How Faculty Assessments of Degree Completion Likelihood
Shape their Advising Relationship with Doctoral Students

A Dissertation
SUBMITTED TO THE FACULTY OF
UNIVERSITY OF MINNESOTA
BY

Nancy L. Kalke

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Darwin D. Hendel
Advisor

August 2016

Acknowledgements

I am finishing up this dissertation just as my advisor is finishing up his last year before retirement. I first met Dr. Hendel when he was advising the work life balance initiative at the University of Minnesota and I was interviewing leaders at the University as a member of the emerging leaders group. We were also members together on the university senate's faculty committee. He has been an advisor to me in multiple ways over my career; these past years as my doctoral advisor. I have appreciated the advice, patience, and encouragement, he has provided through my dissertating years. I wonder if many faculty would be as supportive of a dissertation that explored doctoral advising practices. Dr. Hendel has a Ph. D. in psychology and his research interests include student success so I am confident he was conscious of the irony of advising me on faculty advising practices. His advising practice was scrutinized and provided me with one model from which to analyze the results of this study. And as the results of this study show, even a model of advising practice that is consistently followed becomes variable in practice due to the individual needs, abilities, and circumstances of the student. I valued our discussions and look forward to more of them in the coming years.

Dissertating in the social sciences is isolating. I appreciated the breaks from this state when Dr. Hendel gathered six of us, who have him as an advisor, to meet regularly and discuss our research, account for our progress, and ask questions about the process. I am often asked what made me finally finish. It was unquestionably this group of student colleagues meeting regularly together with our advisor who kept me engaged in a productive way that helped me to finish. Thank you to Amelious, Peg, Jeff, Jules, and

Rand. Also thank you to Nicole, my work cube neighbor and fellow doctoral student until last year when she completed her doctorate, who talked me through many dissertation-related content and frustration issues. A special thank you to Susan Simmons who, as my dissertation coach for two years, kept me writing until Dr. Hendel's dissertation finisher's group began. Susan is a very skilled editor and has many effective tips for writing through blocks.

Lastly and most importantly, thank you to my partner, Sally, and my parents. School was always my sanctuary. I loved learning! Even so, I am surprised I grew up never questioning that I would go to college. Why? Neither my mom nor my dad went to college, and no one in their families went to college either. We had enough money to live well but no money for college. I credit my mom for my confidence and determination. She never questioned my going to college and she has always been a model for me of intellectual questioning and strength of character. My dad loved me and showed me his love when he could. My grandmother loved me fiercely. I wish that everyone could have this form of unconditional love from at least one person in their life. I believe Sally loves me just as fiercely. I am very blessed! Sally, thank you for supporting me in all ways and always!

Dedication

To Sally, thank goodness we made the decision for me to get my doctorate together!

Abstract

The issue of doctoral student attrition has been recognized in the literature since the middle of the 20th Century. Although not always described as a problem, and with a change in attribution of the reasons from primarily that of the student to more of an institutional responsibility, the attrition of doctoral students remains at only slightly less than half. Especially concerning is why students, who have successfully passed all their courses and the preliminary examinations that promote them to a doctoral candidate in the final phase of the doctoral program, fail to complete. This qualitative study explored perspectives from 18 tenured members of the graduate faculty from four U. S. doctorate-granting institutions with very high research activity located in the general Midwestern regions that had graduated more than 50 doctorate recipients in one or major fields of the social sciences, focused on their assessment that a particular student will complete his/her degree after passing the preliminary exam and becoming a candidate for the Ph. D. (what is commonly also referred to as "All But Dissertation" (ABD).

Two models, Girves and Wemmerus' (1988) degree progression model, and Tinto's (1993) three-stage model on doctoral student retention, provided the foundation for the conceptual framework for the study. The results of the study show that a diversity of themes was found that characterized each of the four advisee types and differentially shaped the advising relationship. One of the main salient findings of this study concerned those advisees seen as being "at risk" of non-completion. The descriptions of their "extra efforts," in some cases, extraordinary time and effort, contribute to the body of literature reviewed that falls into the category of multi-level (institutional, departmental, and

individual) approaches that can be taken to propel doctoral students over the finishing line. The implications for practice from the findings of this study may be helpful to faculty advisors, doctoral students, and department administrators.

Table of Contents

List of Tables

List of Figures

CHAPTER ONE: INTRODUCTION

The issue of doctoral student attrition has been recognized in the literature since the middle of the 20th Century (Spaulding & Rockinson-Szapkiw, 2012). Although not always described as a problem, and with a change in attribution of the reasons from primarily that of the student to more of an institutional responsibility, the attrition of doctoral students remains at only slightly less than half. Some have said that only the best and brightest are admitted into doctoral programs (Denecke, Frasier, & Redd, 2009, p. 36), particularly those admitted into the institutions categorized as RU/VH Research Universities (very high research activity) (Carnegie Classifications, 2014) in the United States. Most students who enter doctoral programs have successfully completed prior graduate degrees (the exception are those who enter programs that offer a route to the Ph. D. degree directly from a Bachelor's degree). Why then do almost half of these already successful students fail to complete?

Especially concerning to this researcher is why students, who have successfully passed all their courses and the preliminary examinations that promote them to a doctoral candidate in the final phase of the doctoral program, fail to complete. This study explored perspectives from doctoral faculty advisors focused on their assessment that a particular student will complete his/her degree after passing the preliminary exam and becoming a candidate for the Ph. D. (what is commonly also referred to as "All But Dissertation" (ABD). This introductory chapter will describe the rationale for the study; provide a brief overview of factors associated with attrition; discuss the role of faculty in doctoral student attrition; describe the faculty advisor role; highlight the role of faculty assessment

1

and expectation; note the mentor role of the advisor; and present the research study

purpose. A review of the literature in Chapter Two begins with a brief review of the

history of doctoral education in the United States and demonstrates that even with

decades of research on student attrition from Ph. D. programs, an adequate understanding

of why students drop out late in the degree-completion cycle remains elusive. Chapter

Three describes the conceptual framework and research methodology for the study.

Chapter Four presents results of the study and the final Chapter Five provides a summary,

discussion, and conclusions, on the findings from the study.

Research Study Rationale

Doctoral student attrition, first measured in the early 1960s, has remained at

slightly below 50% across all disciplines at United States institutions of higher education

(Berelson, 1960; Bowen & Rudenstine, 1992; Denecke, Frasier, & Redd, 2009; Gardner,

2009; Lovitts, 2001; Spaulding & Rockinson-Szapkiw, 2012). The Council of Graduate

Schools' Ph. D. Completion Project (with baseline data as of October 9, 2006) reported

an overall cumulative mean ten-year attrition rate of 43% (Denecke, Frasier, & Redd,

2009). Attrition rates by discipline has been shown to extend from approximately 14% to

85% (Berelson, 1960; Bowen & Rudenstine, 1992; Ferrer de Valero, 2001; Gardner,

2009; Lovitts, 2001; Nerad & Cerny, 1993; Nettles & Millet, 2006). Nerad and Cerny

(1993), for example, in a study of Berkeley students entering doctoral programs in 1978

and 1979, found the range to be from a low attrition rate of 28% in the biological sciences

to a high of 63% in languages and literature (rates measured in 1989). Ferrer de Valero

(2001), in a study of 1,438 doctoral students who began a doctoral program between fall

1986 and spring 1990 at a public research, land-grant university, found attrition rates ranging from 19% in plant pathology, physiology, and weed sciences to 85% in public administration and public affairs. Gardner (2009) reported a range of attrition rates from a low of 14% in the biomedical and behavioral sciences to a high of 57% in the humanities and social sciences.

The Council of Graduate Schools' Ph. D. Completion Project reported a ten-year completion rate range from engineering at 64% to humanities at 49%. The population for this study was selected from faculty members of social science departments because the attrition rate found in social science disciplines represents more of the middle ground. The Council of Graduate Schools' Ph. D. Completion Project's ten-year completion rate for social sciences was found to be at 56% (psychology 65%; economics 52%; anthropology 46%; sociology 45%; and, political science 44%).

There is a cost to the individual and to the institution when students do not complete the program with a Ph. D. degree: A cost that extends beyond the institutional instructional cost per student and the individual's lost time and opportunity cost. The cost is the loss of "a large portion of students who have been judged by faculty and admissions committees to be among the very brightest and talented in the world" (Denecke, Frasier, & Redd, 2009, p. 36). This study's focus is specifically on the attrition that happens in the final stage of a student's doctoral program (i.e., after passing qualifying examinations). Bowen and Rudenstine (1992), stated, "…from our perspective, the disturbing findings for both attrition and the amount of time invested are associated with later stages of graduate study" (p. 253). The high rate of attrition overall

is a concern if, as Ehrenberg and Kuh (2009) suggested, the demand for faculty is likely to increase in the near future due to expected faculty retirements and increasing college enrollments. Additionally, specific unmet need continues to exist for scientists and professionals in many areas, particularly in the STEM fields (Abedi & Benkin, 1987; Ehrenberg & Kuh, 2009; Golde, 2005). Ehrenberg et al. (2009) also suggested that attrition and degree-time to completion are important, not only for the consequences in costs to the individual and the institution, but because they are viewed as indicators of program quality in terms of effectiveness (p. 15). The above section provided the rationale for studies that focus on student attrition in the final stage of a doctoral program in the social sciences. The next section provides an overview of the factors associated with attrition.

Overview of Factors Associated with Attrition

Scholars have conducted numerous descriptive and analytical studies of doctoral student attrition from U.S. research universities in the past 56 years. These researchers have analyzed national, university-wide, and department-specific admissions and program data, in addition to data collected from questionnaires and interviews of doctoral students, faculty, and academic leaders. Across these studies, the most frequently cited factors found to impact doctoral student attrition (or completion) are financial resources (Berelson, 1960; Bowen & Rudenstine, 1992; Cook & Swanson, 1978; Ferrer de Valero, 2001; Gardner, 2009; Lovitts, 2001; Maher, Ford, & Thompson, 2004; Wilson, 1965) and faculty advisors or mentors (Bowen & Rudenstine, 1992; Ferrer de Valero, 2001; Gardner, 2009; Girves & Wemmerus, 1988; Golde, 2000, 2005; Lovitts, 2001; Maher,

4

Ford, & Thompson, 2004; Nerad & Cerney, 1993; Wilson, 1965). Researchers have

identified other factors (e.g., departmental structure, frequency of student involvement in

program activities, student ability and motivation) with less frequency, largely due to

differences in study design (i.e., not all factors were used in all studies), sample

populations, and the complexity of interactions among student and institutional

characteristics (Ferrer de Valero, 2001; Girves & Wemmerus, 1988). In addition,

program size, disciplinary field, and time-to-degree have been found to impact doctoral

student success (Bowen & Rudenstine, 1992; Nerad & Cerny, 1993). Research findings

on these factors are described further in Chapter Two, but a brief preview of the research

on the role of faculty, next, provides context for this study.

Role of Faculty in Doctoral Student Attrition

A review of the literature on Ph. D. completion concludes that much is known

about doctoral student attrition, with the most frequently cited factors found to impact

doctoral student attrition being financial resources and the faculty advisor. Research has

confirmed that a faculty mentor or advisor who provides support, interest, information,

and guidance has a positive impact on doctoral student completion (Bowen &

Rudenstine, 1992; Lovitts, 2001; Maher, Ford, & Thompson, 2004; Nettles & Millett,

2006). Among these studies, some have examined graduate faculty-student relationships

across multiple institutions (Anderson & Swazey, 1998; Berelson, 1960; Bowen &

Rudenstine, 1992; Knox, Schlosser, Pruitt, & Hill, 2006; Lovitts, 2001; Nettles & Millett,

2006; Noy & Ray, 2012; Wilson, 1965), whereas other studies have examined graduate

advising relationships within a specific institution (Barnes & Austin, 2009; Ferrer de

5

Valero, 2001; Girves & Wemmerus, 1988; Gardner, 2009; Golde, 2005; Maher, Ford, & Thompson, 2004; Manathunga, 2005; Nerad & Cerny, 1993).

Few studies have focused on the perspective of the doctoral faculty advisor (Barnes & Austin, 2009; Bowen & Rudenstine, 1992; Knox, Schlosser, Pruitt, & Hill, 2006; Lovitts, 2001; Manathunga, 2005). Fewer still have specifically explored faculty assessments of their doctoral student advisees (Barnes & Austin, 2009; Knox, Schlosser, Pruitt, & Hill, 2006; Manathunga, 2005). No studies have asked faculty to consider to what extent their assessment that a particular student will complete her/his degree plays a varying role in the subsequent advising relationship and eventual degree completion. Although much is known about factors impacting doctoral student retention, including the importance of the faculty advisor, the reasons why students do not complete a dissertation after making ABD status are less clearly understood. A focus on the doctoral advising relationship from the perspective of the advisor, summarized in the next section, may help to understand more precisely the impact an advisor has on student completion of the Ph. D.

The Faculty Advisor Role

The importance of a faculty advisor can be seen in the very beginnings of graduate education in the following quote by Johns Hopkins President Gilman "Investigation has thus been among us the duty of every leading professor, and he has been the guide and inspirer of fellows and pupils, whose work may not bear his name, but whose results are truly products of the inspiration and guidance which he has freely bestowed" (Brubacher & Rudy, 2003, p. 179).

6

In a study of research studies on doctoral student attrition between 1970 and 1998, Bair and Haworth (2004), stated:

> The single most frequently occurring finding in this meta-synthesis was that
>
> successful degree completion is related to the degree and quality of contact
>
> between a doctoral student and her or his advisor(s) or other faculty in the
>
> student's doctoral program. (p. 495)

Bowen and Rudenstine (1992) conducted interviews with faculty members (the number of faculty interviewed was not specified) from the 10 universities that were a part of their research study (the University of California at Berkeley, the University of Chicago, Columbia University, Cornell University, Harvard University, the University of Michigan at Ann Arbor, Princeton University, Stanford University, the University of North Carolina at Chapel Hill, and Yale University) and found a wide variance of attitudes and practices in dissertation advising. Variations ranged from dissertation advising ranking low in priority to advisors holding regular meetings, setting clear expectations and deadlines, and "seeing the student through" (p. 261). The most common practice was that advisors made themselves available when the student asked for assistance. Bowen and Rudenstine (1992) found that with this type of accessible, but essentially passive advisor, students "do in fact often drift without guidance for considerable periods of time, while faculty members continue to operate on the presumption that their declared accessibility, and their genuine interest in students, are sufficient to make the process work" (p. 261).

Among the research studies that have been done from the perspective of the doctoral advisor about their advising practices in general, Barnes and Austin (2009)

interviewed 25 top producers of Ph.D. completers at a public, research extensive, land-grant university about their role as advisor and the expectations they have of their doctoral advisees. Manathunga (2005) interviewed eight faculty Supervision Award winners from the University of Queensland in 2000 and 2001 about the warning signs that may indicate a doctoral advisee is having difficulty. Both of these studies (Barnes & Austin, 2009; Manathunga, 2005) found that providing clear and realistic expectations of the advisor and advisee role was important to the advising relationship and to eventual Ph.D. completion. Neither of these studies explored the role of faculty advisor assessment of degree completion probability on the advising relationship.

Two of the studies included in the literature review included a focus on specific advising relationships (Knox, Schlosser, Pruitt, & Hill, 2006; Lovitts, 2001); neither study explicitly addressed the role of advisor assessment of degree completion likelihood on the advising relationship. Both studies asked advisors to consider specific advisor/advisee relationships in general consideration of examples of "positive" and "difficult" relationships (Knox, Schlosser, Pruitt, & Hill, 2006, p. 495) and "most and least successful adviser-advisee relationships" (Lovitts, 2001, p. 279). Knox, Schlosser, Pruitt, and Hill (2006) interviewed 19 counseling psychology faculty members in an exploration of the advising relationship. Advisors were asked to identify an example of an advising relationship that was positive and one that was negative. Differences between the two resulted from personal and professional characteristics of the advisee. Positive relationships were characterized by respect and open communication, whereas negative relationships included advisee difficulties with research and advisors feeling ineffective

8

helping her/his advisee be successful. Lovitts compared responses of the 33 faculty who were interviewed by whether they were identified as high or low "producers," defined as "number of dissertations supervised by each faculty member in the participating departments" (2001, p. 15). Lovitts found that successful advising relationships were characterized by very positive student traits and behaviors across both high and low producers. A greater number of faculty who supervised a high number of dissertations described their role as including responsibility for helping their advisees complete the program than faculty who supervised a lower number of dissertations.

The study variables on which researchers have focused have changed over time, from an almost exclusive focus on student characteristics (i.e., Berelson, 1960) to the addition of institutional, departmental, and disciplinary characteristics. Following in this vein, earlier studies found characteristics of the student to be primarily responsible for their own attrition (Berelson, 1960; Wilson, 1965), whereas later studies found characteristics of the department, including faculty advising, to hold at least some responsibility for doctoral student attrition (Bowen & Rudenstine, 1992; Ferrer de Valero, 2001; Girves & Wemmerus, 1988; Gardner, 2009; Golde, 2005; Lovitts, 2001; Maher, Ford, & Thompson, 2004; Nerad & Cerny, 1993). Most of the research on advisors of doctoral students has been based on asking advisors about their perceptions of why students do not complete the Ph. D. and about their advising practices with doctoral students in general. Research is lacking on the variation in approach and frequency of contact an advisor conducts among different categories of advisees, including the degree completion assessment held by the advisor for a particular student. Why does one advisee

meet frequently with the advisor while another works independently over periods of time? What considerations go into the variation in approach (active or passive, much or little direction provided) and frequency of contact? The next section briefly explores the role of teacher (i.e., advisor) expectations regarding degree completion likelihood.

The Role of Faculty Assessment and Expectation

Faculty assessment may be thought of in relationship to the research on teacher expectation but, as the following section explains, teacher expectation is not the focus of this study. In their review of "35 years of empirical research on teacher expectations" (p. 131), Jussim and Harber (2005) described the basis for research on teacher expectation, as found in self-fulfilling prophecy (Merton, 1948) (as cited in Jussim & Harber, 2005), and concluded that when found, the effects of self-fulfilling prophecies were small and disappeared over time. Merton (1948) attributed the self-fulfilling prophecy origins to "W. I. Thomas, the dean of American sociologists, [who] set forth a theorem basic to the social sciences: 'If men define situations as real, they are real in their consequences'" (p. 193).

Jussim and Harber (2005) began their review with Rosenthal and Jacobson's (1968) (as cited in Jussim & Harber, 2005) "Pygmalion" (p. 133) study where elementary children, selected randomly, but thought by their teachers as having been identified through a "Test of Inflected Acquisition" as likely to "'bloom' – to show a sudden and dramatic intellectual spurt over the upcoming school year," "…gained more IQ points than did the control students" (p. 133). The effect sizes, however, were small and disappeared after two years. Jussim and Harber also focused on the accuracy of teacher

10

predictions and concluded that "teacher expectations may predict student outcomes more because these expectations are accurate than because they are self-fulfilling" (2005, p. 131). Teacher expectation, as it is referred to in the literature briefly reviewed above (i.e., self-fulfilling prophecy), is not the focus in this study, but is included briefly here because of the possible association between faculty assessment of degree completion likelihood and teacher expectation.

The extent to which an advisor's assessment of degree completion likelihood may influence, and create variability, in the amount of time and attention an advisor provides to each of her/his advisees; the quality of letters of recommendations; and, with whom they co-author publications is the focus of the study (Bowen & Rudenstine, 1992; Lovitts, 2001; Noy & Ray, 2012). As Noy and Ray, 2012, specifically stated, "…what faculty advisors think of their students factors tremendously into the success and overall development of graduate students" (p. 877). The next section will briefly discuss the role of advisor as mentor.

Advisor as Mentor

Many of the studies included in the literature review in Chapter Two specifically identify the role of a faculty advisor in the study of doctoral student completion and time-to-degree (Anderson & Swazey, 1998; Barnes & Austin, 2009; Bowen & Rudenstine, 1992; Ferrer de Valero, 2001; Gardner, 2009; Girves & Wemmerus, 1988; Golde, 2005; Knox, Schlosser, Pruitt, & Hill, 2006; Lovitts, 2001; Maher, Ford, & Thompson, 2004; Nerad & Cerny, 1993; Nettles & Millett, 2006; Wilson, 1965). However, some of the studies described in Chapter Two identify the role of (or similar to) the faculty advisor in

other ways, such as major professor (Berelson, 1960), mentor (Anderson & Swazey, 1998; Nettles & Millett, 2006; Noy & Ray, 2012), and supervisor (Manathunga, 2005).

The following bullets identify how each study described the role of the faculty advisor:

- Berelson (1960) asked in his survey whether "doctoral candidates get too little direct attention, supervision, and guidance on their dissertations from their major professors" (p. 162).

- Wilson (1965) asked both about faculty attributes and responsibilities in general and faculty advisor and dissertation committee guidance in particular.

- Girves and Wemmerus (1988) specifically included the "student/adviser relationship" in the conceptual model they developed for the study of graduate student degree progress (p. 165).

- Bowen and Rudenstine (1992) included the faculty/student advising relationship as a variable, specifically faculty attitudes and practices in dissertation advising.

- Nerad and Cerny (1993) examined student satisfaction with their faculty advisor.

- Anderson and Swazey (1998) analyzed responses to survey items that asked doctoral students about faculty accessibility and collaboration on publications. The researchers also identified the role of the advisor and mentor in their discussion.

- Ferrer de Valero (2001) explored the student-advisor relationship including whether students described their advisor as a friend.

- Lovitts (2001) addressed the faculty advisor role and identified whether faculty were high or low producers of Ph. D.'s.

- Maher, Ford, and Thompson (2004) included student's "working relationships with faculty" (p. 395) and faculty advising in survey items.

- Golde (2005) asked about the fit between advisor and student in interviews with students who had left the department.

- Manathunga (2005) explored the relationship between supervisor and student in interviews with both groups.

- Nettles and Millett (2006) asked students to rate their interactions with their advisor and explored both social and academic interactions. They specifically included advising in faculty academic interactions. In addition, Nettles and Millett (2006) explored the impact of a faculty advisor who is also a mentor.

- Knox, Schlosser, Pruitt, and Hill (2006) specifically explored the advising relationship in interviews with counseling psychology faculty members.

- Barnes and Austin (2009) specifically explored the faculty advising relationship in interviews with faculty members identified as top producers of Ph. D. students.

- Gardner (2009) asked about the quality of advising in interviews with doctoral students.

- Noy and Ray (2012) included "six dimensions of mentorship" (p. 887) from doctoral student responses to the Survey on Doctoral Education and Career Preparation.

In some studies, findings were specific to the faculty as advisor or mentor and help to define the role. For example, Golde and Dore (2001), in their analysis of the responses in 1999 to the Survey of Doctoral Education and Career Preparation from 4,114 students in 11 arts and sciences programs from 27 universities and one cross-institutional program, reported that faculty members spend one to four hours each week in advising activities with students. The authors found from their analysis of survey comments that a student's advisor was very important, and highlighted the following: "Overwhelmingly, students urge their peers to make a careful and thoughtful choice of dissertation advisor" (p. 35). Golde and Dore (2001) described the status of advising noted by survey respondents as follows:

Virtually all of the students responding to our survey have an advisor (only 1.1% do not). More than half (59.4%) can also identify a second faculty member who serves as a mentor; this is especially the case in history (72.1%), sociology (71.6%), and art history (70.2%) and least likely in mathematics (40.0%) and chemistry (43.0%). Students with more than one mentor often benefit from a breadth of perspectives. A second mentor also helps mitigate against dependence on the sponsorship and control of only one faculty member" (p. 35).

Zhao, Golde, and McCormick (2005) analyzed the same data as Golde and Dore (2001) and through factor analysis created four categories of advisor behavior. The

researchers found that "academic advising, based on items related to training and progress" had the highest correlation with respondents' report of satisfaction. The other three factors were "personal touch, reflecting advisor interest and support beyond purely academic concerns; career development, reflecting collegial support, sponsorship, and mentorship; and cheap labor, a factor based on two items capturing negative and exploitative aspects of the advisor-student relationship" (p. 7). Academic advising behaviors included the following:

- Gives me regular and constructive feedback on my research

- Available when I need help with my research

- Gives me regular and constructive feedback on my progress toward degree completion

- Available when I need to talk about my program and progress

- Provides direct assessments of my progress

- Teaches me the details of good research practice

- Provides information about ongoing relevant research

    (Zhao, Golde, & McCormick, 2005, Appendix A1, Table 1)

Noy and Ray (2012) identified separate essential functions that described mentoring and advising. For mentoring, these functions were: counseling; confirming progress; sponsoring; protecting; role modeling; networking; and, informing. For advising, these functions were: student training; program completion; career advancement; social networks; research and publication collaboration; and, job placement.

The University of Minnesota Graduate School has a web resource page titled "Keys to SUCCESS for Faculty Mentors & Graduate/Professional Students" that incorporated advising as one of six areas of mentoring. They identified "six primary areas in which graduate and professional students need mentoring: advising, tutoring, supporting, supervising, modeling, and sponsoring" (University of Minnesota Graduate School web page located at http://gradvising.umn.edu/keys-to-success-for-students-and-mentors.html).

Ehrenberg and Zhang (2005) included advising as part of the tenure and tenure-track faculty role and responsibilities in the statement:

Tenured and tenure-track faculty members are important to the academic institution because, in addition to teaching, they: advise students about their courses of study and provide advice and letters of recommendation for postgraduate education and employment opportunities; conduct research; share governance responsibilities with the administration and the trustees; and provide long-term stability to the   institution (p. 38).

The above section identified some of the ways that researchers, faculty, and students approach and define advising activities, functions, and areas, some in comparison to mentoring. The next section describes the purpose of the study.

Research Study Purpose

The purpose of this study is to explore with experienced doctoral advisors the approaches they have taken with four categories of advisees based on their assessment of likelihood of degree completion at the time the advisee entered the final stage of their

Ph.D. program (ABD). The research question is, "How do faculty assessments of degree completion likelihood shape their advising relationships with doctoral students?"

Each doctoral advisor was asked to identify four students (using a pseudonym), one of whom represented each of the following four types of advisees:

- Type One: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation and did graduate.

- Type Two: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation but did not graduate.

- Type Three: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph.D. program but did graduate.

- Type Four: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph.D. program and did not graduate.

CHAPTER TWO: REVIEW OF THE LITERATURE

This review of the literature begins with a brief review of the history of doctoral education in the United States. It will then present a review of selected descriptive and analytical studies that have addressed the problem of doctoral student attrition in the United States.

History of Doctoral Education in the United States

Worldwide in the early 1800s, German universities were becoming known for scholarship and scientific research, particularly after the founding of the University of Berlin in 1810. Although this same trend could also be seen throughout Continental Europe, the influences of the German university on American graduate education were stronger because so many more Americans went to study at German universities rather than those in Europe or France. Furthermore, German universities developed the following methods of instruction, as explained in Brubacher and Rudy (2003): "The seminar, the specialist's lecture, the laboratory, and the monographic study were introduced as indispensable means of training scholars," and were adopted by American Universities as well (p. 175). These methods of instruction are still seen in higher education in the United States today (Berelson, 1960; Brubacher & Rudy, 2003).

The Master of Arts degree was awarded, along with the Bachelor of Arts degree, from the start of the first colonial colleges in the United States. The Master of Arts degree would typically be awarded to the graduate student three years after receipt of the Bachelor of Arts degree, simply by "…keeping one's name on the college rolls" and paying a fee (Brubacher & Rudy, 2003, p. 193). Honorary doctoral degrees were awarded

as early as 1692 (a Doctorate of Sacred Theology (S.T.D.) to Increase Mather), although

they were awarded primarily in the later 1700s. John Winthrop, Professor at Harvard,

received the first Doctorate of Laws (LL.D.) in 1773. Close to two hundred different

types of honorary degrees (at all levels) were conferred to approximately fifty thousand

persons between 1870 and 1939. In the 28-year period of time from 1872 to 1900, 65% of

the honorary degrees granted were doctoral degrees (Brubacher & Rudy, 2003). These

honorary degrees were in conflict with the earned Ph.D. degrees that were beginning to

be granted, first at Yale, in 1861, with other institutions to follow. Honorary degrees took

more than three decades to die out as doctoral Ph.D. programs took hold

(Berelson, 1960).

The first earned Ph.D. doctorate in the United States was awarded in 1861 by

Yale University (Brubacher & Rudy, 2003; Gumport, 1999). Brubacher and Rudy (2003)

stated the first doctorate was awarded from Yale University's department of philosophy

and the arts. First established in 1847, the new department had been specifically formed

"with a view to giving specialized and advanced instruction" (p. 183). Gumport (1999)

stated the first Ph.D. was from Yale's Sheffield Scientific School. Brubacher and Rudy

(2003) suggested the next three doctorates were also awarded through Yale University.

Gumport (1999), however, stated the second doctorate awarded in the United States was

in 1871 from the University of Pennsylvania, and the third was awarded the next year

(1872) from Harvard.

Graduate programs began in three distinct ways in the United States. First,

Harvard, under President Eliot, established a graduate school of arts and sciences in 1872

by integrating its previously established medical, law, and scientific schools. Harvard and Yale (and others following them) established their graduate schools on the existing foundation of the liberal-arts college. Second, other graduate programs, such as at Stanford University in 1891, were founded with the offering of both undergraduate and graduate programs. Some of the universities that began with the offering of both levels of study were those established as land-grant colleges with funding from the Morrill Acts of 1862 and 1890, and funding provided through the Hatch Act of 1887, for the development of experimental agriculture stations (Gumport, 1999). Third, Johns Hopkins University, under the direction of President Gilman, established an independent graduate school in 1876, with a strong emphasis on scientific research (Brubacher & Rudy, 2003; Gumport, 1999; Walker, Golde, Jones, Bueschel, & Hutchings, 2008).

Brubacher and Rudy (2003) stated that "Johns Hopkins represents the most important innovation in graduate instruction launched during the whole period between the Civil War and the First World War" (p. 178). President Gilman strove to make Johns Hopkins University unique among the other colleges by having the "best scholars in the world" (p. 178-179), through teaching and conducting scientific research in specialized fields, and by serving the needs of the country (Brubacher & Rudy, 2003). Brubacher and Rudy (2003) identified three other universities that were founded based on the "Hopkins Style" (p. 184): Clark University in 1888, the Catholic University of America in 1889, and the University of Chicago in 1892. Making a significant contribution to the development of graduate education, William Rainey Harper, founding president of the University of Chicago, followed in Gilman's footsteps by establishing a strong principle

of advanced instruction and research. As part of this principle, president Harper made scholarship, not teaching, necessary for faculty promotion (Brubacher & Rudy, 2003).

The University of Minnesota's graduate student handbook (2010) states that the institution awarded its first graduate degree (a Ph.D. in history) in 1888, prior to the formal establishment of the Graduate School in 1905. Even though the University of Minnesota's first president, William Watts Folwell, spoke, in his inaugural speech in 1869, of his vision that "a university is not 'merely an overgrown college" but rather 'a federation of professional schools'" (Gray, 1951, p. 44), establishment of the first advanced program did not occur under his administration. It was under the University of Minnesota's second president, Cyrus Northrop, that the Colleges of Law and Medicine were established in 1888. William Sullivan Pattee, who became the first dean of the newly established College of Law, was also the only permanently appointed faculty member for a time. Pattee taught the graduate law course, as outlined in Gray (1951), "His original course covered only two years. Within his time it was extended to three years for the regular daytime student and to four years for candidates in the night classes." Gray continues, "Graduate instruction at last was added. In 1889 the apprentice period of the College of Law ended and the legislature gave it a home of its own" (p. 91).

Berelson (1960) claimed that attempts in the United States to develop graduate programs of study separate from undergraduate study by, for example, Harvard and Yale, all failed initially. Their failed attempts, however, provided important lessons learned in the successful founding of the stand-alone graduate school several years later at Johns

Hopkins. President Eliot said this himself in a public address quoted in Brubacher and

Rudy (2003):

> I want to testify that the Graduate School of Harvard University, started feebly in
>
> 1870 and 1871, did not thrive, until the example of Johns Hopkins forced our
>
> Faculty to put their strength into the development of our instruction for graduates.
>
> And what was true of Harvard was true of every other university in the land
>
> which aspired to create an advanced school of arts and sciences (p. 182).

Berelson (1960) suggested the arguments that were made against earlier attempts

to expand American undergraduate education to include graduate education, prior to the

establishment of Johns Hopkins in 1876, were the same arguments that continued in his

day against making innovations to graduate education, arguments such as the importance

of not further delaying young men from their career and post-collegiate life. It was,

Berelson stated, inevitable that college education expand both on a broader and higher

scale due to the ever increasing body of knowledge and the young American man's[1]

desire to achieve greater learning.

