher education has gained momentum in recent years. Much attention has been devoted to advising at the undergraduate level.

Researchers have investigated the relationship between advising and undergraduate student retention (Beal & Noel, 1980), the delivery of advising services (Davis & Cooper, 2001), undergraduate student satisfaction with advising (Lowe & Toney, 2000), and the role of academic advisors in undergraduate education (Petress, 1996). Less attention has been paid to graduate student advising. The studies that do exist focus on graduate student experiences and neglect the views of faculty advisors, thus leaving a void in our understanding of how doctoral advisors feel they are contributing to the success of their doctoral advisees. This study seeks to fill that void and utilizes four primary bodies of literature.

The first body of literature informing this study is the doctoral student advising and mentoring literature. This body of literature lays the foundation for understanding the multiple ways in which faculty advisors impact doctoral students. The second body of literature is drawn from the student socialization literature. Although this body of literature is quite sparse, it provides an overview of the current understanding of the socialization process and identifies key issues that researchers feel are critical to the socialization process. The third body of literature informing this study is the faculty workload literature. This body of literature provides insight into the many tasks that are vying for faculty attention. And the fourth body of literature is drawn from the literature

on academic disciplines. This body of literature provides insight into the “academic culture” distinct to each discipline. Each body of literature is described in detail below.

Graduate Student Advising and Mentoring

Several bodies of literature on graduate student advising and mentoring have emerged over the last decade. In this next section, a review of several aspects of the literature on advising and mentoring will be highlighted.

Advisor’s Impact on Degree Completion

Effective academic advisements at the doctoral level plays a critical role in determining if students will complete their degree or withdraw before completion (Girves & Wemmerus, 1988; Golde, 1997; Lovitts, 2000; Wong, Selke, & Thomas, 1995). Jacks, Chubin, Porter, and Connolly (1983) found that 44% of “all but dissertation” (ABD) students in their study cited poor relations with their advisor or committee members as one of the primary reasons for why they did not complete their degrees. Similarly, O’Bara (1993) found from her research with 123 doctoral degree completers and 107 non-completers that the students who completed their degrees described more positive interactions with their dissertation chair than non-completers. Another noteworthy finding from O’Bara’s study was that personality characteristics of advisors were extremely important in discriminating between completers and non-completers. Specifically, completers rated their advisors as more approachable, more helpful, and more understanding than non-completers. Golde (1998, 2000) also acknowledged the critical role that advisors play in whether or not doctoral students complete their degree. Golde interviewed 58 doctoral students who did not complete their degree and discovered that their advisor-advisee relationships had problematic features stemming from

mismatched expectations and working styles.

Nature and Quality of Advisor-Advisee Relationship

Lovitts (2002) investigated, at least in part, the nature and quality of the adviser-advisee relationship during the doctoral degree process and what impact that relationship had on degree completion. Lovitts divided student participants into four categories: completers, non-completers, on-track completers, and at-risk completers. On-track completers were doctoral students who never thought about leaving their program. Conversely, at-risk completers were those who had thought about leaving their program. Faculty participants in the study were divided into two groups: high producers and low producers. Lovitts ascribed a status of high producer to faculty members who produced many Ph.D.'s in their department and the term low producers to those faculty members who produced few Ph.D.'s in their department. However, she did not assign a particular number to high or low. Lovitts posited that the quality of the advisor-advisee relationship is greatly influenced by two things. First, whether the advisor is selected by the student or assigned to the student influences the quality of the relationship. It is Lovitts' contention that students who select their advisor based on a common interest or mutual respect have better advisor/advisee relationships than students who were assigned to their advisors randomly. The second influence on the quality of the relationship is based on the advisors' ability to graduate doctoral students.

Valdez (1998) interviewed 21 African American graduate students in order to determine how the day-to-day social interactions between them and their faculty advisor impacted their scholarly development. He concluded that the three key elements having the greatest influence on scholarly development were: ongoing opportunities for

communication between the advisor and advisee, an atmosphere of acceptance and openness, and the development of trust between the advisor and advisee.

Role(s) and Characteristics of Faculty Advisors

Other research studies have sought to characterize the role of faculty advisors during the doctoral degree process (Lees, 1996; McLure, 1986; Winston & Polkosnik, 1984). Winston and Polkosnik (1984) contend that there are several essential roles and functions that doctoral degree advisors must fulfill if they are going to be successful in their advising. These roles include reliable information source, departmental socializer, advocate, role model, and occupational socializer. In an effort to build on the work of Winston and Polkosnik, McLure's (1986) research focused on understanding what roles graduate students desire their faculty advisor to perform during the doctoral degree process. Based on a sample of 107 participants from a large southwestern university, McLure identified four primary roles that both degree completers and non-completers desired from their faculty advisors. These roles included: a role model, a red tape cutter, an encourager, and a reliable source of information. McLure concluded from her study that, although students who completed their degree and those who didn't desired their faculty advisor to perform the same roles, students who completed their degrees reported having more interactions with their advisors than the students who did not graduate.

Types of Advisor-Advisee Relationships

Holland (1992, 1997) conducted a study in order to examine the salient characteristics of African American advisor-advisee relationships during the doctoral degree process. Participants in this study were doctoral students who attended one of two large Research I institutions in the Midwest and doctoral recipients who were graduates

of Research I universities and were currently employed as faculty members or administrators at one of the two Research I universities. Study participants represented the fields of education, humanities, social sciences, and hard sciences. Based on interviews with 42 participants (23 current students and 19 doctoral recipients), Holland identified five types of relationships that African American doctoral students have with their major advisors: formal academic advisement, academic guidance, quasi-apprenticeship, academic mentoring, and career mentoring.

Formal academic advisement is characterized by several attributes: the advisor provides basic and routine academic advice; the interaction is limited to academic matters; the relationship is formal in nature; and the relationship is non-developmental. A non-developmental relationship, according to Holland, is characterized by the absence of professional growth and development.

Academic guidance, in comparison, is characterized by three attributes: flexibility, support, and academic involvement. Having flexibility in the advisor-advisee relationship meant that a structure was not imposed on the relationship, which is one of the ways that it differs from formal academic advisement. Support in this type of relationship meant that the advisor was sensitive to the fact that the student was a minority in a predominately White institution. Support in this type of relationship also meant that the advisor showed an interest in the students' educational and research interest. Academic involvement referred to the advisor's involvement in providing direction in the educational, administrative, and bureaucratic matters of the students' program.

Quasi-apprenticeship relationships are different from formal advisement and

academic guidance relationships in that advisors provide students with research opportunities not available to most doctoral students. In quasi-apprenticeship relationships, students get involved with research projects that will advance the career of their advisor.

The academic mentoring relationship goes beyond the formal advisement, academic guidance, and quasi-apprenticeship relationships and is characterized by two attributes: students are provided with opportunities to work closely with their major advisor and advisors take a personal interest in students' career preparation and success.

Career mentoring relationships are characterized by three attributes: advisors take a purposeful role in preparing their students for faculty employment in higher education; advisors are active in socializing their student into a profession; and advisors take a personal interest in their students' career success. Holland concluded that most of the study recipients were involved in academic guidance relationships. However, students who were involved in academic mentoring and career mentoring relationships reported being more satisfied with their advisor-advisee relationship. In addition, students involved in mentoring relationships were more likely to be influenced to pursue careers in academe and were better prepared to enter the professoriate. A limitation of this study is that it was conducted on a single racial/ethnic group, and is therefore not generalizable to other racial groups.

Just by the nature of the hierarchical structure imposed by institutions of higher education, power differentials exist between advisors and doctoral students. Thus, the question is not does power play a role in advisor-advisee relationships, but instead, how does power get manifested in the advisor-advisee relationship. Heinrich (1991) conducted

a study that investigated how female advisees characterized their relationships with their male advisors with specific attention to power and sexual attraction. Heinrich's findings suggested that male-female advisor relationships could be characterized into three categories which she called approaches—masculine, feminine, and androgynous. These approaches were based on the behaviors exhibited by advisors rather than the advisor's gender. According to Heinrich, male advisors who took a masculine approach to advising were task-oriented and they hoarded their power, as well as abused the power they had over women advisees. Women advisees who had an advisor who behaved in this manner rendered themselves powerless and only enjoyed referent power—power attributed to them based on their affiliation with their advisor. Male advisors who took a feminine approach to advising were overly interpersonal and they eschewed their legitimate power. Women advisees who had an advisor who behaved in this manner were forced to fend for themselves and often ended up taking care of their male advisor. Male advisors who took an androgynous approach to advising were described as benevolent, warm, and powerful. They used their power to foster their advisees' independence and reinforce their competence and their ability to make their own decisions. Heinrich concluded that male advisors who displayed masculine and feminine advising behaviors created ineffective advising relationships with their advisees and misused their power. As a result of this misuse of power, advisees graduated from their doctoral program with a weakened sense of professional self-esteem. Women who had male advisors who exhibited androgynous advising behaviors owned their power, felt professionally affirmed, and were more productive after they graduated.

Gender Related Advising Relationships

The number of women entering doctoral programs has increased substantially over the past two decades (National Center for Education Statistics, 2004). This increase has prompted several studies on how women experience their advising relationship compared to their male counterparts (Lees, 1996; Schroder & Mynatt, 1993); the impact cross-gender advising has on the advisor-advisee relationship (Heinrich, 1991); and the impact that same gender advising has on the advising relationship (Heinrich, 1995).

Schroder and Mynatt (1993) conducted a study to determine if women graduate students whose major professors were female would have more positive interactions with their major advisor as compared to women students whose major professors were male. Subjects for this study were drawn from a variety of departments which included: biology, chemistry, engineering, English, geology, economics, nursing, pathology, physics, popular culture, psychology, social work, and sociology. Findings from this study revealed that although women with female major advisors perceived that their major advisors had more concern for their welfare, overall no significant differences existed between how women students with female advisors perceived the quality of their interactions with their advisors versus the women students who had male advisors. The authors concluded that perhaps the increase in the number of women enrolled in doctoral programs over the past twenty years has made male professors more comfortable interacting with women students.

Using the same data that she gathered from her study on cross-gender advising relationships, Heinrich (1995) explored the relationship that women doctoral students developed with the women who served as their dissertation chairs or as members of their

dissertation committee. Heinrich was interested in understanding how women advisees' relationships with their women advisors resembled earlier relationships with their mothers. Seventeen of the twenty-two women were able to identify similarities between their mothers and their advisors. Women who described warm relationships with their mothers also described a supportive relationship with their advisors. Conversely, women who described difficult relationships with their mothers also described tenuous relationships with their female advisors. Heinrich concluded that mentoring relationships are important to women advisees' development as scholars and that a link exists between the early experiences that women have with their mothers (and other women) and the relationships that they develop with women advisors. She recommended that further research be conducted to explore the unconscious forces of mother-daughter relationships that enhance or obstruct women advisement relationships.

In summary, prior research has established that the advisor-advisee relationship is important to the doctoral degree process and is critical to degree completion. Since advisors are thought to be one of the socializing agents into the department as well as into the field, the relationship also has postgraduate implications. The impact of cross-gender and same-gender advising on the doctoral degree process has also been explored to some degree in the literature. The most recent research has found that cross-gender advising relationships do not necessarily bode positively or negatively for female doctoral students, but the positive or negative relationships that women students have with male advisors are related to the advisors' approach. Several models have been developed to explain the advisor-advisee relationships. Holland's model has particular utility because it acknowledges that the types of advisor-advisee relationships can range from basic routine

interactions to grooming for the professoriate.

Mentoring in Advisor –Advisee Relationships

In some contexts, the terms advising and mentoring are used interchangeably to describe the relationship between a doctoral student and his or her advisor (Heinrich, 1995; Papa-Lewis, 1983; Valadez, 1998), while in other studies the terms have been used as two separate concepts to describe this relationship (Bennett, 2000; Lyons, Scroggins, & Rule, 1990). For example, Bennett (2000) suggested that an academic advisor serves a different role than an academic mentor. She hypothesized that graduate students who had academic mentors would perceive a significantly greater level of effectiveness and general satisfaction with their academic programs than students who had academic advisors. Hawley (1993) made the following observation about the differences between a mentor and an advisor: “Mentors, in contrast to advisors, do more than simply stand and point the way. Mentors accompany their protégés through the entire process” (p.53). For the purpose of this review, the mentoring literature is discussed separately; however, there is considerable overlap between the two bodies of the literature.

Mentoring in the context of graduate education has been described as “a process that provides individuals with support and protection during their graduate training” (Frierson, 1997, p. 2). A number of studies suggest that mentoring relationships between faculty and graduate students are essential to graduate school success (Luna & Cullen, 1998; Lyons, Scroggins, & Rule, 1990; Waldeck, Orrego, Plax, & Kearney, 1997). Furthermore, mentoring during graduate education has emerged as one of the factors that positively correlates with student satisfaction with the graduate school experience (Adkins-Hutchison, 1996; Blackwell, 1983; Faison, 1996; White, 1995; Willie, Grady, &

Hope, 1991). Some graduate education pundits have argued that mentoring is so important in graduate education that it is at the heart of the experience (Cusanovich & Gilliland, 1991; Phillips, 1979). Similarly, Nettles (1990a, 1990b) concluded from his comparative research on the experiences of African American, Hispanic, and White students' persistence and success in doctoral programs that mentoring is such an essential part of doctoral education that all students who are mentored, regardless of their demographic and educational background, have similar positive experiences.

Faculty mentors impact the academic life of graduate students in several ways. They can provide them with opportunities to test new hypotheses and research plans. They can provide graduate students with sources of academic support, and they can provide opportunities for graduate students to participate in research projects, publishing, and professional conference presentations (Cheatham & Phelps, 1995). Lyons, Scroggins, and Rule (1990) argue that academic mentors serve three primary roles in the professional life of doctoral students. First, they transmit formal scientific knowledge. Second, they socialize their students into the discipline/profession. And lastly, they bolster their students' confidence through encouragement and praise.

The question of who gets mentored in graduate school has been the focus of several studies (Green & Bauer, 1995; Waldeck, Orrego, Plax, & Kearney, 1997). In a longitudinal study of graduate students in the sciences at a large Midwestern university, Green and Bauer (1995) hypothesized that doctoral students who were mentored by their advisors during the first two years of their doctoral program would be committed to their program and to a research career, would have a positive disposition towards their advisors, and would have the ability to perform as researchers and scholars. They also

hypothesized that mentoring functions would be positively correlated to productivity. The results of the Green and Bauer study revealed that students who showed more promise of ability to perform at the beginning of their doctoral programs were more likely to receive mentoring from their advisors. However, this study failed to support the theory that the more mentoring functions that a student received from his or her advisor, the more productive (measured by the number of submissions and publications) the student would be during the doctoral degree process.

In an effort to gain insight into the role that mentoring plays in the professional development of graduate students, Tenenbaum, Crosby, and Gliner (2001) conducted a study to ascertain whether graduate students worked disproportionately with advisors of their own gender, whether male and female advisors gave different types of mentoring to their male and female advisees, and whether different types of mentoring led to different outcomes. This study consisted of 189 graduate students from nine departments enrolled at the University of California-Santa Cruz. The departments represented were social sciences, humanities, and natural sciences. The results of this study supported the findings from other studies that the gender of advisors was relatively unimportant (Lyons, et al, 1990; Kelly & Schweitzer, 1999). Male advisors gave less psycho-social mentoring to both their male and female advisors than female advisors, but they were as likely to give both male and female students career-related mentoring. The only notable gender difference that the authors reported was that male students published more with their male advisors. In addition, the authors also reported that career-related mentoring influenced students' productivity.

Mentoring is thought to be one of the most essential aspects of doctoral education

and faculty advisors are often times the most desirable person with whom doctoral students develop a mentor-mentee relationship. The notions that male students are more likely to be mentored than female students and that women doctoral advisees are best mentored by female faculty have not been supported in recent studies.

Doctoral Student Socialization

Several conceptualizations of socialization are applicable to graduate education. Socialization is defined as “the process of transforming a human being into a self who possesses a sense of identity and is endowed with appropriate attitudes, values, and ways of thinking, and with other personal yet social attributes” (Coombs, 1978, p. 14). Professional socialization is defined as the “learning process through which the individual acquires the knowledge and skills, the values and attitudes, and the habits and modes of thought of the society to which he belongs” (Braggs, 1976, p 3). Within the context of higher education, Turner and Thompson (1993) defined socialization as the process of developing cognitive skills, developing the appropriate attitudes toward research and scholarship, and acquiring field specific values. Socialization during graduate education has been defined as “the processes through which individuals gain the knowledge, skills, and values necessary for successful entry into a professional career requiring an advanced level of specialized knowledge and skills” (Weidman, Twale, & Stein, 2001, p. iii). The end result of the socialization process is the incorporation of group values and norms into the individual’s self image. Successful professional socialization results in professional identity (Braggs, 1976).

Three streams of research comprise the literature on the socialization of doctoral students. The first stream advances several models of the doctoral student socialization

process. The second stream is concerned with race and gender equity during the socialization process. And the third stream focuses on ethical issues surrounding doctoral students' socialization. Each stream is discussed in more detail below.

Models of the Doctoral Student Socialization Process

Different models have been advanced in order to explain the process that doctoral students undergo during their doctoral degree training and preparation. Early models of graduate student socialization depicted a process whereby faculty admitted students, socialized them in some prescribed way, and then graduated them after a specific period of time (Bragg, 1976). This type of linear model received criticism largely because it ignores the effect of student perceptions of the socialization process (Weidman, Twale, & Stein, 2001). In response to this criticism, Twale and Kochan (1999) developed a dynamic and interactive model. Their model merges student input and experiential knowledge with faculty contributions of theoretical, empirical, and analytical information. Further, the Twale and Kochan (1999) model suggests that the socialization process is not confined to the university community but extends to the professional community where information can flow between the practical or applied world and the academic world.

Weidman, Twale, and Stein's (2001) model suggests that professional socialization occurs in four stages: anticipatory, formal, informal, and personal. These authors argued, "the outcome of socialization is not the transfer of a social role, but identification with and commitment to a role that has been both normatively and individually defined" (Weidman, Twale, & Stein, 2001, p. 36).

Building on the work of Stein and Weidman (1989), Weidman, Twale, and Stein

(2001) further developed a model for explaining the socialization process of graduate students. At the center of this model is the core socialization experience in the graduate degree program, consisting of the institutional culture of the university (academic programs and peer cultures), the socialization process (interactions, integration, learning,), and the central elements of socialization (knowledge acquisition, investment, and involvement). Other components of this model include professional and personal communities, background and predispositions of students, and novice professional practitioners. According to Weidman, Twale, and Stein (2001), the novice professional practitioner is the end product of the professional socialization process.

The models described above range from being linear and static to being complex, interactive, and developmental. Although it is implicit in each of the models that faculty members play a role in the professional development of doctoral students, none of the models explicitly address how faculty understand and fulfill their critical role in the professional socialization process.

Race and Gender Issues in Doctoral Student Socialization Process

In an effort to understand the differences between the socialization process for minority and majority women doctoral students, Turner and Thompson (1993) interviewed 37 minority and 25 majority women doctoral students about their personal and professional development. Students were asked to describe the kinds of relationships they had with other students and faculty, and the ranges and types of opportunities they had for acquiring professional values and skills both inside and outside of the classroom. Students shared their perceptions of the institution's recruitment process, departmental opportunities for apprenticeship and mentoring experiences, whether a cooperative or

competitive departmental environment existed, and racial and gender discrimination in their departments. Findings showed that minority women had fewer opportunities for professional socialization experiences, had less mentoring and apprenticeship experiences, and had fewer networks within their department.

Differences in the graduate student socialization process may be based on gender and race. Previous research shows that women and people of color are not afforded the same type of opportunities as their White and male counterparts. However, with the increase of women and people of color enrolling in doctoral programs, it is imperative that they are given access to the same types of opportunities for professional development as their White and male colleagues.

Moral and Ethical Concerns of Doctoral Students' Socialization

The last stream of the graduate student socialization literature focuses on the moral and ethical socialization of doctoral students. Anderson, Louis, and Earle (1994) argued that a large part of doctoral students' socialization comes from participating in research projects. These authors also contend that it is through conducting research with faculty and other graduate students that students learn, formally and informally, what behaviors are expected and rewarded, as well as what constitutes unacceptable deviation from shared norms of conduct. As a part of their investigation on the effects of discipline, department structure, and department climate on graduate student observations of misconduct, Anderson and colleagues surveyed 5000 second year and beyond doctoral students from four disciplines (chemistry, microbiology, civil engineering, and sociology). The areas of misconduct that the study focused on were research, employment, and personal misconduct. Anderson, Louis, and Earle drew three

conclusions from their study. First, based on the amount of misconduct doctoral students witness during their training, doctoral students are being trained in an environment that may create ambivalence about basic values of the academy. Second, students who have the greatest opportunities to learn research skills are also those who are most likely to be exposed to forms of behavior that is inappropriate or illegal. And lastly, no disciplinary differences exist in the rates of observed research misconduct and personal misconduct.

Braxton (1991) also studied the impact of scientific misconduct on the socialization process of doctoral students. Braxton hypothesized that “the higher the quality of a graduate department, the greater the formality of action taken for the violation of the norms of science” (p.90). Although Braxton’s hypothesis was not supported by the results of his study, he drew some conclusions from his research. He concluded that the attitudes, values, and beliefs concerning professional self-regulation or academic honesty tend to be shaped, at least in part, during the doctoral degree process. In addition, the social processes tend to influence sanction actions for violations of the norms of organized skepticisms. He also posited that professional self-regulation is characterized by ambivalence that is induced by conflicting attitudes, values, and beliefs. Braxton’s research implies that doctoral students will be less concerned with maintaining academic integrity if they graduate from a department that is ambivalent about sanctioning scientific misconduct.

In sum, research on the ethical and moral development of graduate students suggests that doctoral students are witnessing and possibly engaging in unethical research practices. Since so much of what faculty practice as professors is shaped by their doctoral degree experience, it becomes critical to the future of the academic enterprise that

scientific misconduct is dealt with effectively during the doctoral degree process.

Faculty Workload

A third important body of literature that contributed this study is the faculty workload literature. Faculty time is primarily spent on one of three activities: instruction, research, and public service. Although these three activities are not necessarily mutually exclusive, they are often thought of as competing interests. Time spent on one activity means time spent away from one of the other activities (Braxton, 1996).

The role of teaching generally includes a variety of activities such as classroom instruction, curriculum development, course preparation, and advising (Brand, 2000; Fairweather, 1993). Teaching responsibilities vary by discipline and type of institution. For example, at leading Research I Universities, faculty can spend time teaching both graduate and undergraduate courses or teaching graduate courses exclusively (Clark, 1999). This is in contrast to faculty who teach at liberal arts institutions where faculty will tend to teach undergraduates exclusively (Clark, 1987). Within various disciplines the percentage of time spent on teaching ranged from 32% in the health sciences to almost 53% in fine arts (Fairweather & Beach, 2002). The research function of faculty work is epitomized by the well-known saying “publish or perish.” Since the Ph.D. is a research degree and is meant to start the recipient on a lifetime of scholarship, a premium is put on the discovery of new knowledge during the faculty career (Atwell, 1998). Preparing for and doing research, publishing or reviewing articles or books, attending professional meetings, and seeking outside funding are a few of the tasks that typically characterize the research roles of faculty (Fairweather, 1996).

A large body of literature is devoted to understanding faculty work as it relates to

teaching and research. Clark (1987) noted, however, that the greatest paradox in academic work is that teaching is what faculty spend a lot of their time doing. Teaching, though, is an activity that is not highly rewarded by the academic profession, nor is teaching valued by the system. Instead, research and scholarship are the activities for which faculty receive the most recognition – both in their professional communities and in the tenure and review process.

The public service role in which faculty engage is perhaps the least well-understood function. Service tasks include work related to college/university meetings, community activities related to one's expertise, and involvement with professional organizations (Blackburn & Lawrence, 1995).

Previous research has clearly identified instructing, research, and service as the three primary ways in which faculty spend their time. According to Ward (2003), advising graduate students bridges all three roles since interacting with them usually encompasses research, teaching, and service. The advising role that faculty members serve is typically embedded in either their role as instructors or their role as researchers. One exception, however, to this conceptualization is in the work of Milem, Berger, and Dey (2000). Milem, Berger, and Dey present the tripartite model of faculty work as teaching, research, and advising. These authors contend that advising is a critical and distinct aspect of faculty workload.

Research on faculty workload does not, however, address how the tripartite system impacts the advising role. How do faculty members make sense out of their advising role in the midst of other competing responsibilities? This study is intended to fill this gap in the literature.

Academic Disciplines

Disciplinary communities have been likened unto tribes and territories (Becher, 1989) because they have unique academic cultures and the nature of their knowledge can make them very different from one another. Many of the differences that are evident in various disciplines can be attributed to varied work assignments, symbols of identity, types of research and publications, modes of authority, career lines, and associational linkages (Clark, 1999; Yunker, 1984). Biglan's (1973a, 1973b) research on the characteristics of subject matter led him to classify academic disciplines into three dimensions: hard versus soft, pure versus applied, and life system versus non-life systems. Each discipline can be classified according to these three dimensions. Chemistry for example, would be a hard, pure, and life system science, because it is characterized by the existence of a single paradigm (hard), may be less concerned than other disciplines about the application of knowledge (pure), and is concerned with life systems (life system). Thus, the natural sciences and mathematics fall under the hard, pure category. The hard, applied category encompasses the science-based professions such as engineering. The soft, pure category includes the humanities and social sciences. The social professions, such as education, social work, and law fall under the soft, applied category (Clark, 1999; Becher, 1989).

Since Biglan's (1973a, 1973b) classification of disciplines, many studies have been conducted on disciplinary cultures and how they differ in the ways in which they ask questions, the nature of knowledge, the relationship between teaching and research, and goals for students' intellectual development (Braxton, 1996; Braxton & Hargens 1996; Clark, 1999; Eljamal, Stark, Arnold, & Sharp, 1999; Felman, 1987; Yunker, 1984).

Braxton and Hargens (1996) investigated high consensus disciplines (hard, pure) and low consensus disciplines (soft, applied) and discovered that faculty in high consensus disciplines had more of an orientation towards conducting research, had more publications, and spent a disproportionate amount of time on research activities, as compared to those in low consensus disciplines. Therefore, disciplinary culture impacts how faculty spend their time and may impact advising roles.

Variations between academic disciplines may also account for the amount of time it takes for doctoral students to complete their degrees. Baird (1990) researched time-to-degree and identified departments that graduated their doctoral students the “fastest.” Chemistry (5.9 years), chemical engineering (5.9 years), and biochemistry (6.0 years) graduated students the “fastest,” while the “slowest” departments to graduate doctoral students were music (10.0 years), art history (9.3 years), French (9.2 years), and history (9.2 years). Baird (1990) suggested that the differences between time-to-degree across departments roughly corresponded to the clarity of central paradigms within disciplines and the degree of agreement about those paradigms. Similarly, Nerad and Cerny (1993) found that Berkeley University students in the natural sciences and engineering completed their doctoral degrees in a shorter time (5.5 – 6.2 years) as compared to students in the social sciences, arts, and languages and literature (8.4 – 8.9 years). These studies suggest that disciplinary differences cannot be ignored in studies of graduate student advising, since time-to-degree, and consequently degree completion, may be linked to discipline.

In summary, academic disciplines have subcultures, forms of inquiry, and habits of the mind that differ significantly from one another. One critical way in which

academic disciplines have had an impact on graduate education is in the preparation and graduation of doctoral students. However, there is still a gap in the literature as to how advising may vary by disciplines.

Summary of the Literature

Four bodies of literature lay the foundation and guide this study: advising/mentoring, doctoral student socialization, faculty workload, and academic disciplines. The literature on advising/mentoring indicates that faculty members who advise doctoral students play a critical role in how their doctoral students experience the doctoral degree process. More specifically, the literature on advising reveals that advisor-advisee relationships have a major influence on when, or if, students complete their degrees. This body of literature has also identified types of advisor-advisee relationships, as well as the qualities and characteristics that make for a “good” advisor.

The literature on mentoring has established that being mentored during the doctoral degree process is critical to the success of doctoral students. Research conducted by Lyons, Scroggins, and Rule (1990) suggested that mentors transmit formal knowledge, socialize their students into the discipline/profession, and boost the academic and professional confidence of their doctoral students. The bodies of literature on both advising and mentoring provide evidence that there is a strong link between doctoral student success and the relationships they develop with their faculty advisors. Therefore, the current study is built on the assumption that faculty advisors play a critical role in the development of the next generation of scholars.

The literature on doctoral student socialization provides several meaningful definitions for this study, as well as models to understand the process of socialization.

This literature explains what it means to be socialized during the doctoral degree process and what it means to be professionally prepared to engage in a discipline/profession. Since the socialization process places a heavy emphasis on how doctoral students are trained, this set of literature clearly identifies ways in which an advisor can help their advisees be successful.

The faculty workload literature provides the framework for understanding the paradox between teaching and research. Although teaching is the activity that faculty members spend most of their time performing, research is the activity that is typically most valued and rewarded by the academy. Since advising generally falls under the larger umbrella of teaching, the tensions that can be created for faculty members who have responsibilities for advising doctoral students may have serious implications for how doctoral students are supported, trained, and groomed during the doctoral degree process.

Finally, the literature on academic disciplines suggests ways to categorize academic disciplines and provides information on disciplinary differences that may impact advising. Specifically, this body of literature provides a foundation for understanding the relationship between academic disciplines and time-to-degree.

CHAPTER 3

RESEARCH METHODOLOGY

A review of the literature reveals that faculty advisors have a significant impact on the success of doctoral students. However, most of this evidence has come from research conducted with doctoral students. The literature is virtually silent on how faculty members view their role as advisors and how they help advisees achieve success. This research seeks to fill that gap in the literature by examining how exemplary advisors understand and believe they enact their advising role. The five research questions guiding this study are:

1. How do exemplary advisors understand and believe they enact their advising role?
2. What factors influence how exemplary advisors advise?
3. What expectations do exemplary advisors have of their doctoral advisees and what do they think their advisees expect from them?
4. How do exemplary advisors balance their role as advisor amidst all of their other faculty roles and responsibilities?
5. How do the advising practices of exemplary advisors vary depending on the disciplinary context?

Research Epistemology

In an effort to determine the most appropriate research design for this project, I wrestled with several design questions: What do I, as the researcher, believe about the nature of knowledge? What are my epistemological beliefs about how knowledge gets created? What methodological approach supports my epistemological perspective? And

lastly, what method or technique will be the most fitting to answer my research questions? According to Crotty (2003), there are at least two widely accepted research epistemological stances—objectivism and constructivism. Objectivism is the belief that reality exists as meaningful entities independent of consciousness and experience. The two cornerstone ideologies of this position are that the known can be separate from the knower and that objective truth exists. The theoretical perspectives that undergird objectivism are positivism and post-positivism. Experimental research and survey research are two methodologies that are most closely associated with objectivism.

Constructivism, on the other hand, rejects this notion of objective truth and embraces the idea that meaning or truth comes out of the realities of our world. From this perspective, experiences and realities are not tested in the research process but instead are described and explained through the research process. Some of the theoretical perspectives that undergird constructivism include interpretivism, critical theory, feminism, and postmodernism (Crotty, 2003). Constructivist ideology is most closely aligned with a qualitative paradigm, and the methodologies that are most closely linked to constructivism are grounded theory, action research, and ethnography. Research methods most often used to conduct this type of research are observations, interviews, and content analysis (Crotty, 2003).

Situations exist for which the known can be separated from the knower, and as a result an objectivistic or quantitative paradigm would be an appropriate framework to conduct a study. For some situations, however, truth or meaning is a socially constructed phenomenon. From this perspective, human beings construct their own realities based on their worldviews and experiences. A constructivist or qualitative paradigm is most

appropriate in this situation. Since my epistemological ideology appears to fall somewhere in the middle of the post-positivist-constructivist epistemological continuum, as opposed to either extreme of the continuum, I am not what Onwuegbuzie (2002) calls an epistemological “purist”--quantitative or qualitative--but rather a situationalist. According to Johnson and Onwuegbuzie (2004), epistemological purists believe that their paradigm is the superior paradigm and it is the most ideal way to conduct research. Situationalists, in contrast, argue that “certain methods are more appropriate for specific situations” (Onwuegbuzie, 2002 p.521).

An objectivist or post-positivistic paradigm can be an appropriate method to employ when theories for a phenomenon have already been established, when constructs have already been validated, and when reliability for the measures can be easily obtained. In those established situations, the known can be separated from the knower and pre-existing patterns in the social order can be revealed. However, exemplary faculty advisors’ understanding of their advising role has been understudied. Theories or models have not been established, constructs have not been validated, and reliability for measures cannot be easily obtained. Therefore, I elected to approach this study from a constructivist paradigm in an effort to create “new” knowledge from which theories, models, and constructs of exemplary advising can eventually be developed.

Research Methodology

Within a constructivist paradigm, the tradition of inquiry or the research methodology that I employed is grounded theory. One of the cornerstones of grounded theory research is the development of a theory that emerges from the data and findings from a study (Creswell, 1998). Since I am interested in eventually gathering enough

understanding about how doctoral advisors advise to be able to develop models or theories of doctoral degree advising, the grounded theory method is an appropriate guide. Another distinct feature of grounded theory is the constant comparison of data (Creswell, 1994). When utilizing the constant comparative approach in data analysis, the researcher is continuously comparing what is emerging from each interview with what is already known about the subject matter. Findings emerge from the refinement that comes about through this constant comparative process.

Research Method

Qualitative interviewing was the method used to collect data for this study. The purpose of a qualitative interview is to collect data to find out what is in and on someone else's mind and to gain access to their perspective (Patton, 1990). Qualitative interviewing is a powerful data collection method for several reasons. Interviews allow close interaction between the researcher and the individuals being studied. Interviews also provide the researcher opportunities to ask for more detail or further clarification if an answer is vague or unclear. And, open-ended interviews result in copious amounts of information on an issue, which can lead to conceptualizations of the issue in ways that are different than originally anticipated (Tashakkori & Teddlie, 1998).

Rubin and Rubin (1995) suggested that qualitative interviews have three pivotal characteristics that distinguish them from other types of data collection methods. First, they are extensions of normal conversations. Second, qualitative interviewers are much more concerned with understanding, knowledge, and insights of the interviewees than in categorizing people in terms of theories. Lastly, the content of the interview, as well as the flow of the interview, changes to match what the individual interviewee knows or

perceives in the context of each interview.

Qualitative interviews have typically been divided into the following categories: structured or standardized, unstructured or informal, and semi-structured (Krathwohl, 1998; Merriam, 1998; Patton, 1998; Seidman, 1998). Structured or standardized interviews have been characterized as being carefully worded and arranged with the intention of taking each respondent through the same sequence of questioning. Unstructured interviews have been characterized as having maximum flexibility, and the conversation flows in whatever direction the interviewee takes it. Semi-structured interviews are characterized by a set of predetermined questions that the interviewer wants to explore but the order of the questions and the actual wording of the questions can vary depending on the interviewee (Patton, 1998).

For this study, I elected to employ semi-structured interviews, as opposed to unstructured or structured. Semi-structured interviews allowed for the definition of interview topics in advance, while still allowing enough flexibility to pursue other interesting areas that emerged during the interview (Merriam, 1998). Another reason I elected to use semi-structured interviews was because it was critical that all of the participants were asked some core questions about their advising practices so that categories and themes would emerge during the data analysis phase.

Selection of the Participants

The faculty population for this study was drawn from a public, Research Extensive, land-grant university, located in the Midwest region of the United States. The unit of analysis for this study was faculty members who advise doctoral students and who were identified as exemplary advisors. An exemplary advisor was defined as a faculty

member who has been one of the top producers of Ph.D. students in his or her department over a five-year period. This particular university was selected because it consistently ranks in the top 25 universities for producing doctoral students.

Faculty advisors were drawn from three disciplinary areas (natural sciences, social sciences, and humanities) and one professional area (education). These fields were selected because they represent major domains of knowledge. Particular departments within each discipline/profession were selected based on the number of doctoral degrees conferred between 1994-95, 1999-00, 2000-01, and 2001-02 (see Appendix A). These years were chosen because they were the years for which the most recent data on degrees conferred were publicly available for the selected university. For the natural sciences, the three top ranking departments included chemistry, physics and astronomy, and mathematics. For the social sciences, the three top ranking departments included economics, political science, and psychology. For the humanities, the three top ranking departments included English, history, and music. For education, the three top ranking departments included counseling education, educational administration, and teacher education.

Once the departments were selected, data from the graduate school indicated which faculty members (in each department) chaired/directed the most doctoral dissertations over a five-year period (between spring semester 1999 and summer semester 2003). The four highest-ranking faculty members from each department were sent a letter inviting them to participate in the study (see Appendix B). Follow-up email letters (see Appendix C) were sent out approximately three weeks after the original letters were sent to all of those who had not responded. A total of 58 original letters were sent and 25

advisors agreed to participate.

Study Participants

Twenty-five eligible advisors participated in the study (see Table 3.1). Six of the participants represented the natural sciences, five represented the humanities, six represented the social sciences, and eight represented education. Ten of the study's participants were female. Seven of them held the rank of associate professor while the rest of them held the rank of full professor. The average number of years that the participants have been in the professoriate is 23 years and the average number of students that they were currently advising was eight.

As a group, the 25 participants in this study have over 500 years of experience in the professoriate and nearly that many years advising and guiding doctoral students. Collectively, they are currently advising nearly 200 doctoral students and cumulatively they have advised and graduated nearly 1000 doctoral students.

Pilot Interviews

Prior to undertaking the full study, a pilot study was conducted in December of 2003 and January of 2004. The primary purpose of piloting the study was to test the interview protocol and to determine if the interview questions were addressing the research questions in the manner that they were intended. In addition, after each pilot interview the participants were asked for their feedback on the clarity of the questions, their level of comfort in answering the questions, and if they felt any questions needed to be added, removed, or revised. The first three people in the pilot study were from the natural sciences and communications. Some of the feedback received from the first group

Table 3.1: Demographic Characteristics of Participants

Discipline	Gender	Rank	Years in the academy	Current number of doctoral advisees
Natural Science	Male	Associate Professor	9	10
Natural Science	Male	Professor	13	5
Natural Science	Male	Professor	15	12
Natural Science	Male	Professor	34	3
Natural Science	Male	Professor	10	7
Natural Science	Male	Professor	30	2
Humanities	Female	Associate Professor	15	6
Humanities	Male	Associate Professor	13	2
Humanities	Male	Professor	38	11
Humanities	Female	Professor	24	5
Humanities	Male	Professor	37	16
Social Science	Male	Professor	45	7
Social Science	Male	Professor	37	8
Social Science	Female	Professor	32	2
Social Science	Female	Professor	17	8
Social Science	Male	Professor	21	1
Social Science	Male	Professor	34	8
Education	Female	Professor	33	8
Education	Female	Professor	18	2
Education	Male	Associate Professor	16	12
Education	Female	Associate Professor	15	22
Education	Female	Professor	11	11
Education	Female	Associate Professor	18	25
Education	Female	Professor	7	15
Education	Male	Associate Professor	25	7
		Professor		

of piloted participants was that the interview protocol was too long, that I needed to ease into the interview instead of immediately asking questions about advising practices, and that leading questions needed to be avoided. Based on their feedback, the interview protocol was changed in the following ways: I reduced the number of questions by collapsing questions that could be interpreted as redundant; I dropped questions that seemed too specific or leading; I asked more general demographic questions at the beginning of the interview and then worked my way down to more specific questions; and I made sure that all of my questions were worded in a way as to not impose my interpretations or particular bias on the situation. After making the above adjustments, the interview protocol was piloted again with three different faculty advisors. The three faculty advisors who participated in the second round of piloting were from engineering and education. No further alterations to the interview protocol were necessary based on the feedback from the second group of pilot study participants. The six faculty advisors who participated in the pilot study were not eligible to participate in the full study.

Interviews

Interviews for the full study were conducted between February and September of 2004, but the majority of the interviews took place between March and April of that same year. All of the interviews, except one, were conducted face-to-face. The one that was not conducted face-to-face was conducted over the phone. The interview protocol was designed to take approximately an hour and a half. However, actual interviews lasted between forty-five minutes and three hours. The differential in the length of the interviews can be attributed to several things. First, time constraints were an issue for some of the participants. Interviews that lasted between forty-five minutes to an hour

were due to the fact that the interviewee had a tight time schedule, and he or she could not allot more than forty-five minutes to an hour. Second, some participants were very loquacious and expressive about issues concerning advising and so they provided more detailed information about their advising practices. As a result, those interviews went significantly longer than the intended hour and a half. Third, as I became more familiar with the interview protocol and more comfortable with the art of asking questions, the interviews became more efficient.

Each interview began with me introducing myself and providing the participant with an opportunity to read and sign the consent form (see Appendix D). Once the consent form was signed, I spent a few minutes describing the purpose of the study and my previous academic work in graduate education. Participants had ample opportunity to raise any questions they might have about the research study. The purpose of starting off the interviews in this manner was to ease into the conversation and to establish mutual trust and a rapport.

The interview guide (see Appendix E) was divided into six parts. The first part of the interview was designed to collect demographic information from the participant and to learn about how advising works in their department. Part I of the interview was called *introduction*. The questions under this section included:

1. How long have you been in the professoriate?
2. What is your current academic rank?
3. How many doctoral students are you currently advising?
4. What stages of the doctoral program are your students?
5. How is it that you come to work with a student as an advisee?

Parts II, III, IV, and V of the interview guide corresponded to one of the subsidiary research questions (the fifth subsidiary question is being answered using comparative analysis based on the participants' responses to the first four questions). The questions in part II of the interview guide was under the heading *how do exemplary advisors understand and fulfill their role as an advisor*. The questions under this section included:

1. How would you describe yourself as an advisor?
2. What do you see as the most critical responsibilities as an advisor?
3. What evidence would you give of how you enact those responsibilities?
4. Give me as many words that you can think of that describe you as an advisor.
5. What evidence do you have of that?
6. What is the nature of the relationships that you have with your advisees?

Questions in part III of the interview guide were under the heading *what factors influence how doctoral advisors advise*. The questions under this heading included:

1. What influences how you advise?
2. How do you think you were socialized to be an advisor?
3. How did that type of socialization work for you?

Questions in part IV of the interview guide fell under the heading *role expectations*. The questions under this heading included:

1. What expectations do you have of your doctoral advisees?
2. What do you think your doctoral advisees expect of you?

Questions in part V of the interview protocol were under the heading *balancing responsibilities*. The questions under this heading included:

1. Describe for me what your other faculty responsibilities include.

2. How does advising fit with all of your other responsibilities?

Part VI of the interview guide was called *conclusion*. The questions under this section were:

1. What would like your legacy as an advisor to be?
2. Is there any thing else about your role as an advisor that we have not covered but you would like to share?

Although this outline gives one an adequate summation of how the interviews were designed, it fails to capture the full interaction. More specifically, it fails to capture the specific probes and follow-up questions that were part and parcel to each individual interview.

Data Analysis

To begin the data analysis process each audiotape was transcribed. I transcribed 15 of the 25 tapes and two transcriptionists were hired to transcribe the other ten. However, I listened repeatedly to all of the tapes (those that I did not transcribe as well as those that I did) in order to become familiar with each of the interviews. During these multiple listenings, I paid close attention to and recorded things such as voice inflection, sighs, giggles, and long pauses. Once all of the interviews had been transcribed they were compiled into a single data file. In an effort to make the data from each of the transcripts easily identifiable, a number was assigned to every line of data. The complete data file was 406 pages and contained more than 18,000 data lines.

Using the basic tenets of grounded theory, the data were analyzed using two separate but iterative stages: open coding and axial coding. During the first data analysis stage, open coding, each transcript was reviewed section by section. Responses to each of

the research questions were identified, marked, and then cut and pasted onto a strip of poster board. Next, key words or phrases were identified in each of the responses and codes were assigned. During the second data analysis stage, axial coding, the strips of poster board that had been previously coded were further scrutinized for discrete ideas and placed into categories. Once a strip of poster board had been coded, it was affixed to a large foam board using Velcro in an effort to determine what categories were being established. Using foam boards to display data during this phase of the analysis was very useful because it gave me the capability to be able to move data around physically when trying to establish categories. This was an important capability because I needed to be able to manipulate the data physically so that I could see how well various codes were contributing to or not contributing to the development of a particular category. Once categories had been identified, then a similar process took place in an effort to use the established categories to identify the themes, or what Strauss and Corbin (1998) called subcategories, that had emerged from the data. Finally, thematic matrixes were developed for each of the research questions and a constant comparison analysis was done for all of the themes within and between each of the disciplines/professions.

Throughout the entire data collection and analysis process, I kept a journal of the data. The purpose for keeping a journal, which in grounded theory is called memo writing, was to record thoughts, feelings, and ideas about the data as it was emerging. By the end of the data analysis process, the journal entries had served at least two useful purposes. First, by capturing what I was thinking about the data at various times throughout the process, it allowed me to see (not just intellectually believe) that qualitative data analysis is truly an iterative process. Being able to trace the numerous

times that I wavered on how a particular response was coded and then recoded and then coded again after a category had been established (for which that response no longer fit) is proof of this iterative process. Secondly, reflecting back on my journal entries has allowed me to see how I am developing my own identity as a researcher. I have taken a topic that the field has very little knowledge of and now can lend a certain level of expertise related to this topic.

The primary way that the data from this study are presented is through a discussion of the themes that emerged from the participants' responses. Excerpts from the participants are used to support each of the emergent themes. It is not possible to present all of the responses from all of the participants. Therefore, I have tried to be as judicious as possible in deciding which excerpts to use as representatives of a theme. In making that decision, I have tried to fully represent the multiple perspectives that may have emerged within any given theme as well as to give equal representation, as much as possible, to responses given from participants from across each of the disciplines/profession.

Role of Researcher

My previous research and general involvement in graduate education has been quite broad. For two and a half years I worked closely with the Associate Dean of Student Affairs in Michigan State University's Graduate School on a research project that investigated what factors lead to doctoral students' progress and achievement outcomes. As a part of that research project, I developed an instrument that was designed to measure the multiple dimensions of an advisor-advisee relationship. In addition to my scholarly work on this topic, I have also been involved with graduate education on a national level.

I served one year as the president of the largest graduate and professional student organization in the nation—The National Association of Graduate-Professional Students (NAGPS). As a result, I have been invited to participate in national meetings, workshops, and conferences as both a participant and as a speaker to engage in discussions centered on some of the issues currently plaguing graduate education. I have a solid understanding of the structure of graduate education, and because I have grappled both intellectually and practically with some of the most critical issues surrounding graduate education, I am qualified to undertake a study looking at one of the most critical aspects of doctoral training—the role of the advisor.

It would be virtually impossible, however, for anyone who has completed a doctorate degree to conduct a study looking at the doctoral advising process without being influenced by their own lived doctoral experience. Some students enter doctoral programs with no preconceived notions of what an advisor is or what an advisor is supposed to do. In contrast, I entered my doctoral program with well-formed thoughts and ideas about what an advisor is and what an advisor is supposed to do. In order to conduct this study, it was essential that I suspend my own thoughts and beliefs about doctoral advising. Throughout the data collection and data analysis stages, I bracketed my personal beliefs about advisors' roles in order to be open to what I was hearing during the interviews. I entered every phase of this project with the mindset of a researcher, as opposed to a doctoral student.

Research Integrity

Within a qualitative tradition, the term “goodness of criteria” as used by Smith (1990) and Marshall (1990), and the term “trustworthiness” as used by Guba and Lincoln

(1982) both raise questions about how to determine or judge the legitimacy and accuracy of naturalistic inquiry. Educational and social inquiry inherited from the life and natural sciences the notion that in order for research to be judged legitimate it needs to have internal validity, external validity, reliability, and objectivity. However, many educational researchers who practice a naturalistic form of educational inquiry argue that because qualitative research is based on different assumptions about reality and a different worldview, it should have its own criteria for being judged (Merriam, 1998). Guba and Lincoln (1982) proposed four analogous terms—credibility, transferability, dependability, and conformability—for which qualitative inquiry could be judged. These are the four standards used to enhance the trustworthiness of this study.

Credibility in qualitative research is concerned with whether the researcher adequately represents the realities of the researched. According to Guba (1981), doing member checks is one way a researcher can enhance the creditability of his or her study. Member checks can be done with members of the study or with members of the same group but who are not participants in the study. I conducted member checks with other doctoral advisors who were not part of the study. Throughout the data analysis process, I also shared my coding procedures, as well as my interpretation of the data, with a faculty member who has advised and graduated a large number of doctoral students during her tenure in the professorate. In addition, I had numerous conversations with a number of different faculty advisors who came from outside of the institution from which the data was gathered.

Transferability is concerned with whether the findings from this study can be transferred to other situations. One way to enhance the transferability of the findings from

a qualitative study is to do theoretical or purposive sampling from the start (Merriam, 1998). The purpose of purposeful sampling is to select people who can best illuminate the question under study (Patton, 1990). I purposely selected people who met the criteria for being an exemplary advisory in order to uphold transferability.

Dependability speaks to the consistency of the findings and asks whether or not the results are consistent with the data collected (Merriam, 1998). The way that I addressed dependability in this study is by maintaining a clear and accurate audit trail for all of my findings. Throughout the data analysis process, I have kept a trail of records in a way that would allow another researcher to be able to see how categories were formed and themes were generated.

Confirmability concerns whether the conclusion from the study can be confirmed based on the data. In this study, the same audit trail that another researcher could use to determine the dependability of this study could be also be used to judge the confirmability of this study. By using the audit trails to see how the data was coded, how categories were formed, and how the themes were generated would ultimately lead that person to see the conclusions that emerged from the data.

CHAPTER 4

FINDINGS

The purpose of this study was to examine how exemplary advisors use their role as advisor to successfully guide their doctoral advisees through the doctoral degree process. Findings are organized around the research questions that guided this study:

1. How do exemplary advisors understand and believe they enact their advising role?
2. What factors influence how exemplary advisors advise?
3. What expectations do exemplary advisors have of their doctoral advisees and what do they think their advisees expect from them?
4. How do exemplary advisor balance their role as advisor amidst all of their other faculty roles and responsibilities?
5. How do the advising practices of exemplary advisors vary depending on the disciplinary context?

This chapter is divided into five major sections and numerous subsections. Each section addresses a research question, while the subsections focus on the categories and themes that emerged from the research.

Research Question 1: How do exemplary advisors understand and believe they enact their advising role?

Advisors in this study identified numerous ways in which they conceptualize their role as an advisor, as well as ways in which they enact those roles. Therefore, responses to this research question are divided into the following four categories that emerged from the data: responsibilities that they feel they have to their advisees; functions they perform; types of relationships they develop with their advisees; and behaviors or

characteristics that they exhibit when working with their advisees.

Responsibilities

One of the primary ways in which the advisors in this study understand their advising role is through the responsibilities they feel they have to their doctoral advisees. Across the interviews, five themes emerged with respect to responsibilities, however, not all of the themes were mentioned by advisors from all of the disciplines (see Table 4.1). The first theme, *to help their advisees be successful*, and the second theme, *to help their advisees develop as researchers*, emerged from responses given by advisors from across all four disciplines. The third theme, *to help their advisees with their professional development*, emerged from responses given by advisors across three of the disciplines. The fourth theme, *to help their advisees find their passion*, and the fifth theme, *to help their advisees transition into their doctoral program*, emerged from advisors in a single discipline.

Theme 1: Responsibility to help their advisees be successful

One of the responsibilities that more than half of the advisors from across all of the disciplines said they have to their advisees is to help them be successful. Although what it means to help their advisees be successful was expressed in a multitude of ways, respondents discussed six different, but related ways. The six ways are: assessing their advisees' needs; helping their advisees progress; helping their advisees find a doable project; helping their advisees cope with unexpected results; helping their advisees select committee members; and counseling their advisees out of the program when necessary.

Table 4.1: Responsibilities advisors feel they have to their advisees

	Education	Social Science	Humanities	Natural Science
To help their advisees be successful	●	●	●	●
To help their advisees develop as researcher	●	●	●	●
To help their advisees with their professional development	●	●	●	
To help their advisees find their passion	●			
To help their advisees transition into the doctoral program	●			

Assessing their advisees needs.

One of the things that many of the advisors in this study acknowledged was that doctoral advising is a very individualistic activity. Thus, how they advise and how they think about their role as an advisor is largely dependent upon the advisee with whom they are working at any given time. As a result, one of the responsibilities that several of them feel they have is to make an assessment of their advisees' needs so that they can

determine how they can best meet those needs. One advisor from the humanities had this to say about assessing her advisee's needs:

It's a very complicated sort of multifaceted role that I play [as an advisor] and...the extent to which [each] facet is in front will be dependent on who that student is and what they need from me. Some students need for me to sit behind them and kick them in the rear to keep them moving. Other students don't need for me to do that, but they need me to help build their professional confidence... everybody needs something different and you need to assess what those needs are and meet them. (Female, music)

Another advisor from humanities had this to say about assessing his advisees' needs:

I think different people require different things. Some people are incredibly self-motivated and I feel like I am sort of running behind them to catch-up with them; other folks I just constantly have to bug them to get going. It is my job to figure out...what they need and I do that by asking them on a regular basis. I think...it is just a matter of establishing an ongoing dialogue where you are asking them questions about what they are doing and if they're getting what they need. I will say, "How is it you want me to be your advisor? ...Do you need an ass kicking or do you need me to lay off certain things so that you can get through something else?" (Male, music)

The context in which both of these advisors from the humanities talked about their role to assess their advisees' needs is intricately intertwined with their recognition that all of their advisees have different needs. The most effective way for them to help their advisees be successful in their doctoral program is for them to determine what those individual needs are and then to act accordingly.

One advisor from education talked about how she assesses her advisees' needs based on what stage they are at in the doctoral degree process.

I am always listening for the needs that are emerging as they're progressing through their program and then being responsive to what those needs are. [I am] tuned in to when things are changing for them. The way I might've spent my time with someone during their first couple of years might be very different from the next two or three because of where they are in their program and what their needs are. (Female, teacher education)

Unlike the male advisor in the music department, who flat out asks his advisees what role

they want him to play as their advisor, this advisor takes a more intuitive approach to assessing her student's needs and relies more heavily on her listening skills to determine how she can best determine the needs of her advisees. This example also illustrates that advisors realize that advising needs not only can change from advisee to advisee, but that the same advisee's needs change as he or she advances through their program.

Helping their advisees make progress.

Several advisors mentioned a responsibility to provide their advisees with clear direction and timely feedback in an effort to keep them focused and making progress toward degree completion. An advisor in the social sciences recognized the perils of not providing his students with enough guidance while working on their proposals.

I also need to provide some clear directions and not let the student flounder for too long. A little floundering is okay for the first three, four, or five weeks but by the sixth or seventh week they better be moving in a direction that seems to lead to a conclusion, otherwise they are going to get lost and they are going to get frustrated and then you could lose them. (Male, psychology)

Another social science advisor spoke about her responsibility to give advisees timely feedback to keep them progressing towards the degree.

I think I have a responsibility to keep them moving and not be the snag in the process. This whole issue of progress for me is I don't ever want a student to say, "a part of the reason for my slow progress was she was never available, never gave me timely feedback, or whatever." To me that's sort of on the unacceptable side, and that's not going to be the reason. There may be many other reasons why they get bogged down, but I shouldn't be the reason why they didn't get done. Not me. (Female, psychology)

A third female advisor from teacher education also talked about the importance of keeping her advisees moving. "A part of my responsibility is to keep the ball rolling and to keep them moving through in a purposeful way because there are a lot of things that can delay people."

Helping their advisees find a doable project.

A third responsibility mentioned by several of the advisors was helping advisees to select doable projects. A “doable” project was characterized as being reasonable, affordable, realistic, and manageable. However, none of them seemed bashful about setting high standards for deciding if a research project is acceptable.

Sometimes I will have a student come to me and say, “I want to do this project” and then I have to tell them...that this won’t work because it is not a good project and I have to find a way to not only say that without offending them, but also make suggestions on where I think it can work. [However], I have lost some grad students...who have gone away from me...because I would not let them do a project and they found someone else who was more congenial to the kind of project that they wanted to work on...my role is to get them to develop a project, which they are crazy about and that they are in love with, but it has to be a reasonable and doable project. (Male, English)

When it comes to selecting a research project, one of the advisors in the social sciences encourages his advisees to use data from one of his lab’s databases in order to facilitate completion of the project. Although he is amenable to his advisees going off on their own and collecting their own data, he is emphatic about the standards they will have to meet before he approves their research design.

If a student wants to collect their own data I have to insist that the logistics of collecting data are reasonable. Students sometimes have unrealistic notions about how big of a project that they should have. Some mentors let their students do whatever they want to. I don’t! I insist that they prove to me that the data collection is reasonable and manageable in a reasonable amount of time—a year. If they cannot prove that to me, then, I won’t let them do that. They can work with someone else but I insist that the project is manageable and can be done. (Male, psychology)

When probed further, he explained what type of proof his advisee would need to provide.

They would have to show me that the access to the population that they are testing is available, reasonable, and can be done without excessive traveling and without excessive time commitments. If they say they are trying to sample 200 people then I say, “where are you going to get them and how long is the testing going to take? If it’s going to take you ten hours to test each person then you probably are

not going to be able to do that, you either have to have a smaller sample or fewer tests. And are these people really going to come to participate, are you going to try to get people from nursing homes that can't give consent?' So all of the realities of doing the project have to be reasonable and feasible. All of the logistics have to be very clear and I have to know and be convinced that they can actually do the project. I have had enough experience to say, "to the best of my knowledge you cannot do this and I am not going to let you do this." (Male, psychology)

This advisor also admitted that he has lost advisees over the years who insisted on doing a particular research project that he would not endorse.

One advisor from education talked extensively about how important it is to encourage his advisees to pursue their academic interests and not to be kowtowed or bullied into doing a research project that they have no interest in. However, he too acknowledged that he has a responsibility to make sure his advisees select a project that they will be able to accomplish and that is going to be supported by other people on their committee.

If I'm skeptical or if I know [the project] dead ends, then I have a responsibility to point that out and if I think that something isn't going to fly given the climate or the lack of support given by anyone else then I have to tell them that they just have to do something else and they can do that later. Also, my role is to try to help people scale down their ambition to make it manageable. That's an important feature of advising and that takes time and that takes persuasion so that people walk away feeling that they are doing what they want to do rather than feeling that they have been coerced into doing something different than what they wanted to do. (Male, teacher education)

Helping advisees accept unexpected results.

Preparing their advisees to be able to cope with unexpected results from an experiment was identified as an extremely important responsibility for some advisors in the natural sciences. An advisor noted that one of the reasons why his doctoral students successfully complete their doctoral program in three to four years is because he has the responsibility to help them make sense out of the results from an experiment that may be

different from what they originally expected.

I think [a] critical role I have as an advisor is to help my students cope with failure. Helping students understand that [they have not failed] because their result is...unfavorable. Anytime that you get a result that was not what you expected, if it was carefully reasoned in the first place, it is a considerable result. So helping students to cope with unexpected results so that they don't get demoralized or disenchanted are some of my biggest responsibilities. (Male, chemistry)

When asked how he helps prepare his advisees to accept unexpected results, he explained:

I stress to them that we are searching for truth and not a result. Truth, no matter what, is truth. It is not my truth or your truth or anybody's truth, it is just truth. Then all of a sudden they sort of become ambivalent about the results and whichever way it crumbles, it looks good. So I get the student to realize what they are looking for is truth not a result...just the fact that the student knows that they were involved in and instrumental in finding truth is often reward enough for their effort. (Male, chemistry)

Helping advisees select committee members.

In addition to having a single advisor guiding them through their program of study, doctoral students also have to depend upon a committee of people to help guide them through particular aspects of their doctoral program—developing a program plan, preparing and taking comprehensive exams, planning and executing a study, and defending their dissertation research. According to a couple of the advisors in this study, having the right mix of committee members to assist them through these various stages is crucial to doctoral student success. Therefore, they feel one of their responsibilities is to help their advisees select members for their committees who are going to be supportive, useful, and can get along with each other.

Picking the right people for the committee is important...I don't want to say to them, "I know that you can't work with that person," but over the years you find out which faculty members are more likely to be helpful than not. Not that most faculty members can't be helpful but some faculty members, their chemistries

don't mix and if you put faculty members on the committee that don't get along, you are going to have to fire one or two committee members. So having the right committee mix is really crucial to the success of the student. [As their advisor] I have to provide some advice as to the kinds of expertise that they need to have a solid committee. The worst thing that could happen is that a student has a committee that fight[s] with each other and the student gets battled back and forth because [the] faculty members don't like each other. (Male, psychology)

An advisor in education also expressed similar sentiments about giving her advisees advice on the people they have selected to serve on their committee.

I make sure they have people on the committee who are sane and willing to work together. If I see a problem with the people they have selected, I will say, "Okay, you have these people but I don't know if these people will work [well] together because I know something that might fuel them not being able to get along." (Female, counseling education)

Counseling them out of the program when necessary.

A particularly difficult task for which two of the advisors talked about having responsibility for is counseling students out of the program when they see that the program is not a good fit or when they see that the students' heart is not into it. One of the ways that an advisor in the natural sciences determines that his students are making progress in their program is when he can see that they are beginning to take the initiative in their project and are becoming more independent. When he can clearly see that students are not becoming more independent, then he has to be prepared to take the next step.

This person was not a bad problem solver but when you are getting a Ph.D., you have to be at a level where you can use your technical expertise and your intelligences to sort of work through a problem and you have to know how to interpret the results and what to do with the data and I was not seeing any of that in him. I tried everything including setting deadlines and saying, "it's got to be done by this time" but that did not help. It got to the point where I said, "this isn't working." I told him that I didn't have a problem writing him a letter of recommendation if he wanted to move to a different program at a different university, but what was clear was that the project, at least the one that I gave him, was not one that was motivating him to the point where I thought he needed

to be motivated. I didn't question his intelligence or anything like that, but what I told him was, "You've got to be honest with yourself in terms of what you want to do. If I gave you a stack of journals and a stack of World War II books and the freedom to do whatever you want...the stack of journals would never have been looked at and you would be looking at the books. He decided to take the master's degree and leave. It was a hard thing for me to do because I really liked the kid, but it was my responsibility and I didn't think this was the correct career path for him. (Male, chemistry)

An advisor from education also talked about having to have a similar conversation with one of his advisees, once it became clear to him that the student was not moving forward.