Berelson (1960) goes on to outline four controversial issues that occurred around

the beginnings of graduate education (prior to 1876) and continued to be debated at the

time of his study. First, faculty members, in general, resisted changes to the academy.

Second, there was debate as to whether the primary goals of graduate education should be

scholarship or training for professional practice. Berelson wrote of a distinction between

---

[1] At the beginning of graduate education in the United States and on up to the publication of Berelson's
work in 1960, most of the graduate student body was male.

graduate education that has as its primary purpose that of providing training for the professions such as in divinity and the law, and graduate education provided as "pure learning" (p. 8) for scholarship purposes, and as an orientation to the academy. Third, the body of knowledge for each discipline was quickly increasing, but at an uneven rate, therefore having an impact on the distribution of resources and how higher education programs were organized. The fourth issue Berelson identified was the academy's need to provide service, both to serve itself, and to provide service to the community (Berelson, 1960).

Due largely to the cost, most graduate programs were not stand-alone schools, but rather were tied to an undergraduate program. The undergraduate program, larger and less costly, helped provide their sibling graduate program with necessary funding support and with a pool of student alumnae, many of whom went on to the graduate program of their alma mater. Again, according to Berelson (1960), the layering of graduate program onto the undergraduate program led to issues that are still being debated today. These issues included use of faculty hired to teach at one level to also teach at the other; holding classes with a mix of both undergraduate and graduate students; and the use of requirements (e.g., required attendance, lectures to large classes, undifferentiated levels of content being taught, and required course assignments) in the graduate program that were initially set up for the undergraduate program (Berelson, 1960).

The period between 1876 and 1900, beginning with the founding of Johns Hopkins and ending with the start of the Association of American Universities, is one that firmly established the role of science and scholarly research as central to graduate

education. Ten academic associations were established in this time period, beginning

with the American Chemical Society in 1876, and other scholarly associations that were

established in every major discipline. The Association of American Universities started in

1900 with the 14 institutions that conferred almost 90% of the doctoral degrees at that

time[2] (Berelson, 1960). The issues addressed in the early 1900s by the Association of

American Universities included the following topics identified by Berelson (1960) in the

following statement:

> Fellowships, the meaning of research, the character of the dissertation, the quality
>
> of the students, the foreign language requirement, the major-minor problem at the
>
> doctoral level, the proper examinations, the role of the Master's, preparation for
>
> college teaching, college-university relations, uniform statistics – all these topics
>
> came up in the first years of the AAU (p. 17).

Berelson also wrote that discussions at the time for requiring faculty to have a

Ph.D. were led in large part by the associations. The debate seemed to have been between

requiring the two-year Master's degree for college teachers and "reserving the Ph.D. for

the few genuine researchers" (Berelson, 1960, p. 21). Berelson (1960) identified several

programmatic issues in his present time. These were the lengthy time to degree, the value

of the dissertation and the time it takes, whether the Master's degree is, or should be, a

terminal degree or given on route to the doctorate, use of post-doctoral work to further

specific training in research, whether there is justification for a foreign language

---

[2] The 14 AAU charter members were Harvard, Columbia, Johns Hopkins, Chicago, California, Catholic University, Clark, Cornell, Michigan, Pennsylvania, Princeton, Stanford, Wisconsin, and Yale (Berelson, 1960).

requirement, whether the final examination has become too routine and too costly, and, how to evaluate the quality of graduate education.

As with undergraduate student expansion, so too did graduate schools see growth in the awarding of the Ph.D., from approximately 3,500 doctoral degrees awarded by 1900, to more than 40,000 a year at the start of the twenty-first century (Walker, Golde, Jones, Bueschel, & Hutchings, 2008). Kenneth Redd, Director, Research and Policy Analysis, wrote in a March 2007 Council of Graduate School Report that the number of doctorates awarded by United States doctoral institutions has continued to grow over the last thirty years, "especially in the fields of science and engineering" (p. 4). The total number had increased by 47% since 1970, 51% in science and engineering fields alone (Redd, 2007). The 2013 Survey of Earned Doctorates reported that 52,760 doctorates were awarded in that year from 421 institutions (mean per institution: 125.3; median per institution: 44).

The Carnegie Foundation for the Advancement of Teaching classified doctorate-granting universities as "institutions that awarded at least 20 research doctoral degrees during the update year (excluding doctoral-level degrees that qualify recipients for entry into professional practice, such as the JD, MD, PharmD, DPT, etc.). Excludes Special Focus Institutions and Tribal Colleges" (http://carnegieclassifications.iu.edu/). Carnegie Classification of doctorate-granting universities included the following three types with 2010 updated number of institutions within each type:

- RU/VH: Research Universities (very high research activity)
  - 35 private not-for-profit
  - 72 public

- RU/H: Research Universities (high research activity)
  - 25 private not-for-profit
  - 72 public
- DRU: Doctoral/Research Universities
  - 11 private for-profit
  - 48 private not-for-profit
  - 29 public

As with increased student enrollment and expansion of higher education institutions in general, federally funded research was an integral part of the growth in graduate education through the 1960s (Brubacher & Rudy, 2003). Federal funding of research in the universities assisted the growth of higher education, including graduate education, beginning in the 1940s. Walker, et al., stated, "The Manhattan Project and Vannevar Bush's manifesto, *Science, the Endless Frontier* (1945), ushered in the era of federal funding for university research" (2008, p. 23). The National Defense Education Act (NDEA), signed into law in 1958, was in response to the successful launching of the Russian space vessel, *Sputnik*, and continued to funnel federal funding to higher education institutions. These funds were initially directed to science and engineering areas supportive of national defense efforts but eventually broadened to the distribution of funding to the humanities and social sciences also. Federal funds supported increases in the numbers of faculty, doctoral education programs, graduate fellowships, and research efforts. For example, Smith and Bender (2008) documented that, "By 1968 the country had spent $3 billion on fifteen thousand NDEA graduate fellowships…" (p. 398).

Federal funding decreases starting in the early 1970s continue to be a struggle for all levels of higher education institutions today (Walker, Golde, Jones, Bueschel, & Hutchings, 2008). Weerts and Ronca (2006) reported that state funding for higher education

dropped by 40 percent since 1978, primarily due to the economic recessions of the early 1980s and the early 1990s. Other factors they suggested contributed to decreases in federal funding were the increased costs of state funded programs such as public K-12 schools, Medicaid, social services, and corrections.

The next section will review the literature on doctoral student attrition in the United States.

Review of the Literature on Doctoral Student Attrition in the United States

The following review of the literature includes 16 descriptive and analytical studies that have addressed the problem of doctoral student attrition in the United States over the past half century. The 16 studies that were chosen specifically studied student attrition at the doctoral level, included an institutional-wide or multi-disciplinary focus (as opposed to a single department or discipline), and most were primarily located in higher education institutions in the United States. Studies that collected data from the faculty themselves were a particular focus.

To understand how studies of doctoral student attrition have placed increasingly greater responsibility for student attrition on the institution (discipline, department, and the faculty advisor), each of the studies is discussed in chronological order, from Berelson's (1960) comprehensive study of graduate education in the United States, to Noy and Ray's (2012) analysis of the Doctoral Education and Career Preparation survey data from 4,010 doctoral students in 11 arts and sciences disciplines at 27 universities. For purposes of this chronological review, the research studies are reviewed in one of three phases of doctoral student attrition: 1) foundational research; 2) post-Tinto (1975)

model of college attrition (from individual to institutional responsibility); and, 3) recent research on doctoral student attrition: a focus on the advising relationship.

Of the 16 studies that make up this review of the literature on doctoral student attrition in the United States, noted in Table 1, seven were quantitative in methodology, using surveys to collect data (Anderson & Swazey, 1998; Berelson, 1960; Girves & Wemmerus, 1988; Maher, Ford, & Thompson, 2004; Nettles & Millett, 2006; Noy & Ray, 2012; Wilson, 1965). Seven of the 16 studies were qualitative in methodology, using interviews or focus groups (Barnes & Austin, 2009; Ferrer de Valero, 2001; Gardner, 2009; Golde, 2005; Knox, Schlosser, Pruitt, & Hill, 2006; Manathunga, 2005; Nerad & Cerny, 1993).

Two studies used mixed qualitative and quantitative methodology (Bowen & Rudenstine, 1992; Lovitts, 2001). Seven of the 16 studies analyzed data from both faculty and students (Berelson, 1960; Bowen & Rudenstine, 1992; Ferrer de Valero, 2001; Gardner, 2009; Lovitts, 2001; Manathunga, 2005; Wilson, 1965), seven from students only (Anderson & Swazey, 1998; Girves & Wemmerus, 1988; Golde, 2005; Maher, Ford & Thompson, 2004; Nerad & Cerny, 1993; Nettles & Millett, 2006; Noy & Ray, 2012) and, two from faculty only (Barnes & Austin, 2009; Knox, Schlosser, Pruitt & Hill, 2006).

Eight of the 16 studies analyzed data from one institution (Barnes & Austin, 2009; Ferrer de Valero, 2001; Gardner, 2009; Girves & Wemmerus, 1988; Golde, 2005; Maher, Ford, & Thompson, 2004; Manathunga, 2005; Nerad & Cerny, 1993).

Table 1

Selected Studies of Doctoral Student Attrition in the United States

Author(s)	Population and Data Source
Berelson (1960)	Data from questionnaires received in 1959, from 79 graduate program deans and 1,821 graduate faculty members of the Association of Graduate Schools (39 American university members), an additional 53 universities, and 2,331 degree recipients of the Ph. D. National Research Council data on recipients of the doctorate in 1936 and 1957. Graduate faculty respondents represented five disciplines: physical sciences, biological sciences, social sciences, humanities, and professional disciplines
Wilson (1965)	Survey data from 1,929 students who received their Ph. D. between 1950 and 1958; 25 graduate deans and 100 academic department faculty and administrators from 23 colleges and universities located in one of 16 states in the Southern Regional Education Compact. Faculty and administrator respondents represented physical sciences, biological sciences, social sciences, and humanities.
Girves and Wemmerus (1988)	Student records and a survey distributed in early 1985 to 948 master's and doctoral students who began a graduate program in fall 1977, in one of 42 departments across 12 colleges in one Midwestern university (486 students responded: 324 master's and 162 doctoral).
Bowen and Rudenstine (1992)	Data from the National Research Council's Doctorate Records File on 36,000 students and interviews with an unspecified number of faculty from 10 universities across six fields. Data used for analyses on attrition from the 1972-76 cohort across six fields of study (English, history, political science, economics, mathematics, and physics) at six of the ten universities. In-depth interviews of faculty in the English, history, and political science disciplines.
Nerad and Cerny (1993)	A review of 4,949 files of students entering doctoral programs at the University of California at Berkeley in 1978 and 1979. Interviews with 40 students in history, English, French, sociology, psychology, and biochemistry.
Anderson and Swazey (1998)	Analysis of 1,440 responses from a survey sent in the fall of 1989 to 2,000 doctoral students selected randomly from 99 departments in four disciplines (chemistry, civil engineering, microbiology, and sociology) at major public and private research universities.
Ferrer de Valero (2001)	Data from one U.S. public research university in the Mid-Atlantic region of 876 students enrolled between 1986 and 1990. Semi-structured, open-ended interviews of 16 faculty and 24 doctoral students.

Lovitts (2001)	Survey and interview data from 816 students enrolled full-time in Ph.D. programs between fall 1982 and fall 1984, and 33 faculty, from one rural public research and one urban private research university in the United States.
Maher, Ford, and Thompson (2004)	Survey data of 160 women Ph.D. doctoral degree recipients admitted to the Stanford School of Education between 1978 and 1989.
Golde (2005)	Student record data for all students who entered a doctoral program between fall 1984 and fall 1989 from four departments at one Midwestern university. Interviewed 58 students who had left the doctoral program.
Manathunga (2005)	Eight case study interviews with the award and certificate winners of the University of Queensland's 2000 and 2001 Supervision Awards. Focus groups were conducted with 32 students at varying stages in the program.
Nettles and Millett (2006)	Survey data from 9,036 students in their second year or more in one of 21 major doctorate-granting institutions across 11 disciplines.
Knox, Schlosser, Pruitt, and Hill (2006)	Interviews of 19 faculty advisors from APA-accredited counseling psychology doctoral programs who had been advising for at least 5-years.
Barnes and Austin (2009)	Interviews conducted in 2006 with 25 faculty advisors of students in Ph. D. programs at a public, research extensive, land-grant university located in the Midwest of the United States. The faculty represented three disciplinary areas (natural sciences, social sciences, and humanities).
Gardner (2009)	Interviews of 60 doctoral students and 34 faculty members at one public research-extensive university across six disciplines in 2007.
Noy and Ray (2012)	Survey on Doctoral Education and Career Preparation data from 4,010 doctoral students in 11 arts and sciences disciplines at 27 universities. Responses on advisor type collected in 1999 from students who had been in their doctoral program at least three years.

Each selected study is described further in the next section, followed by a summary of findings across studies related to the impact of the faculty advisor on doctoral student attrition.

Foundational Research on Doctoral Student Attrition

Eight of the 16 studies reviewed in this chapter analyzed data across multiple doctoral research institutions in the United States (Anderson & Swazey, 1998; Berelson, 1960; Bowen & Rudenstine, 1992; Knox, Schlosser, Pruitt, & Hill, 2006; Lovitts, 2001; Nettles & Millett, 2006; Noy & Ray, 2012; Wilson, 1965). Berelson and Wilson's studies were the first of these. The findings of both of these foundational studies demonstrated that the majority of respondents (faculty, administrators, and students) primarily attributed graduate student attrition to be the responsibility of the student. However, there was some foreshadowing of the change in thinking that was seen in subsequent decades, from a focus primarily on the individual characteristics responsible for student attrition to a broadening of the responsibility to the institution (department and faculty), in that both researchers noted the importance of the faculty advisor's direct attention and guidance, and orientation of students to the department.

Berelson (1960) began his study of graduate education in 1957 with a review of the current literature and published data available at that time. Berelson met with faculty and administrative members of several universities and in 1959 sent out questionnaires to all graduate program deans and graduate faculty members of the 39 American university members of the Association of Graduate Schools, plus faculty in an additional 53 universities, all of which conferred 10 or more doctorates annually. Seventy-nine questionnaires were returned from the 92 deans (86%), and 1,821 questionnaires were returned from 4,440 graduate faculty members (41%). Questionnaires were also sent to 3,843 recipients of a doctoral degree in 1957, with 2,331 of the questionnaires returned

(61%). Of the graduate faculty who returned questionnaires, five disciplines were represented: physical sciences (43%), biological sciences (52%), social sciences (46%), humanities (32%), and professional fields (38%).

Berelson (1960) included all disciplines except medicine and law. Of graduate students in Berelson's (1960) study, 35% made the decision to pursue a doctorate at the end of undergraduate college, and 65% made the decision after college, with most of these making the decision after completing their master's program. More students who enrolled in the humanities and in professional disciplines made their decision late. Over half were married prior to beginning their graduate study and another quarter married while in their program. Overall, 11% of the population of Ph.D. recipients in 1957 was female.

Berelson (1960) obtained an estimate of the graduate education attrition rate from survey responses and found the graduate deans' estimate to be at about 40% and the graduate faculty members' estimate to be just over 20%. Most of the faculty did not identify attrition to be a problem, whereas half of the deans identified attrition as a problem for the institution. Berelson believed the deans were in a better position to know the attrition rate than the graduate faculty, a finding supported in a later study by Lovitts (2001). Berelson (1960) explored differential attitudes in the attribution of reasons for attrition by asking respondents a survey question on what were the "most important" reasons for attrition (p. 169). As the results in Table 2 indicate, over two-thirds (69%) of the graduate deans indicated that lack of financial resources was the most important reason students did not finish the degree program. Most graduate faculty (64%)

Table 2

Survey Responses to Most Important Reasons for Attrition

Which of the following reasons are involved for the group of students that do not finish?	Percent respondent group indicated reason as most important		
	Graduate Deans	Graduate Faculty	Recent Recipients
Lack financial resources	69	29	25
Lack intellectual ability to do the work	50	64	52
Lack proper motivation	38	45	47
Lack necessary physical or emotional stamina	33	33	49
Found the degree wasn't necessary for what they wanted to do	19	10	12
Disappointed in graduate study and quit	1	12	21

Note. Table adapted from *Graduate Education in the United States*. Berelson, 1960, p. 169.

listed the lack of intellectual ability as the top reason for student attrition. A majority of

recent Ph. D. recipients who were asked to rank order a provided list of reasons for why

students in their department did not finish also gave the lack of intellectual ability as the

most important reason for attrition (52%), with lack of necessary physical or emotional

stamina (49%), and lack of proper motivation (47%) following close behind in frequency

of responses. The only reason listed that might be interpreted as the institution's

responsibility as opposed to the student's, was students who quit because they were

disappointed in graduate study. Recent recipients noted disappointment in graduate

studies as the most important reason at a frequency of 21%, in comparison to the faculty

at 12%, and the deans at 1%. In responses to this survey question, Berelson found that

graduate deans and faculty "do not consider it [attrition] the fault of the graduate school"

(Berelson, 1960, p. 169).

Berelson discussed time-to-degree differences between fields using three different measurements: 1) the elapsed time between receiving the Bachelor's degree and receiving the doctorate; 2) the elapsed time between entering upon graduate study and receiving the doctorate; and, 3) the actual time spent in doing the work for the degree (p. 157). Using the median "elapsed time from baccalaureate to doctorate" from the National Research Council data on recipients of the doctorate in 1936 and 1957, Berelson (1960) found a range in median duration from a low of 6 years in the physical and biological sciences to a high of 10 to 11 years in the humanities and professional fields.

Recent degree recipient and graduate faculty member respondents to Berelson's survey agreed on two primary reasons for lengthy time-to-degree completion: "doctoral candidates get too little direct attention, supervision, and guidance on their dissertations from their major professors, and that makes for unnecessary prolonging of the period of doctoral study" (one-third of the recent degree recipient respondents and one-fourth of the graduate faculty respondents) (p. 162). The other primary reason was lack of financial support.

Like Berelson's 1960 study, Wilson (1965) surveyed recipients of the doctoral degree, graduate deans, and faculty in the same approximate time period and same disciplinary fields, although Wilson surveyed a subset (23) of the 92 colleges and universities Berelson included in his population. Wilson (1965) studied time to doctoral degree through survey data collected from 1,929 doctoral students who received a Ph. D. between 1950 and 1958; 25 graduate deans; and 100 academic department faculty and administrators (deans, department chairs, and graduate faculty) from one of 23 colleges

and universities located in one of 16 states in the Southern Regional Education Compact. Academic department faculty and administrator responses were categorized "by broad academic areas as follows: physical sciences (46), biological sciences (22), social sciences (16), and humanities (16)" (Wilson, 1965, p. 10). A 12-page questionnaire was mailed by graduate deans at the 23 colleges and universities to 2,709 doctoral graduates with a response rate of 71.2% (1,929). Graduate respondents were distributed as follows: physical sciences (844; 44%), biological sciences (336; 17%), social sciences (418; 22%), and humanities (331; 17%). Graduate respondents were primarily male (94%), though the percentage of women respondents ranged from 1.6% in the physical sciences to 16.3% in the humanities.

Similar to Berelson's (1960) finding on median duration, Wilson (1965) found the average time-to-degree to be 7.5 years after receipt of the baccalaureate degree and 6.1 years after entry into graduate study. The average age at degree completion was 30.8 years with a range from 28 in the field of chemistry to 35 in the field of English.

Five factors related to time-to-degree were selected by at least one-fourth of the graduates who responded to the survey item, "To what extent was the amount of time it took you to get a doctorate affected by each of the following factors?" (Wilson, 1965, p. 46), in order of frequency: discontinuity of graduate attendance (32%); work as a teaching assistant (31.9%); nature of the dissertation subject, per se (30.4%); writing dissertation off campus while engaged in full-time employment (27.2%); and financial problems (27.3%). Response percentages for four of these five factors were higher in the social sciences than in the biological sciences. The exception was the nature of the

dissertation subject where the range was less, from 31% in the social science fields to 34% in the biological sciences.

Graduate deans and faculty, when asked about duration of doctoral study, identified in order of "total frequency of mention" (Wilson, 1965, p. 44): the importance of continuity in the program of study (affected by financial assistance, family obligations, and job opportunities that do not require a doctorate); the dissertation and research; student attributes (ability, aptitude, and persistence); factors related to the foreign language requirement and to undergraduate preparation; particular requirements or patterns of requirements (e.g., minor field expectations and minimum number of credits for degree); and, departmental expectations and faculty attributes and responsibilities. The first three responses can be largely considered the student's responsibility.

Many of the responses are very similar to Berelson's findings (lack of financial resources, lack of intellectual ability, proper motivation, necessary physical or emotional stamina, found degree was not necessary). Graduate deans more so than the faculty identified departmental expectations and faculty attributes and responsibilities (factors not found in Berelson's survey). These factors included orientation of students to department expectations, departmental climate, faculty advisor and dissertation committee guidance, and expectations of progress through the program (Wilson, 1965). Wilson did not identify what measurement was used to elicit graduate deans and faculty opinions and does not identify response frequencies. Wilson did state that the graduate deans included in the study were asked to obtain comments from representatives of the participating departments.

In his conclusions, Wilson suggested that the graduate school has a role in providing increased programmatic structure to address the prolonged length of time many graduates spend to achieve the doctoral degree. As Wilson published his book shortly after Berelson's study was published in 1960, there are many references to Berelson's findings, all of them found in footnotes. Among these footnoted references to Berelson's findings are similar median age of graduates by field, reports of a lower median time spent working on the dissertation due to Wilson's use of "elapsed time from topic approval to completion of the dissertation rather than respondent's estimates of actual time spent working on the dissertation" (Wilson, p. 102), and reference to Berelson's findings on anxiety as a possible explanation of graduate responses to Wilson's survey that their rate of progress was different than what they expected when they started their doctoral program.

The primary findings from the two foundational research studies (Berelson, 1960; Wilson, 1965) firmly attribute attrition to the student and do not challenge the overall responsibilities of the graduate school. Both researchers, however, made suggestions for departmental improvements, including providing more programmatic structure and faculty supervision and guidance, as well as, highlighted the importance of expectations of progression to degree completion. The next set of eight studies includes those that were published after the publication of Tinto's 1975 model of college attrition and analyzed data collected primarily in the 1980s (1977-1989). The findings in this set of studies show a clear transition of attributing attrition from the student to the institution, and also attention to the increasing diversity of students seeking the Ph. D. degree.

Post Tinto's 1975 Model of College Attrition

The majority of the studies included in this section of the literature review on doctoral student attrition are analyses of data collected in the 1980s and published between 1988 and 2005. Tinto (2006) stated,

> When the issue of student retention first appeared on the higher educational radar screen, now some 40 years ago, student attrition was typically viewed through the lens of psychology. Student retention or the lack thereof was seen as the reflection of individual attributes, skills, and motivation. This view of retention began to change in the 1970's [*sic*]. As part of a broader change in how we understood the relationship between individuals and society, our view of student retention shifted to take account of the role of the environment, in particular the institution, in student decisions to stay or leave (p. 2).

This shift from attribution of responsibility for attrition from the individual to the institution is seen in the eight articles described in this section, beginning with Girves and Wemmerus (1988) who included department characteristics in addition to student characteristics as a set of variables in their conceptual framework, and specifically builds on Tinto's 1975 theoretical model of college attrition.

In the two studies described in the previous section on foundational research of student attrition, student characteristics described all the findings in Berelson's (1960) survey (with the possible exception of one of the reasons listed on the survey: students who quit because they were disappointed in graduate study) and a majority of the findings in Wilson's (1965) survey where a minority of graduate dean and faculty

38

responses identified departmental expectations and faculty attributes and responsibilities as factors having an impact on the duration of doctoral study.

The eight research studies in this section include three that analyzed cross-institutional data (Anderson & Swazey, 1998; Bowen & Rudenstine, 1992; Lovitts, 2001) and five that analyzed data from one institution (Ferrer de Valero, 2001; Girves & Wemmerus, 1988; Golde, 2005; Maher, Ford, & Thompson, 2004; Nerad & Cerny, 1993). Three were quantitative (Anderson & Swazey, 1998; Girves & Wemmerus, 1988; Maher, Ford, & Thompson, 2004), three were qualitative (Ferrer de Valero, 2001; Golde, 2005; Nerad & Cerny, 1993), and two used mixed methods (Bowen & Rudenstine, 1992; Lovitts, 2001).

Girves and Wemmerus (1988) analyzed data from student records and a survey distributed in early 1985 to 822 master's and doctoral students who began a graduate program in one of 42 departments across 12 colleges in one major Midwest university in fall 1977. Fifty-nine percent (486) of students responded to the survey; 162 of the student respondents were doctoral students. By fall 1984, 52% (85) of the 162 doctoral students in the sample population had completed their degrees. The authors did not specify that the doctoral degree is a Ph. D., however, their description of doctoral degree progress includes "one's ability to do independent research" that may suggest the degree is a philosophy degree rather than a practice degree (Girves & Wemmerus, 1988, p. 184).

Girves and Wemmerus's (1988) research is the first study included in this chronological review of the literature that used variables in a conceptual model of graduate student retention. The researchers examined a conceptual model of graduate

student degree progress based on Tinto's (1975) theoretical model of college attrition and Bean's (1985) undergraduate student retention model. The conceptual model included four sets of "first stage" variables: department and student characteristics, financial support, and student perceptions of their relationship with faculty (p. 165). Second-stage variables included involvement in the program, satisfaction, and alienation. Grades and involvement were included as measures of academic integration. Satisfaction and alienation were included as measures of social integration (academic and social integration from Tinto's (1975) conceptual model).

At the doctoral-level, using hierarchical regression with degree progress regressed on all the variables, the combination of all second-stage variables with all first-stage variables in the model was found to be significantly related to doctoral degree progress (accounting for 37% of the variance in degree progress). However, it was only one variable at the second stage—involvement in one's program—that contributed to significance ($p < 0.05$), and only achieved significance at the $p < 0.01$ level in interaction with financial support and student perceptions of the faculty. In addition, the first-stage variables of department characteristics and student perceptions of the faculty were found to be significant factors in doctoral degree progress without the addition of the intervening variables. The measurement of student perceptions of the faculty included survey questions on being treated as a colleague by members of the faculty and the number of faculty members with whom a student relates. In these findings, attribution of student characteristics responsible for attrition decline and department characteristics and

the student perceptions on how they are treated by the faculty are more prominent attributes than in previous studies.

Bowen and Rudenstine (1992) selected 10 universities and six fields in the arts and sciences for their study of doctoral education in the United States. Universities were selected if they were recognized as having strong graduate programs, had large doctoral student enrollments over a period of time, and were willing and had the ability to provide the relevant statistics necessary for the analyses. The six fields of study were selected as representative of "a reasonably well-defined field that has enrolled significant numbers of students over many years" (p. 5). Data sources included the National Fellowship data set, and the Doctorate Records File, maintained by the National Research Council. Statistical data on over 36,000 students were included in the dataset. The researchers analyzed subsets of the 10-university set where data were not complete across all 10 universities. The data used for the analyses on attrition were from the 1972-76 cohort across six fields of study (English, history, political science, economics, mathematics, and physics) at six of the 10 universities (University of California at Berkeley, University of Chicago, Cornell University, Princeton University, Stanford University, and University of North Carolina).

Bowen and Rudenstine (1992) studied attrition rates across stages in the doctoral program. The first stage included course work, typically lasting two to three years. The second stage was between the completion of formal course work and the passing of a general or qualifying exam or other requirements. The final stage was the research, writing, and final defense of the dissertation. The researchers found the attrition rate to be

high, beginning with students who did not re-enroll for their second year and remained high throughout all subsequent stages of the doctoral program. In defining the first stage, they found that 87% of students successfully completed the first year. Of those, 80% achieved all but dissertation (ABD) status, and of those, 81% achieved a Ph.D.

Considering the attrition rate over each of these three stages provided a total completion rate of 56.6%, and an overall attrition rate of 46.4%. The authors examined the attrition rates by calculating the probability that a doctoral student will move on in their program having successfully concluded the previous stage. Bowen and Rudenstine (1992) found, by field, that natural sciences had the highest completion rate (65%), followed by social sciences (55%), and humanities (49%); these three categories represented the six disciplines included in the study. English and history were included in the humanities; economics and political science were included in the social sciences; and, mathematics and physics were included in the natural sciences.

The first study included in this literature review to examine program size, Bowen and Rudenstine (1992), completed an analysis of their data by whether the graduate program was small or large based on the size of the entering student cohort for seven of the 10 universities that had consistent data. Three universities (Berkeley, Chicago, and Columbia) had larger groups of entering students between the years of 1972 and 1976, with an average range from 145 to 328. Four universities (Cornell, Harvard, Princeton, and Stanford) had smaller cohorts of entering students from the same years, with an average range from 50 to 98. Completion rates by size of program and field ranged from 29% in English in the larger universities (compared to 59% in English in the smaller), to

76% in physics in the smaller universities (compared to 59% in physics in the larger). Combining all six fields by size of university showed an average completion rate of 41% for larger universities and 63% for smaller universities.

In their analysis of factors affecting completion, Bowen and Rudenstine (1992) found gender to be slightly explanatory (statistic not given) and suggested that structural reasons must be considered given the differences in completion rates across fields of study. The differences by gender for each of the broad fields listed above are: humanities (women: 44.8%; men: 51.8%), social sciences (women: 50.8%; men: 55.7%), and natural sciences (women: 58.8%; men: 65.3%). Students who had financial support (research and teaching assistantships and fellowships) had higher completion rates. The authors observed higher completion rates among students who held teaching assistantships in the English, history, and political sciences (EHP) fields, and suggested that, "Regular interaction with faculty members and students in the context of teaching assignments may well be an important, perhaps even vital factor, in encouraging some graduate students in the EHP fields to complete doctorates" (p. 12). However, similar to Wilson's (1965) findings, they found that students with teaching assistantships had a longer time-to-degree (Bowen & Rudenstine, 1992).

From an in-depth examination of the English, history, and political science (EHP) fields, including extensive interviews and reviews of institutional documentation, Bowen and Rudenstine (1992) found advising during the dissertation phase of the doctoral program to be inconsistent in practice and often too infrequent. Bowen and Rudenstine, in their discussion of dissertation advising, suggested the following:

From all the evidence available, this is perhaps the most variable of all variables,

because it depends so much upon individual personalities, styles, and

expectations. Even with the best of intentions, and apparent mutual

understanding, the entire dissertation process often goes awry because it is so

deeply structured on a personal apprentice-model, with both the professor and the

student being given very broad latitude. (p. 260)

Bowen and Rudenstine (1992) conducted interviews with faculty members and

found a wide variance of attitudes and practices in dissertation advising. Variations

ranged from dissertation advising ranking low in priority to advisors holding regular

meetings, setting clear expectations and deadlines, and "seeing the student through"

(p. 261). The most common practice was that advisors made themselves available when

the student asked for assistance. Bowen and Rudenstine found, with this type of an

accessible but inactive advisor, that students "do in fact often drift without guidance for

considerable periods of time, while faculty members continue to operate on the

presumption that their declared accessibility, and their genuine interest in students, are

sufficient to make the process work" (p. 261).

Bowen and Rudenstine (1992) emphasized the importance of "effective advising"

(p. 284), and in particular, regularly-held meetings with the student initiated by the

faculty advisor. The authors made a case in their chapter on recommendations for

evaluation of a faculty member's performance as an advisor. Among other questions they

suggested graduate schools use the following three criteria to regularly assess effective

advising: "How many Ph. D. candidates has a faculty member been advising?" "How

many dissertations have been completed?" and "When was each advisee seen last?"
(p. 284). Bowen and Rudenstine's analysis of their findings continued (along with
Girves and Wemmerus' (1988) findings) to place a stronger emphasis on the graduate
faculty advisor's responsibility for doctoral student completion than the earlier studies of
Berelson (1960) and Wilson (1965).

Nerad and Cerny (1993) analyzed doctoral degree retention and student interview
data at the University of California at Berkeley. They found that 58% of 4,949 students
who had entered the doctoral program in 1978 and 1979 had achieved a doctoral degree
by November 1989. Completion rate ranged from a low of 37% in languages and
literature to a high of 72% in the biological sciences. They found an average time-to-
degree of 6.9 years, with an average range from a low of 5.5 years in engineering to a
high of 8.9 years in the languages and literature field. They found no significant
differences in race/ethnicity or gender in time-to-degree. They did find a gender
difference (no significance testing done) in completion rate with a completion rate of
47% for women and a rate of 63% for men across all disciplines.