One student of mine who I had worked with closely because she was a graduate assistant for a project that I was involved in went off to teach at a small college...and she was not getting anywhere and that was understandable [because] it was a busy time and it was a labor intensive teacher preparation program. Even after she came back, she still wasn't getting anywhere. Another member of the committee said, "her heart is really not in it." Then the task was for me to talk to her. I said, "What's wrong here? Are you really getting anywhere? Do you really want to do this? You don't have to, there are other valuable things to do no matter what you might have convinced yourself of otherwise." And then she said, "not really, but everybody says I should and it is the only thing that matters." I said, "really? What is it that you really want to do?" I said, "it's not that you can't do it, you don't seem to want to do it or the fire is not in your belly kind of thing...you're heart is just not into it." In this case the student was concerned about would she regret it later on or would she feel like she had failed. I didn't know if she would regret it or not, but at the time I was making a professional judgment and thought it was best for her to leave the program. As it turned out, she left the program and now is an elementary teacher...and has not regretted for a minute turning her back on the program. (Male, teacher education)

With the national rate of attrition for doctoral students hovering around 50%, advising students to leave their doctoral program seems counterintuitive. However, for these two advisors a part of ensuring that their doctoral students are successful means ensuring that they are selecting a field, as well as a career path that is right for them.

In sum, helping their advisees be successful was a high priority and a responsibility for many of the advisors in this study. How they go about accomplishing that task varies somewhat from discipline to discipline and from advisor to advisor. A

central element that linked all the responses and points to the advisors' desire to help their advisees be successful is the fact that all of the responses centered on moving advisees forward in their program. The one exception concerns counseling students out of programs when necessary. However, even the discussion related to counseling students out of programs illustrates that the advisors had the advisees' best interest at heart and they wanted them to do what was best for them.

Theme 2: Responsibility to help their advisees develop as researchers

Since all of the advisors in this study come from programs where the only doctorate degree that is conferred is a Ph.D., and since the Ph.D. is a research degree, it is not surprising that a majority of the advisors noted that one of their responsibilities as an advisor is to help their advisees develop a research identity or to train them to become independent researchers.

Help their advisees develop a research identity.

One of the advisors in education talked about her role in helping her advisees to become researchers and to think of themselves as researchers.

Once people begin to think about their proposal...the next major role is trying to...bolster their thoughts about themselves as a researcher...I spend a lot of time...trying to help them sort out their ideas into a researchable question...and then I am spending a huge amount of time trying to help them own their ideas and getting them to see themselves as very credible researchers. (Female, educational administration)

Helping her students see themselves as researchers and creators of knowledge is important to this advisor. However, it is also extremely challenging because the majority of her advisees have spent years as administrators, and developing an identity as a researcher is an enormous transition. This advisor also talked about how it takes a lot of time, support, conversations, and affirming of her advisees in order to get them to make

the transition, but she feels that it is a very worthwhile investment. She provided a specific story about one of her advisees' transformations.

I think the set of anomalies in which this person has basically lived their graduate career has set that person back over and over and over again...questioning, "is any of this worth it? Am I just crazy? Can I do this? Am I really supposed to be here? Is this going to have any meaning to anybody?" At the same time the evolution of the person as a scholar has been absolutely clear. The person has kind of passed all the way through the stages we expect to the point where at first it is so unclear as to what they are doing...to where they are up in the morning eating, breathing, thinking their research and...feeling like they have become the expert. Making sure that this person finished was certainly a worthwhile investment on my part; I gained far more I believe than the student has gained. Watching that person go through this metamorphosis...has been wonderful. I mean very time consuming but it has been wonderful. (Female, educational administration)

Train them to be independent researchers.

One of the professors in natural science had this to say about what it means for his advisees to become independent researchers.

I need to make sure when they leave here they are independent scientists and to peel it down to as simple as it can get...they need to know how to run their own experiments without someone telling them what to do. They need to be someone who cannot only solve problems but they need to be somebody who can define problems as well. (Male, chemistry)

Training his advisees to do research takes place in several settings including labs where experiments are always going on, during one-on-one informal meetings that he has periodically with his advisees, and during lab meetings where he meets with all of his advisees once a week. He described a typical group meeting:

If you go to one of my group meetings one of the common things you will hear me ask them is, "Okay, what's next? You tell me." If you had been there last night you would have heard [one of my advisees say], "well, because you said I should do this I did that" and I said, "That's not good enough. You have to know what comes next because YOU know, not because someone else told you." So I am constantly asking them what's next and making them reason through the process. (Male, chemistry)

Another way this same advisor helps his advisees become independent researchers is by encouraging them to take any unexpected discovery and run with it, which can result in them gaining a sense of ownership of the project.

The other part of this is just encouraging them to take any discovery they have that was unexpected and run with it. Sometimes this can go awry but I think it is beneficial that we have a project that's in place but I am willing to deviate from it in order to explore and discover more. Once they get out there and it is sort of their discovery, it helps them create a sense of intellectual ownership of that project. I also sort of design a project in a way that their thumbprint is clear and they can say this is my part of it and that helps. You just have to get them to feel that this is their project and they are going to be the expert. (Male, chemistry)

One social science advisor also explained what the process of training his advisees to become independent research scholars entails.

What I want to do in graduate education is to create research scholars who can then go out and just be independent research scholars... Training them to be research scholars entails... helping them learn... how to construct theory. When I am teaching them how to do theory, I will try to entice them to deduce their own logical consequences from a situation that we are talking about because all of science is about here is the way I think things work. If that is correct then the following things should be observable in the real world. If this theory is right, the following things should happen and so if I organize the data correctly, I should be able to observe that happening. So I try to get them to make the deductions. "What do you think is happening? What do you think is going on out there in the real world? Okay, if that is correct, then, what should follow from that, what should you be able to see in the real world?" So the first part is theory making and the hypothesis creation part of it and then the second part of it is the specifics of organizing the evidence to see if those things are correct. (Male, political science)

Another aspect several of the advisors talked about with respect to helping their advisees become independent researchers detailed the process that they use to train them.

The way to train them is not to sort of throw the students into the lab with a budget for supplies and then just hope that something materializes, but at first you really have to give them some very direct supervision. You have to make sure that they have a very good understanding of your expectations of how to do experiments, how to document results, how to evaluate results, how to present data. All of these things have to be done correctly and there is a set format and there is a certain rigor. They don't get this by osmosis. They are not going to breathe it in the air or whatever they have to be told and shown, so the first year

or so it is pretty close mentoring and then as time goes on you step back. (Male, chemistry)

One of the physics advisors also views his approach to training his advisees to be independent researchers as a developmental process.

The most...important thing is that I am training students in research. And the way I do that is basically by giving them a research project and then guiding them through that and what I'm always looking for is for them to become more and more independent. I know it is time for my students to graduate when I am not advising them anymore on a project. (Male, physics)

Not all the advisors in this study necessarily equated helping their advisees learn their subject area with helping them become independent researchers. One of the advisors in natural science focused on his teaching as a responsibility to his advisees.

I believe that the thing that I need to do most is teach them, teach courses in which they learn important ideas and to set them on papers that will help get them to someplace near the boundaries so that when they start working by themselves, they can get there. (Male, mathematics)

When asked if getting them to a place where they can work by themselves meant that his goal was to help his advisees become independent researchers, he responded:

...that [becoming an independent researcher]...is their own responsibility... (after a few seconds of silence, he continues)...okay, if, if learning mathematics makes you an independent researcher [or] if learning the subject makes you an independent researcher, okay. But I don't think that, no, I think my job is to teach them mathematics and it is their own responsibility to become independent researchers. (Male, mathematics)

In sum, training the current generation of graduate students to be ready to assume positions as independent researchers and scholars falls very much into the purview of what some, but certainly not all, of these advisors see as a part of their advising role. The responsibilities for helping their advisees become researchers ranged from helping them develop an identity as a researcher to helping them become full-fledged independent researchers. The process that all of the advisors described using to help their advisees

make the transition from a novice to an expert is developmental in nature and requires time, support, and encouragement throughout the process.

Theme 3: Responsibility to help their advisees with their professional development

Over the last few decades, the academy has become an increasingly competitive enterprise for newly minted Ph.D.'s. Even careers outside of the academy are becoming increasingly more difficult to find because of "downsizing" and "rightsizing" that has taken place over the last couple of decades within the types of government agencies, corporations, and organizations that typically hire PhDs. Therefore, much care needs to be given to the type of opportunities that students are afforded and the kinds of activities they are engaged in during their doctoral training that will contribute to their professional development and prepare them to enter into their chosen profession. Advisors from three of the four disciplines identified the third theme, to help their advisees with their professional development, as one of the responsibilities they have as an advisor. Amongst the numerous ways in which the advisors in this study talked about helping their advisees with their professional development, the majority of the ways can be subsumed under four categories: teaching them to work with others; socializing them into the profession; helping them build professional networks; and making them employable.

Teaching them how to work with others.

For one of the advisors in the humanities, helping her advisees develop professionally means helping them understand how to successfully work with others, including how to work with an advisor.

I had a doctoral student who I had recruited here who was my GA and the first week she was here I thought, this is going to be a disaster. She was driving me crazy (laughs)! Every ten seconds she was asking me, "Have you done this yet, have you done that yet, have you done this yet?" Finally, I sat her down on the

chair and said, “Delilah, we need to talk about this because otherwise this isn’t going to work. If it isn’t on fire, I don’t put it out; if it isn’t due in ten minutes, I probably haven’t thought about it yet, so you need understand that that’s my working style and it is not going to change. Therefore, your asking me every ten seconds if this is done or if that is done is making me unhappy....I realize that you’re anal and you like to get things done in advance and I will respect that where I can, but you also need to know and respect how I work....” To her credit from then on the working relationship was fine. (Female, music)

Socializing them into the profession.

Being socialized into one’s discipline can range from learning the appropriate language from reading the literature, for example, to developing the habits of mind that one can observe from attending conferences or other professional meetings. According to more than half of the advisors in this study, one of the things that they do to help socialize their advisees is to encourage them to attend conferences. Several of the advisors also talked about how they often co-publish with their advisees. During the writing process, they help their advisees understand what is acceptable and unacceptable in the field. In disciplines such as the humanities where co-published papers are not widely valued, advisors talked about providing their advisees with the type of encouragement and guidance that would allow them to be able to submit their single authored papers for publication.

I have worked with my students on getting publications. Every time I teach a graduate course I encourage students to write a publishable paper and I have suggested journals where they could try to get it published. In fact, one of my advisees who took a class from me a year ago last fall wrote a paper and after the semester ended, I worked with her on it—I critiqued it and helped her revise the introduction—and then I encouraged her to submit it for publication and it got accepted. (Female, English)

It is very, very rare to see a paper co-published in my area. [So] If I know someone is putting together a particular collection and I have a student who has done a good paper on that topic I will say, “Hey, work that up and send it in to such and such a person to see if they will include it their collection.” (Male, history)

Another advisor feels that socializing her doctoral advisees into the profession means taking them through a full-blown induction process.

The induction process is making sure that they know what it is that they will face when they get out there in terms of what are the decisions you need to make as a professional...trying to talk them through why I make the decisions that I make and explain my life a little bit to them so they have a clear sense of what it's like [to be in the professoriate]. A part of that means that I need to teach them to be successful researchers because if they are not, they are not going to survive. Part of that means I need to teach them to be successful in the classroom because, if they don't experience that success, they are not going to survive. Then I try to model for them what good advising looks like. I also think an important part of the...induction process...is modeling the family balance with the professional balance piece. Because it is a pretty rare female student that I get here who is not either married or hoping to be married and hoping to have a family. I think it is particularly important for female students to sort of see their mentor and their role model making the choices and balancing and sort of [seeing] what that looks like and how they can make this work, too. My view of guiding and advising is pretty darn broad and to some extent it is showing them how to live professionally.
(Female, music)

This advisor also talked extensively about how she sees it as her responsibility to give her advisees critical feedback on their vitas and their letters of applications so that they can be competitive on the job market. She holds mock interviews in order to help them understand what the interview process is like, and talks with them about the promotion and tenure process so that they will not get blindsided by things that are "very simple and stupid." For this advisor, inducting her advisees into the profession covers a whole gambit of training activities. Similarly, one of the other advisors in this study said, it "...is not necessarily training of their intellectual strengths, but training that will allow them to maneuver through a system that has become increasingly highly, highly competitive."

Building professional networks.

In addition to socializing their advisees in an effort to help them develop

professionally, several of the advisors also believe that they can help their advisees with their professional development by helping them build networks and connections with other professionals who are already established in the field. One advisor from the social sciences said that she helps her advisees build professional networks by sending them to conferences and by introducing them to her more senior level colleagues. Another advisor also talked about how he uses national conferences to get his advisees networked.

Almost all of the conferences I attend they attend with me...Like the biennial meetings of the Society of Research in Child Development meets every two years. Every two years on one of the nights during that conference fifteen or twenty of my [current and former] students go out to dinner. They are networked...and I encourage that. I actively encourage those kinds of things as a part of their graduate training. And I network current students with past students. For example...any African American female who is doing her dissertation with me would be networked with six other African American females in the United States, within two weeks of me agreeing to be her advisor. (Male, psychology)

This advisor also discussed another strategy that he uses to help his advisees become connected, as well as to get them to understand that being a part of his lab means that they are a part of history.

I will give them a hundred names and say, "By the end of the semester you better know who those hundred people are, what there contributions are, where they are right now, and what there academic rank is." I would have stars by some of those names and I would say, "and you have to find out what those starred people have in common." The common denominator, they eventually come to learn, is that all the starred people are my former Ph.D. students. I do this so that these students can get a sense that there is a history to them being here, there is a history to our lab, there is a history to the kind of issues that we deal with...So I have always promoted that sense of connectedness because...it is just how I do things. (Male, psychology)

Making advisees employable.

The bottom line for some of these advisors is to ensure their advisees will be employable by the end of their academic training. What this means for them as advisors, then, is that during their student's training they have to be very intentional about how

they guide and direct their course of action. One of the advisors in the social sciences, whose advisees can choose between an academic or an applied career, described how she prepares her advisees for either one of those trajectories:

I think I have a responsibility to say, “who are you, and who do you want to be, and how can I help you get there?” If someone is choosing an applied career there are certain kinds of things that they may want so when they walk out of that door they will look appealing to employers. There are certain kinds of experiences they should gain, and certain kinds of skills that they may want to work on [while they are in graduate school]. For example, a lot of it is a translation of skills. In order to be able to take their academic research and be able to stand up and talk to a group of managers they’ve got to change their language. They’ve got to be able to talk that language of business. [For] a student choosing that route we will talk a lot about how to do the research and then how to translate it to business. On the other hand, if someone is choosing an academic career we talk about getting publications, we talk about how they are going to have publications by the time they graduate. I will say, “Okay, this is what you want to do and you are working on one project, [but] one project is not going to give you the kind of publication rate you need in this field so let’s talk about what other type of projects that you are going to do.” So making sure that they are building their vita, doing presentations at conferences and getting the visibility that will make them more attractive on the job market is important to do. (Female, psychology)

An advisor in education talked about specific things that she wants her advisees to be equipped with by the time they go on the job market.

The bottom line is I need to make them employable. I want them to have vitas that distinguish them from all of the other doctoral students...who will be going out. I want them to have personal styles that speak of leadership. I want them to have research questions that are cutting edge within the field so that there is not so much redundancy. I want them to have research questions that are well refined and thoughtful and that they can articulate them in a way that makes them competitive whether it is in a practitioner mode or it is in an academic setting. I want them to be able to replace me. (Female, counseling education)

Making sure that their advisees are employable also includes assistance in actually attaining employment. Several of the advisors talked about taking active roles in helping their advisees with their job search as well as writing them glowing letters of recommendations. For example, one advisor from the humanities said that every time she

hears about a position she sends the announcement out to all of her advisees that are on the job market. Another advisor from the humanities talked about how he tries very hard to “sell” his advisees through his letters of recommendation.

I write glowing letters of recommendations; if the student isn't very good I still try to put a little glow in there, you know, but if it's a student where my heart is in the student I will say it as strongly as I can that this is a great student. I think that helps. I know it helps because I have been on hiring committees and I know that if [the advisor] says this is the greatest student in the world...people pay attention to that. (Male, history)

In sum, helping their advisees with their professional development was a third theme that emerged from the data. The categories that fell under this theme are particularly critical for advisors to pay attention to when guiding their doctoral students, as the themes illuminate some intentional aspects of advising that are not taught as part of the curriculum. Helping advisees learn how to build healthy, productive relationships with others is of particular importance because having the ability to work with others is the key to professional success. Being adequately socialized into their discipline can be a hit or miss opportunity for some doctoral students. However, for several advisors in this study, making sure that their advisees are engaged and active in the socialization process is of critical importance to them. Therefore, they provide every opportunity they can for their advisees to attend professional conferences, write for publication, and to get involved in professional organizations and associations. Helping their advisees build professional networks was also discussed as being critical in the professional development of their doctoral advisees. Several advisors discussed the various strategies they employ to ensure that their advisees are meeting the leaders in their discipline and are gaining visibility.

Making sure that their advisees are employable, as well as actually helping them

gain employment, rounded out the categories in this theme that emerged from the interviews. All of the advisors who mentioned this as a particular responsibility acknowledged that the job market is getting more and more competitive and as a result they have to become more intentional about how they guide and direct their students through the doctoral degree process and into employment. More specifically, they talked about helping their advisee identify their career path early in their academic career and helping their advisees with the job search process.

Theme 4: Responsibility to help their advisees find their passion

Four of the advisors from education said that a part of their responsibility as an advisor is to help their advisees find meaning or passion in their work and particularly in their research. Two advisors spoke about it with great conviction.

In theory I think...the most critical responsibility that I have is to make sure that they are doing what is meaningful to them. I would say that is what I give my heart to. I want students working in their course work and in their dissertation on things that mean something to them. For example, Monica came in about a month ago and she had this elaborate thing all laid out and after about two hours and gradually de-constructing what she had developed and through my sort of prodding and questioning she began to realize that what she brought in was really exciting and fun and interesting because it was elaborate, it was specific, but it wasn't her and she recognized that through the two hour conversation. She began to see that that was not taking her down the road that she was really interested in and I sort of reminded her from previous talks of the kinds of things that we had talked about and I said, "It seems to me that this is really what you are interested in, is it not?" and she said, "Yeah, that really is what I am about and it is the direction that I should be going and the one that I want to go." So when a student comes in I don't know that, I don't assume that from the get-go but it is usually the product of careful listening and prodding and questioning during the conversation. (Male, educational administration)

A second advisor from education who also spoke ardently about this topic, said this:

The last thing that I think is really important is you've got to feel passionately about your topic. This is very tedious work, very labor intensive and it takes time. And if you're not in love with that topic, you're going to be bored, you're going to procrastinate, and you're going to get discouraged. So how do you maintain

effort even through difficulty? Well, you do because you're passionate to know and because you're getting feedback or motivational feedback in the activity itself. Two students of mine have come to me in the last few years, saying, here's my topic. I'm going to write about learning how to read in the 4th grade. Or I'm going to write about policies in so and so big city. They are doing a lot of wheel spinning, you know, reading the literature, scoping out possible research sites and so on, but [their passion is] just flat and I can tell and they can tell. But you know, as we're wrapping up or when we're not talking about the study, and they're talking about really interesting things that they're doing in their courses or that they are preoccupied with in their lives then you see their passion. In one case, it's a student who through a children's lit course discovered a collection of rare books and found comic books that were written in Ukrainian that were used to teach Ukrainian immigrants in the United States, adults, how to read in night school. And her mother passed during the time she was getting ready to do her dissertation and her mother and aunts, great aunts, grandmother came from the Ukraine. And...the grandmother learned to read that way and I could feel and she could feel that a way to honor her mother and to learn something really interesting about literacy and to satisfy an intellectual hunger that she has had was to try to study that process. Didn't feel like what you should be doing in a literacy dissertation from her perspective, but it was the book she wanted to write. And so long story short, once we made the adjustments and once we kind of had this sort of pep rally that this was worth honoring and trying and risking and what have you, off she went gathering information from historians on our campus, going to Ukrainian church services, interviewing people in Ukrainian schools, steeping herself in the literature about immigration and about life in the Ukraine, historically, the period when her forebears came. Learning some of the language. Even doing her [IRB] forms in Ukrainian and English. So sometimes my job is to pay attention, to affect, and to listen and try to get the know the person and then to get them to believe that they can do something that didn't come in believing they could do. (Female, teacher education)

To summarize, helping their advisees find and pursue their passion was cited as a high priority for several of the advisors in education. For them, if their advisees are pursuing their passion that means they are doing work and research that matters and has meaning for them. However, because many of their advisees come from very structured professional worlds as teachers or administrators, where they are required to do what is rational, asking them to identify and pursue their passion can be a foreign concept. Therefore, they often spend many hours talking with and listening to their advisees in an effort to help them uncover and discover their passion and then they may also spend

many more hours trying to give them courage to pursue their passion.

Theme 5: Responsibility to help their advisees transition into their doctoral program

Another responsibility that emerged from the advisors in education was the responsibility to help their advisees transition into and through the doctoral program.

According to one female, educational administration advisor, “I try really hard to provide the support that students need to transition into the program and then to move effectively through the program, so I think that’s one of my responsibilities.”

According to another advisor from education administration, a large number of her advisees enter the program having worked for several years as professionals in educational institutions. Thus, her students need help getting back into a “student” role as well as needing help learning what it means to be a student.

Many of our students are school administrators and some of them are school superintendents. So when they come here and they are students [again], there is a huge adjustment. And so as an advisor...I have to help them negotiate those different cultures...First of all, I tell them about this program, what it means to be a doctoral student in this program and basically, what it means to be a doctoral student period....I explain to them the analytical thinking that they will grow into, what the expectations are of the way that you think logically through ideas, how you have to suspend so many of your assumptions, and you need to put your solutions last as opposed to first. If you give many school administrators a problem they have the solution. They don’t think the idea through. So I tell them the notion of being a doctoral student means that you put up problems and you try to look at it from as many angles as possible. And I try to make it seem like a fun thing to do, for a lot of them their head hurts [from all of the thinking] because as school administrators, they need to do it right now. They need to have the answer right now. But I want them to enjoy the folly of it all because they have the time and the space to really take things apart. They don’t have that in their real life. But that is important for them to do as doctoral students. (Female educational administration)

An advisor from counseling education talked about her responsibility to help advisees transition into a new environment.

I think training, especially in counseling, is also about the personal development
















as well as the professional development and being able to help my advisees make that adjustment to a new environment. I think it is critical in terms of their academic satisfaction with the program....So I provide them with a safe space to come and gripe and problem solve. And I help them figure out the rules and the cultural norms of the department. (Female, counseling education)

Helping their advisees transition, negotiate, and adjust to their new academic environment is a responsibility that several of the advisors from education feel they have to their advisees. One reason why they feel that their advisees need assistance with this transitional process is because many of their students are working professionals and may need assistance traversing both a professional culture and an academic culture simultaneously.

Functions they perform

In order to meet the various responsibilities that these advisors feel they have to their advisees, they identified and elaborated on four specific roles or functions they perform (see Table 4.2). Three of these functions—*collaborator*, *mentor*, and *advocate*—were identified by at least one advisor from each of the disciplines. Advisors from three of the disciplines identified *chastiser* as a function that they perform. Other terms that the advisors used to describe the functions that they perform, although they did not necessarily elaborate on or provide an explanation about, included: role model, teacher, and taskmaster.

Table 4.2: Functions advisors perform

	Education	Social Science	Humanities	Natural Science
Collaborator				
Mentor				
Advocate				
Chastiser				

Collaborator

Fifteen of the respondents in this study said directly or indirectly that a function they perform is that of a collaborator. One specific project that a few of the advisors talked about as being a collaborative effort is the student’s dissertation.

When we are embarking on the dissertation we sit down and really hammer out design, and hammer out purpose and problems and those kinds of things. At this stage it is very much a shared collaborative process where we are bouncing back and forth our ideas with one another. (Female, music)

Another advisor said:

I hold students to some pretty stiff standards when we write. When they’re writing the proposal and when we go forward with the proposal I make sure they’ve thought that through. My students do not hold a proposal defense or a dissertation defense until in my estimation and theirs, it’s the best work that we can do. (Female, teacher education)

An advisor in education deliberately makes the proposal and dissertation writing process a collaborative effort between her and her advisees because she believes that how

well prepared or ill prepared her advisee is during the defense reflects directly on her.

We work in partnership with one another and I like to make sure when students go to their committee meeting whether it be for the proposal meeting or the dissertation defense that we have really prepared together as fully as possible. So all during the process I am raising all the questions that I can think of because their performance [during the meeting] reflects on me too. (Female, counseling education)

Another advisor in education talked about the different contributions that both he and the advisee make when collaborating on a project. He also discussed some of the ways in which both he and his advisees benefit by working collaboratively.

When students and I are collaborating on a... research project I may know a little bit more about doing research but they typically know more about the content area. I bring my senior experience in sort of knowing how to do research and they bring to me their years of experience in the content area as well as their knowledge of the literature and we try to put these things together...In the process of doing that I think they are learning how to do research better. They are learning how to write better, they are learning how to think better, they are learning more about their topical area and why it is important. [On the other hand] I am learning about their area, I am learning about an interesting topic, and I am learning about my own research area. In addition, I am learning more about myself as an advisor—what works and what doesn't work. (Male, educational administration)

An advisor in the social sciences calls his advisees his collaborators. Currently, he is working on a dozen different research projects and every one of them is in conjunction with at least one of his students. He gave a description of what working collaboratively on an article with an advisee entails.

We sit down and do an outline together and talk through the various parts of the outline. Some of the questions that we go through are: what are the specific hypotheses should we test and how should we organize the data? What do you think? What do I think? Which seems more persuasive? What do we need to gather and what techniques should we use? How should we structure the presentation in the paper we write? (Male, political science)

In sum, advisors and advisees working together on research projects is a natural course of action during the doctoral degree process. But, for the advisor to think about his

or her advisee as a collaborator on these projects is probably less common. Nevertheless, for a large percentage of the advisors in this study, that is exactly how they think of their advisees. Having their advisees work collaboratively with them means that their advisees' thoughts, ideas, and opinions are just as highly valued as their own. Collaborative projects include dissertations, conference presentations, publications, and experimentations if the advisor has a lab.

Mentor

Although the terms advisor and mentor has often been used interchangeably in the graduate education literature, several of the advisors in this study talked about how they distinguish the two roles.

Advising is a much more broad based term because you can advise people to drop this course and take that course sort of like a high school guidance counselor. Mentoring is more one-on-one direct communication without the trouble of paper work and stuff like that. Advising is somehow in my mind a more formal paper based function. I am more of a mentor than an advisor. Technically my title may be advisor or chair of the dissertation, but mentoring is the function. (Male, psychology)

Advising and mentoring for me are intimately wrapped together, but advising presumably is more to do with teaching them scientific methodology and things like that, and mentoring is giving them a role model, setting standards, and helping them to...fulfill their potential. (Male, physics)

Another advisor distinguished between an advisor and a mentor, but she also acknowledged that she has the responsibility of operating in both capacities at various times throughout her advisees' academic career.

I serve both roles. I think at some point I am more of an academic advisor where I tell [my advisees] these are the things that you need do. At some point I become more of a mentor where they're getting all of this information, they are thinking, they're writing, they're putting it together. And I am pulling it apart, challenging it, asking them to do this or do that, take a look at this or that, rewrite this or that.

It is much more of a mentoring relationship when we're looking to put together papers for presentation, publications, and stuff like that. (Female, educational administration)

A fourth advisor drew a parallel between being a teacher and a mentor.

I am a teacher and I am a mentor. A mentor, it seems to me, is a little bit different from a teacher in that you're kind of guiding along multiple realms of growth; multiple kinds of growth. If I am your teacher, it's more like I'm teaching you to do something around some content area. [Mentoring] is a bigger kind of teaching, which is developing professional growth and sometimes nurturing personal kinds of growth as well. (Female, teacher education)

However, not everyone in the study was interested in being a mentor to his or her advisees. One advisor from the natural sciences said that he does not actively try to mentor his advisees because being a mentor can be very complex and difficult.

A mentor...is a person who has to think of their [mentee] a lot—what is he doing, what is she doing? It also means in doing research you have to really understand the person much more to be able to mentor them. I don't have that kind of time or capability, or something. So to me mentoring is very hard and time consuming. (Male, physics)

Another advisor commented that the idea of being a mentor is very grandiose and it is not a term that she feels comfortable using to describe who she is or what she does. However, she did talk cogently, based on her own experience, about the perils that could later befall an advisee who has been mentored or groomed by their advisor.

[The problem with being groomed is] the groomers take a lot of credit for how things are; they always have and always will...I have experienced it. I know what it is like to cross the mentor and not to come out well on the other side and it takes years to recover and sometimes it doesn't recover and life is too short and the world is too small and everybody knows everybody and we have more important things to do than [to talk about] who's protégé you are...And that is a huge, huge, responsibility that an early career person post degree does not need to have. I mean you always want to honor your heritage but you don't want to have to suck up to it for the rest of your career and be concerned about when you switch research agendas or take different career options or find a partner who causes you to pass on that job that it is being scrutinized by six layers of people who think they know better than you. (Female, education)

In sum, although being both an advisor and a mentor are functions that several of the advisors talked about serving, for most of them being an advisor is more the official term and connotes their responsibility for making sure that all of the required paperwork is complete. On the other hand, being a mentor has broader meaning and covers less of the academic and more of the professional development that occurs during the doctoral degree process.

Advocate

An advocate is often thought of as a person who has power and clout within a particular system and is willing to use their power and clout on the behalf of someone else who is of a lesser status. Due to the bureaucratic nature of doctoral education and the fact that some academic departments can be highly political and competitive, having an advocate—someone who is willing to go to bat for you in times of trouble—can mean the difference between being successful as a doctoral student or not. Five of the advisors in this study said that one of the functions they perform as an advisor is that of advocate to their advisees. What it means to be an advocate and how they actually advocate on the behalf of their advisees varied somewhat from advisor to advisor, but a common element that was present throughout all of the responses was a notion of making certain that their advisees are not being hindered by the system itself or by particular people in the system. One of the advisors from the humanities said that advocating for her students is something that she will do without hesitation and that she will put a relationship with a colleague at risk in an effort to protect an advisee. A particular circumstance for which she has been an advocate for her students is during the dissertation defense.

This was during the time when my colleagues were feeling the most threatened by me because I was recruiting all of the students, I was doing all of the advising, I

was getting known in the state and doing all sorts of stuff that they weren't experiencing themselves...so, it was clear that [during the defense] the questions they were asking the student were not being directed at him but their anger was being directed at me so I wasn't going to let the student have to deal with that... I was not going to let the student pay for [their anger towards me] on his back. So that was one of those [circumstances] where I don't care if I have to answer those questions in the defense myself, I'll do it [or] If I have to shut down another faculty member, I'll do it...because once [the student] has gotten that far and they have gotten above my bar, which is going to be higher than anybody else's, then,...if someone has a problem....I WILL DEAL WITH THE PROBLEM... because at that point they are just being obstructionists, and I will not let that happen at the student's expense. (Female, music)

An advisor in education also said that on occasions she has had to be an advocate for her advisees during the dissertation process but for a slightly different reason.