Nerad and Cerny (1993) interviewed 40 students from fields that had low
completion rates and longer time-to-degree (i.e., history, English, French, and sociology)
and students from fields that had higher completion rates and shorter time-to-degree (i.e.,
psychology and biochemistry). They found that students in the humanities and social
sciences with longer times-to-degree were more isolated and spent more time preparing
for their oral exams and, subsequently, more time searching for a dissertation topic and
preparing their prospectus. In a review of exit questionnaire data, students from social

science and humanities fields responded they were the least satisfied with departmental advising services and were more satisfied (than students in other disciplinary fields) with their individual advisor. The researchers suggested there was a link between departments "identified as having an impersonal environment that provided no professional student support activities or social events" (Nerad & Cerny, 1993, p. 34), and students who took a longer-time-to-degree or did not complete.

Similar to the findings of Girves and Wemmerus (1988), Nerad and Cerny (1993) found that students who reported feeling treated as "junior colleagues" and who participated in the program had shorter time to degree completion and completed at higher rates than students who reported feeling isolated with little interaction with faculty. These factors were also associated with departments that fit Biglan's (1973) classification of a discipline with "less well-developed paradigms (soft)" (Girves & Wemmerus, 1988, p. 181, parentheses in text). In summary, Nerad and Cerny's (1993) findings attribute responsibility for doctoral student attrition both to the student (over preparing for orals, searching for dissertation topic, personal reasons (found they did not need the degree and lack of fit), and to the departmental environment (impersonal environment, lack of activities, and lack of interaction with faculty advisor).

Anderson and Swazey's (1998) analysis of 1,440 responses from a survey sent in the fall of 1989 to 2,000 doctoral students found differences in the way students did their dissertation research in the fields of chemistry, civil engineering, microbiology, and sociology. Surveys were sent to doctoral students selected randomly from 99 departments in these four fields at major public and private research universities in the United States.

The survey included questions on what students' reasons were for attending graduate school, their course work, graduate assistantships, dissertation research and writing, graduate program climate, and interactions with faculty and other students. Overall, 91% agreed that faculty were accessible to them to some extent (50%) or to a great extent (41%), and 88% agreed to the statement that "students and faculty collaborate on publications" to some extent (37%) or to a great extent (51%).

Anderson and Swazey (1998) also found that students from the sociology discipline were least likely to agree that their department was community-like in its climate. In particular, responses to the item regarding student and faculty collaboration ranged from 70% of students in chemistry agreeing versus 15% of students in sociology. Furthermore, 49% of students in sociology agreed that "competition characterized their department to a great extent" compared to 15% of students in chemistry who agreed with this item (Anderson & Swazey, 1998, p. 8). The response differential between chemistry and sociology students regarding department collaboration versus competition may be important when considering a pattern of time-to-degree with the median time lapse since starting graduate school of 5.9 years in chemistry to 7.2 years in sociology (2006 Survey of Earned Doctorates). The authors concluded their paper with a recommendation that "faculty members collectively and individually have a responsibility for improving the experiences of their graduate students" (p. 12).

Ferrer de Valero (2001) analyzed student-record data from 1,438 doctoral students at a public land-grant research university who began a doctoral program between fall 1986 and spring 1990 and were counted as a completer if the student had earned the

47

doctoral degree by the end of the 1995 fall term. Most students in the study were men (66%). Analyzing only departments with more than five enrolled doctoral students, Ferrer de Valero retained 876 doctoral students in the analysis. Of the 876, 53% received their degree by fall 1995. The median rate of completion was 57.1%, and completion rates ranged from public administration and public affairs (15.2%) to plant pathology, physiology and weed sciences (80.9%). The median time to degree was about four and a half (4.6) years. Those taking the least time (3.3 years) were sociology, and those taking the most time (6 years) were computer science, public administration, and public affairs.

Factors that affected completion rates and time-to-degree were identified by Ferrer de Valero (2001) through semi-structured, open-ended interviews of graduate faculty members and graduate students who were randomly selected from a pool of those who met the selection criteria. In the departments that were characterized by high completion rates and short times to degree (HS), the factors found to promote success were financial support, departmental orientation and advising, and congruence between course work and research skills,

Departments that had more than five enrolled doctoral students were grouped as either a high or low completion rate department depending on whether their median completion rate was equal to, or greater than, or less than, the median of the population. Departments were also grouped as either a short or long time-to-degree department depending on whether their median time to degree was equal to, or less or greater than, the median of the population. Therefore, four department clusters were analyzed. Departments were categorized as follows: high completion rates and short times to degree

(HS); low completion rates and short times to degree (LS); low completion rates and long times to degree (LL); and high completion rates and long times to degree (HL). Two departments from each of the four clusters were selected at random: Family and Child Development and Chemical Engineering, both with high completion rates and short times to degree (HS); Finance and Aerospace Engineering, with low completion rates and short times to degree (LS); Chemistry and Biochemistry, with high completion rates and long times to degree (HL); and Physics and Psychology, with low completion rates and long times to degree (LL). Ferrer de Valero's 2001 study design, shown in Table 3, is similar to the study design proposed for this study.

Table 3

Department Categories by Rate of Completion and Time-to-Degree

Time-to-degree	Completion Rate	
	High	Low
Short	HS	LS
Long	HL	LL

Ferrer de Valero (2001) found the student-advisor relationship to be a positive factor in all four types of departments. The student–advisor relationship was found to be closer (most students described their advisor as a friend) and had a higher degree of involvement in the activities throughout the graduate process in all the departments categorized as having a high completion rate and short times-to-degree (HS). Ferrer de Valero found that "changing advisors was considered as an impediment to succeed in graduate school in all the four clusters" (p. 361).

The primary difference Ferrer de Valero reported between short-time versus long-time-to-degree departments were in type of financial support and whether students were taught how to conduct independent research as part of their coursework. However, Ferrer de Valero conceded that all but one of the students in the study had received financial support and most had teaching assistantships across both types of departments.

In high versus low-completion-rate departments, two factors were found to have made a difference. Departmental orientation was provided with more frequency and with more options in high-completion departments, and a departmental environment of collegial attitudes toward students was found in high-completion departments versus a more competitive environment in low-completion departments. Additionally, in responses to interviews, Ferrer de Valero (2001) found three-quarters of the faculty identified student motivation as a strong factor for student success and 42% of students identified motivation as important. In Ferrer de Valero's findings, attribution moves back to placing responsibility on student motivation, yet also supports evidence that the department (orientation and an environment of collegial attitudes toward students) has an impact on completion as well.

Lovitts (2001) surveyed 816 students, all of whom were enrolled full time in Ph. D. programs between fall 1982 and fall 1984 at one of two universities in one of nine departments. Of the 816 students, 511 (63%) received the Ph. D. degree and 305 (37%) did not complete the program. One of the universities was a public research university, and the other was a private research university. The public university was located in a

small town and the private one in a large city. Lovitts called the small public university "rural" and the larger private university "urban" (pp. 11-22).

Lovitts (2001) found an attrition rate of 33% across nine departments in the rural university, and an attrition rate of 68% across nine departments in the urban university. The nine departments were mathematics, chemistry, biology, economics, sociology, psychology, history, English, and music in both universities. The attrition rate at the rural university ranged from a low of 19% in chemistry to a high of 44% in music. The attrition rate at the urban university ranged from a low of 23% in psychology to a high of 82% in economics. Characteristics of the sample in Lovitts' (2001) study were 61% male, 88% white, 8% Asian, 2% black, 1% Hispanic/Latino, and 2% other/unknown race and ethnicity.

Lovitts (2001) found that students who did not complete the degree were more likely not to have received any financial support (25% of noncompleters versus 4% of completers). Students who obtained a Ph.D. degree were more likely to have had a research assistantship (64% of completers versus 21% of noncompleters), or a teaching assistantship (85% of completers versus 45% of noncompleters). In addition, students who completed were more likely to have actively chosen an advisor (47% of completers versus 23% of noncompleters). Lovitts (2001) found that an advisor who provided support, interest, information and guidance, had a positive impact on doctoral student completion. Almost all of the students who received a degree (97%), "selected or were selected by their last advisor," as compared to 57% who did not complete (p. 134). In addition, completers had more frequent interaction with their advisor than noncompleters.

51

Lovitts (2001) also interviewed 33 faculty members as a part of the study. Based on the faculty members' department chair and data from the *Dissertation Abstracts International* from 1987 to 1994, faculty were categorized as either high producers of Ph. D.s (18 of the 33), or low producers of Ph. D.s (15). All faculty members were white; all but two were men. Lovitts found that faculty who were designated as high producers listed multiple ways in which they established a relationship with their advisees in contrast to low producers who listed only one way advisee relationships were established. More students expressed interest in wanting to work with a highly-productive faculty member, either because of similar interests or after having taken a class from the faculty member, than students who selected a low-producing faculty member.

High-producing faculty members were more open to taking on new students and were more apt to have interaction with students in general. High producers stated they spent 4.85 hours a week individually with their advisees versus 4.50 hours a week for low producers. High producers initiated contact with their advisees more frequently and worked with them in collaborative research projects at almost double the frequency as low-producing faculty advisors. Overall, student advisees of high-producing faculty members were more satisfied with their advisor than student advisees of low-producing faculty members and the "more satisfied students were with their advisor the more frequently they participated in colloquia/brown bags, sports, and other social activities involving faculty and students" (p. 155). In addition, students who completed the degree were more likely to have had a high performing advisor. In sum, Lovitts (2001) wrote,

Students who work with advisors by mutual choice are more likely to get the advice and guidance they need to progress smoothly through their programs and into their careers, to be academically and socially integrated with their advisor, to be very satisfied with the relationship, and to complete the Ph. D. than students who have little or no say in the matter. (p. 164)

Faculty members who were interviewed were also asked to describe "their most and least successful adviser-advisee relationship to discern elements of the relationship and characteristics of students that make a relationship work" (p. 279). Student characteristics identified by both high and low performing faculty members as those that contribute to a successful advising relationship were "very bright, independent, self-motivated, hardworking, dependable, talented, resourceful, mature, articulate, and had good social skills" (p. 280-281). Other factors identified as contributing to a successful relationship were: "students who they could challenge;" "the quality of the student's dissertation;" "whether the student had gone on and had a successful academic career;" and, "the intellectual give and take they had with the student" (p. 281).

Differences were found in the responses between high and low performing in regard to the type of relationship advisors had with any advisees after graduation. High performing faculty responded that the relationships were collegial (although only identified staying in contact with former male advisees); low performing faculty members described situations where their past-advisee (now alumnus) contacted them asking for their advice. In providing descriptions of unsuccessful advising relationships, some respondents discussed whether they were responsible for getting students through

the program. Lovitts quoted two respondents: one high producing faculty who described his responsibility as such and one low producing faculty who did not. Overall, Lovitts (2001) found that faculty advising had a clear impact on student completion, placing greater attribution of attrition on the faculty rather than on student characteristics. In addition, the impact of rural versus urban institution contributed to differences in completion rates.

Maher, Ford, and Thompson (2004) analyzed survey data from 160 women Ph. D. graduates of the Stanford University School of Education. The 46-item survey was developed by the Stanford doctoral program in education to "identify factors affecting women's progress toward the doctoral degree" (p. 388). The researchers analyzed the data by comparing survey respondents across three groups:"(a) 'early finishers,' who completed their doctoral degree in under 4.25 years (Stanford operates on a quarter system), (b) 'average finishers,' who took 4.50 to 6.50 years to complete their doctoral degrees, and (c) 'late finishers,' who took 6.75 years or more to complete their doctoral degree" (p. 390).

The researchers found that the early-finishing group reported "few if any factors that constrained their degree progress," and of the many factors they identified as "facilitating their degree progress" (p. 391), the following five were statistically significant at $p < .01$: "Strong commitment to finish in a timely manner;" "Helpful advisor/committee;" "Productive prior professional experience;" and, "Dissertation went smoothly/able to quickly overcome problems" (p. 392). Significantly significant factors at $p < .01$, that facilitated degree progress for the late-finishing group were "Helpful

advisor/committee" and "Help/support from staff," although this last factor was significant in that many more responders stated they did not receive help or support from staff. Whereas most of the respondents who finished early reported few factors that constrained their degree progress, late-finishers identified multiple constraining factors. Responders who identified a factor as constraining, however, ranged from 3% to 52%. The researchers suggested that, "Taken alone, specific constraining factors tended to impact only a minority of late-finishing women; however, taken together, multiple constraining factors seemed to play a role in the doctoral careers of most of the late-finishing women" (p. 393).

Maher, Ford, and Thompson (2004) also compared responses between the early- and late-finishing groups and identified six themes that differentiated the two groups: "Commitment to Timely Degree Completion" (a greater number of early finishers had a strong goal to finish quickly compared to late finishers; "Working Relationships with Faculty" (late finishers responded that lack of a plan and poor mentoring constrained their degree progress); "Funding Opportunities" (more late finishers indicated insecure funding); "Family Issues" early finishers reported supportive family whereas late finishers reported constraints with family at greater frequencies); "Research Experiences," (a greater number of late finishers reported difficulty identifying a dissertation topic and in their research phase); and, "Capability to Make 'the System' Work for Them," (early finishers indicated greater ability to seek out help or support) (pp. 395-400).

Specifically regarding faculty advising, Maher, Ford, and Thompson (2004) found that "Faculty advisors often carefully choose among doctoral students to decide to whom and to what extent they are willing to provide meaningful mentoring relationship" (p. 387). Overall, Maher, Ford, and Thompson found that women who finished a Ph.D. program early, in comparison to women during the same time frame that finished late, stated with more frequency that they were motivated, confident, and supported.

Golde (2005) analyzed student record data for all students who entered a doctoral program between fall 1984 and fall 1989 from four departments (geology, biology, history, and English) at one university located in the Midwestern part of the United States. The researcher then conducted 58 interviews with students who had left the doctoral program for multiple reasons. The purpose of the study was to understand how departmental policies and practices influenced doctoral student attrition. Golde (2005) identified six reasons for attrition: Students found the norms and practices of the discipline and the profession did not fit their goals or their strengths; students were unprepared to meet the expectations of the department, did not fit in with their peers, and were academically underprepared in comparison with their peers; poor fit between advisor and student; students were disappointed with choice of academic career; students learn academic job market is highly competitive; and, students become isolated from peers and faculty. Although Golde (2005) focused on departmental practices and culture, the findings, limited by a small study of students who had left a doctoral program, primarily places responsibility for withdrawal as the student's responsibility with only

isolation and the fit between advisor and student as factors with possible departmental obligations.

The next section includes a review of research studies from 2005 to 2012. The six studies selected for the next section continue, as the last eight studies did, to include the institution (i.e., department and faculty) as potential factors in doctoral student success. A majority of the six studies in the next section differ from those reviewed in both prior sections in that they focus exclusively on the faculty advisor and student relationship (Barnes & Austin, 2009; Knox, Schlosser, Pruitt, & Hill, 2006; Manathunga, 2005; Noy & Ray, 2012).

Recent Research on Doctoral Student Attrition: A Focus on the Advising Relationship

The final six studies selected as a focus of this literature review were published from the middle to the end of the first decade in the 21st Century. Two of the six studies explored the experiences and perspectives of doctoral faculty advisors (Barnes & Austin, 2009; Knox, Schlosser, Pruitt, & Hill, 2006). Three of the six studies analyzed student and faculty responses to surveys or interviews (Gardner, 2009; Manathunga, 2005; Nettles & Millett, 2006). The final study in this section, Noy and Ray (2012), explored advisor type (i.e., "six dimensions of mentorship: *affective, instrumental, intellectual, exploitative, available*, and *respectful*" (italics in quoted text, p. 887)) from doctoral student responses to the Survey on Doctoral Education and Career Preparation.

Manathunga (2005) analyzed data collected from interviews with eight faculty supervisors (advisors) who were the award and certificate winners of the University of

57

Queensland's 2000 and 2001 Supervision. The eight award winners represented the

following disciplines: Health Engineering, Social Sciences, Humanities, Agricultural

Science, and Science. Data were also collected from 32 students in "a series of focus

groups conducted with students at varying stages of candidature and representing a cross-

section of genders, domestic and international students, and disciplines" (p. 221).

Student participants were not necessarily under the supervision of one of the

faculty award winners who were interviewed. Interviews were also conducted with four

support staff and learning advisors. The purpose of the study was to explore "how

experienced supervisors detect and deal with early warning signs that their research

students are experiencing difficulty" (p. 219). The warning signal most often identified

by participants (all types: supervisor, student, and staff) was "students avoiding

communication with their supervisors" (p. 223). However, it was the student and staff

participants who explained that this was not always simply a student problem. Rather, it

was described as a "culture of avoidance" (p. 223). Manathunga (2005) used the

following quotation from a student to explain:

> They [supervisors] don't see you, you get slower. It's easy to avoid them, no
>
> progress happens. The supervisor has no time to seek you out; you know they're
>
> busy so you don't want to bother them… (p. 223, brackets in quotation in text).

Manathunga found that not all supervisors were attending to or able to pick up

warning signs from students. Students and staff suggested this may be due to the

student's reluctance to discuss personal issues or to appear incompetent with their

supervisor. Additionally, some students identified relationship problems with their supervisor, as stated in the study,

> These included unrealistic or unclarified expectations of the students' and supervisors' roles and responsibilities; insufficient supervision; a lack of consistency and trust in the relationship; disagreements between supervisors; and an overall lack of supervisor interest in students' research (p. 225).

Manathunga found from interviews with the supervisors that they all met regularly with their students and felt they had built relationships that allowed the student to discuss any issue that was preventing them from making progress in their program. All of the supervisors also discussed the "importance of building research students' confidence as a fundamental teaching and learning strategy" (p. 229).

Manathunga's (2005) analysis of interview responses from faculty and staff, in addition to focus group responses from doctoral students, identified warning signs that students may be having difficulty progressing in the program. Further exploration into the reasons behind lack of progress showed difficulties in the supervisory relationship, in particular around communication, clarity of roles and expectations, and student confidence. Presenting the warning sign of student avoidance as more than an individual problem but that of a "culture of avoidance" (p. 233) may be indicative of studies of attrition that are more recent where the responsibility for lack of progress can lie both with the student and with the supervising faculty member.

Nettles and Millett (2006) analyzed 9,036 students from 21 major doctorate-granting institutions in the United States and found that a faculty member who is an

advisor and mentor was a critical factor to attainment of a Ph. D., particularly in the fields of education, engineering, and social sciences. Notably, the authors showed that having a mentor had a positive impact on time-to-degree for students in the humanities and social sciences. A faculty advisor was defined in the survey as, "persons assigned by their department to act in an official capacity in such ways as discussing and approving your coursework, or signing registration forms" (p. 96), and a mentor as, "someone on the faculty to whom students turned for advice, to review a paper, or for general support and encouragement" (p. 98).

Sixty-nine percent of students stated they have a mentor and 62% identified their advisor as also being their mentor. The percentage of students who have a mentor ranged by discipline from 64% in education to 75% in humanities; by gender from 69% of men in the sciences and mathematics and the social sciences to 77% of women in the humanities; and by race from 57% of African American students to 76% of white students.

Nettles and Millett (2006) found no statistically significant gender difference overall in how students rated their interactions with their advisors, except in engineering and education where female students rated their interactions less positive than did the male students. Faculty social interactions with students, defined by "student perceptions of the quality, ease, and satisfaction of their relationships with faculty in their programs" (p. 91), varied by discipline, with the highest rated faculty student interactions in engineering, sciences and mathematics, and education fields, and lowest in humanities and social sciences.

Students in engineering and education also indicated a high rating of academic interactions with faculty, and in contrast to their low rating of social interactions with faculty, students in humanities rated their academic interactions with faculty high. Faculty academic interactions with students in sciences and mathematics and social sciences were rated low. Faculty academic interactions included availability, advising, feedback, interest, and job placement (Nettles & Millett, 2006).

Nettles and Millett (2006) found gender and race differences in faculty social and academic interactions. In education and engineering, female students rated their social interactions with faculty at a lower frequency than did male students. African American students in engineering rated both their social and academic interactions with faculty at a lower frequency than did Asian American, white, and international students. Small differences were found between male and female students in their ratings of academic faculty interactions by discipline with female students giving lower ratings in engineering and education.

In summary, Nettles and Millett (2006) found that a faculty member who is an advisor and mentor was a critical factor to attainment of a Ph. D., and having a mentor improved times to degree for humanities and social science students with more than half of the students in these disciplines responding they had a mentor. However, the time to degree for humanities was the longest "mean elapsed time to degree" at 7.41 years (average was 5.97), and humanities student respondents were mixed in how they rated their interactions with faculty, giving them a higher rating in social and a lower rating in academic interactions. Statistically significant differences were found in engineering and

education where female students rated their overall interactions with their advisors and social interactions with faculty less positive than did the male students, and with African American students in engineering who rated their interactions overall with faculty at a lower rate than did Asian American, white, and international students.

Knox, Schlosser, Pruitt, and Hill (2006) analyzed data collected from interviews with 19 counseling psychology faculty members in APA-accredited counseling psychology doctoral programs. The purpose of the study was "to explore the advising relationship from advisors' perspectives (e.g., how advisors define the roles of advisor and advisee, the costs and benefits of advising, and one specific example of a good and one of a difficult advising relationship)…" (p. 492, parens in text). Most advisors (17 to 19 in frequency) described the role of advisor to "help advisee navigate program" and to be a "support or advocate" (p. 498).

Ten to 16 advisors defined the role of advisee as "be responsible, take initiative, and follow through" and to "communicate openly and honestly" (p. 498). An advisee's personal characteristics (positive or negative), respect (present or lack of) and communication (open or problematic) were the primary issues identified as characterizing the differences between a good advising relationship and a difficult one. An advisee having difficulties with their research typically characterized a difficult advising relationship. An advisor who felt ineffective working with an advisee also typically characterized a difficult advising relationship. The following issue was identified by four to nine advisors as contributing to difficult advising relationships, "after the advisee's

initial advising relationship was disrupted, the current advisor (i.e., the participant) took on the advisee" (p. 506).

Barnes and Austin (2009) analyzed data collected from interviews with 25 faculty advisors who taught at a U. S. public, research extensive, land-grant university located in the Midwest. All 25 faculty members had been identified as a "top producer of Ph. D. students in his or her department over a five-year period" (pp. 302-303) representing three disciplines: natural sciences (n=6), humanities (n=5), social sciences (n=6), and education (n=8). A top producer was defined by the number of doctoral dissertations the faculty member chaired or directed. The purpose of the study was to explore "the perceptions of 25 exemplary doctoral advisors, who have graduated a large number of doctoral students, about their roles and responsibilities as advisors" (p. 297). The researchers found that most advisors identified their role as primarily to help their advisees to succeed by "1) assessing advisees' needs, 2) helping them progress, 3) helping them find doable dissertation projects, 4) helping them cope with failure, and 5) helping them select committee members" (p. 304).

Gardner (2009) interviewed 60 doctoral students and 34 faculty members in 2007 at one public research-extensive institution in the United States in departments selected to both "represent diversity among the disciplinary spectrum" (p. 101), and the highest and lowest rates of doctoral student completion over a 20-year period. The six disciplines and their completion rate at the time of the study were engineering: 17.6%; mathematics: 37.6%; English: 56.4%; psychology: 70.2%; oceanography: 72.7%, and communication:

76.5%. Ten students and four to seven faculty were interviewed in each of the departments. The overall doctoral student completion rate for the institution was 52.3%.

Using attribution theory as a conceptual framework, faculty attributed reasons for student attrition to "student lacking" (53%), "student should not have come" (21%), and "personal problems" (15%). Students attributed reasons for other students leaving to personal problems (34%), "departmental issues" (30%), and "wrong fit" (21%) (Gardner, 2009, p. 103). A student lacking in ability included "drive, focus, motivation, or initiative" (p. 104), and faculty across all departments identified it as one of the main reasons for attrition. Approximately 20% of faculty identified "the student should not have come" as a primary reason for attrition across four of the six departments, not including oceanography and engineering. The last reason attributed to attrition, personal problems, was identified by faculty in all departments except English and oceanography, and about one third of the students in all departments except oceanography. Examples cited in this area from faculty centered on emotional problems, whereas students primarily discussed examples related to marriage and family.

One third of the students across all departments, except oceanography, also identified departmental issues, "including bad advising, lack of financial support, faculty attrition, and departmental politics" (p. 106). The last primary reason about one-third of the students gave was attributed to a lack of fit (Gardner, 2009). In summary, Gardner's (2009) findings show faculty respondents attributed reasons for doctoral student attrition entirely to characteristics of the student, whereas student respondents attributed reasons both to the student and to the department.

Noy and Ray (2012) examined data from 4,010 doctoral students who were in their third year or more of a doctoral program in 1999 and responded to questions about their primary and secondary advisors on the Survey on Doctoral Education and Career Preparation. The purpose of the study was to explore whether women and students of color perceived a disadvantage from her or his faculty advisor. Student respondents were asked to select from a list of 24 items the extent to which (using a 4-point Likert scale of "strongly disagree" to "strongly agree") the item described the behavior of their advisor (p. 886-887). The authors categorized the 24 items into "six dimensions of mentorship: *affective, instrumental, intellectual, exploitative, available*, and *respectful*" (italics in quoted text, p. 887). Comparison tests were completed using race, gender, and discipline.

Noy and Ray (2012) found that female doctoral student respondents reported that their perceptions of their "primary advisors are more affective" and their secondary advisors are more "instrumental" and "affective" when compared to the male respondents (p. 890). Differences in perceptions by race showed that "students of color report having a less respectful primary advisor than whites" (p. 890). Women of color reported less instrumental support and less respectful with their primary advisor compared to white men, men of color, and white women. Women of color, however, reported "having more supportive secondary advisors" (p. 903).

Noy and Ray (2012) also compared the responses of students in the biological and physical sciences with students in the humanities and social sciences. They found students in the biological and physical sciences reported they perceived more "instrumental support in their primary advisors" (p. 894) but less supported in all other

65

areas than students in the humanities and social sciences. The researchers reported their findings by discipline as similar to those found by Zhao, Golde, and McCormick (2005) who in their study of the same survey data (the Survey on Doctoral Education and Career Preparation) found "doctoral students in the social and biological sciences are less satisfied with their advising relationship than their peers in the humanities" (p. 12).

Noy and Ray's (2012) findings suggest that affective support from a doctoral student's primary advisor may not be as effective as instrumental and respectful support in degree completion due to the lower completion rates found in the major fields of humanities and social sciences (Gardner, 2009) as well as the lower completion rates reported for women of color in a Council of Graduate Schools occasional paper series report, "Overview of Research on Underrepresented Populations in Graduate Schools (http://www.cgsnet.org/cgs-occasional-paper-series/memphis-university/part-1).

The next section presents a summary of the findings on the impact of the faculty advisor.

Summary of Findings on the Impact of the Faculty Advisor

The following section presents a summary of the findings specific to the impact of the faculty advisor across the selected studies described in this review of the literature on doctoral student attrition.

In 12 of the 16 studies included in this review of the literature, faculty and or students have identified the faculty advisor-to-advisee relationship to be an important factor in doctoral student degree progress and completion. Two of the 12 studies specifically addressed the importance of the doctoral advisor in the final stage of the

66

doctoral program when the advisee is working on her/his dissertation (Berelson, 1960; Wilson, 1965). The other four studies (Barnes & Austin, 2009; Knox, Schlosser, Pruitt, & Hill, 2006; Manathunga, 2005; Noy & Ray, 2012) do not specifically address doctoral student progress or degree completion. Rather, the four studies explored faculty advising relationships with doctoral students, two of the studies analyzed data collected from the perspective of the faculty advisor (Barnes & Austin, 2009; Knox, Schlosser, Pruitt, & Hill, 2006), one study analyzed data collected from both the faculty advisor and doctoral students (Manathunga, 2005), and one study analyzed data collected from doctoral students (Noy & Ray, 2012).

The following bulleted statements present finding(s) from the 12 studies that included an exploration of the impact of the faculty advisor on doctoral student completion and or time-to-degree:

- In response to reasons for a prolonged time to degree completion, degree recipients and faculty agreed that lack of attention doctoral candidates received from their major professors was a factor (Berelson, 1960).

- Graduate deans and faculty respondents to Wilson's (1965) survey identified departmental characteristics, including advisor and dissertation committee guidance, as contributing factors to longer times to degree.

- Girves and Wemmerus (1988) found student perceptions of the faculty and the number of faculty members with whom a student relates as factors in doctoral degree progress.

- Bowen and Rudenstine (1992) found even with an accessible but inactive advisor students tend to drift in their progress toward the doctoral degree.

- Similar to the findings of Girves and Wemmerus (1988), Nerad and Cerny (1993) found that students who reported feeling treated as "junior colleagues" and who participated in the program had shorter time to degree completion and completed at higher rates than students who reported feeling isolated with little interaction with faculty.

- Nerad and Cerny (1993) and Ferrer de Valero (2001) found the relationship students had with faculty members in their program had an impact on time to degree and degree completion.

- Anderson and Swazey (1998) and Ferrer de Valero (2001) found similarities in the impact of departmental environments. Anderson and Swazey (1998) found that student respondents who agreed their department was more competitive than collaborative came from a field (sociology) that had longer times to degree. Ferrer de Valero (2001) found a link between an impersonal department and longer times to degree.

- Lovitts (2001) found that an advisor who provided support, interest, information and guidance, had a positive impact on doctoral student completion.

- Maher, Ford, and Thompson (2004) found early versus late finishing respondents identified having a helpful advisor and committee as a factor that facilitated their degree progress.

- Golde (2005) found, from interviews with 58 students who had left their doctoral program, that a poor fit between advisor and student was one of six reasons identified for attrition. In addition, Golde (2000) found that "the amount of time spent, the quality of the interactions, and a sense of care from advisor to student were all important" (p. 220) to helping students progress in a doctoral degree program.

- Nettles and Millett (2006) found that a faculty member who was identified by student respondents as being an advisor and a mentor was a factor in degree completion.

- Gardner (2009) found departmental issues as a factor in student responses to reasons for attrition.

The four studies that explored faculty advising relationships with doctoral students from the perspective of the faculty advisor found that advisors agreed that a primary part of the advisor role is to, in some way, help students complete the program.

- Manathunga (2005) found that the warning signal most often identified by participants (supervisors, students, and staff) was "students avoiding communication with their supervisors" (p. 223). Additionally, Manathunga (2005) found, from interviews with the supervisors, that all met regularly with their students and felt they had built relationships that allowed the student to discuss any issue that was preventing them from making progress in their program.

- Knox, Schlosser, Pruitt, and Hill (2006) found from interviews with 19 faculty members in counseling psychology doctoral programs that an advisee's personal characteristics (positive or negative), respect (present or lack of) and communication (open or problematic) were the primary issues identified as characterizing the differences between a good advising relationship and a difficult one. The researchers also found that most advisors they interviewed (N = 17) described the role of advisor to "help advisee navigate program" and to be a "support or advocate" (p. 498).

- Barnes and Austin (2009) found that most advisors identified their role as primarily to help their advisees to succeed by "1) assessing advisees' needs, 2) helping them progress, 3) helping them find doable dissertation projects, 4) helping them cope with failure, and 5) helping them select committee members" (p. 304).

- Noy and Ray (2012) found that women doctoral students of color reported that they received less "instrumental" and "respectful" support than white men, men of color, and white women. Also that students in the biological and physical sciences reported they perceived more "instrumental support in their primary advisors" (p. 894) but less supported in all other areas than students in the humanities and social sciences.

Across all 16 studies included in the review of the literature, the role of the faculty advisor, and the advising relationship as a consistently found factor (among other factors) in doctoral student success, is not debated. The extent to which the faculty advisor and

70

advisee relationship explains doctoral student success above other factors found to be significant remains unknown. Furthermore, the research that has been done at the doctoral level has focused on advising relationships generally. Few studies have focused on the perspective of the doctoral faculty advisor. Only a sub-set of these have explored the faculty advisor's role and experience with their own advisees. No studies have asked faculty to consider how their assessment of degree completion likelihood shapes their advising relationship with doctoral students. Chapter Three will present the research methodology for the study.

CHAPTER THREE: METHODOLOGY

This chapter presents the research question, conceptual framework, and research methodology to be used in the study. The study was designed to explore perspectives from doctoral faculty advisors focused on their assessment that a particular student will complete their degree after passing the preliminary exam and becoming a candidate for the Ph. D. (ABD status). A grounded-theory methodology was used to explore the research question.

Research Question

How do faculty assessments of degree completion likelihood shape their advising relationships with doctoral students?