There are some doctoral students who are going to be marvelous, brilliant... administrators, they just are. And they are going to contribute to the lives of kids and their families in significant ways but they are going to write a dissertation that's minimally average. And those doctoral students need the advocacy of not only their committee chair but of other people around that table. So what I do is I personally talk with all of the members of the committee and say, [this] student has matriculated through, and we know that they are going to be brilliant...and so what we need to do is to facilitate this person's process through the dissertation, to help them think deeper about a topic that is of interest to the field, and know that their dissertation isn't going to be the exemplary dissertation that you are going to hold up in front of everyone else, but it is going to be a well-done research project and that's it. (Female, educational administration)

Two of the advisors in the social sciences said that they have a reputation among students in their department for being an advocate for their advisees. According to one male psychology professor, "Everybody knows that when one of my students runs into difficulties with other members of their committee or when they are doing their dissertation defense or whenever, that if things get really dicey I will step in be their advocate." Similarly another advisor made the following comment:

My reputation in the department is that when you work with [me] you are going to get done. You are also going to have to work fairly hard. I am not going to pester you excessively, pester you some but not excessively, but most importantly I am going to be on your side and your advocate and I am going to get you

through the program. (Male, psychology)

Serving as an advocate for their advisees is not limited to just academic situations, but can spill over into personal matters as well. An advisor in the natural sciences talked about how he interceded on behalf of one of his international advisees when she ran into difficulty getting her visa renewed.

I had a student from Korea and she was pregnant and her visa was running out and she had applied for another visa, but if the visa did not come by a certain time she would have to leave but she was at a stage where she couldn't travel and they were telling her that it would be 300 plus days before she would get her visa. So...I called all sorts of people. I called deans, I called chairs, I called politicians, I called all sorts of people and eventually they changed the time from 300 and something days to 10 days. So she got her visa and that took care of that. (Male, chemistry)

Advocating on the behalf of their advisees is a function that several of the advisors said they perform. Although most of the issues for which they advocate are of an academic nature, their advocacy efforts are not limited to academic issues. The issues in which advisors serve as advocates for their advisees could at times put the advisor at odds with their colleagues and at other times it could require the advisor to rally their colleagues in an effort to support their advisee. All in all, a primary reason why advisors serve as advocates for their advisees is to ensure that the advisees' progress is not being hindered.

Chastiser

The role of chastiser stands in stark contrast with that of advocate. Almost all of the advisors who said that they are advocates for their advisees when they are in need of support, do not experience any difficulty taking on the opposite role of chastiser when their advisees' actions, attitudes, or behaviors need correcting. One advisor from the music department gave an example of how she handles it when one of her advisee is

behaving badly or inappropriately. “I will sit people down and kind of grab them by the nose and say, ‘STOP IT! Do you realize, first of all, what you may be doing to yourself and second of all what you are doing to me?’ An advisor from counseling education discussed the circumstance for which she will chastise one of her advisees. “I will do tongue lashing when there is unethical behavior going on [or] when people have been angry or nasty to somebody else.”

Two advisors from the social sciences and one from the humanities provided illustrations of the sorts of attitudes, behaviors, and actions they chastise, and they provided examples of what they would say or what they would have said to their advisees as a part of the reprimand.

I have had some conversations with some of my graduate students in the past...that have been very, very frank evaluations of their personalities. If I think someone is being an absolute (slight pause) whatever, I tell them. For example, if I hear an advisee giving lip, or being surly, or being arrogant to a staff person or secretary they get it...face to face. “Who do you think is going to support your career and why do you think they would even try to be interested in your career if you don’t treat them in the same way you would like to be treated?”....If I see them doing something that I think is going to be an impairment to them professionally, I am not afraid to tell them. (Male, psychology)

This year one or two students have needed some chastising about maintaining focus and priority. I have one student who, let’s say, squanders his social capital. He has gotten some support from a different college and also got a research assistantship but rather than focusing on that and making sure he fulfills everything that that person expected, he has developed a new project to give a paper that is not directly relevant, and that’s unfortunate and wasteful and could cost him that support....I said to him, “I want to talk about social capital and how you have squandered it. You didn’t know exactly what was required...but you gave the impression to me and my colleague...that everything was squared away and that you had...passed the exam. Then we learn from two other faculty members and the graduate secretary that you haven’t and that is stupid. You are a smart person, you are intelligent about some things but you are being stupid about this.” ...I don’t have to do that too much, but...I have to do it fairly brutally or crossly if somebody is not catching on. (Male, history)

You know, I have emphasized the softer, gentler, kinder part, but there are times when you have to read somebody the riot act. I haven't had to do that many times, but you know....There has been times when I have had to say, "Look, you really need to change [or] this is not working. I remember...this guy who would go away for six months and then give me all of this stuff. And it would be all wrong. I finally sat him down and said, "Look, I don't think that I have made this clear but let me try again. You need to come to see me more often. You can't go six months and then come in with all this stuff. You have got to make more mid-course corrections." So sometimes it is not all Mr. Nice Guy. (Male, economics)

In conclusion, correcting bad behavior is just as important as rewarding good behavior when helping doctoral students develop professionally. Several advisors in this study said a part of their responsibility as advisors is to pull on their advisees' coattail when they see them doing things that they know could be detrimental if left uncorrected. A bad attitude, disrespectful behavior, or unacceptable actions are just a few of the things that would easily deserve reprimand. In the next section the types of relationships that the advisors typically develop with their advisees will be discussed.

Types of Relationships they Develop

A third way that advisors in this study talked about how they understand their advising role is via the type of relationship that they develop with their advisees. Naturally, the ways in which they talked about, as well as the ways in which they defined their relationships were diverse. However, the four types that were emphasized were: professional/friendly, collegial, open, and egalitarian (see Table 4.3).

Table 4.3: Types of advisor/advisee relationships

	Education	Social Science	Humanities	Natural Science
Professional/Friendly	●	●	●	●
Collegial	●		●	
Open		●		
Egalitarian		●		

Professional/friendly was a term that advisors across all four disciplines used to describe their relationship with their advisees. *Collegial* was a term that advisors from two of the disciplines used to describe their relationship. *Open* and *egalitarian* were terms used from advisors in a single discipline. And the terms professional and friendly were paired together because within the context of this study, advisors frequently used both of these terms to describe their relationships. Each type of relationship is discussed in more detail below.

Professional/Friendly

Some of the advisors in this study described the relationships with their advisees as being professional and/or friendly. Two advisors described their relationship as being professional because they do not engage in social activities with their advisees or get deeply involved with their advisees' personal or social lives.

It's professional in the sense that I don't socialize a lot with my students; well, actually, I don't socialize with them at all outside of our work. You know, I'm very friendly when we meet...but beyond that it is just professional. (Female,

teacher education)

Professional... I don't get into their personal lives a great deal. I do know what's going on in their personal lives and I ask about it and they feel free to tell me but it's not that I consider that one of my major interest (laughs) and I don't think they expect me to consider it to be one of my major interest....it's very open ended in that students are frequently coming in the door saying, "Do you have a minute?" So it is professional but it is not constrained in terms of being formal. (Female, psychology)

Another advisor described her relationship as being professional and friendly because of the comfortable and informal ways in which she interacts with her advisees.

It's a professional relationship as well as a friendly relationship. I am not a very formal person so I think people feel very comfortable coming to talk with me about their progress or their work. I think that's why I am as busy as I am because they feel very comfortable just dropping in, sending me an email, and calling me for advice. It has always been a professional relationship but it has always been fun. (Female, English)

An advisor from the social sciences also believed that he has a professional/friendly relationship with his advises but points out that the cultural background of the advisee can have a great influence on the nature of the relationship.

I think in most cases it is professional and friendly....I try not to be too much of their buddy. There still has to be a little bit of a barrier...but I want to be friendly to them. [However], for some people it is more reserved, more formal. Not always but many times Korean students are more formal. You see I think Americans tend to think, oh, yeah, that is my professor. For the Koreans and people from some other countries, it is like they are here, here is God, and here's the professor....I could never get this one guy to stop calling me, sir. He would say, "Yes, sir. No, sir. I will work very hard on that, sir." So a lot of it has to do with the cultural background of the advisee. (Male, economics)

In two other cases, advisors struggled with how to describe the fact that they have friendly and meaningful relationships with their advisees without suggesting that their relationship could constitute a friendship.

You know, it's not a friendship but (pauses) well, sometimes it is a little more like a friendship. It is a special connection. It is (pauses) I am trying to think of another word for friendship (long pause). I would say that my relationships are friendly. I feel like I can talk to my advisees.... Open is a good word. (Female, social science)

It isn't a friendship because there really is a clear delineation that I am in charge here to a large extent. I mean it never needs to manifest itself in those words because they came here because they respect me and they respect my work so they don't mess with me. Although I do care about who they are....It's not a friendship (pauses).... Although I say it is not a friendship, that does not mean that I don't enjoy my students as people because I very much do and they all come with sort of different profiles and whole different cores and it's fun to see how that interacts with the things that we need to get accomplished in their time here. (Female, music)

To summarize this type of relationship, a professional/friendly relationship is characterized as being friendly but not a friendship, structured but not controlled, and official but not formal. For several of the advisors a professional/friendly relationship allows the advisors to develop a good working relationship with their advisees, but it also allows them to have boundaries that both the advisor and the advisee respect.

Collegial

The term collegial was used by four of the advisors to describe the type of relationships they develop with their advisees. An advisor from education discussed why a collegial relationship with her advisees works better for her than a top down, apprentice, or a friend model.

In the top down model [the advisor] has to always keep [the advisee] at an arm's distance....it's too much of a power structure...The apprentice [model] gives me the willies...because that implies that I am really good at what I do and I would never say that out loud and I don't think that I believe that anyway. So someone learning from me like that is an odd notion and I have never liked it....But I also think that it is a one-way street in that model. I know that you are coming to learn from me and that's just not what this is about for me. The friend is tricky because [I am] in a graduate program with people who are [my] chronological peers or [I am] younger than they are...and having always been in a practice where that was

the case and having to fire my roommate in my first job as an administrator the friend thing is hard. I also think that I am way too private of a person and too much of an introvert to go there....I strive for a collegial relationship....[because] I want to have a high level of respect with the student. I don't expect to be disrespected in the way they talk with me if I missed a deadline or they don't like something that I am saying but I do think that they are going to come in and rant and rave and get upset...but as their advisor...I know that that's something that is going to happen....I think for me it works better if it's about the mutual respect piece because otherwise you can't get the work out of people, they won't give it to you, they say "not ready yet," or they can't hear the feedback that needs to be given and you don't have the ability to walk into a dissertation defense or a shared presentation or a co-authored piece and have them feel like they [belong] there too. (Female, educational administration)

Another advisor talked about a few of the ways that he tries to foster a collegial relationship with his advisees.

When we're sitting in my office and we're looking at something or we're writing something, I have them sitting next me so it does not look like they are a peon coming to be with the great master....I take them out to lunch every now and then. I try to give them the impression that we're on the same team. That this is a collegial, cooperative relationship, rather than adversarial relationship. Although I am the same person that is also giving them their grade, that is not the part of the relationship that I want to emphasize. I want to emphasize the part where we're working in partnership. (Male, economics)

Based on the description used by these advisors, in a collegial relationship the advisor tries to dismantle the power structure or at least blur the lines so that the advisee can feel like the relationship between the two of them is balanced.

Open

A third type of advisor/advisee relationship can be categorized as open. The advisor from the social sciences who thought "open" was a good word to describe her relationship with her advisees provided a few illustrations as to what she means.

I try to be very open with them and I hope they are open with me. For example, one student I can say to her, "you know, here is what I am able to do, here is what I need for you to do," and she can [feel free to] write back to me and say, "I can do this but I can't do that." [Also] about a month and a half ago my Mom had some surgery and it did not go so well and I was stressed. My Dad had had

surgery like a couple of days before that and my siblings were calling from various locations and I sort of had this role of coordinator of the family communication....I felt my relationship was such that I could say to my students look, here is what I can give you right now, this is what is happening with me but I will take care of this when I can. That's the open communication that I think is really important. I really do strive to have that and I think I have that fairly well with my advisees. (Female, social science)

In sum, a key characteristic of an open relationship, based on how the advisor described it, is that both the advisee as well as the advisor is free to be honest about what they can do or what they cannot do without fear of retribution. An open relationship also suggests that neither person will take advantage of the other or the situation and that both of them can trust the other to do what they say they will do.

Egalitarian

One of the advisors from the social sciences described his relationship with his advisees as egalitarian as both he and the advisee have equal input into the research they do collaboratively in the lab, as well as equal input on the student's dissertation research.

We have an egalitarian relationship where I am not telling them exactly what to do...but we each have a voice in terms of what we want to do and where it is all going and I always try to respect what it is that the students wants to do. (Male, social science)

Based on how this advisor described his relationship with his advisees, egalitarian is another word for equal partners. Developing a relationship with advisees where both people feel that they have a voice in how to design and execute a research idea gives everyone the feeling that the project has their thumbprint on it.














In addition to describing the types of relationships that they have with their advisees, a few of the advisors described the types of relationships they do not have with their advisees. For example, one of the advisors from the humanities said, "I am not trying to be their buddy, and I am not their daddy or their therapist." An advisor from the

social sciences said, “I am not their pal.” An advisor who is from the natural sciences said, “I don’t view students as my family. You know, they are not my children or my brothers or sisters.”

Behaviors and Characteristics they Exhibit

The responsibilities that advisors have to their advisees, the functions that they perform, and the types of relationships they develop are all buttressed by the behaviors and characteristics that they exhibit while working with their advisees. Numerous terms were used to describe the behaviors and characteristics that they exhibit while working with their advisees, but only four of the terms were elaborated on extensively. Advisors from across all four disciplines used the term *supportive*. Advisors from three of the disciplines used the terms *accessible*, *honest*, and *caring* (see Table 4.4). However, other terms that were mentioned (but not discussed in any depth) by advisors from across all four disciplines included: demanding, encouraging, nurturing, understanding, committed, loyal, positive, challenging, and knowledgeable.

Table 4.4: Behaviors and Characteristics

	Education	Social Science	Humanities	Natural Science
Supportive				
Accessible				
Honest				
Caring				

Supportive

Nine of the advisors in this study stated that they provide support to their advisees. However, only three of them actually talked about it in any detail. An advisor from the social sciences talked about the type of personal support that he provided to one of his advisees.

I try to support my advisees in whatever ways I can....For example, Allyson came into my office one day and said, "...I have to go do this thing" and then handed me this basket and for two hours I baby-sat her baby (laughs). My advisees know that they can do those kinds of things because they know that I will support them. (Male, psychology)

Another advisor from the social sciences talked about how she provided her advisee moral and financial support to pursue a research experiment that he wanted to pursue even though initially she did not believe the projects had any promise.

A number of years ago I had a student who was an RA on my grant and I

had a set of experiments that I wanted to get working on so I gave him the background reading and said, “take a look at this; we need to develop an experiment based on this paradigm.” So he read it and we started designing the experiment. He was very bright and he had very creative ideas about the research so much so that when I had initially heard his idea I thought it was off the wall. He comes to me one day and says, “I see something in this data that I think is very interesting” and I said, “You know, this is crazy.” And he says, “I really think that it is there.” And I said, “you are imagining stuff, I see what you are looking at but this is a fluke.” So he brought in some more data that looked the same and I said, “I think that there really is something here.” So I said, “Okay, I tell you what...go ahead and do this experiment.” So he went ahead and did the experiment and it turned out low and behold the way that he predicted. It was very interesting results and I still didn’t believe it so I said to him, “look, there is a confound here. Maybe you are right but there is a confound here. You have to redo the experiment and check the confound.” So he redid the experiment; he checked out the confound and he was still right. We went through a couple of iterations like that and the end result is that that developed a whole line of research, which he now is very well known for. He had to convince me, but I was willing to let him do the project and support him through the experimentations. (Female, psychology)

An advisor from education talked about the way she supported her very first doctoral advisee, Beatrice. Beatrice had already been in the doctoral program almost 15 years before this advisor took her on as an advisee.

I think almost everything I learned about being an academic advisor I learned from...going through that journey with [Beatrice]. Beatrice was the first doctoral student that I graduated....One of the most important things that I learned from her was how to be very supportive of the student by me taking the initiative to communicate with them. What I did throughout her process was to send her little greeting cards every once in a while. One time, [near the end] she went AWOL on me where I couldn’t find her. She wouldn’t answer any of my emails or my phone calls or anything. [But] I just kept sending her these little cards. And finally, she called me up and...said, “Okay, you finally got to me.”...So just that whole notion of being the faculty member that is responsible for communicating with your students, taking the initiative to do that and staying on top of it, it all pays off. And the experience of working with her taught me how to...stick with providing support. (Female, educational administration)

In sum, the types of support that these advisors provided range from babysitting

an advisee's infant, so that she would not miss an important appointment, to supporting an advisee in a discovery that later made him widely renown in his field. Regardless of the type of support that an advisor provides to their advisee it appears from these examples that the advisees are in a better place because of that support.

Accessible

The graduate education literature is full of information that suggests having an advisor who is accessible is important to doctoral student success. Six of the advisors in this study talked about being accessible and what that means to them. For one advisor in the social sciences, being accessible meant being able to meet with a student within a day or two of their request.

I am pretty accessible even to the point where students can come and say, "Can I have an appointment with you tomorrow?" Often I can work them in and they don't have to wait that long to get to see me. I always felt that being accessible was important and students value that. One of the problems that students complain about from advisors is that they are so slow to read their papers and critique them and their appointments are a month a part that they can't get moving fast enough. (Male, psychology)

For an advisor from education, being accessible meant that her students can stop by and talk with her without an appointment.

I am always accessible to my students because I tend to spend a lot of time in my office... I come in the mornings and I am here all day and sometimes later, so they know where to find me. And I tend to be pretty open to having them stop by, although it's great when they make an appointment and I can plan on them coming. (Female, counseling education)

One of the advisors in education described how she defines being accessible.

If they need to have contact with me whether they need to meet with me or they need me to take a look at a draft of something, it doesn't take me forever to do it. It's not like if someone says I need to meet with you, I kill myself to meet with them that same week...but I think especially at the proposal development and the dissertation stage, how accessible I am affects the momentum that they can have. And so I need to think about what will keep them going and what I can live with

at the same time...I think another way that it's important to be accessible is, if somebody sends me an email, I think I should answer it within a day, unless I just can't get to my email. Even if the response is I can't give you the long answer now. Just let them know I got it because I think that you can end up having grad students read all kinds of things into why they didn't hear from you that has nothing to do with it. It can create a lot of anxiety for no good reason. So being accessible that way is as important as anything else (female, teacher education).

Through the use of technology, being accessible is no longer limited to face-to-face contact. An advisor in the natural sciences talked about why he feels he is always accessible to his advisees.

I am pretty much always available to my advisees because I am always on call. They will call me and leave me messages on my voicemail or they will call me at home or on my cell phone and ask me, "Are you coming in? Can I see you this evening or can I see you in the morning. Can I see you in the afternoon?" So I am always on call for them. I do a lot of traveling, but even when I am gone I let them know where I am staying and I will get them a fax and phone number for the hotel and even if I am in Europe, I have two cell phones that work in Europe one that works in Eastern Europe in places like the Czech Republic and places like that and then I have another phone that covers places like England, France, and whatever so they can always call me. I want to be available to my students so I give them all these different ways that they can contact me and that's best because if a student needs to talk to you outside a certain time, like your office hours, then they feel like it is an imposition or that they are breaching some kind of protocol if they try to reach you outside of those times. This way is much better because you remove all of the barriers that shouldn't be there in the first place. (Male, chemistry)

A few of the advisors who talked about accessibility talked about it in terms of not being as accessible as they would like to be.

For the last year and half or so being accessible has been very challenging for me. I think it is a little bit of a life stage issue where I have to make some choice about the time I spend with my children versus here. I think I am accessible, I am willing to and do meet with my students over the weekends and we can go to a coffee shop or we will just sit down here and do an hour or so worth of work. But I would love to be more accessible than I am. (Female, social science)

An advisor from education also spoke about her limited accessibility.

The last five years, not counting my sabbatical, although I did work with a number of students on my sabbatical, I've been living in [another part of the state]

and I've been commuting so it is a great frustration to me not to be able to hold as many office hours as I used to. On campus, a lot of people want to meet with me for one thing or another and...it takes about two weeks to get to talk to me. I'm not happy about that but it's the best that I can do with living and working in two worlds. (Female, teacher education)

In sum, the notion of having a doctoral advisor who is accessible and available has emerged in the graduate literature as one of the most favorable attributes that an advisor can possess. Similarly, the advisors in this study also put a high value on being accessible to their advisees. However, just how accessible an advisor needs to be is still up for debate. In the final analysis, it appears that it is left up to each individual advisor to define for him or herself. For the advisors in this study, being accessible to their advisees ranged from "it takes about two weeks for them to get an appointment with me" to "they all have my cell phone numbers so they can reach me at anytime or anywhere."

Honest

Five advisors mentioned being honest as a characteristic that they exhibit when working with their advisees. A specific area that advisors talked about centered on giving their advisees honest feedback on their writing. Two advisors from the social sciences gave examples of how they handled giving feedback to their advisees when they received work from them that they did not feel was well developed or well written.

Well, I have to be honest with them. I can't pull punches and say this is good when it is not, but I try to be positive. I don't say this is shit. I will try to say, wow, you have put in a lot of work into this. But, you know, we really need to do such and such. And portray it that way. (Male, economics)

I will start by saying, "Look, this is not quite where I want it to be...I've been talking with you about this for some period of time so I think I know what you are trying to say, but I'm not sure anybody else could figure it out." And [pointing to a specific example] I will say, "Here you go from A to F and you don't give us B, C, D and E in the middle." So I try to be kind but I have to be honest because I will not let people move ahead unless I think their project is ready. (Female, psychology)

An advisor from education talked about how she uses honesty as an overall approach to her advising.

I have long since stopped trying to think too hard about how I am reacting to things or what I am saying. So, if I am very laudatory about what they are doing they don't have to wonder if I say that to everybody or if I think it is terrible I don't try to think of nice words to say about it. I will tell them that it sucks and we move on from there. I think by and large [being honest] works pretty well.
(Female, educational administration)

Being honest with their advisees was mentioned by several of the advisors as an important behavior to exhibit. A few of them talked specifically about having to be honest with their advisees about their writing when their writing was not meeting a passable standard. However, being honest was most often, but certainly not always, coupled with being supportive, encouraging, and gentle.

Caring

Seven advisors used the term caring to describe one of the behaviors they exhibit while working with their advisees. One advisor, in particular, summed up the importance of demonstrating to his advisees that he cares.

I think that if you were to ask my [former] students, I think that they would say that I cared whether they lived or died. And a lot of people, especially in a large bureaucratic place like [this institution], people really don't care whether you live or die so long as you pay your tuition. If you are dead and you pay your tuition that's fine. So I think that making that personal connection and giving them the sense that somebody cares whether they succeed and wants them to succeed is important. And, yeah, I can solve certain kinds of linear equations systems, and I know a lot of literature, and I have intuition for what the results mean, and all of those things are good too, but those are not the things that matters most to them. They have to feel like you care because if you don't care, boy, that is going to make everything so much harder. And even if they finish, they'll look back on it and think this is the place where I struggled through long enough to get a degree.
(Male, economics)

Having the capacity to care seems to be one of the fundamental elements that

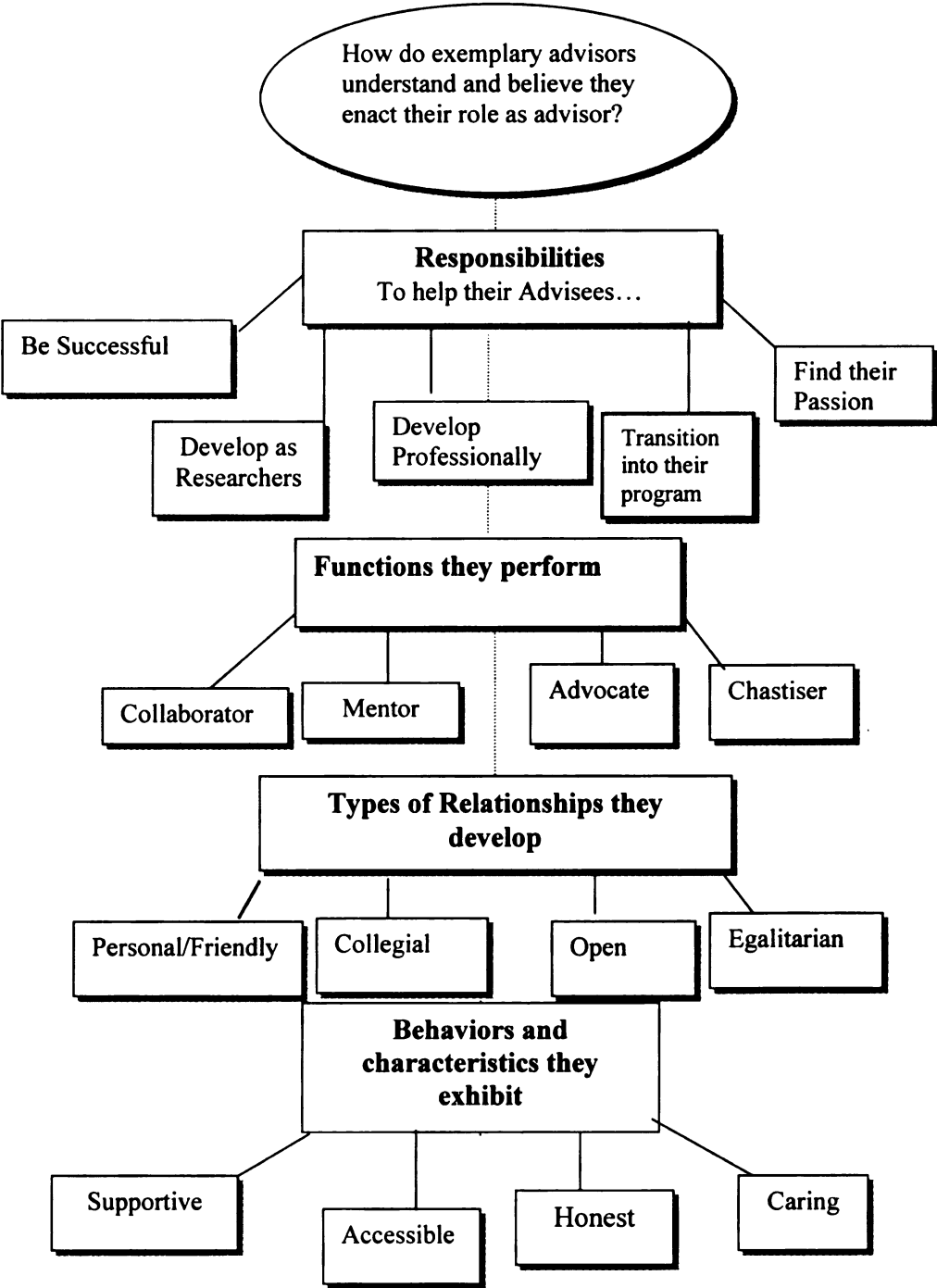
make human beings human. Likewise, having the capacity to care is one of the fundamental elements that make an exemplary advisor exemplary.

Summary of Research Question 1

The ways in which advisors in this study understand and believe they enact their role as advisors were divided into a series of responsibilities they feel they have to their advisees, functions they perform, types of relationships they develop with their advisees, and the behaviors and characteristics they exhibit when working with their advisees (see Figure 4.1). The most simplistic way to talk about how exemplary advisors understand their role as advisors is through the responsibilities they feel they have to their advisees. Five themes emerged with respect to how these advisors view their responsibilities to their advisees. The five themes related to responsibilities are: to help their advisees transition into their doctoral program; to help their advisees be successful; to help their advisees develop as researchers; to help their advisees develop professionally; to help their advisees find their passion; and to help their advisees transition into their doctoral program. The categories that comprised each of the themes were broad and ranged from being responsible for helping their advisees adjust to being in a doctoral program to making sure that their advisees are employable by the time their doctorate degrees are conferred.

The ways these advisors enact their responsibilities are by the functions they serve, the types of relationships they develop, and the behaviors and characteristics they exhibit while working with their advisees. The most noted functions that they perform are collaborators, mentors, advocates, and chastisers.

Figure 4.1: How exemplary advisors understand and believe they enact their role as advisor














The functions that these advisors perform are critical because they become the avenues for which they are able to fulfill their responsibilities to their advisees. For example, being a collaborator with their advisees on research projects helps their advisees be successful and helps them with their professional development. Similarly, the types of relationships these advisors develop with their advisees serve as catalysts for them to fulfill their responsibilities by helping them to set boundaries around the relationship, as well as helping them define what it is that they want to achieve in the relationship. The behaviors and characteristics advisors exhibit when they are working with their advisees provide the human elements that are needed in any relationship in order to make them meaningful.

Research question 2: What factors influence how exemplary advisors advise?

Advising does not come with a book of instructions. Therefore, how advisors learn to be advisors is a little understood phenomenon. Based on how the advisors in this study talked about what influences how they advise, three themes emerged (see Table 4.5).

The first theme, *their students* and the second theme, *their own experiences as graduate students*, emerged from responses given by advisors from all four disciplines. The third theme, *individual characteristics of the advisor*, emerged from responses given by advisors in three of the disciplines.

Table 4.5: Factors that influence how exemplary advisors advice

	Education	Social Science	Humanities	Natural Science
Their advisees				
Their own experiences as graduate students				
Individual characteristics of the advisor				

Theme 1: Their Advisees

Several of the advisors in this study said that one of the things that influences how they advise is the advisee him or herself. Advisors talked about several different ways in which the advisee influences how they advise. Two advisors talked specifically about how their advisees’ needs influence how they advise.

As we have already talked about, it is what the student needs. My perception of what the students need. Or what the students frankly just tell me what they need. That really drives what kind of advice and advising and the degree of it and stuff like that. And that’s always linked to three key areas. The research project that they are working on, so you know the content domain that they are involved in, the academic experiences they need in order to be a competent professional, which to me is more like the advising, and then personal issues. (Male, psychology)

Well, I have said a couple of times that I tend to be responsive to what the students’ needs are, so I think to some degree the way they take the lead and letting me know what they are looking for is a big part of how I advise. (Female, counseling education)

An advisor from education talked about how both the advisees’ research topic and

who the advisee is has a significant role in how he advises them.