The purpose of the study was to explore with experienced doctoral advisors the differential approaches they have taken with four categories of advisees, shown in Table 4, based on their assessment of likelihood of degree completion at the time the advisee entered the final stage of their Ph.D. program (ABD). Each doctoral advisor was asked to identify four students (using a pseudonym), one of whom represents each of the following four types based on their assessment of degree completion likelihood:

Table 4

Categories of Advisees upon Entering Final Stage of Ph. D. Program

Expected to graduate		High	Low
Completed degree	Yes	Type One	Type Three
	No	Type Two	Type Four

- Type One: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation and did graduate.

- Type Two: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation but did not graduate.

- Type Three: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph. D. program but did graduate.

- Type Four: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph. D. program and did not graduate.

Conceptual Framework

The conceptual framework underlying this study derives from two sources: Tinto's (1993) three-stage model on doctoral student retention; and Girves and Wemmerus' (1988) degree progression model. Barnes (2009) used these two theoretical models in a study of 25 advisors representing three disciplines (natural sciences, social sciences, and humanities) and one professional area (education). Barnes noted, "It is the notion of the importance that advisors have in the progression and persistence of doctoral students that provides an overlap between these two models..." (p. 328).

The conceptual framework, shown in Figure 1, builds on Table 4, showing the exploration of the perspectives of faculty advisors about the advising relationship that stemmed from a high or low expectation of completion of selected doctoral advisees at the point of time an advisee passed the preliminary exam. The point of time is "all but dissertation" (ABD) and is described by Tinto (1993), "Finally, having attained candidacy, the individual seeks to identify a dissertation topic, successfully carry out a doctoral research project, and defend that dissertation at a formal hearing" (p. 241). The study is placed within a contextual time frame of the final stage of the doctoral program. The focus of the study is on the advising relationship, a factor in both Tinto's 1975 and 1993, and Girves and Wemmerus's 1988 models. Both theories will be briefly described to articulate the conceptual framework for this study.

Categories of Advisees upon Entering Final Stage of Ph. D. Program					Role of assessment in subsequent advising relationship
Expected to graduate		High	Low		
Completed degree	Yes	Type 1	Type 3		
	No	Type 2	Type 4		

Figure 1. Conceptual framework for this study

Tinto (1993) described a theory of doctoral persistence based on his research on undergraduate student retention. Tinto described the beginning development of his theory by making three points, and only the third point pertains to the conceptual framework for this proposed study.

1) Student persistence at the doctoral level is likely to be more localized within the discipline and less influenced by institutional characteristics than found in undergraduate persistence. In Tinto's words,

> First, the character of doctoral persistence is likely to be much more a reflection of the particular normative and structural character of the specific field of study and the judgments that describe acceptable performance than a reflection of the broader university (1993, p. 232).

2) Social integration at the doctoral level is predicted to be found within the academic community. As Tinto (1993) describes,

> Second, the process of doctoral persistence, relative to undergraduate persistence, is more likely to be reflective of, and framed by, the particular types of student and faculty communities that reside in the local department, program, or school. In this respect, the notion of social integration at the graduate level is more closely tied to that of academic integration than it is at the undergraduate level (p. 232).

3) The faculty advisor relationship will be more important in student persistence at the doctoral level than was found (though still an important factor) in undergraduate retention.

The academic community described in Tinto's second point is likely to change over time. It is likely, then, that the process of doctoral persistence, especially in the later stages, will be more a function of the behaviors of a specific group of faculty or of a particular

faculty member (e.g., one's adviser) than it is of the local community generally (Girves and Wemmerus 1988).

Tinto's (1993) theory of doctoral student persistence, described briefly above, supports the conceptual framework of this study that the faculty advisor is critical to doctoral student success. Tinto's (1993) theory also supports the study's focus on the final stage of the doctoral program in the following ways. Tinto defined three separate stages of the doctoral experience and stated the importance of understanding a theory of doctoral persistence differently for each of these stages. The stages are:

1) A stage of "transition and adjustment" (p. 235) over the first year in the doctoral program.

2) A stage "leading to candidacy, entails the acquisition of knowledge and the development of competencies deemed necessary for doctoral research" (p. 236)

3) "The final stage of doctoral persistence that of the completion of a doctoral research proposal, to the successful completion of the research project and defense of the dissertation" (p. 237).

Tinto (1993) described a "longitudinal model of doctoral persistence" (p. 238) that suggests that student "attributes" (demographic, familial, educational, and financial) provide a platform for the formulation and commitment to education and career goals that lead to different levels and forms of participation in the program. Subsequently, the level of participation early in the doctoral program influences the extent the student will continue to participate in later stages of the program, developing relationships with

faculty and affiliations with disciplinary groups that are critically important to persistence and completion in the final stage of the doctoral program. Unfortunately, Tinto did not identify specific advisor-related variables essential to success in the final stage.

Girves and Wemmerus' (1988) built on Tinto's (1975) theoretical model of student dropout behavior with a degree-progression model using the following variables: department characteristics (academic discipline); student characteristics (age, gender, ethnicity, and marital status); financial support (loans, assistantships, fellowships, etc.); perceptions of faculty (the relationship between doctoral student and advisor); and, intervening variables (grades, involvement in the program, satisfaction with the department, and alienation). Analyzing data from student records and a survey distributed to 822 master's and doctoral students who began a graduate program in one of 42 departments across 12 colleges in one major Midwest university in fall 1977, the researchers found student perceptions of the faculty to be significant factors in doctoral degree progress. The measurement of student perceptions of the faculty included survey questions on being treated as a colleague by members of the faculty and the number of faculty members with whom a student relates.

These two models, Girves and Wemmerus' (1988) degree progression model, and Tinto's (1993) three-stage model on doctoral student retention, provided the foundation for the conceptual framework for the study. The next section of this chapter will describe the design of the study.

Research Design

The research design for the study is qualitative. Prior to this study, initial efforts were made by this researcher to design a quantitative method using a survey of faculty advisors. However, it became clear that further exploration was needed to understand the role of advisor assessment of degree completion likelihood in distinguishing between students who finish a Ph. D. and those who do not. A qualitative methodology is an appropriate approach for exploratory research (Creswell, 2013).

Several research studies that were reviewed in the previous Chapter Two, used a quantitative method of data collection (Berelson, 1960; Girves & Wemmerus, 1988; Maher, Ford, & Thompson, 2004; Nettles & Millett, 2006; Noy & Ray, 2012; Wilson, 1965), and found a relationship between faculty advising and graduate student success, particularly time-to-degree. In addition to the conceptual framework, this study also builds on these findings to explore the yet largely unknown path from within the advisor role to doctoral student persistence and degree completion. The study's research design was structured to explore the advising relationship from the viewpoint of the faculty advisor.

As described by Creswell (2013),

Qualitative research begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem. To study this problem, qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive

to the people and places under study, and data analysis that is both inductive and deductive and establishes patterns or themes" (p. 44).

Following Creswell's description of qualitative methodology, interviews of faculty advisors were conducted to explore the characteristics of specific types of advising relationships and to understand how faculty assessment of degree completion likelihood shapes advising relationships. How a grounded theory approach was used in this study is described in the next section.

The Grounded Theory Approach

Creswell (2013) identifies five approaches to qualitative inquiry: narrative, phenomenological, grounded theory, ethnographic, and case study. The author defined the "intent of a grounded theory study is to move beyond description and to generate or discover a theory." He continued by explaining that "participants in the study would all have experienced the process, and the development of the theory might help explain practice or provide a framework for further research" (Creswell, 2013, p. 83).

The grounded theory approach is particularly relevant to this study as the participants were experienced faculty advisors whose views on advising contributed much data to the research question being studied. Furthermore, as shown in the review of the literature in the previous Chapter Two, the attribution of reasons for doctoral student attrition has changed over time from Berelson's 1960 foundational study, adding to the rationale for an approach grounded in time and context.

The purpose of the grounded theory study is to understand if an advisor's assessment that a particular student will complete their degree plays a variable role in the

advising relationship for a student who is ABD. As addressed in the previous sections, the literature on doctoral advising does not specifically address the role of a faculty advisor's assessment of degree completion likelihood on the advising relationship. Interviewing experienced faculty advisors provided information from the faculty advisor perspective to explore and develop a general framework on what happens during this time within this important relationship.

Interview questions were designed to be broad, with the intention to allow the faculty advisor to describe their experiences and perspectives with a focus on one, several, or all four types of students identified at the beginning of the chapter. An open-ended structure was designed to allow the participant to describe their experience with the individual advisee they identified for each category as well as any contextual components they recalled.

Open-ended interview questions allowed the participant to address both the typical steps in the advising process and any differences they recalled specific to the individual advising relationship that fit one of the four categories. Primarily the participant was asked to "tell the story" for each type of advisee they selected. Participants were asked if they would allow follow-up questions so that the researcher had an opportunity to clarify and pursue additional questions helpful to further form an understanding of the advising process under study. By providing a structure for the primary interview that allowed an open-ended exploration on the part of the participant, re-engaging the participant for follow-up questions and clarification if needed; and, with a plan to interview 15 to 20 participants, a saturation of the advising process was expected to be achieved.

The challenge to the researcher in the grounded theory method is to "set aside, as much as possible, theoretical ideas or notions so that the analytic, substantive theory can emerge" (Creswell, 2013, p. 89). The researcher addressed the challenge in being transparent about her own perspective, presented in the next section, and by using a systematic approach in the data analysis, presented in the forthcoming data analysis section (Creswell, 2013).

Researcher Perspective

As a past member of the graduate faculty in the School of Social Work at the University of Minnesota, Twin Cities, this researcher had the opportunity to serve on school, college, and university committees, and engaged with tenured, tenure-track, and contingent faculty members on issues of student admissions, institutional policies and procedures, curriculum, and scheduling. In her current role as an academic administrator in a private, for-profit online university, she works closely with faculty advisors of students who are in a graduate program, primarily at the Master's level.

As the researcher began her own doctoral program and prepared for preliminary exams, she was initially interested in a dissertation topic that explored the intersection between the growth of contingent faculty in higher education institutions in the United States and doctoral student success. However, in her preliminary examination she realized the intersection was very tenuous, since contingent faculty typically may have only an indirect impact on doctoral student study. A result of the preliminary examination discussion was that the researcher's interest was piqued in the problem of doctoral student attrition.

81

The researcher's past roles as a graduate instructor, committee member, and her current roles as a doctoral student and in academic administration, provide her with the perspective and experience necessary for interviewing faculty advisors about their role and expectations with doctoral advisees. It is in her current role as a doctoral student in the final stage of her doctoral program, however, that makes it impossible for her not to relate to the different types of advisees the interviewees are describing. The researcher thought it possible that differentiation would occur in the faculty advising relationship between advisee types. She did not, however, have a pre-formed theory or idea as to how this differentiation would manifest. The possibility of differentiation was set aside in order for the findings to emerge without influence from each interviewee and for the conclusions to be grounded in the data.

Human Subjects Approval

The study was approved in July 2015 by the University of Minnesota Institutional Review Board (IRB) Human Subjects Committee as exempt from review under federal guidelines 45 CFR Part 46.101(b) category #2 for Surveys/Interviews, Standard Education Tests & Observations of Public Behavior. The study met the exempt requirements as it involved no more than minimal risk to participants; the selection of participants was equitable; adequate provisions to maintain confidentiality of the data were made; and, a consent process was followed that disclosed the research activity, a description of the procedures, emphasized that participation is voluntary, included the researcher's name and contact information, and made adequate provisions to maintain the privacy of the participants. The study was not required to obtain written consent from the

participants. Rather, a consent information form titled "Information Sheet for Research" (see Appendix A) was provided to participants prior to the interview. The information sheet for research provided a description of the study; the reason they were selected as a possible participant; interview procedures; how records of the study were to be kept confidential; the voluntary nature of the study; and contact information for the researcher, her advisor, and the Research Subjects' Advocate line.

Research Subjects

A purposeful, as opposed to a random, sample was used for the study. Patton (2002) stated that "purposeful sampling is one of the core distinguishing elements of qualitative inquiry" (p. 272). Furthermore, Patton stated that "the logic and power of purposeful sampling lies in selecting *information-rich* cases for study in depth. Information–rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry, thus the term *purposeful* sampling" (p. 273, itals in text).

The research subjects for the study were self-selected from the population of tenured members of the graduate faculty from four U.S. doctorate-granting institutions with very high research activity located in the "Great Lakes" or "Plains" regions as defined in the Carnegie Classifications, and have graduated more than 50 doctorate recipients in 2013 in one or more major fields of the social sciences (Anthropology, Economics, Political Science, Psychology, Sociology, and Other social sciences) identified by the National Science Foundation Survey of Earned Doctorates, 2013.

Table 5 provides information on the four U.S. doctorate-granting institutions located in the regions defined in the Carnegie Classifications regions as "Great Lakes" and "Plains" with similar number of doctorate recipients in 2013 in the major field of social sciences and mixed in respect to the Carnegie Classifications of "large four-year, primarily nonresidential" and "large four-year, primarily residential." The four institutions are categorized as RU/VH: Research Universities (very high research activity).

Table 5

Selected U.S. Doctorate-granting Institutions with Number of Doctorate Recipients in Social Sciences: 2013

Institution	Social sciences	Region	Setting
Institution A	76	Great Lakes	Residential
Institution B	104	Great Lakes	Nonresidential
Institution C	101	Plains	Nonresidential
Institution D	79	Great Lakes	Residential

Source: NSF/NIH/USED/USDA/NEH/NASA, Survey of Earned Doctorates, 2013

The selection of the major field of social sciences was because these disciplinary areas have consistently demonstrated attrition rates that lie between the higher rates that have been found in the field of humanities and the lower rates in the natural (laboratory) sciences fields (Bowen & Rudenstine, 1992; Ehrenberg, Jakubson, Groen, So, & Price, 2005). Restricting the field to one major area also provided similarities in the expectations of completing the dissertation requirement (e.g., independent research in the social sciences versus team projects in lab sciences) and relationship with an advisor (e.g., work in collaboration with advisor's funded research more typical in laboratory sciences versus independent research more typical in the social sciences).

All faculty members in select sub-disciplinary departments (i.e., sociology, anthropology, and political science) within the major field of social sciences in the four institutions were sent a recruitment letter (see Appendix B) describing the study and the inclusion criteria, with an invitation to be interviewed. Names and contact information (including phone and email addresses) were obtained from public-facing University web sites with links to directories. Faculty members were asked to self-select by indicating they were currently in a tenure-track position and had been at the institution for at least ten years. These two criteria were used to identify faculty who had enough years of experience, as a doctoral faculty advisor and as a committee chair, to have advised students through the final dissertation stage of their doctoral program with some students having completed the degree. Ten years of experience also allowed the faculty member to know the culture of the institution. Interviewing faculty with multiple years of experience has precedent in a study of 19 counseling psychology faculty members, who had been advising for at least five years, about their advising relationships (Knox, Schlosser, Pruitt, & Hill, 2006).

Uncertain as to how many faculty members would respond to the invitation to interview, the recruitment letter was first sent by email, at the end of August, 2015, to the 253 faculty members who were listed on the University web site in sociology departments at the four selected institutions. Eighteen faculty members responded they were interested in participating by completing a short online survey as requested in the recruitment email letter. The online survey was developed using the *Qualtrics* online survey tool through a secure authentication web site on the University of Minnesota

server. Attempting to obtain 20 interviews, the recruitment letter was then sent by email, at the end of September, 2015, to the 123 faculty members who were listed on the University web site in anthropology departments at the same four institutions. Three faculty members responded by email that they were interested in participating in the study. To insure an adequate number of interviews, the last recruitment letters were sent by email, in early October, 2015, to the 166 faculty members who were listed on the University web site in political science departments at the four institutions selected for the study. Three faculty members responded with interest in participating.

Overall, the recruitment letter was sent by email to a total of 542 faculty members who were listed on the web sites of three sub-disciplinary departments in four Universities. Twenty-four faculty members replied by email or by completing the online survey that they were interested in participating in the study. Thirteen out-of-office replies and 15 delivery failure notices were received. In addition to the affirmative responses, out-of-office replies, and delivery failure notices, 30 faculty members sent a reply email message with the following types of response: Nineteen faculty members responded that they did not meet the criteria (inclusion criteria were included in the recruitment letter); one faculty member's spouse replied with information that he had died recently; six faculty members responded with regrets that they were not available during the study's interview time frame (included in the recruitment letter); and, four responded that they decline the invitation to interview. Factoring out ineligible and unavailable replies, the response rate was 24 out of 488, or 5%.

Faculty members who responded that they were interested in participating in the study were sent an email message thanking them for their interest in interviewing and asking them to provide two available times to interview (see Appendix C). With all but one faculty member, one of the two available times they gave to interview worked with the researcher's schedule. With the one faculty member who provided available times to interview that did not work for the researcher, a follow-up email was sent asking for an additional option. The additional time was provided and confirmed. Of the 24 faculty members who responded affirmatively to be interviewed, and were sent the follow-up request for two available times, four did not respond. A second request sent to the four after two weeks also received no response. A final participant sample of 20 was established. Telephone interview appointments with the 20 participants were scheduled and held between September 15 and October 29, 2015. One faculty member responded that they had several decades of experience as a university professor but had only been at his current university for eight years. The researcher's advisor agreed that the faculty member could be included in the study.

Upon agreement to interview, each participant was sent, by email, a confirmation of the date and time along with information asking them to identify, prior to the interview, one to four (all four if possible) doctoral student advisees who, at the time of their completion of all the requirements of their program with the exception of the dissertation (ABD), represented one of the categories represented in Table 4 (located at the beginning of this chapter) (see Attachment D for the confirmation email).

Participant Consent, Confidentiality, and Protection

Participants were sent, by email, the research information form (Appendix A) prior to the scheduled interview. At the start of each interview, the researcher asked the participant if they had received the research information form and if they had any questions. All but one participant stated they had received the form and did not have any questions. For the one participant who stated he could not find the form, the researcher read through it on the phone, prior to starting the interview or the audio-tape recording. Upon ending the interview the form was sent by email to the participant. Each participant was then asked for their permission to audio-tape the interview. Every participant agreed. Upon their agreement the audio-tape was started and the researcher asked the participant to state for the record they had received the research information form, had no questions, and permitted the interview to be audio-taped. Audio-taped recordings of the interviews were transcribed by a professional transcriber. All research records and materials, including transcripts and the interview recordings, were kept on a secure University server or on a personal password-protected computer that was only accessed by the researcher.

Anonymity was protected by assigning pseudonyms to each participant. The transcripts were identified by a code. Electronic copies were stored on a secure University server. Hard copies were stored in a locked file in the researcher's home office. Only pseudonyms were used in the writing of the dissertation report. Participants were not informed of their pseudonym. Interview recordings were destroyed after the study was completed.

Instrument

Data was collected through semi-structured interviews, conducted over the telephone, with individual tenured faculty members. Interviews are a primary method of data collection in a grounded theory study (Creswell, 2013). A semi-structured interview protocol was used as defined by Orcher (2005): "A semi-structured interview can have a core set of questions to be asked of all participants, while allowing the interviewer to add additional questions as needed to explore unexpected findings" (p. 131). The semi-structured interviews followed a scripted outline as defined by Creswell, "a form about four or five pages in length (with space to write in answers), with approximately five to seven open-ended questions and ample space between the questions to write responses to the interviewee's comments" (p. 164).

Conducting interviews over the telephone was a practical way to interview participants who lived at a distance from the researcher and across several states in the U.S. All but one interview was conducted using the telephone, regardless of location, to provide an equitable and consistent experience. One participant urged the researcher to meet for an in-person interview. The researcher agreed. This interview had to be excluded from the results due to the noisy environment that prevented an audio-recording. Another interview was also excluded from the results because the audio-recording stopped after five minutes. The other 18 interviews were recorded for subsequent transcription and analysis

Interview Pilot

Pilot interviews were conducted with two faculty members with tenure at the University of Minnesota, Twin Cities. Both of the faculty are members of the researcher's doctoral committee. One is the researcher's advisor. The pilot interviews were valuable in determining the average time needed to complete the interview and in identifying any questions that were unclear or concerning to the interviewee. Based on the pilot interviews, it was determined that a one-hour interview provided sufficient time for the participant to address the interview questions and would also accommodate the potentially busy schedules of the participants. It was also determined that the questions were clear and sufficient.

Interview Questions

The following information provides context and reference for the study's interview questions. The first two interview questions were designed to elicit general information about the participant's general practice and approach to advising doctoral students.

1) In general, how do you define your role as an advisor and what is your typical approach to advising?

2) In what ways is your typical practice and approach different from what you experienced from your doctoral advisor?

Questions 3 and 4 were intended to gather information from the participant on each student they identified to fit one of the advisee category types defined in the previous section and provided to interviewees prior to the scheduled interview. The intent of

Question 3 was to provide an initial description of the student being addressed for the subsequent set of interview questions (questions 4, 5, and 6) that were asked for each advisee category type.

3) How would you characterize (or describe) the student you chose to represent the following category (one of the four categories will be identified).

The intent of question 4 was to allow for a deeper exploration of the circumstances and context surrounding the advising relationship with the advisee identified for each type.

4) How did it come to be that you were this person's advisor?

Question 5 allowed the participant to describe the reasons they selected a student in particular to fit one of the advisee types. Follow-up questions were often asked to assist the researcher in understanding the participant's belief and perspective underlying their selection.

5) Describe what you can recall about what formed your belief that the student was or was not likely to complete within an expected period of time.

Question 6 was an open-ended invitation to the participant to tell the story of each student they identified for each advisee type.

6) Tell the story of your experience with this student.

As with previous questions, the researcher typically asked follow-up questions to assist in understanding the story of the advising relationship.

Data Analysis

The data was analyzed in the form of a transcript of each telephone interview and notes taken by the researcher. Corbin and Strauss (2008) stated that, "analysis involves

what is commonly termed coding, taking raw data and raising it to a conceptual level"

(p. 65). Creswell defined the process of analyzing data in qualitative research as follows:

> Preparing and organizing the data (i.e., text data as in transcripts, or image data as
>
> in photographs) for analysis, then reducing the data into themes through a process
>
> of coding and condensing the codes, and finally representing the data in figures,
>
> tables, or a discussion (2013, p. 180).

Preparing for Analysis

During each interview the researcher took notes on key points for reflection

afterwards and to refer back to if additional information was needed to clarify and verify

understanding. After each interview, the researcher added to the notes any thoughts about

possible emerging themes. Creswell (2013) identifies this process as "memoing" (p. 89).

The written transcript, upon receiving it from the transcriber, was read through fully to

"obtain a general sense of the information and to reflect on its overall meaning"

(Creswell, 2003, p. 191).

Open Coding

After a read through of all transcripts, each transcript was first pre-coded on hard-

copy, using underlining and circling to identify potential code words, and quotations that

may be used to illustrate the code (Saldana, 2013). Next, the "In Vivo Coding" (Saldana,

2013, p. 91) method was used by entering words of the interviewee themselves, captured

on the transcripts, into an excel spreadsheet using an anonymous reference identifier for

each transcript, entering the in vivo code word or phrase, and the sentence or paragraph

that contained the coded word or phrase. Entering the coding data into an excel

spreadsheet in this manner made it easy to filter by code word and to find the source when more context was needed.

The second coding cycle process involved reading through each interviewee's response to each question. For example, reading through all interviewee responses to the first question, then going back and reading through all interviewee responses to the second question, and so on. In this second coding cycle process, initial code words that related to a category were provided that category label. For example, the initial in vivo code words: "guide," "help them get through," hands-on," "facilitator," "mentor," "meet regularly," were categorized as "guide through program." The second cycle coding process is described by Saldana, 2013:

> As you code and recode, expect – or rather strive for – your codes and categories to become more refined and, depending on your methodological approach, more conceptual and abstract. Some of your First Cycle codes may be later subsumed by other codes, relabeled, or dropped altogether. As you progress toward Second Cycle coding, there may be some rearrangement and reclassification of coded data into different and even new categories (p. 11).

The next coding process included a search for themes by reviewing each interviewee response, and the applied category labels, in the following areas: advising approach; as to whether the faculty assessment of each advisee's degree completion likelihood was high (types 1 and 2) or low (types 3 and 4); and, then what transpired in the advising relationship for each advisee type. Analyzing each component of the data by comparing the participant's response to the same question across advisee type and

comparing their responses across advisee type to other advisor responses was an important procedure in grouping together similar concepts and to identify differences. Corbin and Strauss (2008) described it in this way:

> As the researcher moves along with analysis, each incident in the data is compared with other incidents for similarities and differences. Incidents found to be conceptually similar are grouped together under a higher-level descriptive concept such as "flight." This type of comparison is essential to all analysis because it allows the researcher to differentiate one category/theme from another and to identify properties and dimensions specific to that category/theme (p. 73).

Themes were developed based on interviewee responses to the questions, the study's conceptual framework, and review of the literature (Saldana, 2013). Themes found to be similar were collated and refined into primary and secondary themes. Primary and secondary themes were found that characterized each category basically following the interview question structure. As Saldana (2013) explained, using quotations from Butler-Kisber (2010), about the "winnowing down of themes:

> Butler Kisber (2010, pp. 50-61) advises that this process consists of extracting verbatim "significant statements" from the data, "formulating meanings" about them through the researcher's interpretations, clustering these meanings into a series of organizing themes, then elaborating on the themes through rich written description (p. 176).

The next section describes the procedures undertaken to validate the process and findings of the study.

Validity of the Study

Creswell (2013) defined "'validation' in qualitative research to be an attempt to assess the 'accuracy' of the findings, as best described by the researcher and the participants" (pp. 249-250, quotations in text). Creswell also stated, "…there are many types of qualitative validation and that authors need to choose the types and terms with which they are comfortable" (2013, p. 250). In this manner, this study used the following validation strategies: an external check of the research process; clarifying researcher bias; member checking; and, rich, thick description. How each of these strategies was used is described next.

External Check of the Research Process

Creswell (2013) defined a person that provides the researcher with an external check of the research process as, "an individual who keeps the researcher honest; asks hard questions about methods, meanings, and interpretations" (p. 251). External checks of the research process were performed by the researcher's advisor through regular meetings and reviews of drafts of the report.

Clarifying Researcher Bias

This researcher has written about background experiences she has had that relate to the study in a previous section. It is expected that the researcher has, as Creswell (2013) suggested, "…past experiences, biases, prejudices, and orientations that have likely shaped the interpretation and approach to the study" (p. 251). In particular the researcher's own relationship with her advisor and experience as a doctoral student would likely bias interpretations in the study if they remain unconscious and unchecked. To

95

facilitate the process of awareness, the researcher took notes throughout the study, from making preparations for the interviews, through the initial readings of the interview transcripts, to making final interpretations.

The researcher's experience as a doctoral student was the basis for many thoughts and reflections in the analysis of the data for this study. The researcher and her advisor often discussed their own advising relationship. In addition, the researcher is a member of a small group with five other doctoral students who have the same advisor, providing another level of context for consideration of advising relationships. These thoughts, reflections, and discussions provided a more personal, experiential and contextual framework along with the study's literature-based conceptual framework that assisted with the development of themes and interpretations of interviewee responses.

Keeping the researcher's bias on a conscious level allowed the final interpretations and conclusions to emerge from the data as shown in the findings in Chapter Four. The discussions and conclusions in Chapter Five are referenced by the relevant literature and noted when attributed to the researcher's experience.

Member Checking

Upon completion of the coding cycles and the constant comparisons, the researcher sent to each interviewee the quotations and interpretations included from their interview in each section: advisor approach, whether the advising approach is different from their own advisor, and their response to each advisee type. A full transcript was also provided to the interviewee. Fourteen of the 18 interviewees replied with agreement with, or edits to, the researcher's interpretations. Interviewee edits were incorporated into the

final interpretations and the final narrative. This is in line with Creswell and Miller's (2000) definition of member checking: "It consists of taking data and interpretations back to the participants in the study so that they can confirm the credibility of the information and narrative account" (p. 127).

Rich Thick Description

Similar to the need in quantitative analysis to provide all the statistical detail necessary to allow the reader to repeat the statistical tests and understand the researcher's conclusion, so does the qualitative researcher need to provide the details of the data collected for a reader to understand the researcher's interpretations and conclusion. In addition, a rich thick description allows the reader to consider how the study's interpretations and findings might be applicable in other settings. As stated in Creswell (2013):

> *Rich, thick description* allows readers to make decisions regarding transferability (Erlandson, et al., 1993; Lincoln & Guba, 1985; Merriam, 1988) because the writer describes in detail the participants or setting under study. With such detailed description, the researcher enables readers to transfer information to other settings and to determine whether the findings can be transferred "because of shared characteristics" (Erlandson et al., 1993, p. 32)" (p. 252, itals, references, and quotations in text).

To achieve the above noted transparency, and to allow the reader to assess the validity of the themes that were developed, the findings presented in Chapter Four, includes the specific quotations used to form each theme.

Participants

Table 6, provides information for the 18 faculty advisor participants, using an alias name, on gender, Ph. D. conferral year, and number of years they had been a faculty member at their current institution, organized by PhD conferral year, earliest to most recent. Of the 18 participants, five are female. Ph. D. conferral year ranged from 1958 to 2003, the median year was 1977. Four participants had the conferral year of 1976. Half of them received their Ph. D. degree in the 1970s. The number of years they have been a faculty member at their current institution ranged from eight to 38. The mean number of years was 21, and the median was 19.5. One interviewee, Daniel, had retired from the

Table 6

Faculty Advisor Participants

Participant Alias	Gender	PhD Conferral Year	Number of Years at Current Institution
Daniel	Male	1958	10+
Auguste	Male	1972	30
Max	Male	1974	25
Emile	Male	1975	38
Gary	Male	1975	17
Clifford	Male	1976	8
Harriet	Female	1976	15
Ruth	Female	1976	19
Jane	Female	1977	35
Woodrow	Male	1977	24
Karl	Male	1982	26
Jurgen	Male	1984	27
Charles	Male	1985	21
Anthony	Male	1988	10
Ida	Female	1994	20
Alexis	Male	1997	18
Antonia	Female	1997	15
Paul	Male	2003	12

institution where he had been a tenured faculty for many years. His curriculum vita was not available on the institution's web site to verify the exact number of years.

Faculty advisors who were interviewed are not identified by their own names. Rather, to protect their anonymity, each interviewee was given a pseudonym reflecting only the correct gender. The title of professor is used for every interviewee regardless of the faculty member's actual title. The date each interviewee received their Ph. D. degree and the number of years they have been at their current institution is included as that is considered not to be a risk to anonymity and is considered to provide context to the number of years they may have been eligible to advise doctoral students (depending on the specific requirements of the institution) as well as how long ago they were a doctoral student receiving advice from an advisor themselves. Any references to specific institutions or disciplinary fields have been removed to protect anonymity.

CHAPTER FOUR: RESULTS

This chapter provides a summary of the interviewee responses to each question by the primary and secondary themes found across interviewees. The first section on the advisor's approach to advising includes interviewee responses to the first two questions. Themes found across faculty advisor descriptions of their own approach to advising will be presented first. Then, how their advising approach differed from what they experienced from their advisor in their doctoral program will be presented. The final section presents themes found across interviewee descriptions of each type of advisee vis a vis degree completion likelihood.

Advising Approach

Participants were first asked two general questions to explore their advising style and approach. The first question, "In general, how do you define your role as an advisor and what is your typical approach to advising?" was intended to provide an overall stance of how the faculty interviewee saw their role and approach to advising as a foundation for how they described their advising relationship with the four types of advisees. An analysis of comments across interviewees about their approach to advising revealed four primary themes and three secondary themes. The primary themes, based on finding the theme in more than 25% (five of 18) interviews, were: a similar or variable advising style; help guide students through the program; help students in their career path; and, role of the committee. The three secondary themes, found in fewer than five interviews, were: help students get published; the importance of advisor choice; and, students as independent researchers. The seven themes are described next.

Primary Themes in Advising Approach

The primary themes, based on finding the theme in more than 25% (five of 18) interviews, were: a similar or variable advising approach; help guide students through the program; help students in their career path; and, role of the committee.

Primary theme of variable advising approach. Across all interviewees, 10 of 18 (56%) described an advising approach that varied depending on the student. Interviewee responses that exemplified a variable advising approach are described for each of the 10 interviewees next.

Professor Daniel explained that the impact of his guidance, as an advisor, varies depending on the student. He stated that "the trick is you have to keep trying, and suddenly, you'll hit something, and you might hit big. And that's what I told my students over time, I told them it's about trying. It's unfortunate when they don't." Professor Daniel further stated that, as an advisor,

> …you have to poke and you have to be supportive, but you also have to poke, prod, you know. And sometimes it doesn't work and it's disappointing. You get a good student that just won't move, you know, it's too bad, but you can't make them move.

Professor Emile defined his role as "a bit different from some advisors at least because I vary my approach and try to tailor my approach to where the student is and what sort of strengths and weaknesses they seem to have." He continued by explaining that his role is "fairly minimal" with students who "seem to have their act totally together

and they know what they're doing and they know what they want to do and they go ahead and do it." He is willing to meet with them as much as they want to.

Professor Woodrow described a variable advising role, as follows:

In terms of my typical approach to advising, I tell students especially when they ask me, and they often do, that our relationship could be what you make of it. If you want to be fairly close and you want me to be fairly hands-on, I can do that. Or, if it's better for you if I just back off and let you do your thing, I can do that as well.

Professor Karl specifically discussed variable approaches that are needed based on the "particular advisee," as he stated in the following:

There are people, very self-directed, who are very creative and have convincing ideas as to what they want to do and they require not very much involvement on my part. There are others where the process develops in much more tortuous ways and where through all the stages a lot of guidance is needed.

Professor Jurgen shared that his variable approach "depends on who the person is," whether it is:

…holding their hand, reading papers, showing them the weakness of initial drafts, helping them with analysis or simple thought needed to improve their argument, identifying what their puzzle is, identifying its relevance to the broader literature that they are engaging…but it varies tremendously by student in the discharge of that role.

Professor Anthony shared that his approach to advising is "very non-directive." He asks "a lot of questions to get students to think out loud about their choices, their confusions, their options, and their criteria for choosing ultimately." He stated that he tries to avoid "giving advice or directing," and that he is "certainly opposed to the kind of do-it-my-way model that is still, I think, too prominent in higher education." Later in the interview, Professor Anthony shared that,

> It's interesting when you let students guide you in the advising experience. There is a lot of range from students who want to meet very frequently and tell me everything to students who want to meet very infrequently and tell me very little.

Professor Alexis described his role and approach to advising by stating that he thinks of himself,

> …as an advisor who likes to be supportive and help think through what the choices are, but I'm not as directive as some about which kinds of projects or topics that one should do, and how they go about it. It's much more, maybe a little bit more independent, where I'm helping them to become independent intellectuals and researchers. So, more about giving feedback and thinking through choices than actually giving absolute direction of what classes to take, or what your prelims should be about, or how to design your research for your dissertation.

Professor Auguste described being very directive in his experience with a type three advisee and stated that he "realized she needed structure." He did not specifically

describe his interaction with the other types of advisees, however, his statement of realization may be indicative of a variable approach.

Professor Charles stated he tries "to make up for that" with his advisees, to be "more involved and more personable, giving them more feedback and structure if that's the kind of thing they want."

Professor Paul describes, in his experience with an advisee type one student that she "didn't need a lot of hand-holding," perhaps suggesting that other advisees have needed more hand-holding from him.

Primary theme of a similar advising approach. Across all interviewees, eight of 18 (44%) described an advising style that was similar across advisees. Specific interviewee descriptions that exemplify a similar advising style follow.

Professor Max described his role as an advisor as helping a student through the program. He stated, "Well, I mean, I define my role as an advisor as kind of a mentor, as somebody who is going to help a particular student get through the complexities and subtleties of the Ph. D. program."

Professor Gary described his typical approach was to meet with his students once a week. "That way," he stated, "people don't get lost. You keep nagging them gently."

Professor Clifford described his own advising approach, by stating, "we have to keep them on track," and that as an advisor he "will respond to student's questions, ask for update reports, and in general give them advice as needed during the course of their work." He described advising specifically in the context of the discipline as well:

Many of our students are working in very remote parts of the planet. So, it's very helpful that we now have electronic communication that allows us to keep in touch with them. Then, once they return back to the university, we sit down with them…and review their plan for writing up their research and help them to outline their dissertation or critique an outline if they have one already, and tell them to get ready. Get going. We try to bring them from the point where they are students to the point where they are professionals. And we do quite a lot of mentoring on many, many things…on getting grants, on publishing professionally, on attending meetings, on searching for jobs. So all of that is part of the work that we do.

Professor Harriet described her role as a hands-on advisor, helping students through the program, as follows:

I'm a fairly hands-on advisor. That is to say, I consider it my job to take any student that I'm either the major advisor or an engaged committee member for, and make sure that they're doing what they need to do and they understand what they need to understand, both the formal and the informal curriculum.

Professor Ruth stated that she meets, or connects in some way, with the majority of her students every week. If she doesn't see them she gets emails or call from them.

Professor Jane described her role as an advisor as follows:

I see my role as helping them to pick a dissertation project. Trying to mentor them through the process of doing research. And also talking to them about career plans and objectives and trying mostly at the research time, but thinking about how that fits into if they want to do it the rest of their lives.

Professor Ida stated that she is probably hands-on than some of my colleagues. She sets up regular meetings with her advisees with a timeline that is set up with a schedule of milestones each student is trying to achieve at specific points in time. The department has put in place an annual review of each student that is facilitated by completing a form that addresses specific questions. Professor Ida elaborated that "the annual performance review allows for a conversation" between the student and their advisor. The form asks each student to address the following type of questions. "Are you getting grant writing experience? Are you getting publication experience? How are you working to build your vita? How are you making progress on your dissertation?" Professor Ida added that she is aware that some of her fellow advisors "have a very arm's length approach" and feel that "these are adults and they should be able to think and they have to take responsibility for it." Professor Ida explained that her thinking, as follows:

> I think that's easy if your approach is that everybody comes in with the same kind of endowment of resources and knowledge of what a Ph. D. program is about. But…my tendency is to not assume that and assume instead that there are certain rules to the game that we can make explicit and the more we can make explicit the more people can meet expectations.

Professor Antonia addressed her department's structure for students who were working on their dissertation. They would register for independent study with an advisor who would meet with them regularly every week or every other week, except when a student was in the field. Professor Antonia described her own style of advising by stating,

I'm pretty micro, I'm accused of being micromanaging. I will read every f--king

word that they write and I will edit the grammar. …I edit what they write at a

sentence and word level and ask a lot of questions about, okay does this apply to

X? Does this apply to Y? Try to fill out their questions. And there are people that

I still do that for publications who are now advanced in their careers.

Primary theme of advisor as guide through program. Sixteen of 18 (89%)

interviewees described their approach to advising as a guide, mentor, or facilitator in

helping students through the program or dissertation. For many of the interviewees, they

described a highly structured step-by-step approach to advising. Interview excerpts

illustrating this approach follow.

Professor Daniel stated "it was important for me to encourage the student to do

the best they can and to guide them in the proper way that would lead them to their

completion of a dissertation."

Professor Auguste stated his advising role, "is to get the student to get through the

degree program in a timely fashion."

Professor Max defined his role "as a kind of mentor, as somebody who is going to

help a particular student get through the complexities and subtleties of the Ph. D.

program."

Professor Gary described his typical approach was to meet with his students once

a week. That way, he stated, "people don't get lost. You keep nagging them gently."

Professor Clifford described the advisor role as "the person who takes primary

responsibility for the thesis research and mentors the student throughout the research."

Professor Harriet described her role as a hands-on advisor, as follows:

I'm a fairly hands-on advisor. That is to say, I consider it my job to take any

student that I'm either the major advisor or an engaged committee member for,

and make sure that they're doing what they need to do and they understand what

they need to understand, both the formal and the informal curriculum.

Professor Ruth described her role as follows:

My role is to make sure that students have a solid education and a solid

background in the topic of their interest, to help them craft a reasonable research

problem, and to do everything I can to help them get through and get finished.

Professor Ruth stated that she meets, or connects in some way, with the majority of her

students every week if she doesn't see them or get emails or calls from them.

Professor Jane described her role with her advisees as "helping them to pick a

dissertation project and trying to mentor them through the process of doing research."

Professor Woodrow defined his role as an advisor as "primarily to help the

students get through the program, preferably with a Ph. D. degree at the end of it."

Professor Karl identified tasks the advisor has in guiding the student through the

program, as follows:

…through the process of developing a research question, reading the appropriate

literature, processing it, coming up with a research design, conducting data

collection and data analysis, and then writing up the doctoral dissertation.

Professor Jurgen stated his "key goal is to do everything possible to make sure the student's dissertation is done successfully in time to go on the job market and then be successful there."

Professor Charles stated that he helps his advisees on their dissertation with "…timing, organization, the quality of their literature review, their writing and rewriting." He added that he tries to be "more involved…giving them feedback and structure if that's the kind of thing they want."

Professor Anthony defined his role as a "facilitator, to support students to find their own path and as their resource person, to help them pursue that path once they choose it."

Professor Ida stated that, as a "Ph. D. thesis advisor," she provides the "primary kind of mentorship of the student through the process…and helping them build a team that will help them be successful in completing their dissertation…and in their career." She stated that she is "probably a lot more hands-on than some of my colleagues." She sets up regular meetings with her advisees with a timeline that is set up with a schedule of milestones each student is trying to achieve at specific points in time.

Professor Antonia described meeting with students "regularly every week or every other week except when a student is in the field."

Professor Paul described his role as an advisor by stating that, in his disciplinary field,

> …students are expected to develop their own research ideas…they're not just
> doing what their advisor is working on. And so, I feel my role as advisor is to

guide them through that process to help them find a workable dissertation plan, and then to help them guide that plan through to conclusion.

Primary theme of career path. Seven of 18 (39%) interviewees stated that helping advisees with their career path was part of their advising role.

Professor Clifford described "searching for jobs" as one of the tasks of the advisor.

Professor Jane stated, "also talking to them about career plans and objectives, and trying mostly at the research time, but thinking about how that fits into if they want to do it the rest of their lives."

Professor Jurgen explained that as an advisor his "key goal is to do everything possible to make sure this student...is the dissertation done successfully in time to go on the job market and be successful there."

Professor Charles stated that in addition to helping students with the dissertation, he then "works with students he advises on their job search activities."

Professor Ida shared that her department's approach to advising included mentoring advisees in their career.

Professor Alexis stated that "one of the big advising things besides working on the dissertation is how to approach and manage the job market." He shared:

One of the big advising things besides working on the dissertation is how to approach and manage the job market. The academic job market…. Kind of developing an understanding of what kind of job and what kind of institution is the best, what you're interested in, and is the best fit for you…and what you need

on your resume or CV that's really going to put you in the best position to get some offers and interests and the places that you want to be. And I do, I'm not sure if it's like that in every field, maybe some even more so than our field. But to me, that's one of the hidden things of…being an advisor. And this is something, by the way, I think I went to a kind of a non-conformist, anti-discipline sociology department. I didn't get much advice on that at all as a graduate student. Like the job market, the profession. So I guess that I got lucky in some ways or figured it out, but I end up doing a lot of work with my students. In some cases probably even more work on the professional job market side of things than on the dissertation itself.

Professor Paul stated that "at the tail end of the program, just helping them find a job."

Primary theme of role of the committee. Five of 18 (28%) interviewees addressed the role of members on the student's doctoral committee.

Professor Emile described the role of the committee as variable in that the committee members "may either be heavily involved or some of them may be heavily involved in terms of reading chapters and things or they may not be until the advisor and the student think they are ready for the defense."

Professor Clifford described that the "committee members are actually just as involved as the primary advisor."

Professor Ida explained the importance of helping an advisee "build a team that will help them be successful in completing their dissertation."

Professor Antonia, shared that there are two levels of advising, that of the advisor and that of the other members of the committee, who Professor Antonia calls the "advisory team." She explained that the principle advisor's role is "distinct from the rest of the advisory team who also have input on the research design." She also stated that it is also the role of the principle advisor to "call the shots and may be the one who has to negotiate changing the committee make-up if that becomes necessary."

Professor Paul stated that, "one of the things I emphasize for my students is that different dissertation committee members play different roles and that they should learn what it is the different committee members can provide to them."

Secondary Themes in Advising Approach

The three secondary themes, found in fewer than five of the interviews, are faculty who: helped students get published; discussed the importance of advisor choice; and, encouraged students to be independent researchers.

Secondary theme of publication. Closely related to helping an advisee with their career path is helping them get published. Four of 18 (22%) interviewees stated this was part of their role as an advisor.

Professor Max stated he put "a very strong emphasis on let's get something published."

Professor Gary described two primary components of being an advisor, "first is just to do recent research for one...two, get them published."

Professor Harriet was the only interviewee who discussed authorship contracts explicitly with her advisors. She stated that she offers three different contracts to students

112

who want her as an advisor. The first one is to "advise you a little bit, but you do the rewriting, you do the rethinking, you turn it into an article…a sole authored article." The second contract is where the student does the rewriting but, she described that the student can, "come to me a lot with questions, I rewrite some bits and pieces, I give you tons of comments…. I'm co-author." The third contract is, "you had a great idea, the master's thesis was pretty good, you're fairly hopeless about writing it up, we go around and around, I end up writing more than 50 percent of the article…I'm first author, you're second author."

Professor Alexis specifically discussed working with his advisees to co-author publications. He stated,

I do a lot of collaborative work with my grad students. I usually try to do some sort of project or a paper with them at some point in co-authorship capacity. Not just for the product of it but I think it's kind of a good collaborative experience.

Secondary theme of advisor choice. Three of 18 (17%) interviewees emphasized the importance of advisor choice.

Professor Emile explained that when he meets with students who are not his advisees:

I try to insist on one thing that they're basically in control of...they really have to actively go out and meet professors and decide who would be best for their committee and who is best for their advisor and try to convince them of this.

Professor Harriet shared that,

It's important that students and advisors be matched themselves. That is to say that somebody who wants and can benefit from a hands-off, distant relationship gets that, and somebody who needs a lot more kicking and pushing gets that. The match is important. Persistence is important. A lot of it is just plain old perspiration. To hang in there, listen to what you're told, and do it. I think people can do okay with less absolute brain power and more persistence…as long as they have some concept of what they're seeing and what they want to make sense of. Sometimes students aren't and if they don't have an advisor who makes up for their own lack of persistence by kicking them in the butt, then they don't finish.

Professor Antonia discussed the importance of a student deciding whether an advisor's style works for them or not. In reference to her own style she stated,

I think part of the advisor/advisee quality is how much of your advisor do you really want, you know? And does…a micromanaging kind of personality really doing you any good or is it kind of shutting you down? You know? Is it too claustrophobic?

Secondary theme of independent researchers. Three of 18 (17%) interviewees described their role as helping students become independent researchers.

Professor Max further defined his approach to advising when he described a student who wanted him on his committee despite having a dissertation topic in which Professor Max had no experience. He explained to the student:

…look, I said, you know, it doesn't…do you any good for me to be on your committee. You need somebody who knows something about this subject. But I

114

think what…this particular student wanted was somebody to hold their hand, and that's not the role of a graduate advisor to my mind. To help? Yes, absolutely. To have intellectual discussions about various important issues? Absolutely. But not holding your hand…and by holding your hand I mean in the sense of saying, you know, here's the topic, here's how you need to write it up, here's how you need to do the analysis, here's how you need to collect the data. I mean that's what a doctoral degree should be about, you should be making those decisions for yourself, not having an advisor make them for you.

Professor Emile stated that it is "desirable for the student to work as independently as possible."

Professor Alexis shared that, as an advisor, he is

…helping them to become independent intellectuals and researchers. So, more about giving feedback and thinking through choices than actually giving absolute direction of what classes to take, or what your prelims should be about, or how to design your research for your dissertation.

Themes in Advising Style, Comparison with Their Doctoral Advisor

Twelve of 18 (67%) interviewees stated they have a different advising approach compared to their doctoral advisor. Five of 18 (28%) interviewees described having an advising approach that was similar to what they experienced from their doctoral advisor. The interview held with Professor Antonia did not address this question. An analysis of interviewee comments specific to advising differences between their own style and what they experienced as a doctoral student showed that the five interviewees who had an

115

advising style similar to their advisor primarily described the experience they had with their advisor as positive, using words such as, supportive, special, and having received a lot of feedback. The 12 interviewees who had an advising style different from their advisor primarily described the experience they had with their advisor as negative, using words such as, hands-off, absent, not helpful, difficult, and unsupportive. Interview excerpts illustrating themes in advising style are presented in the next section.

Advising role different from their advisor. Twelve interviewees stated they have a different advising style from their doctoral advisor.

Professor Auguste described how his approach to advising is different than what he experienced from his advisor by stating that his doctoral advisor was absent the year he wrote his dissertation so he worked with another faculty member. He explained that, as an advisor, he is "usually not that remote for most of the students I supervise. I'm much more hands on."

Reflecting on his own experience with his doctoral advisor, Professor Max shared that he was at the university where he did his doctoral program the year after there were "massive student demonstrations, and one of the strange consequences of those student demonstrations was the abandonment of all specific details for getting a Ph. D. in any subject." This environment, he explained, led to two extremes: "You had people who sort of came in knowing what they wanted to do and did it quickly, and others who just sat around for years and many who never completed the degree." He completed his degree quickly with very little help from any faculty except,

116

…from a member of my committee who was a methodologist who when I worked for him for a year as a research associate, we put together a lot of stuff and I wound up publishing an article and four bulletins with him as well as writing up a mammoth report.

Professor Emile's comments about his experience with his doctoral advisor were also quite extensive. He explained how it took him years to complete his dissertation for the following reasons: Because he wanted to do it all himself and not ask for help; he chose faculty for his committee because he was interested in the work they were doing in his topic, and realized later that "there's no way that all these poor people are going to agree on this, what am I going to do?;" and, he wanted to use both quantitative and qualitative methods, and he didn't base his research on just one research question. He "looked for an advisor who would give me lots of freedom," which he found, and stated, "I always say that, you know, he gave me all the rope I needed to hang myself, and I nearly did…."

In describing how he related to his advisor, Professor Gary explained that his advisor "…was pretty much hands-off. He just let me do it alone and then had some general comments." He shared that he did co-author a paper with his advisor, stating that his advisor "actually put my name on, and did much."

In commenting about her experience with her doctoral advisor, Professor Harriet stated, "My advisor was fairly hands-off. I mean, he was very good, but…here's a dataset, see what you can do with it kind of advisor. He didn't actually offer very much advice." She explained that her advisor did provide her with data sets and opportunities

117

as a teaching assistant but not "advice in the advising sense." She added that she thinks "it never really occurred to him that anybody needed that."

Professor Ruth commented on her experience as a doctoral student by sharing that her doctoral advisor "wasn't particularly supportive." She was given "lots of leeway" and stated that she "could do pretty much whatever I wanted for a dissertation. It was very generous in that regard but I couldn't really look to him for a lot of support."

Professor Jane reflected on her experience as a Ph. D. student by sharing that her advisor wasn't helpful and was hostile to her. She stated, "I would say because of the antagonism, there was not much at all about professional development or anything, except just getting a dissertation done and being kind of passive aggressive and hostile."

In reflecting on his experience with his advisor, Professor Karl shared that he earned his Ph. D. in Germany. In describing his experience, he stated,

> I think my dissertation advisor invested less time in advising me than I would invest in most undergraduate senior project papers. So it was a radically different experience, but it was a radically different institutional context in which I did my Ph. D.

In reflecting on how his advising approach is different than what his experience was as a doctoral student, Professor Jurgen stated he only met with his advisor once or twice. He shared that he "didn't seek a lot of help from my doctoral advisor" and that he "barely knew what I was writing on until I handed something in."

Professor Charles reflected on his experience as a Ph. D. student by sharing that the university where he did his doctoral work was "noted for having hands-off

supervision" at that time. His dissertation advisor gave him a lot of feedback but he did not meet frequently with his advisor. He stated that, "it was kind of a sink or swim…approach. So it wasn't a warm and fuzzy hands-on kind of thing." Professor Charles stated he tries "to make up for that" with his advisees, to be "more involved and more personable, giving them more feedback and structure if that's the kind of thing they want."

Professor Anthony shared that his advisor let him choose his own path though stated she wasn't very supportive. He explained, "Partly because I was assigned to her and the work that I was doing was well outside of her expertise. And so the things that she could talk to me about were…we had a fairly narrow overlap."

Professor Alexis responded that the experience he had with his doctoral advisor was similar to how he advises even though his advisor's field was very different and, because of this difference, Professor Alexis relied more on his committee members than on his advisor. He stated that "he tried to get guidance and help from different committee members on different aspects of what they could contribute. And then my advisor was fairly hands-off." He and his advisor did "end up writing a book together."

Advising role similar to their advisor. Five interviewees described having an advising approach that was similar to what they experienced from their doctoral advisor.

When asked whether his advising approach was similar to that of his doctoral advisor, Professor Daniel responded:

Oh, I'm sure it was. I had a good tutor...and he was pretty special. He was a pretty

good guy to get to know. And he helped me get a number of things. One was I got

a Fulbright grant…which was fantastic for me.

In reflecting on his own experience as a doctoral student, Professor Clifford

shared that his "doctoral advisor was really quite wonderful and very supportive." He

described the difficulties at that time due to the need to send drafts by mail. "Sometimes

there was a lag of two or three weeks before we could get material back." Also, not

having electronic word processing so everything had to be typed manually. He continued,

I think the experience that I have today with my advisees is a far more efficient

and positive experience than actually I had. Not because…I was unhappy with my

advisor, to the contrary, he was really quite a wonderful advisor. But just the

physical effort to get the dissertation done was much harder back then than it

is today.

Professor Woodrow stated that his approach to advising is not much different than

what he experienced from his doctoral advisor. He stated, "…my doctoral advisor let

students find their own way pretty much and would intervene if he thought it necessary."

Professor Ida stated that she "…had a great advisor, so I would say I try to model

that." She explained that her advisor "met with me very regularly, was good at

troubleshooting, was willing to read every draft of everything I ever wrote and give me

really solid and concrete advice."

Professor Paul reflected on his style of advising in comparison to his doctoral advisor by stating he is "probably a little bit more hands-on" than what he experienced from his doctoral advisor. He specified that his advisor,

> …was enormously helpful in helping to find a job and then helping me to plan most of the study. He was somewhat less involved in sort of the day-to-day progression of my dissertation. That didn't bother me because I had other people in the dissertation committee who did play that role.

In the next sections interviewee responses will be presented by advisee type in order (1-4). Prior to the scheduled interview, the faculty advisor who was scheduled to be interviewed was asked, by email, to identify an advisee who represents each of four categories of advisee type. The next section presents interviewee responses about advisee type one: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation and did graduate.

Advisee Type One

The first type of advisee is one who upon passing their preliminary examinations appeared to be well on their way to completing their graduation and did graduate. Each faculty advisor was asked, prior to the interview, to identify an advisee who represents each of four types. All 18 interviewees had at least one example of a type one advisee who upon passing their preliminary examinations appeared to be well on their way to completing the program and graduated. Three primary themes were apparent across interviews in the description of interviewee experiences with a Type One advisee. A theme was identified as primary if it was found in more than 25% (five of 18) interviewee

121

comments. The three primary themes together describe a student who is focused, independent, self-motivated, or smart; had an early advising start; and, had an academic career goal. Themes were identified as secondary if they were found in more than one and fewer than 25% of interviewee responses. The three secondary themes are: accepting criticism; having a topic related to advisor's research agenda; and, effective use of committee member expertise. Interviewee comments exemplifying each of the themes are presented below.

Primary Themes Characterizing the Type One Advisee

Three primary themes were apparent across interviews in the description of interviewee experiences with a Type One advisee. In a few of the interviews, more than one student is characterized by an interviewee as fitting the Type One advisee.

Primary theme of focused, independent, self-motivated, or smart. Sixteen of 18 (89%) interviewees included positive student characteristics in their descriptions of an advisee who did well throughout the program and completed. Characteristics included in this theme were focused, independent, self-motivated, or smart.

Professor Daniel described his advisee:

He was a wonderful student. He just went breezing through. He worked real hard and didn't waste a lot of time. He got through the dissertation very well. I helped him get the data for it because there were a lot of other studies I had worked on. We put them together, sort of a meta-analysis of these things, he went on to finish it up in very quick form.

Professor Auguste described his advisee as "more typical of the people" he's worked with who are "pretty focused and move through with very little delay or side tracking."

Professor Max described an advisee who began the doctoral degree program with a master's degree in international studies, did well with her preliminary exams, and graduated. He shared that "she pretty much had her dissertation designed before she started her qualifying exams" and she did a dissertation on a topic that was related to his research. He continued, stating that,

> She got both the National Science Foundation dissertation, completion of dissertation fellowship, and a Fulbright. And spent a year doing research…as part of her dissertation…very, very much self-motivated, very much had a pretty darn good idea what she wanted to do. Picked up Italian and Swahili along the way, and just, you know, fantastically effective student and wound up getting herself a post-doc which turned into a full-time job.

Professor Emile described his advisee as "a brilliant student."

Professor Harriet stated her advisee was "very smart."

Professor Jane described her experience with a student who, upon passing their preliminary examinations appeared to be well on their way to completing the program and did graduate, as one who taught her about time management and organization. She shared that he wrote a "highly successful grant-funded project" that he published. He also published his master's thesis. It was "obvious," she said. "He was always very focused and driven on getting done and getting out. So it was obvious he was going to succeed."

123

She has seen this with other students as well. She stated that she sees these type one students as those who,

> …really just march through the program doing everything they're supposed to do. They, you talk to them, they're task focused, they meet deadlines, they keep working in the face of set-backs. When they come in to talk to you they've gotten something done since the last time.

Professor Karl shared that his experience with students who do well throughout the program is that they,

> …tend to be very well-organized, tend to be self-directed, tend to have a very clear idea as to what they want to do. They also tend to be academically and intellectually on the successful side. So they will have a very good grasp of the literature. They know how to develop a theoretical argument. They have a pretty good sense as to what constitutes good data. They are outgoing. They are proactive. Yeah, those are all adjectives I would use to describe them.

When asked about his advising style with this student, Professor Karl stated that she would initiate meetings with him asking his advice. He would provide the requested advice and when they next met, she had followed the advice given. He described this style of advising as "a very efficient way."

Professor Jurgen discussed the difference he has seen between advisees who do well throughout their Ph. D. program, and those who struggle, by describing the following impact on his time. He first described the advisee who did well:

What impressed me about him was the fact that he did not need a huge amount of maintenance and handholding. He was a mature person. That was good. I've had students who were, you know, going through one psychotic episode after another, and usually not finishing their thesis. I've wasted a fair amount of time in my life trying to get people focused on their thesis.

In general, Professor Charles described students who fit the Type One advisee as "successful, goal-oriented, and well-organized." He identified one of his advisees to exemplify the Type One student who does well throughout the program: A woman advisee he described as "very motivated and capable," who wrote a proposal for funding available to faculty members and received it. The funding allowed her to complete her dissertation. Normally, Professor Charles explained, this type of funding would go to a faculty member for a project who would then employ a student in a research assistantship to assist. In this case, the student received the funding for her dissertation project. Professor Charles explained that he,

…and another faculty member were the faculty representatives but ultimately she did most of the work so she received the funding and was able to complete her dissertation with that funding. And then she did quite well in her defense.

Professor Anthony described a student who became his advisee after having "totally stalled out" with another advisor. Her previous advisor had been advising her on what to focus on for her dissertation and "she just couldn't motivate herself to do that." He shared that once she was allowed to pursue a topic where she "was studying things

she'd experienced personally and were deeply meaningful to her…she finished just amazingly fast."

Professor Ida described her successful advisee stating that she had,

…a lot of maturity, a lot of self-motivation, and also just really open to critique. Willing to talk to people about her ideas and get sometimes harsh and sometimes mild feedback about her ideas. She was just really kind of a natural intellect.

Professor Alexis described characteristics of the group of students who go through the program without much struggle as "those who have a good start, make good progress and then get lined up for a job. That's where it happens quickest and smoothest. It's not necessarily that they write the best dissertations but they get the degree completed."

Professor Clifford identified focus in students who are successful throughout the program by stating the importance of a student "getting a focused narrative in their dissertation writing." He explained that, although it is rare, there have been students who have completed in as quickly as six to seven years. He stated that when students get to the ABD phase, "we're pretty sure that they have the ability to complete their research." The difference is in time to degree. He explained that the difference is,

…because of the time for writing the dissertation. Some students are very efficient in getting their dissertation done and others take a very long time. It's a matter of trying to craft a piece of work that is focused enough so that it can actually be completed. I mean, students, after a year's worth of fieldwork come back with tons of material, just tons of it. And…for…young newly minted

Ph. D.'s, they're going to be using that material for many years after they

complete their Ph. D. in publications and preparation of other research projects.

…so the narrowing down of that material and getting a focused narrative in their

dissertation writing is part of the advising process and that's what we hope to

have students do. Even so, we have to keep them on track. Because it's very, very

easy for a student in writing their dissertation to go off on a tangent. And when

there's something really, really interesting they want to include, and it's

peripheral to the main intellectual point of their dissertation, we have to tell them

to save it for, you know, an article or something like that. So we…have to monitor

that process pretty carefully.

Professor Ruth emphasized focus and motivation in her description of the students

she has advised that fit the Type One student who do well throughout the program. She

described them as "well-prepared and well-organized, and very focused on completion."

Professor Ruth further described students who fit Type One, as follows: "They tend to be

highly motivated. In other words, it's not that they don't have lives outside of school, but

they tend to be very focused on what they're doing." One student Professor Ruth

identified as an example of a student who was successful throughout the program was a

"highly motivated" student who came to the university specifically to work with

Professor Ruth. This student had a specific project they wanted to work on but in trying

to help them set up that project it became clear it wasn't going to work. Professor Ruth

explained how this student managed this major setback:

They had always been a highly motivated student, but in changing the area, they realized that they suddenly had to catch up on a lot of things. In other words, they had to read new things and learn new things and all of that sort of stuff. And so, in a way, that motivated them more because they realized they were going to take longer to finish. And I mean not significantly longer, but you know, it was a hiccup that they weren't anticipating even though they were, because they were very organized and so they weren't anticipating it. And so, in a way, it almost motivated them more.

Professor Woodrow identified a student who is intelligent and was able to talk about his self-doubt as an example of a Type One advisee who successfully passed his preliminary exams and graduated. In his words, this student was,

…extremely bright and, well, occasionally he got depressed and worried and suffered from an occasional crisis of self-confidence. It wasn't anything out of the norm of being a graduate student in the Ph. D. program. He did everything really well. When he had doubts, he would come and talk about them, but I always considered that was a smart thing to do, not a dumb thing. I came to understand that…the best thing I could do for the student was to basically stay out of his way and provide simple guidance when necessary.

Professor Paul described his advisee, as follows:

She was fabulous to work with. So, what can you say about a great student? She knew what it took to do, she took the courses she needed to take, she didn't need a lot of hand-holding. She was putting a dissertation program together. She took

128

advice and…used it in whatever way was appropriate. And she wrote a good

dissertation. So she was just a lot of fun to work with.

Primary theme of an early advising start. Eight of 18 (44%) interviewees

described, as part of their story about a Type One advisee who did well through the

program and graduated, that they either recruited the student or the student came to the

university to work with them.

Professor Daniel described a man he had known for a long time and encouraged

to attend graduate school at his university.

Professor Max recruited his advisee because her interests were a good fit with his

research agenda.

Professor Harriet's advisee asked her to be her advisor due to having an interest in

the same area of research.

Professor Ruth described a student who came to the university specifically to

work with her.

Professor Jane described the kind of advisee who, "basically chose me from the

beginning because they want to work in the area that I work in. So they actually start

talking to me from the day they walk in the door and we just work together all along."

Professor Karl's advisee met him during orientation and "made a determination to

come to my school as opposed to another school from which she also had an offer" to

work with him as a research assistant. Professor Karl described her as "an extremely

determined, extremely goal-oriented person who knew exactly which way she wanted to

go, who in a team of six RA's really took the lead and coordinated the work across the

others, totally reliable." This student was awarded both internal and external grants. She elicited undergraduate student help to do data processing for her and wrote a "powerful doctorate dissertation."

An advisee Professor Jurgen identified who fits the successful Type One category is a man with a background in science who "knew about some of my work and so asked for assistance." He continued, stating that this student, "took on a complicated international study which involved a fair amount of field research and multiple trips to exotic lands to investigate" his research question.

Professor Antonia described a student who came to the university to work with her and ended up replicating her "exact areas of regional and disciplinary interest."

Primary theme of having an academic career goal. Eight of 18 (44%) interviewees addressed either the goal, or achievement, of an academic position as part of their description of an advisee who is successful throughout the program and completes.

Professor Daniel described co-authoring a book with the student he identified as having gone through the program successfully, after he graduated and became a faculty member at a public research university. Based on this publication, the advisee got hired at a more prestigious university in an endowed chair. Professor Daniel stated, "I was so glad I burst."