I think probably the most important thing has to do with the student's topic. Like I said before, if it is an area that I am interested in and know something about that is going to significantly influence the shape and the content of my advising as well as the process. It is going to influence how excited I get [and] how emotionally engaged in the topic that I get. So I think that probably one of the most important factors that has influenced the nature of my advising is the student's topic... The more I find the topic intellectually engaging, and emotionally interesting the more likely it is that I am going to be really excited and interested. It doesn't have to necessarily be an area that I am studying but it has to be something that I find intrinsically interesting. (Male, educational administration)

This same advisor went on to say:

Who the students are for sure has an influence. I mean they are all different and they all relate to me differently so the ways in which they come to relate to me influence and shape the nature of the advising. How informal I can feel with them you know sort of how close I can draw to them in part, I think is a function of who they are and the type of personality they have. (Male, educational administration)

Who the advisee is, what the advisee needs, and how well the advisor is able to interact and connect with the advisee each have direct influence on advising. In short, several of these advisors appear to tailor how they advise to each of their advisees depending on their needs.

Theme 2: Prior Experiences as a Graduate Student

A second factor that the advisors in this study said influences how they advise is their prior experience as graduate students. Namely, the way they were advised/trained as graduate students by their own advisors affects their advising. Several advisors talked about particular practices that their advisors used that they try to emulate. For example, one of the advisors from the social sciences talked earlier about how he puts a lot of emphasis on teaching his advisees how to do research and how to develop theory. He remarked that those were the two things that were emphasized during his doctoral

training.

My own training has a strong influence....I was very fortunate to go to a department that had a number of senior people who themselves were extremely committed to graduate training. It was a very small and select program and in many ways some of the things that went on there are reflected in what I do now...They saw their job as to teach me how to do research and how to do theory and stuff like that. (Male, political science)

Similarly, an advisor from the humanities talked about how her advisor developed a community of scholars and how that is the same type of thing that she is trying to nurture within her own group of advisees.

[My advisor] really nurtured a community of scholars in our doctoral program. It really was THE doctoral program in the country. Every week for the whole four years that I was there we would get together and we would talk and we would read one another's work and sort of debrief and do editorial work together so there really was that sense of community of scholar which I have not been as successful at building here, but that is certainly a goal that I have and am working towards. (Female, music)

Another advisor from the humanities talked about how he tries to emulate the kind of caring attitude that his dissertation advisor demonstrated with all of his advisees.

I think I have had different advisors who have had different aspects that I have kind of absorbed. For example, my principal dissertation advisor in graduate [school]...wasn't a particularly a good teacher and he wasn't that organized but he loved the students, he was an incredible mentor. I am going to get choked up just talking about him. He died a couple of years ago...he was somebody who really spent a lot of time helping students to connect with what they needed...I think the whole be organized, be consistent, and don't be a jerk thing came about because...he helped me to see that that's what a lot of people kind of need, not so much in a therapist kind of sense, but in just basic humanist factor perspective because this can be a really trying experience for students and so we as advisors need to be aware that it creates a terrible amount of pressure on people. First and foremost he is the person that I think of when I think of what kind of person I want to be, never mind the type of advisor I want to be, you know. He was somebody who was always willing to give...If a student was in need of something he was the guy who was going to make it happen where as all of the other professors where like "you are on your own." I still really deeply appreciate that and even though he has been gone for seven years, I still feel very emotionally attached to him. (Male, music)

Three advisors talked specifically about how there are both positive and negative aspects of the relationship that they had with their advisors. Exemplary advisors intentionally try to emulate the positive with their own advisees, while they deliberately avoid the negative aspects of the relationship that they experienced with their advisor. Three quotes demonstrate this idea.

It is not uncommon for me to see my advisor in my work. To see the ways in which I am in a sense reproducing characteristics that he had when working with his students is not hard to do at all....I think he shaped and affirmed to some degree that sort of love of ideas and classics and stuff that continues in my own work and work with my students. But he also did things that pissed me off and I try not to do with my students. Like he did not do a very good job at all of sort of anointing me into the scholarship into the world of professional participation because he himself didn't really care about it too much. He never said... "you should write this up, or you should present at this conference, or why don't you think about this at this conference." I did that all by myself. I found the conferences, I found the call for papers and did all of that stuff all on my own....So some of those influences that have shaped me have been negative. So I am sending out notices to students all the time saying think about presenting at this conference...I am always taking students to conferences. I am always collaborating, co-authoring, and co-presenting with students. I have always done that and [my advisor] never did that with us. (Male, educational administration)

I try to treat my students exactly in every way humanly possible that I was not treated (laughs)....My mentor, the chair of my dissertation...did not treat people well. [She] could be incredibly spiteful, could be down right vicious, hold grudges, and probably some other things....But [despite that] she taught me how to be a scientist and did exactly the same kinds of things that I do with my graduate students. I was involved in writing research grant proposals that she was involved with right from the beginning. I was involved with supervising undergraduate students. I was brought into her lab and given positions of responsibility. Right from the get-go I had to learn how to do it by hands on doing it. So that part I learned from her, you bet. And the whole way of your professional responsibilities, your faculty responsibilities, and your obligation to publish the work that society is funding you to do, I learned from her. (Male, psychology)

The way that he ran his lab is probably not that dissimilar to the way that I try to run things here because I respected him a lot and learned a lot from the way he ran things. I thought at times he was a person that you had to fight with a little bit to get control of your own project. Once you had it, he was more than willing to

give it to you but you had to fight to take it from him and I try to avoid that aspect of it actually. But it was a good relationship. He wasn't as involved in some of the things that I try to get involved in like when it comes to seminars and practicing job talks and interviewing and things like that. When it comes to writing papers, having them write the first draft, I want to be involved and to have much more of an exchange then their was with my Ph.D. advisor. (Male, chemistry)

Clearly, all three of these advisors found things that their advisors did while advising them that they feel are worth replicating with their own advisees. Likewise they found other things that their advisors did or did not do that have made them consciously steer clear of when working with their own students. For the advisor in education, the portion of his own advising that he emulates is the coming together with his students around a particular topic or subject and creating the love and the passion for learning. However, the part that his advisor did not do for him, which he feels was a flagrant injustice, was to introduce him to the world of scholarly participation. Therefore, when working with his own advisees, he makes it a point to get them involved with conference attendance and presentations. For the advisor in the social sciences, it was the unpleasant and disrespectful way that his advisor treated her advisees that drives him to be a kinder, more respectful advisor. But it was the excellent way in which his advisor trained him to be a researcher and a scientist that impels him to train his advisees in a very similar manner. For the advisor in the natural science, it was the fact that he had to fight with his advisor to gain control over his own research experiment that he willing and easily lets go of the research experiments that he has given over to his advisees. But the overall way that he runs his lab can be attributed to the way his advisor ran his lab.

Another advisor from the social sciences talked about how she has a continuing relationship with her advisees. Even after her advisees have graduated, they will still contact her for career advice and she said that she does not hesitate to give them the pros

and cons of any situation that they may be contemplating. It is her belief, that once formed, the advisor-advisee relationship continues on for a lifetime. Therefore, it was not surprising when she talked about the continuing relationship that she still has with her own advisor nearly twenty years after her graduation.

I think my own advisor is still my advisor, you know. So if I have a question, like I did before I came here for a job, I call him and say, "I need some career advice." I haven't done that all the time and it gets to be less and less and less as time goes by but I still kind of feel like I can go and ask him and he will give me his honest opinion about I think this is a good idea or I think this is a bad idea. I talked to him last year when I became the editor of a journal because I had some concerns and he had been the editor of the same journal a number of years ago. So he was the first person that I called up and said, "here is a big decision in my career, give me all of the pros and the cons" and he just said, "here are all of the pros and the cons...." I guess the type of relationship that I have with him does influence the type of relationship I have with my own advisees....I don't hesitate to give them all of the pros and cons of any situation that they are considering while they are here with me and even after they have graduated. (Female, psychology)

In sum, a key factor that influences how advisors advise is how they were advised when they were doctoral students. Several advisors talked about specific advising practices or a particular type of attitude that their advisor used when advising them that they have incorporated into their own advising practices. However, they also observed bad or negative advising practices from their own advisors that they try hard not to emulate with their advisees.

Theme 3: Individual Characteristics of the advisor

A multitude of things that influence advising can be attributed to individual characteristics of the advisor. Individual characteristics are internally motivated factors and they range from how the advisor grew up to the advisor's teaching philosophy. An advisor from education explained that she grew up in a town that had a "village" mentality where people were expected to see after, take care of, and be accountable to

each other. For her as an advisor, it is that “village” mentality that she has adopted that influences how she advises.

The way that I grew up [influences how I advise] because I recreate that village over and over again. There is collaboration in the village and the village recognizes and respects differences in terms of ability as well as ways of being and valuing the contributions of each, also being respectful of individualism. Some students only want to work with me and they don't like the research team. They don't like that idea and so we sit and talk about the implications of that. What does that mean and what does that mean for your future not wanting to work collaboratively....The village piece too, as much as people have idealized it, it has some problems because the collective emphasis means that sometime things only go as fast as you can keep everybody going so it requires excellences so it really is exhausting sometimes to pull that off and I think that's why some of the folks might get on board and then say this is too much work and leave because it requires everybody doing their very best. There are taboo behaviors within the village too. People seem to think that the village embraces everything it never did and it never will. There are some things that are not acceptable and so those rules are made clear. (Female, counseling education)

The internal factor that influences how an advisor in the humanities advises is her sense of what is ethical. However, according to this advisor, advising is not highly valued in her department.

I think it is my sense of what is ethical. I don't think a high value is placed on advising in this department. In other words, the fact that I advise a lot of doctoral students doesn't necessarily give me any advantages in the department in terms of salary increases. That is all based primarily on publication. Teaching is a part of it but publications is the majority of it. So I think it is just my sense of what is ethical for an advisor to do that influence how I advise. Not that the department makes [advising] difficult but it doesn't provide the obvious value to what I do as an advisor. (Female, English)

Two advisors, one from education and one from the humanities, talked about how their teaching philosophies influence their advising.

It's not exactly the Socratic Method because the point of that in its pure form was about affirming my superiority but it is about the questioning part and trying to get underneath the surface level of the understanding of things. I think that I am that way in class I really don't care what you call it but I do care if you understand it and to get at that it is always the why question. Why is it that way, why do you think that way, and why, why, why and I do that as an advisor too. I probably

should care a lot more about what people study but there is so much need for good work....But I really don't want to go forward if the student doesn't understand why it is important, why it is important to them, and why are you going to do it this way. Not because I like qualitative, not because I will find my question later, but why is that the appropriate way to do it, why is that going to get you the data that you want? Why should we bother to let you do this and what is it that you are going to do with it? (Female, educational administration)

I practice three principles of good teaching and advising. One is to be organized, the other is to be consistent, and the third one is don't be a jerk (or be honest) and I find that those three things really have more to do with what am I bring to the relationship than what I am doing in the relationship. It is not about technique; it's about what is my attitude in class. I have to be organized. I have to have stuff for them to do I can't just wing it. I have to be consistent. I can't be changing my mind and just being a flake all of the time but it is important for them to see that and if they are in an advising relationship with me that I am not changing the rules on them all of the time saying, oh yeah, it was great last week but it stinks this week, no, I can't do that. Not being a jerk is about paying attention to how you are treating people and making sure that you are not taking your bad day out on your advisees. That's unacceptable. If that happens then you apologize for it as an advisor. (Male, music)

For both of these advisors their teaching philosophies also guide their advising practices because both of them see their advising as an extension of their teaching. More specifically, the advisor from education uses the art of questioning from the Socratic teaching philosophy to guide her advisees, particularly when they are approaching the dissertation stage. The advisor from the humanities uses his three principles of teaching—be organized, be consistent, and be honest—to guide his advising practices because to him the same rules apply. He also talked extensively about how those three guiding principles serve him well as an advisor because it allows him to develop the type of relationship with his advisees that are grounded in trust. For him, a relationship that is not built on trust is doomed to fail from the start.

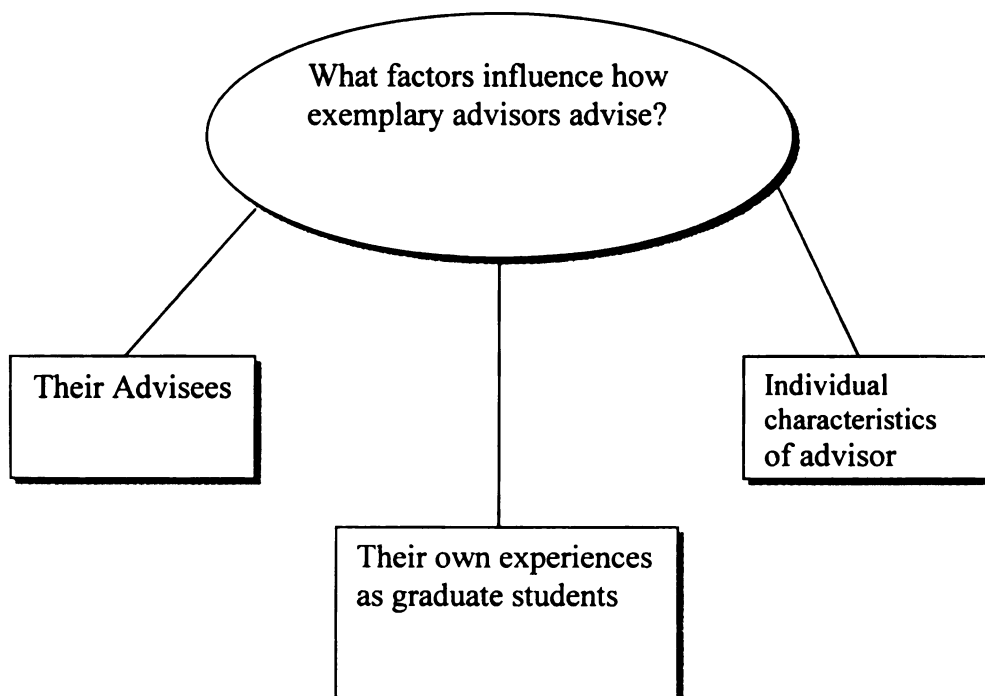
In sum, several advisors said that their own personal characteristics influence how

they advise. For one advisor it was the way she grew up that has influenced her to create a village mentality amongst her research team whereby everyone is expected to do their best and be accountable. Another advisor said that she is influenced by her own sense of what is ethical in training doctoral students because her department does not place a high value on advising. Finally, two advisors talked about how their teaching philosophies influence their advising practices because their advising is an extension of their teaching.

Summary of Research Question 2

How advisors learn to advise or what influences how they advise, if advising is not a learned process, is a little understood social phenomenon. However, according to the advisors in this study three factors influence how they advise (see Figure 4.2). One of the factors is their advisee. Factors such as what the advisees needs are, how well they get along with the advisee, and how well connected the advisee's research topic and interests are to theirs has an impact on how they work with and advise their advisees.

Figure 4.2: Factors that influence how exemplary advisors advise



A second influence on how exemplary advisors advise is the experiences they had during their own doctoral training. A particular influence is the relationship they had with their own doctoral advisor. For these advisors both their negative and positive experiences with their advisors shape their advising practices. They try not to perpetuate the negative experiences they had as doctoral students, and they try to emulate the positive experiences they had as doctoral students.

A third factor that influence how exemplary advisors advise has been termed individual characteristics of the advisors. Individual characteristics consist of things like the advisors' teaching philosophies, the advisors' upbringing, and the advisors' senses of what is ethical.

Research question 3: What expectations do exemplary advisors have of their doctoral advisees and what do they think their advisees expect of them?

A lack of mutually understood expectations between the advisor and the advisee has the potential to cause conflict in the doctoral education process (Klomprens & Beck, 2004). However, there is a dearth of information in the graduate education literature to help us understand what advisors expect of their advisees or what advisors think their advisees expect of them. Based on the data gathered from the advisors in this study, five themes emerged about what advisors expect from their advisees (see Table 4.6). The first three themes, *advisees will be committed to the doctoral degree process*, *advisees will have integrity*, and *advisees will work hard* emerged from responses given by advisors from across all four disciplines. The fourth theme, *advisees will make progress*, and the fifth theme, *advisees will be good departmental citizens*, emerged from responses given by advisors from three of the disciplines.

Table 4.6: What advisors expect from their advisees

	Education	Social Science	Humanities	Natural Science
Advisees will be committed to the doctoral degree process	●	●	●	●
Advisees will have integrity	●	●	●	●
Advisees will work hard	●	●	●	●
Advisees will make progress	●	●	●	●
Advisees will be good departmental/disciplinary citizens	●		●	●

Theme 1: Advisees will be committed to the doctoral degree process.

While advisors undoubtedly expect their advisees to be committed to the doctoral degree process, eleven of the advisors in this study explicitly stated having this expectation of their advisees. Generally speaking, what they meant by being committed is they expect their advisees to be engaged in the learning process, they expect their advisees to be committed to and invested in the work that they are doing, and they expect their advisees to take the initiative for their own learning.

The main thing that I expect from them is to be actively engaged in their own education, they have to be willing to work at it. I am perfectly willing to tolerate a lot of variation in that because I know that people have different styles, but for me to persist with a student, I need to be convinced that they are working hard at what they're doing. If I give them a research project or a course assignment, I expect them to complete it. I guess I also expect them to develop. I expect them to become independent. (Male, political science)

I expect them to be invested in their own learning. They are the ones who have to think about what is going to keep them motivated and how they are going to get re-motivated when they start to lose heart because as you know from doing ethnographic work it can get discouraging. ...For example, they need to decide on their own project and what it is they are going to study. I don't give people topics to study, I heard that some people do that, but I also heard, that statistically speaking, more of those people tend to drop out because of course it might be something that their advisor is interested in doing but they are not and so they are not going to finish it. (Male, music)

I expect them to [have] commitment as much as they expect me to [have] commitment. I have gotten surly I think as I am getting older. I don't like to have somebody kind of...expect me to do their work for them. So quite literally [reading] the twenty-fifth version of the lit review that finally has twenty-five pages is a waste of my time. It says to me that they are looking for me to tell them what to do and I don't like that. A part of that is my responsibility and I spend a lot of time going back figuring out how I can communicate differently, and what type of guidance I'm providing, assuming that it is more my responsibility than the students. But, on the other hand, we don't have a student in this program that is that stupid, they're just not working hard enough but they want me to work that hard and I don't like that at all. ...So I expect that somebody who wants something serious from me is interested in giving back. (Female, educational administration)

I expect students to take the initiative. I expect that they are going to go through the program in a way that shows that they're being [thoughtful] about making sure they're learning what they need to in the broader sense versus just following the steps that someone else has laid out. (Female, teacher education)

Expecting their advisees to take the initiative and the responsibility for their own professional development and growth was a common expectation for the advisors in this study. Since many are willing to invest so much time and energy in their advisees, they want to know that their advisees are willing to make the investment in themselves. The ways that advisees can show evidence that they are willing to make an investment in their

own development is by being committed to the process, taking the initiative for their own learning, and by being actively engaged in their own education.

Theme 2: Advisees will have integrity.

A second advisor expectation relates to integrity. When advisors talked about expecting their advisees to have integrity they spoke about it in respect to either personal integrity or research integrity. One of the advisors from the social sciences talked about expecting her advisees to have both personal and research integrity. One advisor expected her advisees to have personal integrity by way of being honest with her.

I expect them to be honest about what's going on if things are not going well....I can't help them unless I know what the issues are. I can't help them with their research or whatever else if they are not being honest about where they are and where they are having trouble....Like the student who keeps saying that he going to get something to me next week. Is he honestly going to get me a draft next week? Is he that close or is he just saying that and maybe there is not as much as something on a piece of paper? I can't help if I am not getting what I need to know. I just expect that they will take care of their responsibility and they are not going to blow things off. If they are not going to make a deadline, rather they set it or I set it, they have to let me know because there are a lot of reasons why people don't get things done but don't avoid me. If people avoid me like the student that I am talking about, he will get an email from me once in a while. I am not going to go to his home and knock on his door kind of thing but he will get a note saying, I haven't seen you in a while and we need to meet and we need to talk, when would be a good time?" (Female, psychology)

Another advisor expected her advisees to have personal integrity by way of not making excuses for a lack of progress.

When life becomes the excuse behind which one hides I don't like that...and I don't think that I respect that very much either. I would much rather have a person say, "I can't. This isn't a good time for me, my life has changed" than to say, "Well, it's the system, or you didn't have enough time for me." You know...life happens and it gets in the way ALL the time. It goes back to the relationship. I try to let my students know when I am just overwhelmed or when there's too much work and I am going to be behind and they need to be able to say that authentically to me as well and then we work through that. (Female, educational administration)

Overall, when these advisors talked about expecting their advisees to have research integrity they were primarily speaking about expecting their advisees to be upfront and honest about making mistakes and for them to be ethical and responsible when conducting and interrupting research data.

I expect them to tell me when something goes wrong. If they make a mistake in general, even if it is a big, big, mistake, I expect that they will tell me right away...and not just hope that I won't notice or that it will go away or whatever. So I think I have an expectation regarding just general research integrity and doing things appropriately and correctly. I think I don't do well with any breach of that, I could not continue to work with a person who was unethical. (Female, psychology)

Two of the advisors from the natural sciences also talked about expecting their advisees to have research integrity. One of the advisors talked about research integrity in terms of maintaining good documentation from research experiments and the other one talked about research integrity in terms of being intellectually honest about their research.

I expect them to maintain good documentation of the experiments they run so keeping good records in the notebook and making sure that everything is clean and uncompromising. But above all, I expect them to do things right and that means being honest in terms of the way they report their results. (Male, chemistry)

I expect them to be intellectually honest in everything that they are doing. I expect them to learn how to ask a question in such a way that they have no vested interest in the outcome of the answer other than it be the truth. (Male, chemistry)

One of the advisors from the humanities talked about the role she plays in helping her advisees meet her expectation that they will employ research integrity in their data collection and interpretation procedures.

I work pretty carefully with my students when they are doing qualitative research to ensure that they report the data they actually find and to help them understand what information that data is providing for them. I think ethics is very important whether you are doing qualitative or quantitative [research] and I have worked very careful with my students in the research designs and the collecting and reporting of their data. I work closely with my students to design their research

and I expect them to report back on what they have found and to show me their data. (Female, English)

In sum, exercising both personal and research integrity were expectations that several of the advisors talked about having of their doctoral advisees. If their advisees have personal integrity, according to a few of the advisors, it means that their advisees are honest and straight forth about where they are in the process, how they are progressing, and if they are experiencing difficulties. In addition, it also means that advisees do not hide or run away from their advisor when they are not being productive, nor do they make excuses for not making progress. Having research integrity was characterized by the advisors in this study as being intellectual honest, being truthful about research results, not cheating or falsifying data, and not trying to hide human errors made in the data analysis process.

Theme 3: Advisees will work hard.

Twelve of the advisors in this study explicitly said that they expect their advisees to work hard. However, working hard took on several characteristics. For one of the advisors from the social sciences, expecting his advisees to work hard was coupled with expecting them to do the best that they can. Since he acknowledged that getting a doctorate degree in economics is hard work in and of itself, it seems clear that for this advisor as long as his advisees are doing the best that they can, then they are meeting his expectations and they are working hard.

I expect that they work hard and do their best. You know, they come in all sizes and shapes. Some of them are fun and some of them aren't. I don't have much expectation other than they do their best. I don't expect that they will have X accomplished by a certain time. I know if that is what I expected then I would often be disappointed. But one reason that I don't expect it is because I know from my own experience that making that traverse from taking courses to doing your own research is hard. And even describing how it happens is hard. I have

often said to students, when they are so upset that it is taking them so long, “Hey, relax. It takes a lot of people long. If it were easy you would have done it by now, but it is not easy. So relax. Just do your best.” (Male, economics)

For an advisor in the humanities, it appears that working hard means that her advisees are able to multitask. She also acknowledged that pursuing a doctorate degree is hard work and so she tries to make sure that her advisees know that she is available to help them through the process.

I expect them to work hard, to juggle a lot. And I’m willing to help them if they’re having trouble with that and I don’t see that as a demerit or something if they are having problems. It is just a part of the process and I let them know that it very normal. (Female, English)

An advisor from education talked about the fact that she expects her advisees to work hard primarily by talking about how she does not like working with students who do not want to work hard. One of the things that working hard means for her is that her advisees will put in the required time to prepare for a meeting with her.

I’m not interested in working with students who don’t want to work hard. I’m not interested in working with students who want to just blast their way through and get finished as soon as possible. I just read a personal statement from a candidate for our ... program who said, “I want to join this program because I need to have my...degree within four years of whatever.” And I thought, “That’s a heck of a reason, you know.” That’s not acceptable. You have to really be here when you’re here. So I expect students to be prepared...when they come to meet with me. I don’t want them to waste their time or mine with sort of a lack of preparation. (Female, teacher education)

An advisor from the natural sciences talked about expecting his advisees to work hard in terms of the actual amount of time that he expects them to put into working in the lab and conducting experiments.

I expect them to work hard and to put a lot of hours in the lab. I expect to see them there on weekends more often than not and I expect to see them there at night because this is not a nine to five job. (Male, chemistry)

All I ask is that they work hard. I really want them to work

hard....Working hard means that they are working hard at understanding the papers that they are reading and when I meet with them that they've accomplished something. (Male, mathematics)

In sum, working hard took on several characteristics for a few of the advisors. For one of the advisors it meant her advisees will put in the required amount of time to prepare for a meeting. For another advisor it meant his advisees are spending time in the lab conducting experiments and producing results. For a third advisor working hard simply meant that he wants them to do the best that they can.

Theme 4: Advisees will make progress

Five advisors stated that one of their expectations is that their advisees will make academic progress. Based on how these advisors talked about expecting their advisees to move forward in their doctoral program, making progress is an umbrella term for other terms such as staying focus, staying on task, setting and meeting goals, and moving forward. According to a female advisor in the humanities, "One of my expectations is that they will check in with me to make sure that they are on task and that they are taking the right courses. I expect them to make good progress." Similarly, a male advisor from the humanities noted, "They have all of these steps...that they have to pass through, my expectation is that they will always be ready to take the next step in order to make progress." Likewise, another male advisor in the humanities discussed that he "basically expects them to have regular communication about their progress. Often that means setting up a timetable for their completion of chapters or getting their grant proposal completed and turned in on time."

I expect them to be productive and get their work done in a reasonable amount of time and I expect them to communicate with me to let me know where they are, how much more time it is going to take... We will draw up an outline and I will

say, “This is how much you need to get done for next week.” If they skip a week they have to do double the amount of work the next week. They know what they have to do and usually they can do it. If they really can’t do it either they have to cut back the project or they will have to do something else because they always need to be making progress. (Male, psychology)

In sum, advisors saying that they expect their advisees will make progress equates to saying that they expect their advisees to be productive, to stay focused, to set and meet goals, to accomplish task, and to move forward in their programs. Making continuous progress is critical to doctoral student success, as measured by completing or not completing the doctorate degree. For these advisors making progress is not just something that they *hope* their advisees will do, but it is something they *expect* their advisees to do. However, since making progress is a part of their expectation, it appears that they are willing to provide support, encouragement, and feedback to their advisees in order to make that happen.

Theme 5: Advisees will be good departmental/disciplinary citizens

Being integrated into their department is thought to be one of the major contributions that leads to doctoral students’ satisfaction and degree completion (Girves & Wemmerus, 1988; Tinto, 1993). One of the expectations that six advisors mentioned and three elaborated on was that they expected their advisees to be integrated into their department. Put another way, advisors expect advisees to be good departmental citizens. Based on how they talked about it, being good departmental citizens means that advisees are integrated into the department and participate in departmental activities, they support and mentor their fellow graduate students, and they take responsibility for the group as a whole.

I expect them to...participate in a variety of different activities. Like I expect all of the students that I advise to show up at these....symposiums that we have now,

which we do three times a year. I expect them to participate in that. I expect them to mentor, pass on the wealth to other students. I expect that....So some students don't want those expectations, and so they will choose not to have me as their academic advisor, which is fine, just fine. (Female, educational administration)

I expect students to share what they have learned with other students who are coming up behind them. For example, I have a student who has a write-up fellowship at [a university in Washington state] this year and I have asked her to share with some of the people who are getting ready to go through the application stage information she has learned about the different write-up fellowship locations....So that they can benefit from her experience. (Male, history)

I expect them to interact with their peers and help them out because to me the science develops by talking, interacting, helping. I also expect them to take some responsibility of the group.... I expect them to take group responsibility in addition to their own research problem. (Male, physics)

In order to build a community of scholars, doctoral students must take an active role in contributing to the community. For six of the advisors in this study, it is a part of the advisors' expectations that their advisees be active and contributing members to their departments. Advisors expect that their advisees will support and mentor their fellow graduate students, they will participate in the department's intellectual life, and they will take responsibility for the group work that they are expected to do.

What advisors think their advisees expect of them

Three main themes emerged about what advisors think their advisees expect from them. The first theme, *to guide them*, and the second theme, *to provide them with support*, emerged from responses given by advisors from across all four disciplines. The third theme, *to give them feedback*, emerged from responses given by advisors from three of the disciplines (see Table 4.7).

Table 4.7: What advisors think their advisees expect of them

	Education	Social Science	Humanities	Natural Science
To guide them	●	●	●	●
To provide them with support	●	●	●	●
To give them feedback	●	●	●	

Theme 1: To guide them

Several advisors said that they think their advisees expect for them to give sufficient guidance. Four of the advisors talked about guidance that is more academic in nature. “I think they expect some kind of guidance about coursework and when and how to start thinking about their dissertation research” (Female, teacher education). “I think they expect help when they get stuck, I think they expect ideas about what to do next. [I] can’t always give it to them. Sometimes I’m stuck, too” (Male, mathematics). Another male advisor from chemistry noted. “They clearly expect me to give them some guidance on which direction to go with their research.” And a male advisor from economics stated, “I think they mostly hope that I will be able to read their stuff and that I can say something that will steer them in the right direction.”

Three advisors said that the type of guidance that they think their advisees expect from them deals more with programmatic issues. For example, a female advisor from

humanities explained, “I think they expect me to provide solid guidance. I assume that they expect me to be knowledgeable about requirements, the university and procedures and policies, and most of the time I am.” Another female advisor from teacher education said, “I think they expect guidance on program structure and I think they also sort of want guidance both in terms of how to survive in this place as well as what they ought to be doing in the program.” Others spoke of needing to give the best advice.

I suppose at one level they are hoping to be effectively guided toward the end of their doctoral journey. They want to have confidence in me that I am giving them the best advice that I can and I am giving them the correct advice. But with bureaucratic matters that is always questionable. They want to be confident that they can rely on me for the guidance and the correct information. (Male, educational administration)

In sum, expecting to be effectively guided towards their doctorate degree is one of the expectations that advisors think their advisees have of them. The two most common areas of guidance that these advisors think their advisees want center on academic issues and programmatic issues. Academic guidance includes things like information on coursework, help when they are stuck, and direction about the research process. Programmatic guidance includes things like information about degree requirements, as well as department and university policies and procedures.

Theme 2: To provide them with support

Six advisors said that they think their advisees expect for them to provide support. However, they talked about several different types of support. Three advisors, two from the natural science and one from the social sciences, talked about advisees expecting financial support, as evidenced by the following quote from a male advisor in chemistry: “One of the things that they clearly expect is that I am going to provide them the support to do their project.” Another male advisor in chemistry echoed the same sentiment, “They

expect me to be a resource for them. They expect me to provide them with money and equipment and the resources that they need to complete their doctorates.” And the expectation of financial support is also evident in the following quote:

They expect me to provide them with financial support in the lab, and support to go to meetings and so on. If I cannot put them on the grant then they expect that I will provide support as far as getting them a TA or some other type of financial support. (Female, psychology)

Two of the advisors from education talked about their advisees expecting them to provide moral support. According to a male advisor in educational administration, “I think at some level most of them expect me to be able to listen to them to hear what they are saying and at some deep level really to understand them.” Another advisor spoke of how her advisees would like for her to listen to them.