Professor Max described his advisee as a "fantastically effective student" who "wound up getting herself a post-doc which turned into a full-time job."

Professor Gary identified students wanting "to go to the most prestigious university" as a difference between the successful and unsuccessful student.

Professor Harriet responded when asked whether her advisee had a clear career goal that "Oh yes, she wanted an academic career. This was never really in question."

Professor Ruth also agreed that her advisee had a very clear career goal.

Professor Karl described, for students who fit the Type One advisee, that "in the end they tend to be successful…on the job market." The advisee he identified as an example of a student who successfully completed the doctoral program went on the job market after five years in the doctoral program and received offers of a tenure-track position from several research one universities. Professor Karl stated that, in general, he has advisees who

> …have a clear idea that they want to get into tenure track positions after graduation and they do everything. They are very smart, quite impressively so, in learning and knowing what a vita should look like when they go on the market.

Professor Ida included in her description of a successful advisee's dissertation that she was really seeing it as "the first step in her career." She explained that her advisee was,

> …incredibly thorough. She knew her data inside and out, knew the policies inside and out. She was really passionate about the topic of her dissertation rather than just seeing it as something to get done. I mean, she was really seeing it as the first step in her career. And knowing that she was biting off a significant, but only a small piece, of the overall kind of problem she's interested in. So, it was just kind of that intellectual engagement in a problem that was fantastic.

Professor Alexis stated that students who go through the program without much struggle are, "…those who have a good start, make good progress, and then get lined up for a job."

Secondary Themes Characterizing the Type One Advisee

Three secondary themes, identified by at least two interviewees, but fewer than 25% of the interviewees who responded with an example of a Type One advisee who did well through the program and graduated, are presented next. The three secondary themes are: accepting criticism; having a topic related to advisor's research agenda; and, effective use of committee member expertise. Interviewee comments exemplifying each of the themes are presented.

Secondary theme of accepting criticism. Four of 18 (22%) interviewees discussed accepting criticism or feedback in their descriptions of an advisee who does well through the program and graduates.

Professor Harriet's response to being asked to identify a student who fits the advisee Type One category of someone who has done well through the program and graduated, was that she has "lots of Type One's." Asked to pick one example, she described an advisee who was,

> …very smart, self-directed, willing to come in and talk about advice of various kinds, never bashful about asking questions. Able to take advice and work on it. So if she came in with a paper that was not well-written, and I said, look here's what you need to do, you need to reorganize it, you need to do this, I need to be able to see where that's going, she would say, oh, okay, I get it. How about this?

How about that? Yep, okay I get it. I would say. She'd take it away, it would come back and those things would be fixed. It might not be perfect, it might need a second round of revision, but anything that I could point out she fixed. And I would say that is generally true of this large population. Good students are good students.

Professor Karl included in his description of an advisee, who did well through the program and completed, that she would initiate meetings with him asking his advice. He would provide the requested advice and when they next met, she had followed the advice given. He described this style of advising as "a very efficient way."

Professor Ida described students who fit the Type One advisee who does well throughout the program as "self-starters who also know when to get help." She described an advisee she identified as an example as, "really open to critique, willing to talk to people about her ideas and get sometimes harsh and sometimes mild feedback about her ideas."

Professor Paul stated that his advisee, "took advice and…used it in whatever way was appropriate."

Secondary theme of having a dissertation topic related to advisor's research agenda. Two of 18 (11%) interviewees explained that the student they identified, as an example of a student who went through the program successfully and completed, had a dissertation topic related to their own research agenda.

Professor Daniel stated. "I helped him get the data for it because there were a lot of other studies I had worked on. We put them together, sort of a meta-analysis of these things."

Professor Max shared that his advisee did her dissertation on a topic that was related to his research.

Secondary theme of an advisee's effective use of committee member expertise. Two of 18 (22%) interviewees identified an advisee's effective use of their committee in the Type One student they exemplified as one who went through the program successfully and graduated.

Professor Harriet described working with a Type One student, and other successful advisees, by explaining that they sought out advising from other people, not just her solely. In her words:

> There were other people she did work with. She had a five-person committee. And that's another thing I would say characterizes her and the others is they did not hang on me as their sole advisor. I do not have to help them build a committee. They have a lot of people they talk to.

In general, Professor Ida described, generally, students who fit the Type One advisee who does well throughout the program. She explained that students are "not expected to know everything, so they do count on their committee members, and have explicit talents among their committee members that they're willing to draw on." A student Professor Ida identified as exemplifying a Type One advisee put together a

committee of members who had expertise helpful to her topic. Professor Ida provided the following description of how she saw this student:

> She did a great job of building a team and then calling on those team members for those specific things so that they knew where they had to focus. But also, obviously, they read the whole dissertation. But instead of asking what do you think of my dissertation? Period. It's more like, how did I do describing mixed methods approach in chapter three? Did the last chapter do a good enough job integrating the cross mixed methods? Was my description of the sequential design accurate or clear? Would somebody be able to pick that out without me using that term?' So, it was very targeted requests for information as well as kind of a sign-off on the whole dissertation.

The next section presents interviewee responses about advisee Type Two: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation but did not graduate.

Advisee Type Two

Eleven interviewees identified a student or the group of students who fit the advisee Type Two category of a student who, upon passing their preliminary examinations appeared to be well on their way to completing their degree program but did not graduate. Seven interviewees did not provide any example or descriptions for this advisee type. All eleven interviewees who identified an example of a Type Two advisee are represented in the following themes. Three primary themes were found (primary theme defined by being found in more than 25% (three of 11) of the interviews) in the

interview descriptions of an advisee who successfully passed their preliminary examinations but did not graduate. The primary themes identified were: an advisee who took a job that does not require the Ph. D. degree or who had a change of career goal; the advisee has personal or family issues; and, the advisee is characterized as perfectionistic or smart. One secondary theme was identified in at least two interviews. The secondary theme was: moving. Interviewee comments exemplifying each of the themes are presented below.

Primary Themes Characterizing the Type Two Advisee

The primary themes identified were: an advisee who took a job that does not require the Ph. D. degree or who had a change of career goal; the advisee has personal or family issues; and, the advisee is characterized as perfectionistic or smart.

Primary theme of change of career goal. Five of 11 (45%) interviewees stated that at least one of the reasons they believed the advisee they identified as an example did not complete the degree was because they took a position that did not require a Ph. D. degree or had a change of career goal.

Professor Auguste explained that his advisee,

…did very well in classes and…at getting the prelim done…up to preparing a doctoral thesis proposal which was successfully defended last year. And then a year ago, he says, I'm taking a job outside the university in a new tech start-up company but I intend to keep working on my dissertation. So, as far as I know, he has not done anything on it during this last 12 to 14 months.

Professor Clifford shared his experience with students in general who, upon passing their preliminary examinations, were expected to have the ability to complete:

Most of the problems that we've had with graduate students in getting them to complete is because they run out of time in terms of our ability to support them. They can certainly get teaching jobs or even other jobs being ABD. And then finding the time to complete the dissertation is sometimes a problem for them. And so we really have to prompt them and remind them that they have to finish. And then there have been a couple of cases where students have decided, you know, they're well-employed, they're very happy with their lives, and they just don't feel the need to complete the dissertation, so they remain ABD. And, it's fine, you know, if they have successfully found professional employment without actually having the Ph. D., then how can we say that that's bad? That's really a great thing. We've done our job training them and it's just that they didn't actually finish the degree. But of course we would like them to, and…so we stand ready to help them any way we can.

Professor Ida identified one student who successfully passed her preliminary exams and was doing well in the program but did not finish. She described her as,

…really interested in research, hardworking. I think less confident about her interest in reading research projects. Like, loving to do research, loving to be on teams that were doing interesting work, but not necessarily wanting to take the lead.

This student took a full-time position where she could "do the kind of research she liked without having to do the Ph. D." What helped to clarify for this student whether to continue to attempt to finish her dissertation was that, as she described to Professor Ida, "every time she even tried to think of picking it up again she would become incredibly anxious and nauseous."

The student Professor Alexis had in mind as an example of an advisee who was doing well but did not graduate, is one he described as "a student who had a tremendous number of family obligations and health issues to where it really just became impossible at the end for her to meet the graduate school deadlines, even with an extension or two." Professor Alexis continued by stating, however, that it,

> …was probably for the better for everyone by the end, I think, because she didn't really, by the end, wasn't really shooting for an academic job. And…finishing the Ph. D would have been only something else she was doing that she wasn't quite happy with. Finishing the PhD was only a symbolic thing. And I think it was more of a burden to symbolically finish than it was going to be a reward for actually doing it. So by the end I think having kind of timed out was almost a relief.

The student Professor Paul identified as an example of an advisee who was doing well in the program but did not finish, he described as, "a very smart student," who, "in principle could have been a very good academic." Professor Paul further stated that this student,

…realized at some point that just temperamentally he was not well suited to the research career. He had a 9:00 to 5:00 job and found it difficult to deal with a very flexible academic schedule. And he found the process of putting together a research proposal to be stressful. And, so I think he made what I feel, is a really very mature decision, which is to understand what sort of career he would be happiest pursuing…before he got too far along.

Primary theme of personal or family issues. Four of 11 (36%) interviewees described personal or family issues as a reason an advisee who appeared to be doing well did not complete.

Professor Ruth identified an advisee who appeared to be doing well in the program but did not finish as "a very good student" who already had data for her dissertation project. Professor Ruth further described her impression of this student at the time she finished her comprehensive exams:

My mind was, this is a student who would get done quickly because she also was a little older than other students, she has a couple kids, and so on. So, she was highly motivated, she was funded for five years and everything looked like this would just, you know, be done.

Professor Ruth does not know exactly what happened to derail this student but she does know some information, she stated,

There are two things that happened to her. She fell in love, moved out into the country, and isolated herself from everybody. And the thing that really did it for her was that her kids graduated from high school and she didn't have to take care

139

of them anymore. And so suddenly she did have time and she could do things. And so that was an issue and I don't think she dealt with it very well.

At first Professor Charles could not think of a student who was doing well through their comprehensives and their qualifying paper and did not graduate. Then he did think of one student who had family troubles in her country of origin. He stated that,

She was very, very bright but had…some health, some family, and some emotional problems. And, ultimately I think she probably was mostly done with her dissertation. And her work was really outstanding. I've contacted her since she's left saying that I'd like to work to turn her dissertation into a book with her. She just didn't want to deal with it.

The student Professor Alexis had in mind as an example of an advisee who was doing well but did not graduate, is one he described as "a student who had a tremendous number of family obligations and health issues to where it really just became impossible at the end for her to meet the graduate school deadlines, even with an extension or two."

Professor Woodrow described an advisee's personal issues, as follows:

She was undergoing all kinds of psychological counseling and was treated for depression because of this. And she understood in some ways that she was her own worst enemy, but she couldn't get past it. She would go off and do her thing and every six months or so, give her a look and say, come and talk to me and she might, or she might not. You know, because she knew what I was going to say…and she was embarrassed about it.

Primary theme of perfectionistic or smart. Four of 11 (36%) interviewees described their example of the Type Two advisee, who did well upon passing their preliminary exams but did not complete, with the characteristics of being perfectionistic or smart.

Professor Woodrow had one student in particular he thought about as an example of an advisee who successfully passed her preliminary exams but did not finish. He stated,

> She was a really wonderful student in the early stages of her career and just could
> never pull it together and was just never able to formulate a viable doctoral
> dissertation proposal. And she just stalled out. It took her an enormous amount of
> time and finally she ran up against a time deadline posted by the graduate school.
> And she just could not get it together in time. We gave her every possible
> opportunity to do it. And we worked with her, a number of faculty including
> myself, worked with her a great deal. And she could just never overcome.
> I think it was just an ideational block of some sort. You know, some folks are
> perfectionists. And…it's not a good thing to be a perfectionist if you want to be
> an academic because if you wait until your work is perfect, you will never get
> it out.

Professor Emile did not identify a specific student who did well but did not graduate. He did describe the group of students who fit the Type Two advisee, as follows:

> I don't know whether you know that there is a category of students that I think are
> big problems because they are the perfectionists who are never, never satisfied

141

with their work. And I've known people who never finished. They're working in universities. They have intellectual capitals that you wouldn't believe and their universities are relying on them too often, sometimes in an adjunct appointment, sometimes, sort of academic staff, non-faculty, but just absolutely terrific people who have never finished their dissertation because they're too perfectionistic.

Professor Jurgen identified an advisee who was doing well in the program and did not graduate who "is quite brilliant and in fact has a Ph. D. in physics…he has this problem letting go of material. He stews over things more or less for a long time." This advisee is still working on his dissertation currently. He has been ABD for about eight years. Professor Jurgen continued, stating that,

He had a pretty well-defined topic or set of topics and despite lots and lots of time, some by me, more by another advisor, I mean we're talking lifetimes of time, like a lot of time, he has just never quite got it together. And I think people put up with it because he's a tremendously charming guy. And he is phenomenally smart. But he's certainly no further along in completing the Ph. D. even though he started off with this great promise.

The student Professor Charles identified as an example of a Type Two advisee, and fit the theme described in the last section of having personal or family issues, he described as being "very, very bright."

Secondary Themes Characterizing the Type Two Advisee

One secondary theme was identified in at least two interviewee descriptions of a Type Two advisee who appeared to be doing well in the program but did not graduate.

142

Secondary theme of moving. Two of 11 (18%) interviewees described moving as a reason for the student they identified as an example of a Type Two advisee not completing their degree program.

The student Professor Ruth identified as an example of a Type Two advisee, also described in the above theme of having personal or family issues, "moved out into the country" which Professor Ruth stated was, "a huge mistake."

Professor Anthony easily identified one student who fit the Type Two advisee, a student who did two large participatory action research projects with him and, "generated just an amazing amount of data that was, from my perspective, easily dissertation-able." He explained that this student had moved away, "…and then when she moved away, I just, I think it just didn't feel as immediate to her anymore." Professor Anthony stays in touch with this woman; they actually work together on some grant projects. He continued, stating they also "publish together and, you know, of the people I would have predicted most likely to succeed, I would have put her at the top of the list." He added that "she moved to be with her partner and, ended up in a place where, you know, I'm not sure she's found the thing she can do given that she has to stay in that place"

The next section presents interviewee responses about advisee Type Three: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph. D. program but did graduate.

Advisee Type Three

A Type Three advisee is one who upon passing their preliminary examinations appeared to be struggling but does graduate. All 18 of the interviewees had at least one

example of a Type Three advisee. Seventeen of the 18 (94%) interviewee descriptions of a Type Three advisee are represented in one or more of the four primary and three secondary themes presented in this section. Four primary themes were found across interviews in the description of interviewee experiences with a Type Three advisee who, upon passing their preliminary examinations appeared to be struggling, but did graduate. A theme was identified as primary if it was found in more than 25% (five of 18) of interviewee comments. The three primary themes are: extra advisor effort; academic research career fit; low academic performance; and, criticism, self-doubt, and absence. Themes were identified as secondary if they were found in fewer than five interviews. The two secondary themes were: family responsibility and fieldwork challenges. Professor Charles identified a few advisees whom he believed, because they are first generation students of color, they drew on personal strength, skill, and family and community ties to finish with their Ph. D. degree. His experience with these students is described at the end of this section. Interviewee comments exemplifying each of the themes follow.

Primary Themes Characterizing the Type Three Advisee

The three primary themes are: extra advisor effort; academic research career fit; low academic performance; and, struggling with criticism, self-doubt, and absence.

Primary theme of extra advisor effort. Eight of 18 (44%) interviewees described an advisee who was struggling when they passed their preliminary examinations and needed extra effort from them to complete the degree program.

The advisee professor Daniel identified as an example of a student who struggled but did complete the program is a student he recruited to the doctoral program. This student,

> …worked real hard, he's a real hardworking student, and I helped him get through
> his dissertation. But he needed to do some revision work and the committee felt
> he wasn't ready yet. It wasn't. The language was a little stupid and stuff. Anyway,
> he got a job…before he got the dissertation. For about four years he didn't do
> anything on the dissertation. Anything. And I kept prodding him, prodding him,
> which is another thing advisors have to do. And finally he sat down and he did the
> revisions which didn't take him long. And he finally got through the dissertation
> defense and all that and it was a well-written dissertation.

Professor Auguste's example of an advisee who struggled through the program but finished, is a woman who started the doctoral program in 2003, and "was able to proceed through course work in a timely fashion, passed the prelim, designed a proposal, and started collecting the data." Professor Auguste explained the university timeline of five years once a student achieves candidacy status, which this student had achieved by passing the preliminary exam. He stated, "If they fail to complete it within five years, they will be dropped from the program unless they file for an extension." He continued with this advisee's story by stating, "This woman spent that five years basically raising a lot of children, home schooling them. And not…doing much work, if any, on her dissertation. She lost her eligibility." She asked for a "petition extension," and he stated, he "had to write a letter of recommendation to extend it saying what she's going to do

and they approve it. Another year goes by and she still hasn't done it." So the next year, he explains, there is another extension. He continued,

> I sat down with her and tried to map out something. So six months of that goes
>
> by and finally I realize that's the final deadline. If she doesn't complete this in the
>
> remaining six months, she's not going to make it. So, I had her meet with me and
>
> I said, you have six months, you have a foundation, you have a lot of the literature
>
> review done, you have a description of how you collected the data, but in order
>
> for you to finish in time and not have to petition for reinstatement in the program
>
> what you need to do is meet with me every week and we set up a bi-weekly
>
> schedule of what you're going to do and then come back and meet with me again
>
> and we'll review it and give you my feedback and we'll go onto the next two
>
> weeks of work. And that worked.

Professor Emile described a student he agreed to take on as an advisee after she had been "profoundly distressed by two earlier advisors, maybe three." He said to her, "now we're going to get you through this." He stated that his advising style with this student,

> …was the most directive I've ever been in a dissertation. I don't think I'd ever,
>
> until this point, advised students to do a particular thing. But I just knew the
>
> student, left to her own devices, would never finish because she would be getting
>
> interested in other things. She still wanted to interview people, and this was a
>
> person that, you know, she needed absolutely needed to be done with her
>
> dissertation. I mean, she was under a lot of pressure. So I said, no you're not

146

doing any interviewing. There were members of the committee that wanted her to do additional interviewing and I said, no, no, she has enough. She can get a dissertation out of this, this is what we're going to do. If she wants to do something else, then somebody else has to direct this dissertation. And it worked!

In Professor Harriet's description of a student who struggled through the program but did complete, she stated it,

> …took kicking and screaming and pushing. The dissertation was not great. It was just barely passable. It was a good idea, it actually got a dissertation grant based on the proposal, but when it came to actually executing what she proposed to do, it was repeatedly poorly defined or sloppy or needed fixing or whatever. And I spent a lot of time on multiple drafts to get…I don't know how many umpteen times before it got written and out the door.

Professor Jane described an advisee who struggled through the program but did complete by explaining that "towards the end I was just like being extremely directive, like, you're going to have to do this and you're going to have to do – I mean, I actually believed in the project, I thought there was wonderful stuff in there." Professor Jane also described an advisee for whom she asked the committee members for help because she was, "a weak student" who "should not have been let into the Ph. D. program." However, Professor Jane saw "potential in the project." Professor Jane shared that she emailed this student's committee members with a request. Her email message was, "You know, I hope you can find extra time. I'm really tired." She continued, stating, "You know, they got it in shape so we can just, you know, get her out of here." She explained:

147

So, you know…all of us over the years, all of us have done that kind of stuff.

There's the people who are really strong and then there's the people that you're

just, okay, can I hold my nose and find this, and sometimes you're kind of

begging your fellow committee. You know, I've signed for other people's

dissertations where you got to the point where you're just like, okay, this is good,

can we tolerate this? Okay, let's get it out the door, you know.

Professor Ida identified an advisee who struggled through the program but

completed. This student had successfully defended her dissertation proposal but the data

she proposed using fell through. Therefore, she had to develop a new proposal to defend.

There was a faculty member on this student's committee that wanted to "take a vote to

terminate her from the program…but they said, if somebody is willing to champion for

her, then that's fine." Professor Ida agreed to champion this student and agreed to be her

advisor, "because she had a new dissertation idea she was willing to defend and willing to

go forward with." This student also ended up moving across the country several times

due to her husband's career. She finished the dissertation in about two years and "did a

great job." Professor Ida stated that "she was a skilled analyst, a good thinker, and a

mediocre writer. I was glad to have gotten her through the dissertation."

Professor Alexis described the type of students he has advised who struggle to

complete, as follows:

By the time they're in the dissertation, they're operating…as in, this is the

beginning of them being independent scholars. And so I usually try to have them

set and meet deadlines and I give feedback on the materials they provide. And I

148

do think some people kind of can struggle with their own self-discipline, and

maybe not even just the discipline of working, but the autonomy of making

decisions about what to leave in and what to leave out and how much farther to go

down the road on this kind of thing.

Professor Paul described what his and members of this student's committee's

experience was with a student who was struggling to complete, as follows:

Well it was pretty frustrating because there were times when she has not taken

advice on board and has gone a different direction than we felt and that other

committee members felt was appropriate. And I think that has slowed her down in

some cases. And there have been some other challenges, well just in terms of the

actual writing, and that sort of thing. This is a case where I think just more hand-

holding has been necessary…and where it's been more incumbent upon me to just

find clear goals and work towards those as hopes to giving her the sort of latitude

that you would give to a student who was able to pursue more initiative on

her own.

Primary theme of academic research career fit. Seven of 18 (39%)

interviewees described an advisee who was struggling through the program but did

graduate even though the student either found out that an academic research career was

not a fit for them after all, took a job that did not require a Ph. D. degree, or did not have

a career goal that required a Ph. D. degree.

Professor Daniel described an advisee who had taken a job before finishing his

dissertation and did not finish up revisions the committee required him to make for about

four years. When asked if Professor Daniel thought it was just the job that kept this student from finishing for four additional years, he stated, "Well yeah…he just felt it wasn't necessary because he had a good job."

Professor Harriet described an advisee who enjoyed teaching but "really never could put her focus on doing the research." Professor Harriet also stated that,

> …this student wanted to teach and might have had a goal earlier in the program of teaching at a small liberal arts college where she could get tenure. However, after the struggles of getting her degree and not publishing, she needed to go to where there were no expectations of research and publishing.

Professor Harriet explained that this student did get her Ph. D. and a job at a teaching college without tenure appointments.

Professor Ruth described an advisee who, similar to other students she has advised who struggle to complete, "Usually…they don't have a clear career goal because they do doubt themselves so much. The student I'm thinking of in particular is still struggling with what her career goal will be."

Professor Jane described an advisee who struggled in part because she was "not sure she wanted an academic job."

Professor Karl described two students who fit the advisee Type Three category in different ways. The first advisee whom he described as "intellectually, maybe not among the strongest but somehow had the work discipline or will," he explained was more able and apt to go on to get a job at a top research universities than the second student who he described as "extremely smart…but disorganized or distracted." He explained further

about the two different types of student who struggle throughout the program but do finish. The first type of student are those who,

> …for different reasons struggled at that stage. Maybe because they were not the strongest students, but they just did enough to pass and then they did data collection, they wrote a dissertation, in most cases it was not a glamorous dissertation, and most of them did not get jobs at R1 universities. This would be a person who would be, you know, intellectually, maybe not among the strongest, but somehow have some kind of work discipline or will to put it through.

The second type of student that fits the struggling completer are, Professor Karl stated, "…a very different kind of problem." He has had a few advisees who fit this type, who,

> …are extremely smart and they have fantastic ideas and do quite spectacular work but are maybe disorganized or distracted by other activities in their lives. And so maybe they do their prelim but after a lot of delays, maybe the very last minute they can do it, and then they get into the dissertation stage and they are still disorganized or still distracted by other things in their lives.

Professor Karl identified two students recently who fit this description. They both eventually completed the program and earned the Ph. D. One wrote a dissertation that was okay, the other wrote one that was impressive. He has lost track of the one who wrote the impressive dissertation. The other student went back to his home country and is not working in an academic setting. Professor Karl stated that there are different reasons that might explain a student who is struggling to complete their Ph. D. program and they may write an okay or an impressive dissertation, but "what happens afterwards is yet

151

another question because the same life circumstance and personality issues may get in the way of a professional or academic career just as they almost get in the way of earning the Ph. D." Professor Karl has had experience with students who

…might enter academia with a kind of idealistic view and then they see how hard certain aspects of academic life and work are, and they develop different leanings. I know some students in my department who eventually said, no, I don't want a job at an R1 university, I want a job rather at a teaching college. So they became disgruntled with the research process.

Professor Antonia described a student who she was not sure would finish because she was already teaching at a junior college and did not need the degree for that position. She explained:

I wasn't at all sure she needed to [achieve the degree], because she did have this other identity as a junior college teacher of writing and literature…and that was probably what she was going to continue to do. And she didn't really need a dissertation or at all a certain dissertation to alter her grade or salary. So, I wasn't sure if she was going to finish. But now, after I left, she did. By then I was not her principal advisor. And I was glad to see her finish.

Professor Paul described a student who was struggling to complete and had taken a full-time administrative position at another university that did not require the Ph. D. He stated:

We had a student who was about to finish who struggled quite a bit. And it's taken her much longer…I mean the prelim defense was more difficult than is

152

often the case. And the actual process of writing the dissertation has taken much

longer than everybody hoped for. She ultimately took a full-time administrative

position at another university and has been finishing up her dissertation basically

on the weekends. But it looks like she's going to finish this semester which

is great.

Primary theme of poor academic performance. Seven of 18 (39%)

interviewees identified poor academic performance in their description of advisees who

struggled at the time they passed their preliminary examinations but did complete their

degree program.

Professor Max described his advisee's dissertation drafts as,

I wouldn't say incomprehensible but let's say they were meandering. They didn't

really stick to the subject matter and it wasn't clear exactly what it was that she

was trying to say. But in the end she did finish her degree. Professor Max also

stated that generally in his experience with advisees, "the weaker the student the

more time it takes, which is one of the interesting aspects of graduate school, is

the students that are the weakest are the ones that end up requiring the

most attention."

Professor Gary stated that the advisee who exemplifies a Type Three student who

struggled through the program but graduated was one whose "academic performance in

some ways was below the others. He couldn't write." Professor Gary continued,

153

I've often found with blue collar males, writing is like being the opposite of tone-deaf….I think you hear good writing, and this guy had problems with that. But ambition conquers all and this guy just…had to get a job.

Professor Harriet described her advisee's dissertation as "not great. It was just barely passable."

Professor Jane described an advisee as a "weak student" who "should not have been let into the Ph. D. program."

The student Professor Woodrow identified, as an example of an advisee who struggled to complete, had already achieved a law degree before starting his Ph. D. program. He described the student further by stating,

He was the sort of guy who always got through but he never dazzled intellectually. He was always confident and workman-like but he never really, really dazzled at all. And yet, when I would look back I would realize that, you know, he always seemed to plod a bit, but he always gets there in the end. It's kind of hard for me to describe. But he was not labeled in any way a high flyer or superstar of the future. He's just, you know, a solid guy who somehow got through and then, when he did get through you'd look back and look at the product and say, okay that's a lot better than I thought he was capable of. And, in that sense he was almost always exceeding expectations and somehow the expectations in his case were never that high to begin with. But he always met them and exceeded them.

One of the advisees Professor Karl identified as a student who struggled through the program but completed he described as "…intellectually maybe not among the strongest but somehow have some kind of work discipline or will to put it through."

Professor Jurgen has had one student who worked on his dissertation for almost 16 years and eventually got two different Ph. D. degrees. He stated that "the one that he did for me was, you know, I thought not particularly good, but it certainly satisfied the requirements and, you know, enough was enough. He had to get out of here. Get on to his life." This man is now working at a think tank, is now married, and "flourishing in a way in an academic setting."

Primary theme of struggling with criticism, self-doubt, and absence. Six of 18 (33%) interviewees included in their descriptions of an advisee who struggled through the final stage of their doctoral program, that they had a tendency not to deal well with criticism or experienced self-doubt, often resulting in an absence before returning to complete the degree.

Professor Daniel shared that an advisee of his who struggled but did graduate was absent for about four years after his committee said he needed to revise his dissertation.

Professor Max, in his description of a student who had trouble with her preliminary examinations but finished, shared that,

> …the trouble she had with her prelims turned out not to be due much to content, it had to be due to she's a foreign student, and actually, what happened to her made us finally completely rework the way in which we, as a department, deal with foreign students and plagiarism.

155

Professor Max explained that, in this student's preliminary exam, there were a lot of plagiarism violations. However, in every instance, the student had included the author's name. The conclusions made were: "A) she would have to take them over again, and B) we would change the way in which we socialized incoming graduate students on this specific subject." The student passed the second time and then went to her home country…to do her field work. There was a time of absence where, Professor Max stated, "it was really not really clear if she was going to ever finish the field work.

Professor Harriet shared that she found, in her experience with students who finish with a struggle, is the tendency to throw out what they are working on and start over. For example, if they had a data set that was hard to analyze, or a framework that was hard to understand and fix. Professor Harriet described her experience with a student she currently advises who has a good idea, but if her work is criticized, she "…disappears for six months, tears up what she's done, starts all over again and does not make progress." Professor Harriet stated that this characteristic of throwing out current work that is not perfect and starting over again is "the single most common feature of people who, if they graduate, they graduate because the advisor is committed to pushing them through the program."

> Professor Ruth described students as a group who struggle to complete as,
> …students who aren't terribly sure of themselves in a general way…and they are always second-guessing themselves that they must not have done something right or they should have done it better or, you know, all of that kind of self-doubt. And then, when they start doing their dissertation research, they get so into it that they

156

forget that they don't have confidence and they're doubting themselves. And they

get excited about it and they get great feedback from, you know, getting a paper

to conference or somebody asks them to publish something. And then they

suddenly race and get done.

Professor Jane shared an example of an advisee who upon passing their

preliminary examinations appeared to be struggling but did graduate. She described this

student in three parts:

A, kept changing topics, B, was really in this identity crisis, not sure she wanted

an academic job, and C, couldn't deal with criticism well. So, she'd give us some

stuff and we'd make all these critiques and then she would like totally disappear

for a year and come back with a totally new project. So nothing ever moved

forward because she kept, you know, hiding from us and insisting that she would

self-train and so she was screwing it all up.

Professor Paul described an advisee who would not take "advice on board" and

would go a "different direction than we felt and that other committee members felt

was appropriate."

Secondary Themes Characterizing the Type Three Advisee

Two secondary themes are presented next that were identified by fewer than 25%

of the interviewees in their description of an advisee who was struggling at the time they

passed their preliminary examinations but did graduate. The two secondary themes are:

family responsibility and fieldwork challenges. Interviewee comments exemplifying each

of the themes are presented below.

Secondary theme of family responsibility. Four of 18 (22%) interviewees identified that taking care of children or an elderly relative contributed to an advisee's struggle to complete their degree.

Professor Auguste shared that much of his advisee's time between achieving candidacy status and the program-established deadline of five years for her to complete the degree, was spent raising and home schooling her children. He stated: "This woman spent that five years basically raising a lot of children, home schooling them. And not…doing much work, if any, on her dissertation."

Professor Ruth described an advisee who is married and has two children and "is stymied" by the responsibility. In Professor Ruth's experience, students who fit the Type One advisee who successfully move through their doctoral program and complete, "they immediately start figuring out ways to solve the problem." She continued the comparison between the Type One advisee who does well throughout the program and completes, and the Type Three advisee who struggles and completes, by stating,

> I don't want to say this because I don't think it's fair, but in many cases, people, students who have children, sometimes let the children keep them from doing things. Now, sometimes they don't have a choice. But other times, other people in similar situation focus on, sort of focus a little more positively and figure out ways to work around that problem.

Professor Jane described an advisee who struggled but completed the program, that "while working on her dissertation, this student was also caring for her grandfather."

Professor Anthony stated, generally, for an advisee who struggled through the program but earned the Ph. D. degree:

Parenthood has made a lot of difference because they are really devoted to their kids and it just doesn't give them a chance to kind of be the distracted academic that many of us are when we're obsessively thinking about what we're thinking about. You just can't do that when you've got kids in the same way.

Secondary theme of fieldwork challenges. Three of 18 (17%) interviewees described fieldwork challenges advisees struggled with in completing their degree program.

Professor Max shared the example of an advisee who, "…went to her home country to do her fieldwork" and after a time of absence, "it was really not clear if she was going to ever finish the fieldwork."

Professor Clifford described a student who was doing her field work in another country when the political conditions turned bad. He explained that,

…she was there under a Fulbright grant and the Fulbright commission demanded that she return to the United States and abandon her grant, and she refused. But there was a lot of time when she really…had to leave the country a couple of times in order to feel safe. So, those sort of things happens a lot. And we can't predict many of these things in advance. So, sometimes the fieldwork plan has to be revised in the middle of the fieldwork itself.

Professor Antonia recalled a student who struggled through the program but completed. She was her advisor at the beginning of her doctoral program but she finished

159

with someone else due to Professor Antonia moving to another university. Professor Antonia explained:

> This student went to another country to do participant observation research with a particular population but it turned out that she could not easily participate in the group's gatherings without a disruptive effect. This student had to change the topic and focus of her dissertation and went to another community who had a moral obligation to be hospitable, such that hospitality practices became the core subject of the dissertation which was highly successful, innovative, and subsequently published. But her whole research design was revised in the field.

First generation students of color. One interviewee, Professor Charles, had a few students who "after kind of floundering around they just really kind of put their nose to the grindstone and did what was necessary to complete it." These students were first generation college students of color and, he stated,

> They might not have been socialized in an environment that was oriented towards being successful in a Ph. D. program. But they were able to draw on their personal strength and skill and do quite well ultimately and surprisingly so, considering their difficulties in the earlier level. That was very rewarding. In some cases they had a family to support or felt that their research was valuable to communities in need…and their backgrounds allowed them to be someone, you know, they felt a special duty or motivation to relate to people from their own class and racial or ethnic background, and that allowed them to see special value and motivation to be successful. And they did that. So, rather than feeling marginalized by their

background, they felt kind of a special duty and opportunity to assist people who came from experiences like their own and drew upon that for motivational purposes.

The next section presents interviewee responses about advisee Type Four: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph. D. program and did not graduate.

Advisee Type Four

Twelve of the 18 (67%) interviewees identified an advisee who was struggling and did not graduate, six interviewees did not have an example. Across the 12 interviewees, who provided at least one example of an advisee who upon passing their preliminary examinations appeared to be struggling and did not graduate, three primary themes and no secondary themes were found. All 12 interviewee examples of a Type Four advisee are represented in the three primary themes. A theme was identified as primary if it was found in more than 25% (three of 12) interviewee comments. The three primary themes were: poor academic research career fit; poor academic performance; and, family responsibility. No secondary themes were found in more than one and fewer than 25% of the interviews. However, Professor Anthony described a student of color as an example of a Type Four advisee. His experience with this student is included at the end of the section. Three advisees who were identified as an example of a student who struggled through the program and did not finish were counseled out. This is noted in the theme each of the three represented.

Primary Themes Characterizing the Type Four Advisee

The three primary themes identified were: poor academic research career fit; poor academic performance; and, family responsibility.

Primary theme of poor academic research career fit. Seven of 12 (58%) interviewees stated that the advisee they identified as a student who struggled through the program and did not complete, either could not conceptualize a research question to focus on, had difficulty with the research itself, or found a teaching position that did not require a Ph. D. degree.

Professor Max shared that his advisee asked him for a letter of recommendation to be a lecturer at a small college and did not finish the doctoral program.

Professor Gary stated that his advisee is now at a teaching position in a community college and feels she does not need a Ph. D. to continue in her current position. Professor Gary advised that, "you're going to not be very happy if somebody, who is your supervisor, isn't very good, is above you because they have a Ph. D. If you want to stay in education and keep in higher education and get anywhere, you really have to have that ticket."

Professor Harriet shared her experience with two advisees who had trouble conceptualizing a research question. One was a student who "struggled and struggled and struggled with their research," at the preliminary exam level. Professor Harriet continued by stating that, "this student had "perfectly good technical skills but does not have a problem in her head that she really wants to do." This advisee was counseled out. The other student also had difficulty "formulating…a question…she just couldn't get there."

162

Professor Harriet shared that she sees a difference between the Type Three (struggled to complete) and Type Four (struggled and did not complete) advisee. She stated, "…the Type Three people were more problematic in terms of their skills. Type Four people were struggling but they're struggling at the conceptual level. The skills are there but the question is not."

The student Professor Ruth identified, as an example of an advisee who struggled with her preliminary exams and did not complete the program, was a student who switched from her advisor to Professor Ruth because she had been in the program a long time and was "languishing" with her current advisor. This advisee was already working in the area she wanted to work and her employer wanted her to get her Ph. D. So, Professor Ruth stated,

> She should have been highly motivated because they wanted her to get her Ph. D. and this is in a sort of more clinical area, really outside my expertise…but I always sort of saw myself as, you know, sort of overseeing her just getting done. And eventually…I mean her data had already been collected and she finished her dissertation. There were a number of revisions that she needed to do, I couldn't pass it without those revisions. And she got a job, and in fact she got a job at [institutional name redacted], and she never finished. It was like, pulling teeth to get her to do revisions. It was like, she spends all her energy doing whatever she did the first time and she had a very hard time going back to it.

Professor Woodrow described the student he identified as an example of an advisee who struggled through the program and did not finish: "She really had problems

dealing with the conceptual stuff. She could just never get it right…and she eventually went in a different direction…somewhere as an academic administrator."

Professor Jurgen identified an advisee who struggled and did not finish as among the more interesting advisees he had:

He started on a thesis and then just basically drifted away. I think he's finally given up any hope of ever getting it…he had tremendous promise…he just got interested in other things actually. First raising his kids and then figuring out what to do when the kids move on. He had great promise and he had a good topic and he could have nailed it very rapidly. Also he knows how to write. So that was very strange. I mean, he just really, I think he made a quiet decision that I don't want to become an academic, and he didn't tell everybody about it.

Professor Ida remembered her advisee as a "very interesting person who loved school. She liked to teach so was working full-time in teaching at the local community college. And not necessarily having kind of a passion around a particular research topic."

Primary theme of poor academic performance. Six of 12 (50%) interviewees identified some type of poor academic performance in their descriptions of an advisee who struggled through the program and did not finish.

Professor Max had a student that fit the advisee Type Four category who had difficulty with his comprehensive exams and did not graduate. He explained that this student,

…claimed, and I think rightly, that he literally froze up in writing his comps and was…by the way, I should note that we don't have comps that are in-class comps,

164

our comps are [where] you have two weeks to write something, and in one case he

came back with what, three pages…. So…in one of the three exams that we

require, he…basically didn't answer the question….So, he had to take his comps

over. The second time around he did pass. It wasn't the best performance I've

ever seen, but it was a satisfactory performance.

Professor Emile had "an absolutely clear case," of a student who struggled and

did not complete. He described this student as one who "had problems from beginning to

end," first identified at the end of the first year of courses and continuing through his

comprehensive exams. Professor Emile continued his description of this student's

difficulties by explaining,

This student managed to squeak through the comprehensive. And…then the

dissertation was just awful….I mean he picked a topic and…the idea was okay

but he couldn't go out and collect data that was convincing and analyze it. This

particular student turned out to have mental difficulties too. His committee was a

really good committee of people…and we were sort of…always were edging

toward coaxing him out of the program. But he was very determined and then he

started accusing us of bias and so then that was, then you really have to be very

careful of what you do. And I mean it was a long time before we, as a committee,

decided that he was out, and so he was out.

Professor Clifford described one student that was counseled out of the program,

he explained,

…not because they were incapable, it's because they just didn't complete their coursework. They ended up with, you know, six incompletes in their coursework and we gave them every chance to try to make up these incompletes. But we, you have to remember that we support our students, we don't admit students that we can't support financially. All of our students are supported. And so the possibility of not having them go forward with…not completing their courses really is untenable. And…in this particular case actually the person hasn't been dropped from the program but we've asked them to suspend their program for a year in order to make up their coursework and then we'll consider readmitting them.

Professor Woodrow shared about his example of a Type Four advisee who struggled at the time she passed her preliminary examinations and did not graduate:

She was another one of these people who simply couldn't pull it together at the dissertation stage. She really had problems dealing with the conceptual stuff. She could just never get it right. And you know, it was clear that, you know, her ideas were just mostly incoherent and all of that and she was never going to, you know, somehow to my surprise she got through her prelims. But after that, just, you know, again took a tremendously long amount of time to get a dissertation proposal done. It was really terrible and we gave her a few retries and she just could never do it.

Professor Karl described a student who was struggling at the preliminary stage. She did pass, "with some headaches. It was just not convincing. It was maybe just good enough to pass…. It was a year later she started some data collection effort, she simply

166

didn't return." Professor Karl shared that he tried very hard to convince her to "at least turn the prelim paper and one seminar paper into a master's degree paper…" He continued by stating in general,

> If the question isn't clear, if the literature and the research methods are not astute, then people will run into challenges and they get frustrated and give up at some point. And for a committee and an advisor it's not always a clear decision that it will be a successful story, or that it will stay sometimes as a gray zone. And maybe we tend to give the student the benefit of the doubt, and say, well, he's come this far, or she's come this far, and now we don't want to send this paper back the third time, let's see how the data collection and the writing works, maybe that would go more smoothly than expected.

Professor Anthony described an advisee who has struggled through the program and may not complete. He began by stating she is "really, I think, being pushed away by the prelim system here." This student took the first prelim exam and failed, so she now needs to retake the first one and then take the second one. Professor Anthony's opinion of the prelim system at his University is not a good one. He states that the prelims are, "…all day exams and they're insane. There's nothing rational or useful about them. They're just hazing rituals as far as I'm concerned. And so I have a hard time helping these students get motivated for them too."

Primary theme of family responsibility. Four of 12 (33%) interviewees described advisees who were struggling and did not complete who had family responsibilities.

Professor Max described a student who began his data collection and "then met a woman and got married. They bought a house together and began a family."

Professor Gary explained that the advisee he identified as one who struggled through her program and did not complete also had a child to raise.

Professor Jurgen described an advisee who "had tremendous promise" but "just got interested in other things…first raising his kids and then figuring out what to do when the kids move on."

Professor Ida shared that her advisee, "…had to support herself and an ailing mother and an ailing brother."

Secondary Themes Characterizing the Type Four Advisee

No secondary themes were identified in interviewee descriptions of a Type Four advisee who struggled through the program and did not graduate.

Student of color. One interviewee, Professor Anthony, described an "indigenous student" as an advisee who struggled taking the preliminary exams and may not finish. He believes this student finds "the university itself to be too white and too European for her taste." He added that "she's been doing great, amazing stuff here. She herself has gotten important grants…. It's just that the prelims and I think a part of the overall culture just feels alienating."

The next Chapter Five presents a summary and discussion of the primary themes found in Chapter Four and ends with conclusions based on the findings from this study.

CHAPTER FIVE: SUMMARY, DISCUSSION, AND CONCLUSION

This chapter provides a summary, discussion, and conclusions on the findings from this study which focused on the research question, "How do faculty assessments of degree completion likelihood shape their advising relationship with doctoral students?" A summary and discussion regarding the primary and secondary themes discussed in the previous chapter on results will be presented on the advisor approach to advising, and, characterizations of each advisee, Type One through Type Four. The final section provides conclusions on the findings from this study.

Each doctoral advisor was asked to identify four students (using a pseudonym), one of whom represents each of the following four types, based on their assessment of degree completion likelihood:

- Type One: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation and did graduate.

- Type Two: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation but did not graduate.

- Type Three: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph.D. program but did graduate.

- Type Four: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph.D. program and did not graduate.

Summary and Discussion

This section first describes and discusses the advising approach of the 18 interviewees and the themes that emerged in their comments about their approach to advising. Second, a discussion of the interviewee's experience with each advisee type shows different themes found across student type (defined by the interviewee's assessment of degree completion likelihood). Finally, conclusions are presented.

Advising Approach and Themes

Knowing how the faculty advisor approaches advising provided the basis for understanding differences in their advising relationship with students who are in their final stage of a doctoral program based on their assessment of degree completion likelihood. Interviewees were asked two open-ended questions designed to elicit general information about the participant's general practice and approach to advising doctoral students. The two questions were:

1) In general, how do you define your role as an advisor and what is your typical approach to advising?

2) In what ways is your typical practice and approach different from what you experienced from your doctoral advisor?

Advising approach. Interviewees were asked to describe, in general, how they define their role as an advisor and their typical approach to advising. Interviewees were

not asked whether their advising approach differed according to their assessment of

degree completion likelihood of the four advisee types. However, a determination was

made by the researcher as to whether an interviewee's advising approach was similar or

varied across advisees based on interviewee responses to the first two interview questions

(listed above), and on descriptions of their experiences with each advisee type.

Across all interviewees, shown in Table 7, it was determined that 10 of the 18

(56%) described an advising style that varied depending on the student advisee and

included descriptions of trying different approaches with differing intensity or frequency.

Table 7

Interviewee Advising Approach

Interviewee	Advising Approach
Daniel	Variable
Auguste	Variable
Emile	Variable
Woodrow	Variable
Karl	Variable
Jurgen	Variable
Charles	Variable
Anthony	Variable
Alexis	Variable
Paul	Variable
Max	Similar
Gary	Similar
Clifford	Similar
Harriet	Similar
Ruth	Similar
Jane	Similar
Ida	Similar
Antonia	Similar

An example of an interview response determined to be varied is described by Professor Karl who stated,

> There are people, very self-directed, who are very creative and have convincing ideas as to what they want to do and they require not very much involvement on my part. There are others where the process develops in much more tortuous ways and where through all the stages a lot of guidance is needed.

Six of the 10 interviewees (Professors Daniel, Emile, Karl, Jurgen, Auguste, and Paul) stated they varied their advising approach based on student ability. For example, Professor Emile stated he tries to "tailor" his "approach to where the student is and what sort of strengths and weaknesses they seem to have." The other four (Professors Woodrow, Anthony, Alexis, and Auguste) stated they varied their advising approach based on what the student wanted. For example, Professor Anthony shared, "it's interesting when you let students guide you in the advising experience."

Some interviewee comments, such as the explanation provided below by Professor Alexis, suggest that a variable advising approach is undertaken to help advisees to become independent researchers. Professor Alexis stated that in his approach to advising, he is:

> …helping them to become independent intellectuals and researchers. So, more about giving feedback and thinking through choices than actually giving absolute direction of what classes to take, or what your prelims should be about, or how to design your research for your dissertation.

Eight of the 18 (44%) interviewees described an advising style that was similar, and in most cases included descriptions of setting up regular meetings with students, helping students set up a research plan, and providing feedback on regular basis. An example of an interview response determined to be similar is described by Professor Gary who explained that his typical approach was to meet with his students once a week. "That way," he stated, "people don't get lost. You keep nagging them gently."

Interviewees were not asked how often they met with their advisees. The literature on doctoral advising does, however, address a concern that advising is "woefully uneven" (Barnes & Austin, 2009, p. 298). Students who do not take responsibility to check in regularly with their advisor and who may drift or become isolated may not re-appear or may complete with a longer time-to-degree (Berelson, 1960; Bowen & Rudenstine, 1992; Ferrer de Valero, 2001; Girves & Wemmerus, 1988; Golde, 2005; Lovitts, 2001; Maher, Ford, & Thompson, 2004; Nerad & Cerny, 1993; Wilson, 1965). Furthermore, many of the studies reviewed in Chapter Two found that regular interaction with one or more faculty members contributed to degree progress and completion (Anderson & Swazey, 1998; Berelson, 1960; Bowen & Rudenstine, 1992; Ferrer de Valero, 2001; Girves & Wemmerus, 1988; Golde, 2005; Lovitts, 2001; Maher, Ford, & Thompson, 2004; Nerad & Cerny, 1993; Wilson, 1965).

The next section compares the interviewees advising approach with their experience from their doctoral advisor when they attended and completed their doctoral program. The question asked of each interviewee was, "In what ways is your typical practice and approach different from what you experienced from your doctoral advisor?"

Advising approach in comparison to own doctoral advisor. Table 8 indicates

how interviewees described their advising approach in comparison to what they

experienced with their doctoral advisor. Twelve of the 18 (67%) interviewees stated they

have a different advising approach from their doctoral advisor. Five of the 18 (28%)

interviewees described having an advising approach that was similar to what they

experienced from their doctoral advisor. One interviewee did not address this question.

Table 8

Advising Approach in Comparison to Own Advisor and Primary Affective

Interviewee	Advising Approach	Comparison to Own Advisor	Primary Affective in Description
Daniel	Variable	Similar	Positive
Auguste	Variable	Different	Negative
Emile	Variable	Different	Negative
Woodrow	Variable	Similar	Neutral
Karl	Variable	Different	Negative
Jurgen	Variable	Different	Negative
Charles	Variable	Different	Negative
Anthony	Variable	Different	Negative
Alexis	Variable	Different	Neutral
Paul	Variable	Similar	Positive
Max	Similar	Different	Negative
Gary	Similar	Different	Negative
Clifford	Similar	Similar	Positive
Harriet	Similar	Different	Negative
Ruth	Similar	Different	Negative
Jane	Similar	Different	Negative
Ida	Similar	Similar	Positive
Antonia	Similar	Unknown	NA

An analysis of interviewee comments specific to advising differences between

their own approach and what they experienced as a doctoral student, showed that four of

the five interviewees who had an advising style similar to their advisor described the

experience they had with their advisor as positive, using descriptive words such as, supportive, special, and having received considerable feedback (Professor Woodrow's description was neutral). Professor Ida provided a description that illustrated the supportive advising relationship she experienced in her doctoral program and one that impacted her approach as an advisor. She stated that she "…had a great advisor, so I would say I try to model that." She explained that her advisor "met with me very regularly, was good at troubleshooting, was willing to read every draft of everything I ever wrote and give me really solid and concrete advice."

Eleven of the 12 interviewees who had an advising style different from their advisor described the experience they had with their advisor as negative, using descriptive words such as, hands-off, absent, not helpful, difficult, and unsupportive (Professor Alexis' description was neutral). Illustrative of a negative experience, Professor Jurgen stated he only met with his advisor once or twice. He shared that he "didn't seek a lot of help from my doctoral advisor" and that he "barely knew what I was writing on until I handed something in."

The next section further addresses the interviewee responses to the question; "In general, how do you define your role as an advisor and what is your typical approach to advising?" The previous section that addressed interviewee responses to this question presented a discussion as to whether the advising approach was determined to be similar or variable across student advisees. This section discusses the primary and secondary themes identified in the interviewees' responses to this question.

Advising themes. Seven themes, identified in Chapter Four and shown in Table 9, were defined as primary or secondary depending on the number of interviewees who described the theme in their definition of their role as an advisor and their typical approach to advising. A theme was identified as primary if it was found in more than 25% of interviews, and as secondary if found in more than one and fewer than 25% of interviews. Three primary themes were identified in the advising approaches described in interviews. Sixteen of 18 (89%) interviewees defined their advising role approach as guiding the student through the program. Seven of 18 (39%) of the interviewees identified helping their advisees in their career path. Five of 18 (28%) included committee members as having a role in advising doctoral students. Three secondary themes were identified. Four of 18 (22%) interviewees included helping their advisees publish in their advising approach. Three of 18 (17%) interviewees discussed the importance of the student choosing their advisor. Three of 18 (17%) included helping their advisees to be independent researchers in their approach to advising.

Guide through the program. Although most interviewees described their advising role as, in some form, taking responsibility for guiding their advisees through the program, there was variability in their descriptions. This variability was primarily pronounced in the amount of structure or direction provided to the student versus the allowance or expectation of student initiative. The range of variation in how interviewees described their approach to advising as guiding a student through the program can be seen in the following three examples.

Table 9

Primary and Secondary Advising Themes

| Interviewee | Advising Themes | |
	Primary Themes	Secondary Themes
Daniel	Guide through program	
Auguste	Guide through program	
Max	Guide through program	Publication Independent researcher
Emile	Committee has a role	Advisor choice Independent researcher
Gary	Guide through program	Publication
Clifford	Guide through program Career path Committee has a role	
Harriet	Guide through program	Publication Advisor choice
Ruth	Guide through program	
Jane	Guide through program Career path	
Woodrow	Guide through program	
Karl	Guide through program	
Jurgen	Guide through program Career path	
Charles	Guide through program Career path	
Anthony	Guide through program	
Ida	Guide through program Career path Committee has a role	
Alexis	Career path	Publication Independent researcher
Antonia	Guide through program Committee has a role	Advisor choice
Paul	Guide through program Career path Committee has a role	

Professor Max shared his distinction between providing guidance and helping advisees make decisions for themselves, as follows:

But I think what…this particular student wanted was somebody to hold their hand, and that's not the role of a graduate advisor to my mind. To help? Yes, absolutely. To have intellectual discussions about various important issues? Absolutely. But not holding your hand…and by holding your hand I mean in the sense of saying, you know, here's the topic, here's how you need to write it up, here's how you need to do the analysis, here's how you need to collect the data. I mean that's what a doctoral degree should be about, you should be making those decisions for yourself, not having an advisor make them for you.

Professor Clifford described the advisor role as "the person who takes primary responsibility for the thesis research and mentors the student throughout the research."

Professor Ida stated that, as a "Ph. D. thesis advisor," she provides the "primary kind of mentorship of the student through the process…and helping them build a team that will help them be successful in completing their dissertation…and in their career." She stated that she is "probably a lot more hands-on than some of my colleagues." She sets up regular meetings with her advisees with a timeline that is set up with a schedule of milestones each student is trying to achieve at specific points in time. Professor Ida added that she is aware that some of her fellow advisors "have a very arm's length approach" and feel that "these are adults and they should be able to think and they have to take responsibility for it." She explained her thinking, as follows:

I think that's easy if your approach is that everybody comes in with the same kind

of endowment of resources and knowledge of what a Ph. D. program is about.

But…my tendency is to not assume that, and assume instead, that there are certain

rules to the game that we can make explicit and the more we can make explicit the

more people can meet expectations.

An advising approach of guiding a student through the program is well

represented in the literature as is the variability of advising approaches (Bowen &

Rudenstine, 1992; Knox, Schlosser, Pruitt, & Hill, 2006; Lovitts, 2001). Providing

guidance was found by Lovitts (2001) to have a positive impact on doctoral student

completion, along with showing interest, and providing support and information. Knox,

Schlosser, Pruitt, and Hill (2006) found from interviews with 19 faculty members in

counseling psychology doctoral programs that most (n=17) described the role of advisor

to "help advisee navigate program," and to be a "support or advocate" (p. 498). Bowen

and Rudenstine (1992) found a wide variance of attitudes and practices in dissertation

advising, ranging from dissertation advising ranking low in priority to advisors holding

regular meetings, setting clear expectations and deadlines, and "seeing the student

through" (p. 261).

An analysis of interviewee descriptions of the experiences they had across

advisees, discussed in the next section, showed that sometimes in practice, providing

guidance can be difficult. Bargar and Mayo-Chamberlain (1983), in their review of

"developmental issues associated with advisor-advisee relationships in graduate

education," suggested advisors, in advising students on their dissertation, take a

"facilitating role in helping students articulate and assess alternatives…" (p. 414).
However they also stated, "there are "serious pitfalls in such a role for an advisor who
becomes too strongly identified with the outcome and exerts too strong an influence on
the process." The authors emphasize "giving the student every reasonable opportunity for
taking responsibility for the [research] problem and its solution" (p. 415, word inserted in
brackets to clarify).

Professor Anthony reflected this balance between facilitation and becoming too
influential in his description of his advising approach. He shared that he asks, "…a lot of
questions to get students to think out loud about their choices, their confusions, their
options, and their criteria for choosing ultimately." He stated that he tries to avoid "giving
advice or directing," and that he is "certainly opposed to the kind of do-it-my-way model
that is still, I think, too prominent in higher education.

Within the primary theme finding, of guiding the student through the program as
an advising approach, is the difficulty that is inherent in advising unique individuals with
differing abilities. There is a balance in providing guidance that is not too influential,
allowing individual students with differing abilities to find the dissertation topic for
which they have enough passion, and to write their own dissertation.

The primary theme of guiding the student through the program is useful when
viewed as the underlying basis for understanding the different advising relationships that
were found in this study between advisee types defined by the interviewee's assessment
of degree completion likelihood for an advisee entering the final dissertation phase of
their doctoral program.

Career path. Professor Jurgen explained that as an advisor his "key goal is to do everything possible to make sure this student...is the dissertation done successfully in time to go on the job market and be successful there." Seven of the 18 (39%) interviewees included assisting advisees with their career path in their description of their advising approach. Professor Alexis, for another example, stated that "one of the big advising things besides working on the dissertation is how to approach and manage the job market." He shared:

> One of the big advising things besides working on the dissertation is how to approach and manage the job market. The academic job market…. Kind of developing an understanding of what kind of job and what kind of institution is the best, what you're interested in, and is the best fit for you…and what you need on your resume or CV that's really going to put you in the best position to get some offers and interests and the places that you want to be.

Assisting an advisee to obtain an academic position, particularly in a research institution remains the ideal. Schnaiberg (2005) wrote the following observation he made in his department of sociology about faculty mentoring and the faculty advising role:

> In my department, success of our students has been defined as them getting a tenure-track appointment at a major research university. Any deviation from this ideal-typical goal leaves faculty relatively uninterested in the student's graduate career (one of my former colleagues labeled all such students as "marginal," and stated publicly that faculty who chose to work with them were also "marginal"). Paradoxically, though, even with careful selection of highly talented cohorts of

181

students, this path is followed at most by 20 to 25% of those who attain their PhDs (p. 31).

Though only Professor Max specifically included writing a letter of recommendation for an advisee in his interview, a letter of recommendation from a faculty member, and it is most likely that a student's advisor or a member of their committee is in the best position to write a letter of recommendation, is a critical component of any new Ph. D. graduate in their search for an academic position (Noy & Ray, 2012; Youn, 2005). Obtaining an academic position is valuable for both the advisor and advisee. Specifically, Youn (2005) stated:

> In academic markets, institutional prestige is an important source of exchange. Both buyers and sellers of academic services attempt to maximize its value. Faculty mentorship and the prestige of the graduate training institution (two variables that are highly correlated) help to determine the location of initial employment and later career success in academia (p. 30).

The role of committee members. Another primary theme found in five of 18 (28%) interviewee descriptions of their advising practice was that doctoral committee members provide support and expertise in addition to the advisor. Maher, Ford, and Thompson (2004) found committee member involvement to be a factor in facilitating early versus late completers. Interaction with multiple faculty members is also supported by Girves and Wemmerus (1988) who found the number of faculty members with whom a student relates as a factor in doctoral degree progress.

The degree of involvement from the members of a student's committee will vary depending on each faculty member's expertise with the subject area and methodology as well as the relationship of the faculty member with the student's advisor (Bargar & Mayo-Chamberlain, 1983). This variability was expressed by Professor Emile in his description of the role of the committee in his advising approach. He stated that the committee members "may either be heavily involved or some of them may be heavily involved in terms of reading chapters and things or they may not be until the advisor and the student think they are ready for the defense."

Publication. Four of 18 (22%) interviewees described helping their advisees publish in their description of their advising approach. Professor Gary stated it simply as he described two primary components of being an advisor, "first is just to do recent research for one...two, get them published." Ten of the 25 advisors interviewed in the study Barnes and Austin (2009) conducted included "co-publishing with their advisees" (p. 307). Professor Alexis specifically discussed working with his advisees to co-author publications, "not just for the product of it but I think it's kind of a good collaborative experience."

Advisor choice. Three of 18 (17%) interviewees discussed the importance of the student choosing their advisor. Professor Emile explained that when he meets with students who are not his advisees:

> I try to insist on one thing that they're basically in control of...they really have to actively go out and meet professors and decide who would be best for their committee and who is best for their advisor and try to convince them of this.

The importance of a student actively choosing an advisor has been addressed in several of the studies reviewed in Chapter Two, including Golde and Dore (2001) who found, from their analysis of student survey comments in the 1999 Survey of Doctoral Education and Career Preparation, that a student's advisor was very important, and highlighted the following: "Overwhelmingly, students urge their peers to make a careful and thoughtful choice of dissertation advisor" (p. 35). Lovitts (2001), in interviews with 33 faculty members, found that,

> Students who work with advisors by mutual choice are more likely to get the advice and guidance they need to progress smoothly through their programs and into their careers, to be academically and socially integrated with their advisor, to be very satisfied with the relationship, and to complete the Ph.D. than students who have little or no say in the matter (p. 164).

However, Ferrer de Valero (2001) found that "changing advisors was considered as an impediment to succeed in graduate school" (p. 361).

Independent researcher. Three of 18 (17%) interviewees identified the student being independent or learning how to be an independent researcher in describing their advising approach. Of the two interviewees who did not describe the theme of guiding their advisee through the program, one (Professor Emile), described the primary theme of the role of committee members in his advising approach with secondary themes of "advisor choice" and "independent researcher." The other interviewee (Professor Alexis), described the primary theme of assisting his advisee with a career path with secondary themes of "publication" and "independent researcher." A third interviewee, Professor

184

Max, identified "independent researcher, and "advisor choice" as secondary themes with the primary theme of "guide through program." Professor Alexis provided a definition for the theme of "independent researcher." He shared that, as an advisor, he is

…helping them to become independent intellectuals and researchers. So, more about giving feedback and thinking through choices than actually giving absolute direction of what classes to take, or what your prelims should be about, or how to design your research for your dissertation.

The advising approach of helping a student become an independent researcher may be discipline-specific as addressed in a journal article about dissertation "supervision and the independent scholar," written by Burawoy (2005), a sociologist professor, about advising in the sociology disciplinary field:

Let me set the stage. I teach at Berkeley where the ethos has always been to encourage graduate students to develop their own projects independent of faculty research. We call it the "independent scholar" model as opposed to the "apprenticeship" model in which students work on, elaborate the research of their supervisor (p. 43).

Themes Characterizing Advisee Types

Primary and secondary themes were identified across interviewee responses that characterized each of the advisee Types One through Type Four. Themes were identified as primary if found in more than 25% of the interviews and secondary if found more than one and fewer than 25% of the interviewee descriptions of each advisee type. Each doctoral advisor was asked to identify four students (using a pseudonym), one of whom

185

represents each of the following four types, based on their assessment of degree completion likelihood:

- Type One: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation and did graduate.

- Type Two: An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation but did not graduate.

- Type Three: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph.D. program but did graduate.

- Type Four: An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph.D. program and did not graduate.

Table 10 indicates the primary and secondary themes by advisee type. The primary themes, by advisee type were:

- Type One advisees who were "focused, independent, self-motivated, or smart; had an "early advising start;" and, had an "academic career goal."

- Type Two advisees who had a "change of career goal;" "personal, family issues;" and, were "perfectionistic or smart."

Table 10

Themes Characterizing Advisee Types

Advisee Type	Primary Themes	Secondary Themes
Type One	Focused, independent, self-motivated, smart Early advising start Academic career goal	Accepting of criticism Dissertation topic related 　to advisor's research Effective use of committee
Type Two	Change of career goal Personal, family issues Perfectionistic or smart	Moved
Type Three	Extra advisor effort Poor academic research career fit Poor academic performance Not accepting of criticism, self-doubt or was absent	Family responsibility Fieldwork challenges
Type Four	Poor academic research career fit Poor academic performance Family responsibility	

- Type Three advisees who needed "extra advisor effort;" had a "poor academic research career fit;" "poor academic performance;" and, was struggling with "criticism, self-doubt, or was absent."

- Type Four advisees who had a "poor academic research career fit;" "poor academic performance;" and, "family responsibility."

The secondary themes identified by advisee type, were:

- Type One advisees who were "accepting of criticism; had a "dissertation topic related to advisor's research;" and, "effective use of committee."

- Type Two advisees who "moved."

- Type Three advisees who had "family responsibility;" and, "fieldwork challenges."

Theme of focused, independent, self-motivated, or smart. Sixteen of 18 (89%) interviewees included positive student characteristics in their descriptions of a Type One advisee who did well throughout the program and completed. Characteristics included in this theme were focused, independent, self-motivated, or smart.

Professor Auguste illustrated focus in this theme in his description of an advisee who, he stated, was, "more typical of the people" he's worked with who are "pretty focused and move through with very little delay or side tracking." This description in comparison to how Professor Jurgen described a Type Four advisee who struggled and did not finish: "He started on a thesis and then just basically drifted away. I think he's finally giving up hope of ever getting it…he had tremendous promise…he just got interested in other things actually."

Professor Woodrow illustrated his advisee working independently when he stated, "I came to understand that…the best thing I could do for the student was to basically stay out of his way and provide simple guidance when necessary.

Professor Ruth emphasized focus and motivation in her description of the students she has advised that fit the Type One student who does well throughout the program. She described them as "well-prepared and well-organized, and very focused on completion."

Professor Karl shared that his experience with students who do well throughout the program is that they, "…tend to be very well-organized, tend to be self-directed, tend

to have a very clear idea as to what they want to do. They also tend to be academically and intellectually on the successful side."