I think they expect a sounding board. I think it is very commonplace for my advisees to want to run their ideas by me....“I need to talk about something, I want to see how this sounds, I want to try out this idea.” I have a lot of that and I am assuming it is because that is a role that people think of as their advisors’. Where that probably takes me in a bad place is when students expect me to read fifteen versions of their drafts. “Here, I wrote another sentence, can you read this?” (Female, educational administration)

Finally, an advisor from the humanities wrapped support around the notion of the ethic of care.

My advisees want me to support them. That, I think, is one of the most compelling things. That is, they want to feel supported, nurtured, and cared for. They don’t want to feel like a periphery; they want to feel like they are central to my existence in the same way that I know by virtue of my role in their life that I have to be central for theirs. They will never be central to mine in the same way, obviously, that I am central to theirs but they want to know that they matter to me. (Female, music)

In sum, being supported during the doctoral degree process is critical to doctoral student success. The particular ways in which advisors think their advisees expect to be supported is by being provided financial support, by being a sounding board and a place

where they can go to and talk about and through their ideas, and by having someone that they feel connected to in a meaningful way.

Theme 3: To give them feedback

Seven advisors said that their advisees expect them to give feedback, but only two of the advisors elaborated more fully on what type of feedback they think their advisees expect. One male advisor from the humanities explained, “They expect timely feedback. They expect feedback on how they are doing, what they are doing, comments about the process and how they are growing as professionals in the field.” Another advisor explained the type of feedback that he thinks his advisees expect from him.

I think they expect me to tell them when they are doing well. They want to hear that. They enjoy hearing that. They want to know when they are screwing up and they expect that as well; they don’t necessarily enjoy it but they want it. I don’t think they want me to gloss over their weakness or the areas they need improvement. They want me to work with them on those areas. (Male, educational administration)

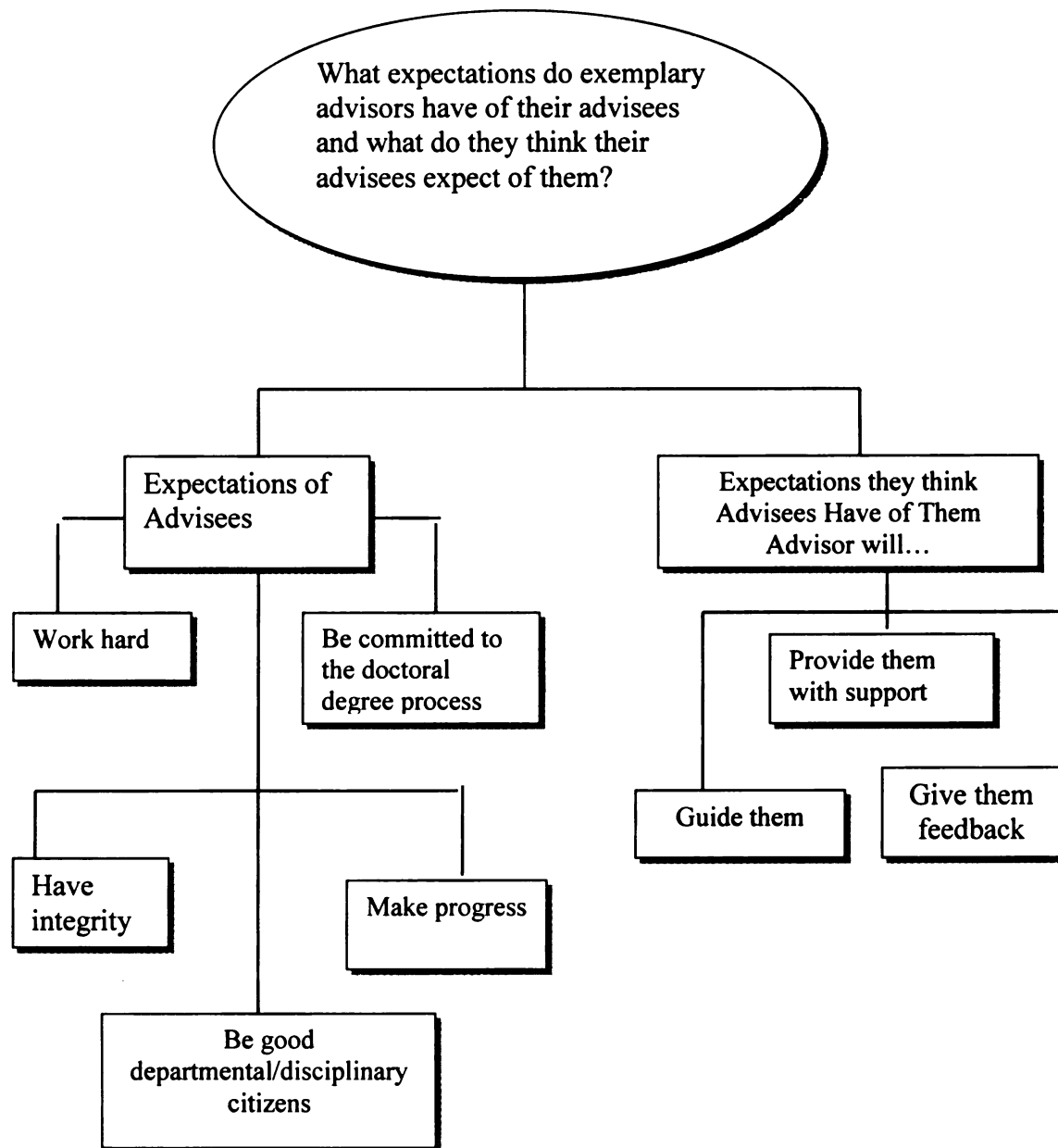
In sum, receiving feedback on their writing, their professional development, and their overall progress serves as a barometer for doctoral students for which they can gauge their growth. Several of the advisors perceive that their advisees want to be told when they are doing well and when their work needs to be improved. From the perspectives of the advisors in this study, advisees expect substantial feedback.

Summary of Research Question 3

The advisors in this study identified five expectations that they have of their advisees and three expectations that they think their advisees have of them (see Figure 4.3). One expectation that advisors have of their advisees is that they will be committed to the doctoral degree process. A few ways that advisees can demonstrate that they are committed to the doctoral degree process is by being engaged in the learning process and

by being invested in the work that they are doing.

Figure 4.3: Expectations that advisors have of their advisees and what they think their advisees expect of them



A second expectation that advisors have of their advisees is their advisees will have integrity. When the advisors talked about having integrity they were referring to both personal and research integrity. Personal integrity was described as a student's ability to be responsible for themselves and what it is that they need to accomplish. Research integrity was described as being intellectually honest with respect to collecting, interpreting, and reporting research findings. A third expectation that advisors have of their advisees is that they will work hard. Working hard was described in several different ways but the essence of working hard means that advisees will put in the time and effort to do the things that they need to do in order to make progress. The fourth expectation that advisors have of their advisees is progress. Making progress primarily consists of expecting their advisees to stay focused, set and meet goals, and stay on task. The final expectation that advisors said they have of their advisees is that their advisees will be good departmental/disciplinary citizen. Being a good citizen requires advisees to be engaged in departmental activities as well as to be involved in disciplinary organizations. All of the expectations that the advisors said they have are connected to the responsibilities that the advisors feel they have to their advisees.

One of the expectations that advisors think their advisees have of them is that they will be able to guide them competently through the doctoral degree process—particularly through the research aspect of the process. A second expectation that advisors think their advisees have of them is that they will provide support. The two types of support that were emphasized were financial support and moral support. Financial support included research assistantships and TA assistantships. Moral support included being listened to, being understood, and being cared for. The third expectation that advisors think their

advisees have of them is to provide them with feedback. More specifically, they think their advisees want them to provide feedback on their writing, their progress, and their overall development.

Research Question 4: How do exemplary advisor balance their role as advisor amidst all of their other faculty roles and responsibilities?

The faculty workload at research extensive universities usually consists of teaching, research, and service, and this pattern was typical for the faculty in this study. All but one of the advisors in this study said that they are responsible for teaching courses every semester. The one advisor who is not currently teaching has taken on a high level administrative position. However, all of them, including the one who is primarily doing administrative work, said that they are still conducting and publishing research, serving on various department and/or university wide governance committees, and are active members of their disciplinary organizations. In addition, many of them said that they have served or are currently serving as the chair for their department, or as the graduate advisor/coordinator for their program. All of these advisors lead full academic lives. So, understanding where and how they fit advising into their academic lives becomes a very curious question.

A few advisors admitted that trying to balance their advising role along with all of their other faculty responsibilities is quite challenging. One advisor said that if it was not for the fact that she is good at prioritizing, balancing, and juggling, she would never be able to get all of her responsibilities accomplished. Two other advisors joked that “you can’t require a lot of sleep if you really think you are going to be able to accomplish everything that you are expected to do.” Both of them also admitted that inevitably something has to give (because you just cannot do it all). If something does “give,” they









try to make sure that it does not have a negative impact on their advisees.

If you are going to do the particular kind of advising that I have been talking about you better not sleep very much because something is going to give. There are periods of time where it is very hard to know what that is. My colleague right across the hall last fall had a terrible time with that because six people were finishing their dissertation in one term and his approach to advising is philosophically very much like mine—very labor intensive where you are reading lots of drafts. When you advise like that, you barely have time to do that, let alone the fact that you are teaching and you' are on governance committees and oh, yeah, you're suppose to write something too. Well, something isn't happening and I think the student-centered advisor goes overboard to make sure that it is not the student and then pays some kind of price health, merit, whatever, but pays some kind of price. (Female, educational administration)

I don't sleep very much (chuckles). It's hard. Sometimes it is very hard just fitting in everything. Sometimes some things have to wait. I take longer returning manuscript reviews than I would like and certainly longer than editors would like. I don't finish papers for submission to journals as quickly as I would like. When things have to give, I try to make it things that would benefit me instead of things that would benefit my students, but even there it is some competition and so it is not always possible. Like my graduate seminar, sometimes I have to juggle when it meets because I have to travel and then it imposes some minor inconveniences on some of the students some time, not much I think, but I try to impose on them as little as I can. (Male, political science)

Three main themes emerged from the responses these advisors gave about how they actually try to balance advising with all of their other responsibilities (see Table 4.8).

Table 4.8: How advisors balance their advising role

	Education	Social Science	Humanities	Natural Science
Integrate advising with other duties				
Prioritize working with advisees				
Organize work to accomplish both advising and research				

Theme 1: Integrate advising with other duties

Five of the advisors in this study said that they balance their advising responsibilities by integrating advising with their other duties. One advisor said that the way he tries to integrate advising with his other responsibilities is by blending his teaching, research, and advising together to make it a seamless process.

In the best of circumstances that you can have, it blends beautifully. Advising feeds into my teaching, it feeds into my research and my research feeds into my teaching and advising and there is a nice fluidity that occurs. When students are working on projects that are of interest to me, I am constantly talking about their research in my teaching...As I sit on other dissertation committees, I will bring up research that my students have done that I think might be helpful to them. In the best of worlds, that is how it all should work. It is the same thing with research and teaching and that is why I believe so much in the integrity of research and teaching. I think I am a much better teacher because I am a researcher and I am a better researcher because I am an advisor. I think my teaching feeds into my research and my research feeds into my advising. (Male, educational administration)

An advisor from the social sciences said that her advising is not separate from her research but the two are integrated together and because her advisees are often in the

graduate seminars that she teaches, her teaching also gets integrated into her advising.

Advising is not separate from the research; it is integrated with it. Often times there is some overlap between my formal teaching, research, and advising. If I were teaching a graduate seminar, for example, then there is some overlap because some of my advisees would be in the seminar...Advising is also done in the research lab. I also meet with my advisees individually, but in fact advising is done whenever we talk. So whenever a student sticks their head in the door and says, "I was just thinking about this, what do you think?" that is a part of my advising. (Female, psychology)

Similarly, another advisor from education also sees her research, teaching, and advising blending together because she does research with her advisees and it all becomes a part of the teaching process.

My teaching, research, and advising are not ever separate. My research is one place where my advising and research interact because I am doing research with my students. Teaching is another place because I have ongoing office hours. I also have structured office hours that they can count on that I am always available sitting here. Sometimes I am sitting here and there's no office hour but they can drop by then too, but because I am so busy I have to put in some times. So that is how I kind of integrate that teaching piece in there. So much of what I do in teaching is mentoring (is silent for a few seconds). I will give you an example, I taught a course and some of my advisees were in that course and everything that they did had to be audio taped. So they had to tape their supervision sessions. Well, my advisees spent so much time with me because they had to do tapes, they had to do transcripts and I did lots of writing, lots of red ink on what they said and what they did and I gave them a lot of feedback. So that's another way of mentoring that is extensive; it went beyond let's just understand supervision. No. Let's see what you are saying and let's change some of that because some of this seems to be a little harmful. So we have lots of engagement in my teaching and my advising. (Female, counseling education)

An advisor from the natural sciences also believes that his research, teaching, and advising are integrated because he is teaching his advisees how to do the research. He stated, "The advising, the research, and the teaching are all integrated. My students are doing the research and I am doing the teaching, and my students are my advisees so it all comes together."

In sum, integrating their advising with their other responsibilities, namely

teaching and research is how several advisors talked about being able to balance their advising with their other faculty roles. For these five advisors, when they are conducting research with their advisees they see that as part of their teaching. When they are teaching their advisees in a formal or informal setting, they see that as a part of their advising. It is clear from these advisors remarks that advising is not an independent or isolated activity, but instead can be blended and integrated with their other faculty responsibilities. Interestingly, none of the advisors talked about how they balance their advising with their service role or how their service role may feed into their advising.

Theme 2: Prioritize working with advisees.

Several advisors said that balancing advising with all of their other responsibilities is not as much a balancing act as it is a deliberate decision to make working with their students a priority. However, for one advisor in the humanities, making her advisees a priority causes her conflict because the university does not value or reward working with students as much as it values producing research.

I don't think there is ANYTHING that I can do that is more important than being a good doctoral advisor. NOTHING...so [working with my students] becomes a priority for me, but that is not, I don't think, the answer that the university would give if they were asked what they value. So it creates conflict...[For example,] I gave up my whole sabbatical practically working on dissertations because I had students who were trying to complete. Now, I could have told those students who had come here to work with me "the hell with you, I am going to do my own work because this is my sabbatical and it is the first one that I have ever had." But I just in good conscious couldn't do that. I just felt like that would be morally wrong. Just bankrupt. I think [the university is] happy to see their doctoral students happy. They're happy to see their doctoral students getting good gigs and being successful and giving the school money and making us famous but I don't think they reward the process almost at all in terms of what it took and the investment that was necessary to get it there....Advising is almost treated as the 20% service, whereas for me it's integral to both my scholarship and my teaching....I think my value system is a little bit at odds with the meritocracy in the university. I understand that this is a Research I university and they want research...but at what cost? (Female, music)

Similarly, an advisor from the social sciences also noted that his department does not value or reward advising, but he makes advising a high priority because advisees, at least for advisors who have research labs, can produce the thing that the department does value—research.

In my department you don't get any credit for advising at all, it is purely a service function. The only thing that counts in this department is research productivity and grants. Teaching doesn't count, advising doesn't count, presenting doesn't count much, it's only publications and grants. So I always felt I needed to prioritize working with my advisees in order to get the research publications and to get things going for the student, but the department does not consider that important at all. Technically, they may pay lip service and say that you need to do that but you don't get promoted on that and you don't get raises on that. (Male, psychology)

Another advisor from the humanities said that he makes working with his advisees a top priority because he feels that how well prepared graduates are is a direct reflection on the program.

We are who we graduate. Our program is measured by the quality of the people we send out of here, so I really take that to heart so I put advising as my very high priority. I think that is my highest priority. Sometimes trying to balance the teaching, research, and service part is difficult, but advising is not because it is my top priority. (Male, music)

One of the advisors from the natural sciences said that out of all of his responsibilities educating his advisees is his top priority and as a result they have unfettered access to him.

As far as I am concerned, out of all of the things I have to do—yeah, I have to teach on a regular basis, I have got committee meetings, I have got departmental administrative things—my top priority is in educating my graduate students. They have unfettered access to me if they want it. And if there is a choice between my students or some other commitment, my students will always win. So it is not first priority in this and not in that. My graduate students have top priority for my time in everything. (Male, chemistry)

Most of the advisors spoke of efforts to balance their competing responsibilities

and prioritize their work with advisees. However, one professor who talked about prioritizing said that he does not prioritize working with his advisees; rather, it is his teaching that takes priority.

Although I think advising is important, it is not at the top of my list. It doesn't fall at the bottom either but it is somewhere in the middle. From my perspective, and I think my own research has suffered as a result, but from my perspective I can't neglect the classes that I am teaching. That's number one. I think a lot of people say, hey, I got research to do, if I do a lousy job in the classroom, so be it. But I just can't do that. So I put a lot of time into my classroom teaching. That is kind of the number one. But all of my responsibilities seem to have accelerated over the past few years so I am just running as fast as I can and trying to make sure that the balls don't fall. (Male, economics)

In sum, instead of worrying about how they are going to balance their advising role amidst all of their other faculty responsibilities, a few of the advisors in this study said that they make working with their advisees their highest priority and everything else just has to fall into place after that. One advisor spent most of her time when she was on sabbatical working to get several of her doctoral advisees completed instead of working on her own research. Another advisor puts training and working with his advisees first because graduating qualified students is a reflection of the program. Although these advisors have made advising their top priority, they are not oblivious to the fact that their department and even the university do not place a high value on advising.

Theme 3: Organize their work to accomplish both advising and research.

Throughout the interviews, several advisors, particularly those in the natural sciences and social sciences, where the advisor ran a lab, talked about how they organize or structure their labs in order to be productive. Two advisors talked specifically about how they organize or structure their labs as a way to balance their advising responsibilities with all of their other faculty responsibilities.

Basically, I think the way it works is firstly organizationally, to try to set up within my group a support system where it doesn't all funnel through me. So they're communicating with each other, I have post docs and students and post docs have a responsibility to help the students, and the senior students help the junior students. So I try and set that up and encourage that. And then when I interact with my students, I make it rather efficient. So we have infrequent meetings but we make a lot of headway during those meetings and so during other time my time is freed up to take care of other things [that I have to do]. (Male, physics)

An advisor from the social sciences also talked about the way that he structured his lab and how it allows him to be productive in other areas, in addition to research.

I was hired to teach so I just taught my courses. One can't find a better balance in the amount of energy and effort and time they have to put into their courses and the amount of energy, effort and time they have to put into their research program than to organize in a hieratical fashion. If you have four doctoral students, three master students, and four undergraduate students who are teaching the other ten, you just have to meet with that team. So you can organize a system of networks that keeps the research going. Those teams are just rolling and stuff is going, you know? You write the grant proposals and you keep the money coming in and you have a coordinated set of meetings where everything gets discussed...but all those folks are doing the actual work. I'm not collecting data, I am reviewing papers, and getting them out the door and writing grant proposals and stuff like that, but the actual work somebody else does. I started [this systematic way of organizing] from the beginning. From the time I came here and I got my first graduate students, we put into place that hierarchy and that network and that system, and so stuff just rolled. In terms of advising it was always a part of the same system because I did not have students working in my lab who were not my advisees. (Male, psychology)

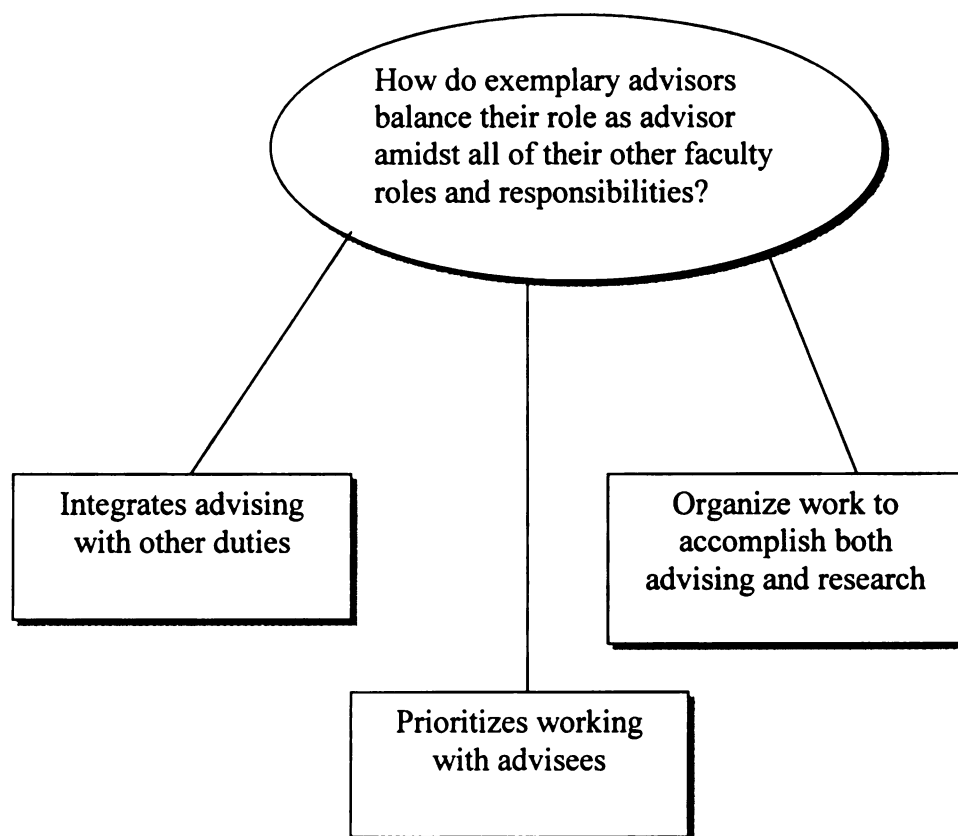
In sum, one way in which two of the advisors talked about balancing their advising with all of their other faculty responsibilities, particularly their research, is by developing a hieratical system within their labs. This type of system allows them to use their time more efficiently because they are meeting with groups of students instead of having individual meetings. This type of system also frees up some of their time because it is their advisees and others who are working in their labs and actually doing all of the research. This arrangement allows them to be able to turn their attention to other things

such as getting funding and getting published.

Summary of Research Question 4

Doctoral advisors who are at research extensive institutions are expected to engage in teaching, research, and service in addition to their advising. However, how they are able to balance all of these responsibilities is an understudied aspect of faculty work life. Three themes emerged with respect to how advisors balance their role of advisors with their many other faculty responsibilities (see Figure 4.4).

Figure 4.4: How exemplary advisors balance their role as advisor



One way they balance their role is by integrating their advising into their other responsibilities, namely, their teaching and research responsibilities. They see their advising and teaching coalescing when they are collaborating on a research project, when their advisees are in the classes and seminars they teach as well as when their advisees stick their head in the door and say, “you got a minute? I have a quick question for you.” The second way in which they balance their advising with their other responsibilities is by prioritizing their advising. Putting their advisees at the top of their priority list ensures that their advisees’ needs get met even if other things do not get accomplished. The third way they balance their advising with at least their research responsibilities is to organize their work so that both of those responsibilities get accomplished. A key component of this structured system is that group advising takes place more frequently than individual advising, and more advanced students are given responsibility for teaching and training first and second year students.

Research Question 5: How do the advising practices of exemplary advisors vary depending on the disciplinary context?

In order to investigate how advising practices differ according to disciplines, it was necessary to first examine how the ways in which advisors conceptualize their roles and responsibilities as advisors, which will dictate their advising practices, may differ across disciplines. In an effort to tease out possible differences in advising practices based on disciplines, a constant comparative analysis was conducted looking at how advisors responded to research questions 1, 2, 3, and 4 and how those responses may signify differences in conceptual understandings that may lead to differences in practices.

The presentation of the findings for this research question is different from the previous four research findings. Instead of identifying themes that emerged from the data

and citing quotes to support them, the findings from this research question are presented as similarities and differences that emerged for the comparative analysis.

How do exemplary advisors understand and believe they enact their role as advisor?

With respect to the responsibilities that the advisors in this study feel they have to their doctoral advisees, far more similarities across all of the disciplines exist than differences. However, there were three areas where there were noticeable differences in how the advisors conceptualized their role as advisors. The first difference was the way in which the advisors from the natural sciences conceptualized their responsibility to help their advisees be successful, as compared to the advisors from education, the social sciences, and the humanities. For example, when the advisors from education, the social sciences, and the humanities talked about being responsible for helping their advisees be successful, they mostly detailed things that could be categorized as being personally beneficial to their advisees—providing them timely feedback, helping them to stay focused, helping them to make progress, and motivating them. In contrast, the advisors in the natural sciences seemed to conceptualize helping their doctoral advisees be successful to mean helping them develop academic or scientific acumen. They talked specifically about helping their advisees “develop taste,” which was expressed as teaching them how to tell the difference between good research and bad research, identify their research niche, and how to cope with scientific failures.

Based on the conceptual differences in how advisors from the natural sciences understand what it means to help their advisees be successful as compared to the advisors in the other three disciplines, it appears that advisors in the natural sciences spend more time with their advisees helping them gain the habits of mind of a scientist and honing

their skills to be researchers.

The advisors in education conceptualize their role as advisors differently from the advisors in the other disciplines in two ways. First, they see themselves as having responsibility for helping their advisees find passion and responsibility for helping their advisees adjust to or transition into their doctoral programs. As a result of these two different conceptualizations of their role, advisors from education talked more about spending their time advising their advisees around issues pertaining to helping them find meaning in their work and helping them make the adjustment to being back into the classroom.

Advisors from all four disciplines used similar terms to describe the functions that they perform as advisors. The only discernable differences across the disciplines is the meaning that the advisors in the natural sciences assigned to the term mentor compared to the advisors from the other three disciplines. By and large, the advisors from education, the social sciences, and the humanities talked about mentoring as a multidimensional or holistic activity where they are concerned with the personal, professional, and intellectual development of their advisees. On the other hand, the advisors in the natural sciences conceptualized mentoring as a single dimensional activity that focuses on the intellectual development of their advisees. The other two dimensions—personal and professional—were noticeably absent from their descriptions. As a result, advisors in the natural sciences appear to steer clear of giving their advisees personal advice and less emphasis is placed on encouraging their advisees to attend professional conferences or meetings, for example.

There were not huge variations in the terms advisors from across the disciplines

used to describe the types of relationships that they develop with their advisees or the kinds of behaviors and characteristics that they exhibit when they are working with their advisees. However, the advisors from the social sciences appeared to talk about both topics in ways that showed a greater awareness of social interactions than advisors from the other disciplines—particularly those in the natural sciences. However, there was nothing in the data to suggest that their deeper social awareness has an impact on their advising practices.

Factors that influence how exemplary advisors advise

Three main factors emerged from the data concerning what influences how exemplary advisors advise—their advisees, their own graduate school experience, and individual characteristics. Once again, no substantial differences existed in the ways in which advisors from across disciplines talked about these three influences. In fact, in each case the ways in which advisors from across the disciplines talked about what influences how they advise fell neatly into one of these three categories. There also were no discernable differences across disciplines for how the advisors conceptualized the terms that they used to describe these influences.

Expectations that the advisor has of their advisees and what the advisor thinks their advisees expect of them

Out of the five themes—advisees will be committed to the doctoral degree process, advisees will have integrity, advisees will work hard, advisees will make progress, and advisees will be good departmental/disciplinary citizens—that emerged from the data for this question, the concept of working hard was described in the most diverse ways by advisors across disciplines. Advisors from the humanities primarily

talked about working hard in terms of being able to juggle multiple tasks simultaneously. Advisors from the social sciences talked about working hard in terms of being able to persist and giving a valiant effort. Advisors from the natural sciences conceptualized working hard in terms of time spent on task (in the lab) and time spent making sense out of understanding the work that they are doing.

Three themes emerged with respect to what advisors think their advisees expect of them—to guide them, to support them, and to give them feedback. Although advisors talked about their advisees expecting them to provide them with support in quite a few different ways, the variations occurred within disciplines more frequently than they did across disciplines.

How exemplary advisors balance their role as advisors amidst all of their other responsibilities

Three distinct themes—integrate advising with other duties, prioritize working with advisees, and organize work to accomplish advising and research—emerged with regard to how advisors balance their role as advisor along with all of their other faculty responsibilities. Again, there were not discernable differences between how advisors from across the disciplines talked about how they balance their multiple responsibilities.

In sum, the advising practices of the advisors in this study seemed to be fairly consistent across disciplines. A couple of the differences concerning advising practices that were observed from the data pertained to how advisors in particular disciplines conceptualized their roles as advisors, as compared to advisors in the other disciplines, for example. Also, advisors in one discipline defined particular terms in ways that were different than their colleagues from other disciplines. However, the advising practices of

the advisors in this study were far more similar than different.

A few differences emerged from the data between how advisors who operate labs advise compared with those who do not operate labs. Advisors from psychology, chemistry, and physics operated labs. Although political science is not a discipline that generally conducts lab research, the political science advisor in this study did operate a research lab. In all, ten of the twenty-five advisors conducted lab research.

Advisors who operate labs conducted much of their advising in a group setting, and they tended to see their advising as a part of their research responsibility. In contrast, advisors who did not operate a lab tended to conduct one-on-one advising sessions and they were more likely to associate their advising with their teaching responsibilities more so than with their research responsibilities. Since advisors who run labs tended to have lab meetings at least once a week, they appeared to have more frequent contact with each of their advisees than advisees who do not work with their advisees in a lab setting. However, advisors who operate labs also said that they periodically have one-on-one meetings with their advisees, while a few of the other advisors said that they meet occasionally with all of their advisees as a group.

A second notable difference between advisors with labs and those without labs is the level of responsibility the advisors feel they have for providing financial support for their advisees. Advisors who operated labs talked about feeling personally responsible for ensuring that their advisees have funding. Although other advisors are concerned about their advisees' funding, they did not indicate that same personal responsibility.

Another difference is that those with labs appeared much more focused on making sure their advisees became independent researchers. While they did not specifically

mention helping their advisees become independent researchers, those without labs mentioned helping their advisees find their passion or develop their identity as researchers.

In sum, the advising practices of the advisors in this study seemed to be fairly consistent across disciplines. A couple of the disciplinary differences that were observed related to how advisors conceptualized their role. Additionally, advisors who operated labs reported doing more group advising, feeling a personal responsibility for ensuring their advisees had funding, and being committed to helping their advisees become independent researchers. However, despite these examples of differences, the advising practices of the advisors in this study were far more similar than different.

Their Legacy

In an effort to get respondents to distill what it is that they are really trying to accomplish as advisors, the penultimate question on the interview protocol was, what would you like for your legacy as an advisor to be? Two themes emerged from responses to this question. First, several of the advisors said that they want to provide “good” people to continue to advance new knowledge in their profession.

I want to fill the profession with people who are wonderful teachers, mentors, and scholars. To send others out there who understand what being a good advisor means because they have seen it modeled, they have participated in that relationship on the other side of it so they know what it feels like. So I am hoping that my legacy will be to just make the music education profession a richer, better place to be by sending my students out in to the profession. (Female, music)

I would like to have people in good faculty positions growing and passing down the knowledge to the next generation. That’s what I would like. To have people seeded into academic positions across the country and I guess I would like them to be faculty who care about the students they are working with. (Female, counseling education)

I want to graduate successful students. All of my students who have graduated so

far have tenure track jobs at Ph.D. granting institutions. So I hope they all go on and train other students to understand the political world and some of them (the students they train) will go on to become political scientists. (Male, political science)

That I trained people who went on to lead good productive lives that contribute to society and that they understood the role of science in human development and that they are people who understood their responsibilities as scientists. And that I trained people who know how to ask questions, who are inquisitive, and who value intellect. I don't care if ALL of them don't become heads of departments or become directors of industry or famous but that some one of them will. In fact, some of them already have. (Male, chemistry)

I would like my legacy to be a good group of people whose work is respected in the field and who are professionally regarded as having high integrity and are good scholars. (Female, psychology)

All of these advisors want to make contributions to their profession by successfully preparing the next generation of scholars who will be capable of advancing knowledge and teaching future faculty.

A second theme in the responses of several of the advisors to the question of legacy was to make a difference in the lives of their advisees. Making a difference took two forms. First, they wanted to make a difference in the way that their advisees experienced their doctoral education and particularly make the experience enjoyable. According to one female English advisor, "I would like my students to say that they really enjoyed working with me and that I really helped them complete their degrees."

Another advisor stated:

Just that this was a good experience for students. That they will leave here and say this is a place where students ought to go because they are going to get a good education and they are going to feel like they have a clear sense of what it means to be a professional in this field. (Male, music)

A couple of other advisors said they want to be remembered for having made a difference in their advisees' lives. Specifically, an advisor from economics said, "I would

like for it to be said that my advisees' life is different in a better way because I worked with them." One of the advisors from chemistry shared a similar sentiment, "I would like my legacy to be that I was able to help my students make their own lives better than they would have been had they not come here."

In sum, these advisors talked about what they want their legacy to be in two particular ways. The first way was with respect to what they would like to pass on to their discipline, and the second way was with respect to the type of impact that they would like to have on their advisees' lives. In essence, the legacy most of these advisors want to pass on to their discipline is a cadre of scholars or scientists who will make valuable contributions to the discipline or profession once they graduate. Therefore, at the very least, they take great care to work with their advisees throughout the doctoral degree process in ways that help make them be successful, develop as researchers, and develop professionally.

CHAPTER 5

SUMMARY, DISCUSSION, AND IMPLICATIONS

Previous research has provided convincing evidence that faculty members who advise doctoral students play a critical role in the success of their doctoral advisees (Austin, 2002; Barger & Mayo-Chamberlain, 1983; Baird, 1995; Golde & Dore, 2000; Girves & Wemmerus, 1988; Lovitts & Nelson, 2000; Schwartz, 1997; Tenenbaum, Crosby, & Gliner, 2001; Valadez, 1998). However, practically everything known about the doctoral advisor-advisee relationship has come from the perspective of the doctoral student. The advisors' perspective has been largely ignored (see Lovitts, 2001, for an exception). This study sought to fill that gap in the literature by learning directly from exemplary advisors and gaining insight into how they use their role as advisors to successfully guide their advisees through the doctoral degree process. In an effort to thoroughly investigate this topic, five subsidiary questions guided this study.

1. How do exemplary advisors understand and believe they enact their role as advisor?
2. What factors influence how exemplary advisors advise?
3. What expectations do exemplary advisors have of their doctoral advisees and what do they think their advisees expect from them?
4. How do exemplary advisors balance their role as advisor amidst all of their other faculty roles and responsibilities?
5. How do the advising practices of exemplary advisors vary depending on the disciplinary context?

This study was conducted at a Research Extensive Land Grant university located

in the Midwestern United States. Faculty advisors were drawn from three disciplinary areas (natural sciences, social sciences, and humanities) and one professional area (education). These fields were selected because they represent major domains of knowledge. Particular departments within each discipline/profession were selected based on the number of doctoral degrees conferred over an eight-year period. For the natural sciences, the three top ranking departments included chemistry, physics and astronomy, and mathematics. For the social sciences, the three top ranking departments included economics, political science, and psychology. For the humanities, the three top ranking departments included English, history, and music. For education, the three top ranking departments included counseling education, educational administration, and teacher education. For the purpose of this study, an exemplary advisor was defined as a faculty member who has been one of the top producers of Ph.D. graduates in his or her department over a five-year (1999-2003) period. Twenty-five doctoral advisors participated in the study. Six advisors represented the natural sciences, six advisors represented the social sciences, five advisors represented the humanities, and eight advisors represented education.

The data was collected using semi-structured interviews. Interviews ranged from 45 minutes to three hours. Each interview was recorded and transcribed. The data was analyzed using a grounded theory approach.

Summary of Findings

One major finding from this study was that doctoral advising is an extremely individual activity and that no two advisors advise in exactly the same way, nor does a single advisor advise any of his or her advisees in exactly the same manner. Therefore,

there is no single best way that advising can or should take place in an effort to successfully guide doctoral advisees through the doctoral degree process. However, data from this study also support the notion that there are common ways in which exemplary advisors understand and enact their role as advisor; that there are similar factors that influence how exemplary advisors advise; that there are shared expectations that exemplary advisors have of their advisees and shared ideas as to what they think their advisees expect of them; and that there are common ways that exemplary advisors balance their advising responsibilities amidst all of their other faculty responsibilities. It is these common, similar, and shared meanings from the findings that will be illuminated in this chapter, followed by a discussion about *how* exemplary advisors successfully guide their doctoral advisees through the doctoral degree process.

The ways that advisors understand and believe they enact their role as advisor was divided into four categories—responsibilities they feel they have to their advisees, functions they perform, relationships they develop with their advisees, and the behaviors and characteristics they exhibit while working with their advisees. With respect to the responsibilities that advisors feel they have to their advisees, five themes emerged. The first theme was to help their advisees be successful. The second theme was to help their advisees develop as researchers. The third theme was to help their advisees with their professional development. The fourth theme was to help their advisees find their passion. And the fifth theme was to help their advisees transition into their doctoral programs.

Advisors talked about feeling responsible for helping their advisees become successful in a multitude of ways. At the core of their responsibility is the need and desire to help their advisees continuously move through their doctoral programs. This

responsibility is evident in their interest in ensuring that their advisees stay on task, make progress, and receive timely feedback.

Advisors felt responsibilities related to helping advisees become researchers. This goal was accomplished by teaching and training advisees how to ask questions, how to theorize, how to analyze data, how to interpret data, and how to decipher good research from bad research. In short, the most common denominator under this theme was that advisors feel a responsibility for helping their advisees conduct research independently. They accomplish this task by guiding and directing their advisees early in the research process, teaching them methodology, and modeling the types of thinking that they need in order to solve problems.

At the core of helping their advisees develop professionally is the responsibility that these advisors feel they have for socializing their doctoral advisees into the profession. A focal point of the socialization process consists of collaborating on research projects and co-publishing and co-presenting with their advisees with the end goal of preparing them to enter into and be successful in the profession.

Only the advisors from education expressed responsibilities for helping their advisees find their passion and transition into their doctoral program. Helping their advisees find their passion is characterized by encouraging them to select an area of study that is interesting to them, as well as a research topic that has meaning to them. For example, education advisors encouraged their advisees to select a dissertation topic not just because it seems like a reasonable topic to study, but because it is something that is meaningful to them and is a topic that they truly care about.

Having an interest in helping advisees transition into their doctoral program is

also somewhat unique to advisors in education because many of them work with advisees who are chronologically older than students in other disciplines. In addition, most of their advisees are full-time professionals who have been out of school for a longer period of time as compared to other disciplines. The advisors in education understand the challenges and contradictions caused by being a professional returning to the classroom. Therefore, they feel that one of their primary responsibilities to ensure success is to help their advisees make that transition from the role of a professional to the role of a doctoral student.

Four primary themes emerged with respect to the functions that these advisors perform—collaborator, mentor, advocate, and chastiser. A great deal of consistency existed with respect to how advisors talked about the functions they perform and how they enact them. The one exception was with the advisors in the natural sciences and the way in which they think about their role as a mentor. Mentoring for the advisors in the natural sciences was limited to the intellectual development of their advisees. In contrast, advisors from the other disciplines, viewed mentoring as a holistic process and they were interested in developing the personal and professional as well as the intellectual facets of their advisees.

The types of relationships these advisors developed with their advisees included professional/friendly, collegial, open, and egalitarian. These terms clearly indicate that advisors respect their advisees and that they see them as colleagues who have less experience but who have a lot to contribute, as opposed to students who only have much to learn and nothing to give.

The four terms used to describe the behaviors and characteristics that they exhibit

when working with their advisees included supportive, accessible, honest, and caring. Advisors tried to provide their advisees with personal, moral, and financial support. Being available to meet with their advisee within a reasonable amount of time of their advisees' request was the most defining characteristic of being accessible. However, how readily available an advisor is to meet with their advisees once a request was made differed somewhat amongst the advisors. Being honest was best characterized as being truthful with their advisees about their work, particularly their writing, in the instances where improvement was needed. Advisors were also very conscious of coupling their honesty with encouragement and support in such a way that leaves students feeling empowered and capable instead of defeated and dejected.

It has long been assumed, based on models of socialization, that how advisors were advised when they were doctoral students influences how they advise their own doctoral students. Data from this study strongly supports that assumption. The advisors in this study embrace and replicate what they deemed to be the healthy, useful, and important aspects of their own advising experience and they eschew that which was negative and unhelpful from their experience when working with their own advisees. However, data from this study also support the notion that there are two other factors that strongly influence how doctoral advisors advise. One factor is the advisee him or herself, and particularly how closely aligned the advisee's research interest is to that of the advisor's. The reason why this particular factor affects how advisors advise is because the closer the advisee's research interest is to that of the advisor's, the more engaged and interested the advisor is when working with that advisee. In these scenarios, it is more likely that the advisor will spend time working with the advisee co-publishing and co-

presenting research with him or her. The other previously unidentified factor that influences how advisors advise is individual characteristics. Individual characteristics include things such as their philosophy of teaching, their sense of what is ethical, their worldview, and the way the advisor grew up.

The advisors in this study identified five expectations that they have of their advisees and three expectations that they think their advisees have of them. First, they expect their advisees will be committed to the doctoral degree process and will take the initiative for their own learning and success in their doctoral degree program. Second, they expect their advisees will have integrity—including both personal integrity and research integrity. Having personal integrity was described as an advisee being open, honest, and upfront about what he or she can or cannot do. Research integrity was described as an advisee being ethical and responsible about his or her research. Third, they expect their advisees will work hard. Working hard was characterized as advisees doing the best they can and by advisees putting in the amount of time necessary to be able to accomplish their assigned tasks. Fourth, they expect their advisees will make progress. Namely, they expect that their advisees will maintain their focus and meet their goals. Fifth, they expect their advisees will be good departmental and disciplinary citizens and will become involved in and make contributions to their department, as well as to their discipline.

The three expectations that these advisors think their advisees have of them are to guide them, to provide them with support, and to provide them with feedback. In terms of guidance, these advisors think that their advisees expect them to provide them with accurate information about program policy and procedures. Advisors mentioned two

types of support they think their advisees expect of them. The first was financial support and the second was moral support. Advisors, particularly the ones who operated labs, believed that their advisees expect them to find continual funding. The type of moral support the advisors think their advisees expect of them is to be listened to, to be understood, and to feel like they are connected to them. With respect to providing feedback, advisors believe their advisees expect them to indicate when they are doing well, when they are not doing as well, and how they are progressing overall.

The three ways that advisors balance their advising with their other responsibilities is by making advising a priority, integrating advising with their other responsibilities, and organizing their work to accomplish advising and research. Making advising their priority was very much about putting advisees and their work above their own work, as well as above any other faculty responsibilities. Advisors who talked about integrating their advising with their other responsibilities, particularly their teaching, talked about making their advising and their teaching a seamless blend. When they are having an advising session, for example, they are also teaching their advisees something of critical importance. Finally, organizing their work to accomplish their research and advising was a strategy used primarily by advisors who operated labs, and it consisted of designing their labs in a way that allowed them to be able to delegate various research responsibilities to their more senior level graduate student. This strategy allowed for more time spent on writing and securing grants and doing the final revisions to research articles that are being jointly authored by them and their advisees.

Discussion

Over the past decade, national studies on doctoral education have pointed out that

advisors play a critical role in the professional success of their doctoral students. For example, research completed by Nyquist and Woodford (2000) identified quality mentoring from faculty as being important to doctoral students' success and the lack of mentoring could result in students not being successful. Similarly, Golde and Dore's (2000) research concluded that advising is a critical aspect of the doctoral degree process. The results from the National Association of Graduate-Professional Students (2000) study identified faculty advising as a critical component of doctoral students' satisfaction with their doctoral school experience. Based on the results of their four-year longitudinal study, Nyquist, Austin, Sprague, and Wulff (1999), recommended that advisors increase the amount of mentoring and feedback they provide to their advisees because both play an important role in the doctoral degree process. In addition, a number of smaller studies have also concluded that advisors can impact degree completion (Girves & Wemmerus, 1988; Jacks, Churbin, Porter, & Connolly, 1983), can influence satisfaction with the doctoral education experience (Williams, 2000), and can facilitate the socialization process of their doctoral advisees (Cheatham & Phelps, 1995; Lyons, Scroggins, & Rule, 1990).

This current study goes beyond confirming that advisors are important in the success of their doctoral advisees and begins to identify the ways in which exemplary advisors successfully guide their doctoral advisees through the doctoral degree process. More specifically, what is learned from this study is what advisors see as the critical responsibilities they have to their advisees and how they enact and fulfill those responsibilities. The current study also exposes the factors that influence how advisors advise. Another thing that we learn is what advisors expect of their advisees and what

they think their advisees expect from them. We learn how advisors balance their responsibilities amidst their other faculty responsibilities. And finally, we learn how advising might differ according to disciplines. In short, this study provides detailed information on some of the more critical aspects of advising practices—aspects that have not been previously ferreted out.

No previous studies were found that looked specifically at how advisors understand and enact their role as advisors. The responsibilities, functions, and behaviors that emerged from this study, however, were similar to the roles and responsibilities that other writers have urged advisors to fulfill. For example, Winston and Polkosnik (1984) identified five essential functions that successful advisors perform. These functions include reliable information source, departmental socializer, advocate, role model, and occupational socializer. Other characteristics that have been deemed important for advisors to possess if they want to have a positive impact on their advisees are: accessibility, being able to maintain contact, and being able to establish pleasant relationships with their advisees (Winston, Miller, Enders, & Grites, 1984). Similarly, Johnson and Huwe (2003) listed several behaviors and characteristics that advisors who are good mentors to their doctoral students possess. The behaviors and characteristics outlined by Johnson and Huwe match those exhibited by the advisors in this study, such as being honest, accessible, caring, and supportive. All of these terms were used by the advisors in this study to describe their responsibilities, the functions they perform, and the behaviors and characteristics that they exhibit when working with their doctoral advisees. Although the advisors for this study were selected based solely on the quantity of students they graduated, the exactness of terms that the advisors in this study used to

describe their advising practices and the terms that other scholars have used to describe successful advisors strongly suggest that the advisors who participated in this study are not only exemplary based on the number of students they have graduated, but also based on the types of functions they perform and the kinds of behaviors and characteristics they exhibit.

With respect to what influences the advising practices of exemplary advisors, two new insights are advanced from the findings of this study. One of the new findings is that various characteristics of the advisee influences how the advisor works with him or her. Advisors find advisees who are approachable, who are committed to the doctoral degree process, and who have similar research interests to be easier and more desirable to work with. The other new finding is that the advising practices of exemplary advisors are also greatly influenced by their own individual characteristics. These two findings suggest that in addition to being a professional practice, advising is also very much a personal practice. Advisors rely on their own personal philosophies and worldviews to guide their work with their advisees as much or more than they rely on university or departmental guidelines and procedures.

What advisors expect from their advisees has not been a clearly understood phenomenon. Only one previous study was found that had examined what expectations advisees have of their advisors (McLure, 1986). No previous studies were found that examined what advisors expect from their advisees or what advisors think their advisees expect of them. From the perspective of doctoral students, knowing and understanding what advisors expect of them can be beneficial for helping them develop good working relationships with their advisors. In the larger context of the advisor-advisee relationship,

knowing, understanding, and meeting the advisors' expectations has greater significance. The expectations that advisors have of their advisees, at least for this study, are not just random ideas about how they would like their advisees to behave. Rather, these expectations are directly linked to the advisor being able to fulfill the responsibilities they feel they have to their advisees. For example, the expectation that their advisees will be good disciplinary citizens is directly linked to the responsibility advisors feel they have to help advisees develop professionally by getting them networked with others in their profession. However, an advisor can only help their advisee network with other professionals in their field if the advisee is willing to attend conferences or other disciplinary events and be visible. In essence, the expectations that advisors have of their advisees are essential qualities that the advisee has to bring to the relationship in order for them to be able to fully benefit from what their advisor is trying to help them achieve. Another example is that advisors can teach their advisees the technical aspects of research that will enable them to be able to become excellent researchers, but only the advisee can decide if he or she will employ integrity as a researcher. However, having research integrity is the foundation of being an excellent researcher, as put forth by the *Guidelines for Integrity in Research* (2004). Therefore, integrity is the dimension that the advisor expects the advisee to contribute to the process.

Although a number of scholars have studied faculty workload (Atwell, 1998; Brand, 2000; Braxton, 1996; Fairweather, 1993; Fairweather & Beach, 2002), few studies have looked at faculty workload in terms of advising practices (see Milem, Berger, & Dey 2000), and no studies were found that explained how doctoral advisors balance their advising responsibilities with their other faculty responsibilities. Nevertheless, there are

workload studies that support the findings in this study that faculty will often blend their various responsibilities into a single activity. Clark (1997) for example, found that college and university faculty integrate their research and their teaching. Colbeck (1998) concluded from her study with faculty from two different universities that faculty often merged their teaching (which included advising) and their research responsibilities during one-fifth of their work time. Colbeck surmised that faculty work responsibilities are not always fragmented and at odds with one another but instead can often be integrated.

Although the ways in which advisors balance their advising responsibilities amidst all of their other responsibilities appears to work well particularly for the advisee, this balance is not without tensions. The greatest tension appears to occur between the high value that advisors place on advising and the low value that they perceive the university places on advising. This tension was particularly pronounced with advisors who did not operate labs. This tension can become even more problematic during tenure and promotion decisions. Making advising a top priority often means that advisors will put their advisees' work ahead of their own work. As a result, they may have fewer publications than might be expected for promotion from associate to full professor.

For some, but by no means all of the advisors, tensions have arisen with their colleagues around their advising load. Most of the advisors in this study are advising a large percentage of doctoral advisees in their programs. Some have, within the last five years, advised 50% or more of the doctoral students in their programs, causing tension between them and some of their colleagues who have accused them of "hogging" all of the good students.

Four of the five subsidiary research questions that were investigated in this study

answered the overarching research question that this study attempted to answer: *how do exemplary advisors successfully guide their doctoral advisees through the doctoral degree process?* Collectively, the responses from the four subsidiary questions have led to four conclusions with respect to how exemplary advisors successfully guide their doctoral advisees through the doctoral degree process.

The first way exemplary advisors successfully guide their doctoral advisees through the doctoral degree process is by building partnerships with their advisees. The data bear this out in several ways. First, it is evident from the ways they describe the collaborative, collegial, and egalitarian types of relationships they develop with their advisees. Just the definition of these terms suggests that both parties' input and ideas are valued and respected. Second, it is evident from the responsibility advisors feel they have to their advisees and the expectations they have of their advisees. When the responsibilities that these advisors feel they have to their advisees are juxtaposed with what they expect from their advisees, it is clear that they will not be able to completely fulfill their responsibilities if their advisees are not meeting their expectations.

A partnership is also evident from the mutual benefits derived from the relationship. One of the things that advisors reap from their partnerships with their advisees is an enhanced presentation and publication record, particularly for those who operate labs because much of the work that they do with their advisees results in conference presentations or publications. A second benefit that advisors reap from their partnerships with their advisees is that they are continuously learning from the discoveries made from their advisees' work, which can inform their own research as well as broaden their understanding of research that may not be intimately related to theirs.

The ways in which the advisees benefit from the partnership is via socialization into the profession.

The second way that exemplary advisors successfully guide their doctoral advisees through the doctoral degree process is by employing an ethic of care. The concept of the ethic of care emerged from the work of Noddings (1984). Noddings used the term to describe a caring encounter between two people, whom she called the one-caring and the cared-for. An ethic of care develops from a person's feeling of interconnectedness with others and is characterized by an emphasis on the responsibilities that they have for the other (Fuller, 1992). Advisors discussed the responsibilities they have to their advisees, the functions that they perform, the behaviors and characteristics that they exhibit when working with their advisees, and how they balance their advising responsibilities amidst all of their other responsibilities that they exercise. An ethic of care when working with their advisees was evident throughout the interviews.

At the root of exemplary advisors' advising practice is this notion that they care about their advisees and they want their advisees to know that they are cared for. Their caring is illustrated in many of the functions that they perform and the behaviors that they exhibit. For example, the primary reason why they chastise an advisee is because they care about correcting behavior that they know will be harmful or debilitating to their advisee in the future if left unchecked. Similarly, the reason they advocate for their advisees is because they care about them being treated fairly and judiciously. The responsibilities that they feel they have for their advisees are grounded in their ethic of care. Because they care about and feel a responsibility to their advisees, exemplary advisors want them to be successful; they want them to learn to be the best researchers

that they can be; and they want them to develop professionally, to develop a passion for their work, and to make a smooth transition into their doctoral program. It is also because they care that they are willing to invest in a partnership with their advisees.

The third way that exemplary advisors guide their doctoral advisees through the doctoral degree process is by making advising a “personal practice.” There are two specific examples from the data that support the notion that advising is a “personal practice” for exemplary advisors. The first example is the way in which they invest in their advisees and the second is their interest in wanting to pass something down to their advisees.

It is quite evident from the ways in which these advisors talked about their responsibilities to their advisees, the types of relationships that they develop with their advisees, and the factors that influence how they advise that their advising practices are born out of their personal experience, particularly from when they were doctoral students themselves. Additionally, their own personal beliefs such as worldviews and philosophies influence their advising practices. In essence, their advising practices are most influenced by their inner being instead of from some place outside of themselves such as an advising handbook. It was also clear that advising is meaningful for them and is not just a perfunctory duty that comes along with the faculty appointment. Particularly evident, based on the factors that influence how they advise, is the notion that advising practices are bound up in who they are. And these practices are derived from their own practical theories and lived experiences, meaning their practices are not separate from their identity. Furthermore, advising is not just an intellectual activity in which they engage but it is a holistic activity that is important to them socially, psychologically, and

emotionally. It is because advising is a personal practice that exemplary advisors can make such a huge investment in their doctoral advisees, that they are able to develop and maintain long-lasting relationships with their advisees well after their advisees have completed their degrees, and that they can be as proud of their advisees when they have succeeded as they are when members of their own family succeed.

The data (particularly the data highlighting what advisors want their legacy to be) also suggest that advising is a personal practice because embedded in the activity is the sense of wanting to pass on to their advisees something of themselves. Erikson (1980) in his eight stages of development calls this stage generativity versus stagnation and characterizes it as one's desire to guide the next generation. However, even though this stage occurs at the end of Erikson's model, Erikson argues that this desire can be present throughout one's life cycle. Likewise, it is also possible that even early career advisors have a desire to guide the next generation of researchers and scholars. Similarly, Levinson (1978), in his often-cited *Seasons of a Man's life*, identifies a similar stage, which he calls "midlife transition" in which a person wants to contribute to the successful development of others. One factor in particular that makes exemplary advisors' desire to prepare the next generation of scientists, researchers, scholars, and practitioners a personal practice is that they want some of the things they have instilled in or modeled for their advisees during the course of their relationship to be manifest in the advisees' work. In essence the advisors would like some form of their advising practices to live on in their advisees and to be passed on to whomever the advisees may advise. Advising is also a personal practice for advisors because it reflects their desire to be able to affect their advisees' lives in a meaningful way. More specifically, they want their advisees'

lives to be enriched by their interactions with the advisor. Put another way, they want their advisees to have benefited from the amount of time and energy they have invested in them.

The final way exemplary advisors successfully guide their doctoral advisees through the doctoral degree process is by being reflective about their practice or by being reflective practitioners. In order to continuously guide a variety of students who have different interests, talents, goals, and ambitions through the complexity of the doctoral degree process, one must be able to think critically about advising practices and have the capability to make mid-course corrections when needed. A reflective practice has been described as a mindful consideration of one's own action in which the reasons that drives one's behavior are thought about in the interest of improving practice (Peters, 1991). Ghaye and Ghaye (1998) argue that reflective practice is about making sense out of one's professional action and then learning from one's reflective experience. These advisors are reflective in their advising practices in at least two ways. First, the way in which they assess their advisees' needs and evaluate how well their advisees are progressing and succeeding in their program is a reflective practice because it results in their identifying ways in which they can be more effective and helpful to their advisees. Second, the ways in which their advising practices have changed over the years is evidence of their being reflective practitioners.

In summary, exemplary advisors guide their doctoral advisees through the doctoral degree process in four ways. First, they develop a partnership with their advisees. This partnership allows both the advisor and the advisee to be mutually responsible for the success of the relationship. Second, they employ an ethic of care.

Their ability to care about advisees serves as the foundation for which all other aspects of their relationship can be built and sustained. Third, they make advising a personal practice. Advising is not a perfunctory activity, but rather a personally engaging one through which advisors are interested in leaving their thumbprints on their advisees and consequently on their professions. Fourth, they are reflective practitioners. Being reflective in their advising practices serves as a barometer through which they can continuously reflect on and learn how to be even better advisors.

Implications

Doctoral advisors play a critical role in guiding their doctoral advisees. Previous research has identified the many influences that advisors have in the professional development and success of their doctoral advisees. However, virtually no previous studies have been conducted in an effort to look at advising from the perspective of the advisor. This study has made an attempt to bridge that gap by looking at how exemplary advisors successfully guide their doctoral advisees through the doctoral degree process. The data provide clear evidence as to how and why advisors have such a powerful impact on their advisees. There are several different audiences—doctoral students, doctoral advisors, department chairs, and graduate deans—for which recommendations can be drawn.

Recommendations for Doctoral Students

One of the most important things that doctoral students need to understand when they start their doctoral program is that they are ultimately responsible for their own academic experience. Doctoral students should take the lead responsibility for getting what they need in order for them to achieve their professional success. One way in which

they will be able to do this is by taking stock of who they are and what they want and then acting accordingly to achieve it.

Another important thing that doctoral students need to understand based on the current findings is that one of the greatest influences on how advisors advise is the advisee themselves, particularly how committed they are to the degree process.

Therefore, a second recommendation is that doctoral students should be able to articulate and demonstrate to their advisor what their level of commitment is to the doctoral degree process. Advisors don't want to feel that they are putting more energy into their advisee getting his or her doctorate degree than the advisee is. Although advisors in this study said they are willing to push their advisees towards the proverbial finish line, none of them said that they are willing to drag their advisees across the finish line.

An additional point for doctoral students to glean from this study is that a good advising relationship means that both the doctoral student and the advisor are mutually responsible for developing and sustaining a positive working relationship. Therefore, the third recommendation is that doctoral students learn how to work with their doctoral advisor. Knowing how to work with one's advisor consists of several things. First, it means being willing to put in the time and energy that it takes to make the relationship with their advisor meaningful. Second, it means that they need to find effective ways to communicate their needs to their advisor as well as find ways to make sure they understand what their advisor expects of them. Lastly, it means that doctoral students should allow their advisor to get to know them in ways that will allow their advisor to be able to write glowing, but truthful letters of recommendations for them. Several audiences (potential employers, fellowship committees, and other award committees) will

solicit opinions about the advisee from the advisor. Thus doctoral students should not leave their advisor's opinions of them up to chance.

Advisors tend to work more closely with their advisees when their advisees' research interest aligns closely with theirs. Therefore, a fourth recommendation is that doctoral students select a research area that at least has some interest to their advisor. The more intellectually removed advisors are from their advisees' research topics, the more difficult it will be for them to express enthusiasm about the project.

Finally, advisors want to work with students who are trustworthy. Therefore, the fifth recommendation is that doctoral students exhibit the highest level of personal and professional integrity throughout their relationship with their advisor.

Recommendations for Doctoral Advisors

One of the most critical things that faculty who advise doctoral students need to understand is that their role as an advisor is one of the most important public roles that they will ever serve. By virtue of their role, they have a monumental impact on the fate of their doctoral advisees. Undoubtedly advisors serve as role models for their advisees. Being a role model as an advisor does not mean that the advisor has reached some superhuman status, but instead means that they are modeling the roles that their advisees want to assume. Therefore, the first recommendation to advisors is that they always model the most appropriate roles for their advisees to emulate.

Doctoral students enter their doctoral programs with different interests, skills, talents, and abilities. A second recommendation, then, is that advisors learn to identify and access their advisees' needs and then work with them accordingly and effectively. Working effectively with advisees means several things. First, it means that they will

always be working to achieve what is in the best interest of their advisees. Second, it means they will openly communicate to their advisees what they expect of them and let their advisees know what they can expect of them as their advisor. Third, they will always seek to empower their advisees throughout the doctoral degree process.

The doctoral degree process can be a very stressful experience for doctoral students. However, one of the things that can help ameliorate the anxiety level is knowing that their advisor cares about them and what they are going through. Therefore, a third recommendation for advisors is that they develop an ethic of care when working with their advisees. By developing an ethic of care, advisors will be able to form an interconnectedness with their advisees, which in turn will let their advisees know that they are not alone.

The final recommendation for advisors is that they become reflective in their advising practices. By becoming reflective practitioners, advisors will be able to continuously reflect on how they are working with their advisees individually and collectively. They will be able to assess whether they are effective and contributing to their advisees' success.

Recommendations for Department Chairs

Department chairs play the dual role of being faculty members and being administrators. As a result, they can have immense influence over their faculty colleagues because they have administrative jurisdiction over them. Therefore, several recommendations for department chairs emerged from this study. The first recommendation is that department chairs should recognize and reward the amount of time and energy that their faculty put into working with their doctoral advisees. A couple

of ways they can reward their faculty is by lessening the workload of those who are carrying extensive advising loads and by making the advising load and the success rate of graduating students a consideration in the promotion and tenure process. In fact, department chairs should ratchet up the value placed on graduating doctoral students to be on par with research publications. By producing human resources, faculty advisors are making honorable contributions to their profession.

A final recommendation for department chairs is that they develop measures to evaluate advising effectiveness. In order for this measure to have optimal usefulness, departments should require faculty advisors to be reflective about their advising practices. For example, faculty could be asked to explain how their advising practices have contributed to the progression of their doctoral advisees over the past year.

Recommendations for Graduate Deans

Singularly, graduate deans are the administrators on university campuses who are the most focused on doctoral students and their welfare. Therefore, graduate deans should strive to develop workshops, such as those focused on effective communication, that facilitate the advising relationships. Although an advisor's ability to communicate openly and honestly with advisees and vice versa is one of the cornerstones to a productive advisor-advisee relationship, knowing how to communicate is not necessarily intuitive for either the advisor or the advisee. Both parties may need help learning how to effectively communicate.

Since this study shows that both employing an ethic of care and being a reflective practitioner contributes to an advisor's ability to successfully guide doctoral advisees through the doctoral degree process, graduate schools should also develop workshops for

doctoral advisors that will teach them the principles and strategies of developing an ethic of care and of being a reflective practitioner.

Finally, graduate deans must be or must continue to be a champion for increasing the effectiveness of doctoral advising. One specific way that they can champion this cause is by providing advisors with opportunities to make advising more public. This could be done in ways similar to how centers for teaching excellence have made the once very private act of teaching more public by encouraging faculty to talk about, reflect on, and study their own teaching practices. If the advising practices of advisors were made more public, then several things would occur. First, advisors would feel comfortable engaging in conversations with their colleagues about advising issues that might crop up. Second, advisors might be more likely to identify and develop a philosophy of advising that describes the central tenets of what they believe their advising role is and how they try to fulfill that role. Finally, it would be clearer to advisees what to expect from advisors and what advisors expect from them.

Limitations

A limitation of this study is that interviews were conducted at a single institution and the institution may not be representative of all graduate-degree granting institutions in the United States. Furthermore, the faculty advisors who participated in the study were not representative of all doctoral degree advisors in the United States. A second limitation of the study is that some excellent advisors may have been overlooked. Based on the criterion for selection (the number of dissertations chaired over a five year period), some exemplary advisors could have been systemically excluded because they did not have the opportunity or the longevity to chair as many doctoral dissertations. Exemplary junior or

new faculty, for example, may have been excluded from this study because of the selection criteria. A third limitation of the study is that all the faculty advisors from the natural sciences were men. As a result, it is difficult to ascertain if any of the differences in the natural sciences are truly due to disciplinary differences or possibly related to gender or other individual differences in advising. A fourth limitation of this study is that it is based only on what the advisor said he or she does. No other data collection methods, such as observations or interviews with advisees, were used to corroborate the advisors' perspectives.

Recommendations for Future Research

Although this study advances our understanding of how exemplary advisors successfully guide their doctoral advisees through the doctoral degree process, further research needs to be conducted on this topic. First, in order for us to know if the findings in this study are unique to advisors who have experience graduating a large number of their advisees, studies should be conducted with faculty who have graduated fewer students. Future studies on those advisors who fall in the lower percentile of producing graduate students would shed light on similarities or differences in advising practices.

Since this study was conducted at a single research extensive institution, more studies should be conducted at other types of institutions with differing missions in order to determine the impact of institutional differences on the doctoral advising process.

Future studies need to be conducted that include more disciplines and more professions. One of the findings from this study suggest that advising practices might be influenced not only by the type of discipline but also based on if the discipline operates a lab or not. This finding needs further explanation to determine if operating a lab does

impact how advisors advise. In addition, future studies should also pay closer attention to the gender, race, and ethnicity of advisors in an effort to determine if or how gender, race, and ethnicity might have an influence on how advisors advise.

Although most of the studies on doctoral advising have focused on the perspective of the doctoral student, this study asked questions of doctoral advisors that have not been asked of doctoral students. For example, what do they understand their advisors' roles to be and what expectations do they think their advisors have of them. Therefore, future studies need to be conducted with doctoral students to see how congruent the two viewpoints are. Similarly, studies need to be conducted with advisor-advisee pairs in order to determine how congruent or incongruent the pair sees responsibilities and expectations.

The conclusions reached in this study—that exemplary advisors successfully guide their doctoral advisees through the doctoral degree process by developing partnerships with them, by employing an ethic of care, by making advising a personal practice, and by being reflective practitioners—need to be further explored. One way that these ideas can be advanced and validated is by pursuing quantitative research studies.

Lastly, there are multiple ways for which this research project could have been approached. Instead of just interviewing faculty advisors, one could have elected to conduct observation of advisors working with their doctoral students or to interviewing the advisees of exemplary advisors. Future studies might approach this question using those data collection methods.

Conclusions

When doctoral students matriculate in doctoral programs the goal is for them to

complete their degrees. The terrain of doctoral education can be rough and rugged, and students need help navigating their way. The one mechanism that most, if not all, U.S. universities have put into place to help facilitate the doctoral student journey is the faculty advisor. Previous research has provided compelling evidence that doctoral advisors play a critical role in determining if doctoral students will be successful in their academic pursuits. Learning how exemplary advisors work with their doctoral advisees in ways that successfully guide them through the rough terrains of the doctoral degree process is an important first step to understanding how and why advisors play such a critical role in their doctoral students' success. Furthermore, these insights are critical for knowing how to prepare current, as well as future faculty for this role.

Based on the findings and conclusions from this study, much of what exemplary advisors do—developing partnerships with their advisees, employing an ethic of care, making advising a “personal practice,” and being reflective practitioners—are practices that may not be taught per se, but are practices that can be encouraged and facilitated. Encouragement from department chairs and college deans via departmental and institutional workshops and other means can facilitate these practices. Advisors' advising practices do not need to be confined by their own experiences as students but they can develop a repertoire of principles and practices that are expansive enough, flexible enough, and comprehensive enough that will allow them to be able to successfully guide their doctoral advisees through the doctoral degree process, regardless of the idiosyncrasies of their advisees. Faculty can develop effective advising practices and thereby enhance the progress and success of their students.

Appendices

Appendix A: Selected Departments

Discipline/Profession	Number of Doctoral Degrees Conferred			
	1994-95	1999-00	2000-01	2001-02
Education				
Counseling Education	19	36	35	9
Education Administration	25	31	23	26
Teacher Education	15	25	20	13
Natural Sciences				
Chemistry	25	26	25	22
Physics and Astronomy	16	13	11	20
Mathematics	7	5	9	14
Social Sciences				
Economics	4	8	12	11
Political Science	5	11	6	7
Psychology	25	13	23	24
Humanities				
English	16	7	14	16
History	9	10	6	13
Music	17	18	16	23

Appendix B: Initial Invitation Letter

Dear (Faculty Name),

I am writing to invite you to participate in a research project on *how **exemplary advisors** guide their doctoral students through the doctoral degree process*. I am asking you to participate in the study because of your **excellent track record** in graduating doctoral students.

Nationally there has been growing interest in the process, quality, and outcomes of doctoral education. I have been studying graduate education for the past two and a half years, and my review of the literature reveals that faculty advisors play a critical role in the success of their doctoral advisees. However, most of this research has been gathered from the perspective of graduate students. The purpose of my study is to understand how doctoral students are guided through the degree process from the perspective of the individuals doing the guiding—their faculty advisors.

This project will constitute my dissertation for my Ph.D. in the Higher, Adult, and Lifelong Education (HALE) program at MSU. My dissertation committee members are enthusiastic about my study and believe my findings will be of interest to this university as well as nationally. I am writing to ask you to participate in an interview about doctoral advising that will take about ninety minutes. At a later date, I may also ask you to participate in a focus group discussion.

If you are willing to participate in this study, please contact me by email at barnesbe@msu.edu, by campus mail at 212 Erickson Hall, or by phone at (517) 485-3524. I hope you will be willing to discuss your approach to advising. Thank you in advance for considering my request and I look forward to hearing from you soon.

Sincerely,

Benita J. Barnes
HALE Doctoral Candidate

Appendix C: Follow-Up (e-mail) Letter

Dear (Faculty Name)

Several weeks ago I sent you a letter inviting you to participate in my research study on how **exemplary advisors** guide their doctoral advisees through the doctoral degree process. I realize that you are very busy and could have easily misplaced the letter. Therefore, I am writing to you again to inquire about your willingness to participate.

As I mentioned in my previous letter, I am inviting you to participate in this study because of your **excellent track record** in graduating your doctoral degree advisees.

As a reminder, the purpose of my study is to understand how doctoral students are guided through the doctoral degree process from the perspective of the individuals doing the guiding—their faculty advisors.

I will give you a call within the next few days to answer any question and learn of your interest in participating. If you would like to contact me, I can be reached by email at barnesbe@msu.edu, by campus mail at 212 Erickson Hall, or by phone at (517) 485-3524. I look forward to talking to you soon.

Sincerely,

Benita J. Barnes
HALE Doctoral Candidate

Appendix D: Consent Form

Success in Graduate School: How Exemplary Advisors Guide Their Doctoral Advisees

What is the purpose of this study? The purpose of this study is to examine how faculty advisors who have many competing responsibilities vying for their attention understand and fulfill their critical role in the professional socialization of doctoral students

Who is conducting this study? This research is being conducted as part of my (Benita J. Barnes) dissertation research. It is being conducted under the supervision of Ann E. Austin, dissertation director.

What will be involved in participating? I will ask for about sixty-to-ninety minutes of your time in order to conduct a face-to-face interview.

Who will know what you say? Only my advisor and myself will have access to your audio tape and/or full transcripts.

What risks and benefits are associated with participation? I do not foresee any risk to you. Your confidentiality is protected and your privacy will be protected to the maximum extent allowable by law. To protect against breach of confidentiality I will ensure that your tapes and transcripts are held in a secure place. Your name will not appear in the transcripts. In any publications or public statement based on the study, your name or other potentially identifying information will be omitted or changed. While participating will require some of your time, sometimes people find participating in an interview to be beneficial in giving them a chance to talk about issues, such as advising, that are important to them.

What are your rights as a respondent? You may ask any questions regarding the research, and they will be answered. You may withdraw from the study at any time during the interview without penalty. Additionally, you may decline to answer any question. Your participation is voluntary.

What will be published? The primary purpose of this study is to complete the dissertation requirement. However, the findings from this study may be disseminated through scholarly presentations and publications in scholarly professional journals.

If you want more information, whom can you contact? If you have questions about this study you may contact the researcher, Benita J. Barnes, at (517) 485-3524, or you can contact the study's dissertation director, Dr. Ann E Austin, at (517) 355-6757. If you have any questions about your rights as a participant, or are dissatisfied at any time with any aspect of this study, you may contact – anonymously, if you wish-Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone at (517) 355-2180, fax: (517) 432-4503, e-mail: ucrihs@msu.edu, or

regular mail: 202 olds Hall, East Lansing, MI 48824.

To ensure accuracy, you agree to have this interview tape recorded.

Yes

No

Signature of participant _____ Date _____

Appendix E: Interview Protocol

Success In Graduate School: How Exemplary Advisors Guide Their Doctoral Advisees

Interviewer _____

Place _____

Time _____

Date _____

Participant Number _____

Introduction: Once again, thank you for volunteering to be a part of this research study. The purpose of the study is to examine how exemplary successfully guide their guide their doctoral advisees through the doctoral degree process. Please be as honest and candid as you can when answering the questions. I promise to ensure you complete confidentiality. Other than myself, no one will have access to your specific responses except my dissertation chair. I will change your name, the name of your institution, and any other potentially identifying information. These tapes will not be duplicated and two years after the end of the study the tapes will be destroyed.

You may ask any questions regarding the research, and they will be answered fully. You may withdraw from the study at any time. Your participation is voluntary. Do you have any questions? If there is nothing else, will you please read and sign the consent form and let's get started.

Part I - Introduction

1. How long have you been in the professoriate?
2. What is your academic rank?
3. How many doctoral students are you currently advising?
4. What stages of the doctoral program are your advisees?
5. How is it that you come to work with a student as an advisee?

Part II - *How do exemplary advisors understand and fulfill their role as an advisor?*

1. How would you describe yourself as an advisor?

2. What do you see as our most critical responsibilities as an advisor?
3. What evidence would you give of how you enact those responsibilities?
4. Give me as many adjectives as you can think of that describe you as an advisor.
5. What evidence do you have of that?
6. What is the nature of the relationship that you have with your doctoral advisees?

Part III – *What influences how doctoral advisors advise?*

1. What influences how you advise?
2. How do you think you were socialized to be an advisor?
3. How did that type of socialization work for you?

Part VI – *Role expectations*

1. What expectations do you have of your doctoral advisees?
2. What expectations do you think your advisees have of you?

Part V – *Balancing responsibilities*

1. Describe for me what your other faculty responsibilities include?
2. Where does advising fit in with what you are expect to do?

Part VI - *Conclusion*

1. What would you like your legacy as an advisor to be?
2. Is there anything else about your role as an advisor that we have not covered but you would like to share?

If there is nothing else, thank you very much for your participation!

References

- Adkins-Hutchison, C. D. (1996). Social support and adjustment among Black Psychology graduate students. (Doctoral dissertation, Rutgers The State University of New Jersey, 1996). *Dissertation Abstract International*, 57, 1956.
- Anderson, M. S., Louis, K. S., Earle, J. (1994). Disciplinary and departmental effects on observations of faculty and graduate student misconduct. *Journal of Higher Education*, 65 (3), 331-350.
- Atwell, J. (1998). *The pleasures of academe: A celebration and defense of higher education*. Lincoln, Nebraska: University of Nebraska Press.
- Austin, A. E. (2002). Preparing the next generation of faculty: Graduate school as socialization to academic career. *Journal of Higher Education*, 73 (1), 94-122.
- Baird, L. L. (1990). Disciplines and doctorates: The relationships between program characteristics and the duration of doctoral study. *Research in Higher Education*, 31, 369-385
- Baird, L. L. (1995). Helping graduate students: A graduate adviser's view. In A.S. Pruitt-Logan & P. D. Isaac (Eds.), *Student Services for the Changing Graduate Student Population*. New Directions for Student Services, No.72. (pp.25-32). San Francisco: Jossey-Bass.
- Bargar, R. R., & Chamberlin, J. M. (1983). Advisor and advisee issues in doctoral education. *Journal of Higher Education*, 54, (4) 407-432.
- Beal, P. E. & Noel, L. (1980). *What works in student retention*. Iowa City, IA: American College Testing Program and the National Center for Higher Education Management Systems.
- Becher, T. (1989). *Academic tribes and territories: Intellectual enquiry and the cultures of disciplines*. Bristol, PA: Open University Press
- Bennett, D. S. (2000). An exploration of African American doctoral students' perception of academic mentoring relationships. (Doctoral Dissertation, Virginia Commonwealth University, 2000). *Dissertation Abstract International*.
- Biddle, B. J. (1986). Recent theory in role theory. *Annual Review of Sociology*, 12, 67-92.
- Biglan, A. (1973a). The characteristics of subject matter in different scientific areas *Journal of Applied Psychology*, 57 (3), 195-203.

- Biglan, A. (1973b). Relationships between subject matter characteristics and the structure and output of university departments. *Journal of Applied Psychology*, 57 (3), 204-213.
- Blackburn, R. T., & Lawrence, J. H. (1995). *Faculty at work: Motivation, expectation, satisfaction*. Baltimore: John Hopkins Press.
- Blackwell, J. E. (1983). *Networking and mentoring: A study of cross-generational experiences of Blacks in graduate and professional school* (Research Report) Southern Educational Foundation, Atlanta, GA.
- Bowen, W. G., & Rudenstine, N. L. (1992). *In pursuit of the Ph.D.* Princeton, NJ: Princeton University Press.
- Braggs, A. K. (1976). The socialization process in higher education. *ERIC/Higher Education Research Report no.7*. Washington, DC. American Association for Higher Education.
- Brand, M. (Nov./Dec. 2000). *Change*, 32 (6), 42-45.
- Braxton, J. M. (1991). The influence of graduate department quality on the sanctioning of scientific misconduct. *Journal of Higher Education*, 62, (1), 87-108.
- Braxton, J. M., & Hargens, L. L. (1996). Variation among academic disciplines: Analytical frameworks and research. In J. C. Smart (ed.), *Higher education: Handbook of theory and Research*, Vol. XI, pp. 1-46. New York: Agathon Press.
- Brown, R. D., & Krager, L. (1985). Ethical issues in graduate education: Faculty and student responsibilities. *Journal of Higher Education*, 56 (4), 403-418.
- Cheatham, H. E. & Phelps, C. E. (1995). Promoting the development of graduate students of color. In A. S. Pruitt & P. D. Isaac (Eds.), *Student services for the changing graduate student population*. New Directions for Student Services. no. 72 (pp. 91-99).
- Clark, B. R. (1987). *The Academic Life: Small worlds, different worlds*. The Carnegie Foundation for the Advancement of Teaching.
- Clark, B. R. (1997). The modern integration of research activities with teaching and learning. *Journal of Higher Education*, 68, (3) 241-255.
- Clark, B. R. (1999). Small world, different worlds: The uniqueness and troubles of American academic professions. In J. L. Bess, D. S. Webster, & B. A. Jones (Eds.). *Foundation of American higher education (2nd edition)*. Asher Reader Series. (pp. 180-191). Needham Heights, MA: Simon & Schuster

- Colbeck, C. L. (1998). Merging in a seamless blend: How faculty integrate teaching and research. *Journal of Higher Education*, 69 (6), 647-671).
- Coombs, R. H. (1978). *Mastering Medicine*. New York: The Free Press.
- Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks: Sage.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks: Sage.
- Crotty, M. (2003). *The foundations of social research*. Thousand Oaks: Sage.
- Cusanovich, M., & Gilliland, M. (1991). Mentoring: The faculty-graduate student relationship. *Communicator*, 24 (6), 1-3.
- Davis, S. J., & Cooper, D. L. (2001). Assessing advising style: Student perceptions of academic advisors. *College Student Affairs Journal*, 20 (2) 53-62.
- Eljamal, M. B., Stark, J. S., Arnold, G. L., & Sharp, S. (1999). Intellectual development: A complex teaching goal. *Studies in Higher Education*, 24 (1) 7-24.
- Erikson, E. H. (1980). *Identity and the Life Cycle*. New York: W. W. Norton & Company, Inc.
- Faison, J. J. (1996). *The next generation: The mentoring of African American graduate students on predominately white campuses*. (ERIC Document Reproduction Service No, ED 401 344).
- Fairweather, J. S. (1993). Academic values and faculty rewards. *Review of Higher Education*, 17 (1), 43-68.
- Fairweather, J. S. (1996). *Faculty work and public trust*. Needham Heights, MA: Allyn & Bacon.
- Fairweather, J. S., & Beach, A. L. (2002). Variations in faculty work at research universities: Implications for state and institutional policy. *The Review of Higher Education*, 26 (1), 97-115.
- Feldman, K. A. (1987). Research productivity and scholarly accomplishment of college teachers as related to their instructional effectiveness: A review and exploration. *Research in Higher Education*, 26, 227-298.
- Frierson, H. T., Jr. (Ed.) (1997). *Diversity in Higher Education: Mentoring and diversity in higher education (Vol.1)*. Greenwich, CT: JAI Press, Inc.

- Fuller, R. C. (1992). *Ecology of Care: An interdisciplinary analysis of the self and moral obligation*. Louisville, KY: Westminster/John Knox Press.
- Ghaye, A. & Ghaye, K. (1998). *Teaching and learning through critical reflective practice*. London: David Fulton Publishers.
- Girves, J. E. & Wemmerus, V. (1988). Developing models of graduate student degree progress. *Journal of Higher Education*, 59, (2) 163-189.
- Gmelch, W., Wilke, P., & Lovrich, N. (1986). Dimensions of stress among university faculty: Factor-analytic results from a national study. *Research in Higher Education*, 24, 66-86.
- Golde, C.M. & Dore, T.M. (2001). At Cross Purposes: What the experiences of doctoral students reveal about doctoral education (www.phd-survey.org). Philadelphia, PA: A report prepared for The Pew Charitable Trusts.
- Golde, C. M. (1998). Beginning graduate school: Explaining first-year doctoral attrition. In M. S. Anderson (ed.) *The experience of being in graduate school: An exploration*. New Directions for Higher Education, No.101 (pp.55-64). San Francisco: Jossey-Bass
- Golde, C. M. (2000). Should I stay or should I go? Student descriptions of the doctoral attrition process. *Review of Higher Education*, 23 (4) 199-228.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, 29, 75-92.
- Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communications and Technologies Journal*, 30, (4), 233-252.
- Guidelines for integrity in research and creative activities. (2004, Spring). *Integrity Research*, 7, (2), 12-14.
- Hartnette, R. T., & Katz, J. (1977). The Education of Graduate Students. *Journal of Higher Education* 48, (6) 646-664).
- Hawley, P. (1993). *Being bright is not enough: The unwritten rules of doctoral studies*. Springfield: Charles C. Thomas.
- Heinrich, K. T. (1991). Loving partnerships: Dealing with sexual attraction and power in doctoral advisement relationships. *Journal of Higher Education*, 62, (5) 514-538.
- Heinrich, K. T. (1995). Doctoral advisement relationships between women: On friendship and betrayal. *Journal of Higher Education*, 66, (4) 447- 469.

- Hewitt, J. p, & Hewitt, M. L. (1986). *Introducing sociology: A symbolic interactionist perspective*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Holland, J. W. (1992). *The effects of faculty involvement on African American doctoral students choosing careers in higher education*. Unpublished Dissertation
- Holland, J. W. (1998). *Mentoring and the faculty development of African-American doctoral students*. In H. T. Frierson, Jr. (ed.). *Diversity in Higher Education, Volume 2* (pp.17-40). Stamford, CT: JAI Press.
- Jacks, P., Chubin, D. E., Porter, A. L., & Connolly, T. (1983). The ABCs of ABDs: A study of incomplete doctorates. *Improving College and University Teaching*, 31, 74-81.
- Johnson, R. B., & Onwuebuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Johnson, W. B. & Huwe, J. M. (2003). *Getting mentored in graduate school*. Washington, D.C.: American Psychological Association.
- Kelly, S., & Schweitzer, J. H. (1999). Mentoring within a graduate school setting. *College Student Journal*, 33 (1), 130-148.
- Klomprens, K. L., & Beck, J. P. (2004). Michigan's State University's conflict resolution program: Setting expectations and resolving conflicts. In D. H. Wulff & A. E. Austin (Eds.). *Paths to the professoriate: Strategies for enriching the preparation of future faculty*. (pp.250-263). San Francisco: Jossey Bass.
- Krathwohl, D. R. (1998). *Methods of educational and social science research: An integrated approach*. (2nd ed.). New York: Addison-Wesley Educational Publishers, Inc.
- Lees, K. A. (1996). *Understanding how female doctoral students' interactions with their chairpersons during the dissertation process affect doctoral persistence*. Unpublished Dissertation. University of Northern Colorado.
- Levinson, D. J (with Darrow, C. N., Klien, E. B., Levinson, M. H., McKee, B.). (1978). *The Seasons of a Man's Life*. New York: Ballantine Books.
- Lowe, A, & Toney, M. (2000). Academic advising: view of the givers ad takers. *Journal of College Student Retention*, 2 (2), 93-108.
- Lovitts, B. E. (2001). *Leaving the Ivory Tower: The Causes and Consequences of Departure from Doctoral Study*. Lanham, MD: Rowman & Littlefield
- Lovitts, B. E., & Nelson, C. (2000). The hidden crisis in graduate education: Attrition from Ph.D. programs. *Academe*, 86 (6), 44-50.

- Lucas, C. J., & Murray, J. W. (2002). *New faculty: A practical guide for academic beginners*. New York: Palgrave.
- Luna, G., & Cullen, D. L. (1998). Do graduate students need mentoring? *College Student Journal*, 23, (3) 322-330.
- Lyons, W., Scroggin, D., & Rule, P. B. (1990) The mentor in graduate education. *Studies in Higher Education*, 1 (3), 277-285.
- Marks, S. R., & MacDermid, S. M. (1996). Multiple roles and the self: A theory of role balance. *Journal of Marriage and the Family*, 58, (2), 417-432).
- Marshall, C. (1990). Goodness criteria: Are they objective or judgment calls? In G. E. Guba (ed.). *The Paradigm Dialog* (pp. 188-197). Newbury Park: Sage Publication.
- McLure, J. B. (1989). Recommendations for faculty advising. (Doctoral Dissertation Georgia State University, 1989). Dissertation Abstract International
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications I Education: Revised and Expanded form Case Study Research in Education*. San Francisco: Jossey-Bass.
- Merriam, S. B., Thomas, T. K. Zeph, C. P. (1987). Mentoring in higher education: What we know now. *The Review of Higher Education* 11, (2), 199-210.
- Milem, J. F., Berger, J. B., Dey, E. L. (2000). Faculty time allocation: A study of change over twenty years. *The Journal of Higher Education*, 71, (4), 454-475.
- National Association of Graduate and Professional Students. 2001. Preliminary executive summary of the National Doctoral Program Survey. Washington, DC. (<http://survey.nagps.org>).
- National Center for Education Statistics. (2004). US Department of Education. Institute of Education Sciences NECS 2004-007.
- Nettles, M. T. (1990a). Success in Doctoral Programs: Experiences of minority and white students. *American Journal of Education*, 98, (4) 494-522.
- Nettles, M. T. (1990b). *Black, Hispanic, and white doctoral students: Before, during and after enrolling in graduate school*. (Graduate Record Examination Board Program). Princeton, NJ: Educational Testing Service.
- Nerad, M , & Cerny, J. (1993). From facts to action: Expanding the educational role of the graduate division. In L. L. Baird (ed). *Increasing Graduate Student Retention and Degree Attainment*. New Direction for Institutional Research . No. 80 (pp. 27-40). San Francisco: Jossey-Bass.

- Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. Berkley: University of California Press.
- Nyquist, J. D., Manning, L., Wulff, D. H., Austin, A. E., Sprague, J., Fraser, P. K., Calcagno C., & Woodford, B. (1999, May/June). On the road to becoming a professor. *Change*, 31 (3), 18-27.
- Nyquist, J. D., & Woodford, B. J. (2000). Re-envisioning the Ph.D. What concerns do we have? *Re-envisioning the Ph.D.* University of Washington, University of Washington.
http://www.grad.washington.edu/envision/project_resources/concerns.html>
- O'Bara C. C. (1993). *Why some finish and why some don't: Factors affecting PhD completion*. (Doctoral Dissertation Claremont Graduate School, 1993). *Dissertation Abstract International*
- Onwuegbuzie, A. J. (2002). Why can't we all get along? Towards a framework for unifying research paradigms. *Education*, 122 (3), 518-530.
- Papa-Lewis, R. (1983). The mentoring relationship between major advisor and doctoral degree advisees. (Doctoral Dissertation University of Nebraska, 1983). *Dissertation Abstract International*.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. (2nd ed.). Newbury Park, CA: Sage.
- Peters, J. M. (1991). Strategies for reflective practice. In R. G. Brockett (ed). Professional development for educators of adults. New directions for Adult and Continuing Education. No. 51 (pp.89-101).
- Petress, K. C. (1996). The multiple roles of an undergraduate's academic advisor. *Education*, 117, 91- 95
- Phillips, G. M. (1979). The peculiar itnmacry of graduate study: A conservative viw. *Communication Education*, 28, 339-345
- Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks: Sage.
- Schwarz, S. (1997). *Students' perception of the role of the dissertation chair in time to complete the doctoral dissertation*. Unpublished doctoral dissertation, The Pennsylvania State University.
- Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. (2nd ed.) New York: Teacher College Press.
- Selke, M. J., & Wong, T. D. (1993). The mentoring-empowered model: Professional role functions in graduate student advisement. *NACADA Journal*, 13(2), 21-26.

- Smith, J. K. (1990). *The nature of social and educational inquiry: Empiricism versus interpretation*. Norwood, NJ: Ablex Publishing Corporation.
- Spriesterbach, D. C., & Henry, L. D., Jr. (1976). The Ph.D. dissertation: Servant or master? *Improving College and University Teaching*, 26 (60) 52-55.
- Strauss, A., & Corbin, J. (1998). *Basic of qualitative Research: Techniques and procedures for developing grounded theory* (2nd Ed.). Thousand Oaks: Sage.
- Stryker, S., & Statham, A. (1985). Sybolic interaction and role theory. In G. Lindzey & E. Arnson (eds.) *The handbook of social psychology*, Volume I (3rd edition). (pp.331-368).New York: Random House.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks: Sage.
- Tenenbaum, H. R., Crosby, F. J., & Gliner, M. D. (2002). Mentoring Relationships in Graduate School. *Journal of Vocational Behavior*, 59, 326-341.
- Thomas, E. J., & Biddle, B. J. (1966). Basic concepts for classifying the phenomena of role. In B. J. Biddle & E. J. Thomas (eds). *Role theory: Concepts and research* (pp.23-45). New York: John Wiley & Sons, Inc.
- Trocchia, P. J. & Berkowitz, D. (1999). Getting doctorred: A proposed model of marketing doctoral student socialization.. *European Journal of Marketing*, 33 (7/8) 746-759.
- Twale, D. & Kochan, F. (1999). Restructuring an educational leadership program: The teacup adventure. *International Studies in Educational Administration*, 27 (1), 61-69.
- Turner, C. S. V., & Thompson, J. R. (1993). Socializing women doctoral students: Minority and majority experiences. *Review of Higher Education*, 16, 355-370.
- Valadez, J. R. (1998). The social dynamic of mentoring in graduate education: A case study of African American students and their graduate advisors. In H. T. Frierson, Jr. (ed.). *Diversity in Higher Education, Volume 2* (pp.129-140). Stamford, CT: JAI Press.
- Waldeck, J. H., Orrego, V. O., Plax, G. T., & Kearney, P. (1997). Graduate student/Faculty mentoring relationships: Who gets mentored, how it happens, and to what end. *Communication Quarterly*, 45 (3) 93-109
- Weidman, J. C., Twale, D. J., & Stein, E. L. (2001). Socialization of graduate and professional students in higher education: A perilous passage? *Ashe-Eric Higher Education Report* volume 28, no.3.

- White, J. W. (1995). Increasing the flow of Black Ph.D's: A comparison of black doctoral fellows in a comprehensive support program with black doctoral students without a comprehensive support program. (Doctoral dissertation, University of Maryland College Park, 1995). *Dissertation Abstract International*, 56, 3024.
- Williams, K. B. (2000). Perceptions of social support in doctoral programs among minority students. *Psychological Reports*, 86, 1003-1010.
- Willie, C. V., Grady, M. K. & Hope, R. O. (1991). *African-Americans and the doctoral experience: Implications for policy*. NY: Teachers College Press.
- Winston, R. B., & Polkosnik, M. C. (1984). Advising in graduate and professional school. In R.B. Winston, Jr., T. K. Miller, S. C.Ender, & T. J. Crites (eds.). *Developmental Academic Advising* (pp.287-316). San Francisco: Jossey-Bass.
- Winston, R. B., Grites, T. J., Miller, T. K., Ender, S. C. (1984). Epilogue: Improving academic advising . In R.B. Winston, Jr., T. K. Miller, S. C.Ender, & T. J. Crites (eds.). *Developmental Academic Advising* (pp.538-550). San Francisco: Jossey-Bass.
- Yuker, H. E. (1984). Faculty workload: Research, theory, and interpretation. *Ashe-Eric Higher Education Research Reports 1984. Report no. 10*.

MICHIGAN STATE UNIVERSITY



3 1293 0273