Motivation is a prominent theme in the literature on doctoral student attrition (Berelson, 1960; Ferrer de Valero, 2001; Gardner, 2009; Maher, Ford, & Thompson, 2004; Wilson, 1965). Thirty-eight to 47% of graduate deans, graduate faculty, and recent degree recipients responded to Berelson's (1960) survey that "lack [of] proper motivation" (p. 169) was a reason for doctoral student attrition. Ferrer de Valero (2001) found three-quarters of the faculty identified student motivation as a strong factor for student success and 42% of students identified motivation as important.

Focused and independent can also be found in the literature. Slightly more than half (53%) of the faculty responding to Gardner's (2009) survey found a student "lacking in drive, focus, motivation, or initiative" (p. 104) as the reason a student did not complete their degree program. Lovitts (2001) found in interviews with 33 faculty members, that student characteristics identified by both high and low Ph. D. producing faculty members as those that contributed to a successful advising relationship were "very bright, independent, self-motivated, hardworking, dependable, talented, resourceful, mature, articulate, and had good social skills" (pp. 280-281).

Two of 11 (18%) interviewees also described a Type Two advisee as being smart. For example, Professor Jurgen identified an advisee who was doing well in the program and did not graduate who "is quite brilliant and in fact has a Ph. D. in physics."

Student intelligence, also described as "bright" or "smart" by the interviewees is also found in the literature. In Berelson's (1960) survey of graduate deans, graduate

189

faculty, and recent alumni, he found that most graduate faculty (64%) indicated "lack of intellectual ability to do the work" as the "most important" reason for attrition (p. 169). Wilson (1965) in a survey of graduate deans and faculty identified student attributes (ability, aptitude, and persistence) as a factor in lengthy time to degree. Golde (2005) identified students who were academically underprepared in comparison with their peers as a reason for attrition from a doctoral program. Schnaiberg (2005) addressed the student characteristics of "bright" and "dull" in the following way:

> Those who enroll in our graduate programs come with traits that might be quite uncorrelated with their training advancement. At the extreme, some of these traits may actually preclude their completing their doctoral work. I noted after my own graduation from the University of Michigan that the attrition of my cohort was bimodal: some of the brightest, as well as some of the dullest students dropped out. The brightest drop out in part because they become alienated from the tasks and roles of graduate school. The dullest also drop out more, because they are labeled as inadequate or failing (pp. 31-32).

Theme of early advising start. Eight of 18 (44%) interviewees stated they either recruited the student they exemplified as a Type One advisee, who successfully progressed from passing their preliminary examinations to graduation, or the student expressed at the start of their program that they wanted to work with them. Literature provides validation of this theme. Nerad and Cerny (1993) found that students who reported feeling treated as "junior colleagues" was a factor in degree completion. Ferrer de Valerio (2001) reported finding the relationship students had with faculty members in

190

their program had an impact on degree completion. Maher, Ford, and Thompson (2004) found that "faculty advisors often carefully choose among doctoral students to decide to whom and to what extent they are willing to provide meaningful mentoring relationship" (p. 387).

Theme of extra advisor effort. Eight of 18 (44%) interviewees described putting additional effort into helping their struggling advisees to finish the program (Type Three) and earn the Ph. D. These extra efforts were varied, from Professor Daniel's description of needing to keep "prodding" his advisee, to Professor Harriet's statement that it "…took kicking and screaming and pushing" and "a lot of time on multiple drafts" to get the dissertation done. Several interviewees discussed that they needed to be more directive. Professor Jane, for example, explained that "towards the end I was just like being extremely directive, like, you're going to have to do this and you're going to have to do [that]…."

Extra advisor effort is supported in the literature as an important component of degree completion. Golde (2000) found that "the amount of time spent, the quality of the interactions, and a sense of care from advisor to student were all important" (p. 220) in helping students progress in a doctoral degree program. Barnes and Austin's (2009) findings are similar to what many of the interviewee's described as extra effort. In particular, helping advisees find a topic or dataset for their dissertation, helping them "cope with failure" and "select committee members" (Barnes and Austin, 2009, P. 304).

Theme of academic research career goal and fit. More than 25% of interviewees described academic research career fit for each of the four advisee types.

In seven of the 18 (39%) interviewee descriptions of the Type One advisee who does well throughout the program and graduates, the advisee was described as having an academic research position as a goal, or as having achieved it. Professor Gary specifically identified students wanting "to go to the most prestigious university" as a difference between the successful and unsuccessful student.

Five of 11 (45%) interviewees, in their descriptions of a Type Two advisee who was doing well as they entered the final dissertation stage of the doctoral program, stated that a primary reason they did not complete was because they took a position that did not require a Ph. D. degree or they had a change of career goal. For example, Professor Paul stated that his advisee,

> …realized at some point that just temperamentally he was not well suited to the research career. He had a 9:00 to 5:00 job and found it difficult to deal with a very flexible academic schedule. And he found the process of putting together a research proposal to be stressful. And, so I think he made what I feel, is a really very mature decision, which is to understand what sort of career he would be happiest pursuing…before he got too far along.

Seven of the 18 (39%) interviewees included in their descriptions of a Type Three advisee who was struggling through the program but did graduate that the student either found out that an academic research career was not a fit for them after all, took a job that did not require a Ph. D. degree, or did not have a career goal that required a Ph. D. degree. Among the advisees described for this Type Three, one advisee's primary goal was teaching; one doubted her capability; a professor identified job market factors as a

reason for another; and, three advisees already had positions that did not require the Ph. D. degree. Professor Ruth compared the student she described as a Type Three advisee with other students she has advised. She stated, "Usually…they don't have a clear career goal because they do doubt themselves so much." Professor Karl described his experience with the Type Three students in general who "became disgruntled with the research process" and pursued jobs at a teaching college instead of a research university. In several examples, the student took a long time to complete the degree. Professor Daniel described an advisee who took four additional years to complete revisions the committee required him to make.

Among the Type Four advisees, seven of 12 (58%) interviewees stated that the advisee they identified as a student who struggled through the program and did not complete, either could not conceptualize a research question to focus on, had difficulty with the research itself, or wanted to teach and found a teaching position that did not require a Ph. D. degree. For example, Professor Harriet described an advisee who enjoyed teaching but "really never could put her focus on doing the research."

In some of the examples, the student knew they wanted to primarily teach. One question this leads to is why a student with a career goal of teaching and not doing research does not pursue a professional doctorate such as the Doctor of Education (EdD) instead of the Ph. D.? Awarding of the professional doctorate dates back to "1921, when Harvard University established the Doctor of Education (EdD)" (Kot & Hendel, 2012, p. 351). And although both the type and number of professional doctorates awarded in the United States expanded in the twentieth century, the prestige of the professional doctorate

193

(e.g., EdD) versus the research doctorate (Ph. D.) has been a discussion in the literature (Kot & Hendel, 2012).

Berelson (1960) addressed the problem of a multipurpose graduate program that provides training for the "academic man" and the "professional practitioner" (p. 88). The proposal to have multiple tracks and two doctoral degrees predated Berelson's work (and is currently in use) but was rejected at the time because:

> Everyone concerned – the universities, the colleges, and the students – would consider the new degree as a second-class one, with all its invidious distinctions. If the system had started this way, it might now seem natural to have two doctorates, separate but equal (if anything of this sort ever can be). As it is, the prestige of the Ph.D. has pre-empted the field" (p. 89).

The following statement in Berelson's questionnaire was agreed to by a majority of the recent Ph.D. recipients and, in similar proportions, of the graduate faculty in the humanities (70% agreed) and social sciences (55% agreed): "Doctoral work suffers because many students don't really want to be researchers but have to go through research programs in order to get the 'union badge' for college teaching" (Berelson, 1960, p. 92).

More recently, Kot and Hendel (2012) found that 13 of 32 professional doctorates examined in 32 selected universities in the United States were "recognized by the National Science Foundation (see Hoffer et al. 2006) as research doctorates, or equivalent to the PhD" (p. 352). This finding may suggest one reason why students who have a career goal to primarily teach attempt to achieve a Ph. D. degree because they find they cannot get away from research challenges by seeking a professional doctorate.

Theme of poor academic performance. Poor academic performance was a primary theme found in interviewee descriptions of a Type Three and a Type Four advisee. Seven of 18 (39%) interviewees identified poor academic performance in their description of Type Three advisees who struggled at the time they passed their preliminary examinations but did complete their degree program. Varied descriptions of poor academic performance were provided, ranging from a "weak student" who Professor Jane stated "should not have been let into the Ph. D. program," to "meandering" in Professor Max's description, to poor writing in Professor Gary's description, to "confident and workman-like" in Professor Woodrow's description.

Six of 12 (50%) interviewees identified some type of poor academic performance in their descriptions of a Type Four advisee who struggled through the program and did not finish. Two of the six advisees described here were counseled out of the program. All six were described as struggling early in their program, particularly with their preliminary, comprehensive examinations. However, as Professor Karl stated, whether or not a student who is struggling eventually succeeds is not always a clear decision:

> If the question isn't clear, if the literature and the research methods are not astute, then people will run into challenges and they get frustrated and give up at some point. And for a committee and an advisor it's not always a clear decision that it will be a successful story, or that it will stay sometimes as a gray zone. And maybe we tend to give the student the benefit of the doubt, and say, well, he's come this far, or she's come this far, and now we don't want to send this paper

back the third time, let's see how the data collection and the writing works, maybe that would go more smoothly than expected.

Theme of criticism, self-doubt, and absence. Six of 18 (33%) interviewees included in their descriptions of a Type Three advisee who struggled through the final stage of their doctoral program, that they had a tendency not to deal well with criticism or experienced self-doubt, often resulting in an absence before returning to complete the degree. Four of 18 (22%) interviewees discussed accepting criticism or feedback in their descriptions of an advisee who does well through the program and graduates.

Theme of family responsibility. Family responsibility was identified as a primary or secondary theme in three of the four advisee types. Four of 11 (36%) interviewees described personal or family issues as a reason a Type Two advisee who appeared to be doing well but did not complete. Family responsibility was identified as a secondary theme by four of 18 (22%) interviewees in their descriptions of a Type Three advisee who struggled through the program but did complete. Four of 12 (33%) interviewees included family responsibility in their descriptions of a Type Four advisee who struggled through the doctoral program and did not complete.

In the examples of the Type Two advisee, the interviewees described severe or numerous personal and family issues, often occurring together for a student. For example, the student Professor Alexis had in mind as an example of an advisee who was doing well but did not graduate, is one he described as "a student who had a tremendous number of family obligations and health issues to where it really just became impossible at the end for her to meet the graduate school deadlines, even with an extension or two."

196

Importance of the Study

This study is important in providing the faculty advisor perspective of the advising relationship with advisees they identified as fitting one or more of four types defined to explore the role of faculty advisor expectation and approach in the advising relationship. Although much is known about factors impacting doctoral student retention, including the importance of the faculty advisor, the reasons why students do not complete a dissertation after reaching ABD status remain less clearly understood. A focus on the doctoral advising relationship from the perspective of the advisor has provided further clarity and implications for continued research.

Implications for Practice

The implications for practice from the findings of this study may be helpful to faculty advisors, doctoral students, and department administrators. As a doctoral student herself, this researcher found the information from the faculty advisor interviews beneficial, particularly in the descriptions of students who struggled through the program and did graduate. The descriptions served as a reminder that the process of completing a dissertation is one that takes continued focus and persistence. It was comforting to hear that faculty advisors expected students who have passed their preliminary examinations to have the ability to complete the program, and most of them were willing to provide the guidance each advisee needed to do so. Writing a dissertation is inherently isolating. Though participation in departmental events and with other advisees is helpful, and to be encouraged, the data in this study can provide a beneficial view of doctoral student

advising across multiple advisors, even for the isolated student. It was helpful for this researcher to know other students experienced similar struggles.

Strategies found in this study that may assist students in persisting and completing their degree are to actively choose an advisor who is a fit (e.g., research area, level of guidance); find a topic that is relevant and personal and stay focused on topic; do not be afraid to ask for help or to appear incompetent; be clear about your career goal and what is needed to achieve it; and, use other resources, including committee member expertise, in addition to relying on your advisor.

For the faculty advisor there are several key findings that may provide guidance in particular for the advisee who is struggling to complete their doctoral program. The literature on advising practices, and many of the interviewee descriptions found in this study, provide the following suggestions for the interested advisor: Be attentive (Berelson, 1960); provide advisor and committee guidance (Knox, Schlosser, Pruitt, & Hill, 2006; Lovitts, 2001; Maher, Ford, & Thompson, 2004; Nettles & Millett, 2006; Wilson, 1965); spend time and relay a sense of care (Golde, 2000; Manathunga, 2005); treat advisees as a junior colleague (Girves & Wemmerus, 1988; Nerad & Cerny, 1993); be collaborative (Anderson & Swazey, 1998) and personal (Ferrer de Valero); and, help advisees find doable dissertation projects and cope with failure (Barnes & Austin, 2009).

Strategies found in this study that may assist students in persisting and completing include facilitating a transfer to another advisor if a student has "stalled out;" recognizing the importance of a topic that is relevant and personal to the student and to help them keep a focused narrative in their dissertation writing; discuss career goals early in the

198

advising relationship and what is needed to achieve them; and, connect advisee with other resources including committee member expertise.

For the department administrator, it may be illuminating or validating, to read of the extraordinary efforts some of the interviewees made to help their advisee(s) complete the program. For most faculty advisors, advising activities are conducted for internal rather than external reward. Providing departmental opportunities for orientation, writing, and research assistance can help provide more consistent and equitable resources to students and provide some relief to the advisor.

Limitations

This study had several limitations: selection bias; the use of a single interview as the method of data collection; and, self-reporting of the data.

Selection Bias

A purposeful sample was used for the study. Research subjects were self-selected from the population of tenured members of the graduate faculty from four U. S. doctorate-granting institutions with very high research activity located in the general Midwestern regions that had graduated more than 50 doctorate recipients in one or major fields of the social sciences. This type of sampling was important to have participants who "can purposefully inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2013, p. 156). The selection of the major field of social sciences was because these disciplinary areas have consistently demonstrated attrition rates that lie between the higher rates that have been found in the field of humanities and the lower rates in the natural (laboratory) sciences fields (Bowen &

Rudenstine, 1992; Ehrenberg, Jakubson, Groen, So, & Price, 2005). Restricting the field

to one major area also provided similarities in the expectations of completing the

dissertation requirement (e.g., independent research in the social sciences versus team

projects in lab sciences) and relationship with an advisor (e.g., work in collaboration with

advisor's funded research more typical in laboratory sciences versus independent

research more typical in the social sciences). However, restricting the sample population

in combination with the low response rate, while providing the opportunity to explore the

research question with experienced faculty advisors in these settings, also limited the

usefulness of the findings to other settings. It is hoped that the use of rich thick

description in reporting the results of this study was sufficient to provide the opportunity

for readers to transfer this study's findings to other settings (Creswell, 2013).

Data Collection Method

A single interview of approximately 60-minutes over the telephone was the only

data collection method used for this study. The researcher was not experienced with

interviewing and in one case an interviewer was not reminded to answer a question,

resulting in a non-response to a question on advising approach. The 60-minute length of

time for the interview was adequate time for all interviewees to answer the pre-

formulated set of questions but did not provide the type of "prolonged engagement in the

field" that helps to establish credibility to the findings In addition, utilizing only the

single interview with no other data sources (e.g., student records) provided no

"triangulation of the data" that would have assisted in validation of the data (Creswell,

2013, p. 246).

Self-reported Data

Interviewees were asked to remember their experiences with four types of advisees who had either completed the program or had withdrawn from the program. There was no additional external validation of the specific circumstances or outcomes of the student examples provided. Validation, rather, came in the form of "face validation" where through thick description the reader may be able to recognize the experience that was shared (Creswell, 2013, p. 247). Even so, memory is selective and can be influenced through knowledge of the outcome.

Areas for Future Research

Two specific areas for future research are suggested that could build on the finding of this study. It is recommended to maintain a semi-structured interview method for data collection with open-ended questions and to add questions that provide data on faculty and student demographics (i.e., gender and ethnicity) for exploration of potential differences and to interview faculty advisors from additional disciplinary fields to explore similarities and differences across disciplines. It is also recommended to add to the data analysis institutional records on size (of institution and department); departmental resources (e.g., orientation provided to students or faculty; writing workshops); and, information to explore the norms of professional development across institutions, departments, and disciplines.

Conclusion

The research question for this study was: How do faculty assessments of degree completion likelihood shape their advising relationships with doctoral students? The purpose of the study was to explore with experienced doctoral advisors the differential approaches they have taken with four categories of advisees based on their assessment of likelihood of degree completion at the time the advisee entered the final stage of her/his Ph. D. program (ABD). Overall, the answer to the research question is that a diversity of themes was found that characterized each of the four advisee types and differentially shaped the advising relationship.

The findings from interviewee responses to the first two questions designed to explore their typical approach to advising showed that 56% of interviewees described an advising style that varied depending on the student advisee's ability or preference. The remaining 44% described an advising style that was similar across advisees, most often including regularly held meetings and consistently providing feedback. Most (12) of the interviewees described their advising style as different from what they experienced from their Ph. D. advisor. All but one of the 12 described their experience with their Ph. D. advisor as negative, using descriptive words such as, hands-off, absent, not helpful, difficult, and unsupportive. Five of the interviewees described their advising style as similar to what they experienced from their Ph. D. advisor. All but one of the five described their experience with their Ph. D. advisor as positive, using words such as, supportive, special, and having received considerable feedback. One interviewee did not answer this question.

A diversity of themes was found that characterized each of the four advisee types. The advising relationship with the Type One advisee who successfully passed their preliminary examinations to become ABD, progressed well through their program and graduated, was characterized by positive student attributes (focused, independent, self-motivated, and smart), an early advising start, and a clear academic goal. Some of the Type One advisees accepted criticism well, had a dissertation topic related to their advisor's research, and made effective use of committee members.

The advising relationship with the Type Two advisee, who also successfully passed their preliminary examinations and appeared to be progressing well through the program but did not graduate, was characterized by a change in career goal, personal or family issues, and a struggle with perfectionism. Some of the Type Two advisees were characterized as smart and as having moved.

The advising relationship with the Type Three advisee, who was struggling at the time they passed their preliminary examinations and became ABD but did complete, was shaped by multiple themes. Their advisor made extra efforts to help them graduate; they often struggled with whether an academic research career was a fit for them; they performed poorly in academic ways; and, struggled to accept criticism and manage self-doubt, which in some cases caused them to be absent for periods of time. For some of the advisees, family responsibility and fieldwork challenges contributed to their struggle to complete.

The advising relationship with the Type Four advisee, who struggled at the time of their preliminary examinations and did not complete the program, was also

characterized by a struggle with whether an academic research career was a fit for them; poor academic performance; and, family responsibility.

Themes were found that went across advisee type but shaped the advising relationship differently. Having a clear academic career goal assisted the Type One advisee to complete the program and move into an academic position. A change in career goal seemed to disrupt the Type Two advisee who was doing well through the program but eventually withdrew. For some students, described as an example of a Type Two advisee, leaving the program came about because they had obtained a job that did not require a Ph. D. degree. A poor academic research career fit characterized the Type Three and Type Four advisee equally. The Type Three advisee who struggled through the program and who also obtained a job that did not require a Ph. D. degree (similar to the Type Two advisee) did, however, find a way to complete their degree program although often taking a long time to do so. In the interviewee descriptions of the Type Four advisee who struggled through the program and did not complete, all were described as struggling early in their program, often prior to taking their preliminary examinations. Several of the Type Four advisees were counseled out of the program.

A principal point in the interview descriptions about the theme of the academic research career choice is not the students who are clear they are in training to be an academician in a research institution, it is the students who find they are not proficient in, or do not prefer to do, research. It is especially concerning when this conflict is not realized until the final dissertation phase of the doctoral program, contributing to lengthy

times to degree in the case of students who complete the program, and to withdrawal from the program for students who do not complete.

Poor academic performance was found to characterize both types of advisees who struggled through the program: the Type Three advisee who graduated and the Type Four advisee who withdrew. Accepting criticism was a secondary theme for the Type One advisee who did well through the program and graduated; whereas not accepting criticism, and struggling with self-doubt and absence, was a primary theme for the Type Three advisee who struggled through the program but did graduate. For some of the Type Three advisees, their time-to-degree was longer. Still they persevered, often only with the help of their advisor.

Although interviewees had some difficulty in identifying students they expected might not graduate, they had no difficulty distinguishing among advisees who seemed to be on a pathway of progressing to graduation. Most interviewees shared their story about the student who exemplified the Type One advisee with pride. One of the main findings of this study concerned those advisees seen as being "at risk" of non-completion. For this advisee type, many of the stories shared were conflicted with frustration. The descriptions of the advisor's "extra efforts," in some cases, extraordinary time and effort, contribute to the body of literature reviewed that falls into the category of multi-level (institutional, departmental, and individual) approaches that can be taken to propel doctoral students over the finishing line.

REFERENCES

Abedi, J. & Benkin, E. (1987). The effects of students' academic, financial, and
   demographic variables on time to the doctorate. *Research in Higher Education,
   27*(1), 3-14. doi:10.1007/BF00992302

Altbach, P. G., Berdahl, R. O., & Gumport, P. J. (1999). *American higher education in
   the twenty-first century: Social, political, and economic challenges.* Baltimore:
   The Johns Hopkins University Press.

Anderson, M. S. & Swazey, J. P. (1998). Reflections on the graduate student experience:
   An overview. *New Directions for Higher Education, 101*, 3-13.
   doi:10.1002he.10101

Austin, A. E. (2002). Creating a bridge to the future: Preparing new faculty to face
   changing expectations in a shifting context [Presidential Address]. *The Review of
   Higher Education, 26*(2), 119-144. doi:10.1353/rhe.2002.0031

Bair, C. R., & Haworth, J. G. (2004). Doctoral student attrition and persistence: A meta-
   synthesis of research. In J. C. Smart (ed.). *Higher Education: Handbook of
   Theory and Research, Vol. XIX*, (pp. 481-534). New York: Kluwer Academic
   Publishers: Springer Science-Business Media 2005.

Baird, L. L. (1993). Using Research and theoretical models of graduate student progress.
   New Directions for Institutional Research, 80, 3-12. doi:10.1002/ir.37019938003

Bargar, R. R., & Mayo-Chamberlain, J. (1983). Advisor and advisee issues in doctoral
   education. *The Journal of Higher Education, 54*(4), 407-432. Retrieved from
   http://www.jstor.org/stable/1981905

Barnes, B. J. (2009). The nature of exemplary doctoral advisors' expectations and the

    ways they may influence doctoral persistence. *Journal of College Student*

    Retention: Research, Theory & Practice, 11(3), 323-343. doi:10.2190/CS.11.3.b

Barnes, B. J., & Austin, A. E. (2009). The role of doctoral advisors: A look at advising

    from the advisor's perspective. *Innovative Higher Education, 33*(5), 297-315.

    doi:10.1007/s10755-008-9084-x

Berelson, B. (1960). *Graduate education in the United States.* New York: McGraw-Hill

    Book Company, Inc.

Bowen, W., & Rudenstine, N. (1992). *In pursuit of the Ph. D.* Princeton, NJ: Princeton

    University Press.

Brubacher, J. S. & Rudy, W. (2003). *Higher education in transition: A history of*

    American colleges and universities (4th ed.). New Brunswick, NJ: Transaction.

Burawoy, M. (2005). Combat in the dissertation zone. *The American Sociologist, 36*(2),

    43-56. Retrieved from http://www.springer.com doi:10.1007/s12108-005-1004-2

Cook, M. M., & Swanson, A. (1978) The interaction of student and program variables for

    the purpose of developing a model for predicting graduation from graduate

    programs over a 10-year period. *Research in Higher Education, 8*(1), 83-91.

    doi:10.1007/BF00985858

Council of Graduate Schools Ph.D. Completion and Attrition: Analysis of Baseline

    Demographic Data from the Ph.D. Completion Project. *Executive Summary.* (pp.

    1-4). www.phdcompletion.org.

Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: techniques and procedures for developing grounded theory.* (3rd ed.). Los Angeles, California: Sage Publications.

doi:http://dx.doi.org.ezp3.lib.umn.edu/10.4135/9781452230153

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, California: Sage Publications.

Creswell, J. W., & Miller, D.L. (2000). Determining validity in qualitative inquiry. *Theory into Practice, 39*(3), 124-130. Retrieved from http://www.jstor.org.ezp3.lib.umn.edu/stable/1477543

Denecke, D. D., Frasier, H.S., & Redd, K.E. (2009). The council of graduate schools' PhD completion project. In R. G. Ehrenberg & C. V. Kuh (Eds.). *Doctoral Education and the Faculty of the Future* (pp. 35-52). Ithaca and London: Cornell University Press.

de Valero, Y. F. (2001). Departmental factors affecting time-to-degree and completion rates of doctoral students at one land-grant research institution. *The Journal of Higher Education, 72*(3), 341-367. Retrieved from http://www.jstor.org/stable/2649335 doi:10.2307/2649335

Ehrenberg, R. G., Jakubson, G. H., Groen, J., So, E., & Price, J. (2005). Inside the black box of doctoral education: What program characteristics influence doctoral students' attrition and graduation probabilities? Cornell University Working Papers (83), 1-28.. Retrieved from http://www.ilr.cornell.edu/cheri/working-papers/2005.

Ehrenberg, R. G., & Kuh, C. V. (Eds.) (2009). *Doctoral education and the faculty of the future.* Ithaca and London: Cornell University Press.

Ehrenberg, R. G., & Zhang, L. (2005). The changing nature of faculty employment. In R. L. Clark & J. Ma (Eds.), *Recruitment, retention and retirement in higher education: Building and managing the faculty of the future* (pp. 32-52). Northampton, MA: Edward Elgar.

Ehrenberg, R. G., Zuckerman, H., Groen, J. A., & Brucker, S. M. (2009). Changing the education of scholars: An introduction to the Andrew W. Mellon foundation's graduate education initiative. In R. G. Ehrenberg & C. V. Kuh (Eds.). *Doctoral education and the faculty of the future* (pp. 15-34). Ithaca and London: Cornell University Press.

Gardner, S. K. (2009). Student and faculty attributions of attrition in high and low-completing doctoral programs in the United States. *Higher Education, 58,* 97-112. doi:10.1007/s10734-008-9184-7

Girves, J. E., & Wemmerus, V. Developing models of graduate student degree progress. *The Journal of Higher Education, 59*(2), 163-189. Retrieved from http://www.jstor.org/stable/1981691

Golde, C. M. (2000). Should I stay or should I go? Student descriptions of the doctoral attrition process. *The Review of Higher Education, 23*(2), 19-227. Retrieved from http://muse.jhu.edu/journals/review_of_higher_education/v023/23.3golde.

Golde, C. M. (2005). The role of the department and discipline in doctoral student attrition: Lessons from four departments. *The Journal of Higher Education,*

76(6), 669-700. Retrieved from

http://www.jstor.org.ezp3.lib.umn.edu/stable/3838782

Golde, C. M., & Dore, T. M. (2001). *At cross purposes: What the experience of doctoral students reveal about doctoral education.* Philadelphia, Pew Charitable Trusts.

Golde, C. M., Walker, G. E., & Associates. (2006). *Envisioning the future of doctoral education: Preparing stewards of the discipline.* Carnegie Essays on the Doctorate. San Francisco: Jossey-Bass.

Gray, J. (1951). *The University of Minnesota: 1851-1951.* Minneapolis: The University of Minnesota Press.

Gumport, P. J. (1999). Graduate education and research: Interdependence and strain. In P.G. Altbach, R. O. Berdahl, & P. J. Gumport (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (pp. 396-426). Baltimore: The Johns Hopkins University Press.

Jussim, L. & Harber, K. D. (2005). Teacher expectations and self-fulfilling prophecies: Knowns and unknowns, resolved and unresolved controversies. *Personality and Social Psychology Review*, *9*(2), 131-155. doi:10.1207/s15327957pspr0902_3

Knox, S., Schlosser, L. Z., Pruitt, N. T., & Hill, C. E. (2006). A qualitative examination of graduate advising relationships: The advisor perspective. *The Counseling Psychologist, 34*(4), 489-518. doi:10.1177/0011000006290249

Kot, F. C., & Hendel, D. D. (2012). Emergence and growth of professional doctorates in the United States, United Kingdom, Canada and Australia: a comparative

analysis. *Studies in Higher Education, 37*(3), 345-364. Retrieved from

http://dx.doi.org/10.1080/03075079.2010.516356

Lovitts, B. E. (2001). *Leaving the ivory tower: The causes and consequences of departure from doctoral study*. Lanham, MD: Rowman & Littlefield Publishers.

Maher, M. A., Ford, M. E., & Thompson, C. M. (2004). Degree progress of women doctoral students: Factors that constrain, facilitate, and differentiate. *The Review of Higher Education, 27*(3), 385-408.

Manathunga, C. (2005). Early warning signs in postgraduate research education: a different approach to ensuring timely completions. *Teaching in Higher Education, 10*(2), 219-233. doi:10.1080/1356251042000337963

Merton, R. K. (1948). The self-fulfilling prophecy. *The Antioch Review, 8*(2), 193-210. Retrieved from http://www.jstor.org.ezp3.lib.umn.edu/stable/4609267 doi:10.2307/4609267

National Science Foundation, National Center for Science and Engineering Statistics. 2015. *Doctorate Recipients from U. S. Universities: 2014.* Special Report NSF 16-300. Arlington, VA. Retrieved from

http://www.nsf.gov/statistics/2016/nsf16300/

Nettles, M. T. & Millett, C. M. (2006). *Three magic letters: Getting to Ph. D.* Baltimore: The Johns Hopkins University Press.

Nerad, M. & Cerny, J. (1993). From facts to action: Expanding the graduate division's educational role. *New Directions for Institutional Research, 80*, 27-39. doi:10.1002/ir.37019938005

211

Noy, S., & Ray, R. (2012). Graduate students' perceptions of their advisors: Is there

systematic disadvantage in mentorship? *The Journal of Higher Education, 83*(6),

876-914. doi:10.1353/jhe.2012.0036

Orcher, L. T. (2005). *Conducting research: Social and behavioral science methods.*

Glendale, California: Pyrczak, Publishing.

Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal,

experiential perspective. *Qualitative Social Work, 1*(3), 261-283.

doi:10.1177/1473325002001003637

Redd, Kenneth E. (2007). *Data Sources: Trends in New Ph. D.s Entering Academe, 197*0

to 2005. Council of Graduate Schools. Retrieved from

http://cgsnet.org/ckfinder/userfiles/files/DataSources_2007_03.pdf

Saldana, J. (2013). *The coding manual for qualitative researchers.* (2nd ed.). Los Angeles:

Sage Publications.

Schnaiberg, A. (2005). Mentoring graduate students: Going beyond the formal role

structure. *The American Sociologist, 36*(2), 28-42. Retrieved from

http://www.springer.com doi:10.1007/s12108-005-1003-3

Smith, W. & Bender, T. (2008). *American higher education transformed, 1940-2005:*

Documenting the national discourse. Baltimore: The Johns Hopkins

University Press.

Spauding, L. S. & Rockinson-Szapkiw, A. J. (2012). Hearing their voices: Factors

doctoral candidates attribute to their persistence. *International Journal of*

Doctoral Studies, 7, 199-219. Retreived from

http://www.informingscience.org/Publications/1589

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent

research. *Review of Educational Research, 45*(1), 89-125. Retrieved from

http://www.jstor.org/stable/1170024

Tinto, V. (1993). *Leaving college*: *Rethinking the causes and cures of student attrition*

(2nd ed.). Chicago: University of Chicago Press.

University of Minnesota Graduate School web resource page, "Keys to SUCCESS for

Faculty Mentors & Graduate/Professional Students." University of Minnesota

Graduate School web page located at http://gradvising.umn.edu/keys-to-success-

for-students-and-mentors.html).

Walker, G. E., Golde, C. M., Jones, L., Bueschel, A. C., & Hutchins, P. (2008). *The*

formation of scholars: Rethinking doctoral education for the twenty-first century.

The Carnegie Foundation for the Advancement of Teaching. San Francisco:

Jossey-Bass.

Weerts, D. J. & Ronca, J. M. (2006). Examining Differences in State support for higher

education: A comparative study of State appropriations for research I universities.

The Journal of Higher Education, 77(6), 935-967. Retrieved from

http://www.jstor.org.ezp2.lib.umn.edu/stable/4122363

Wilson, K. M. (1965). *Of Time and the Doctorate: Report of an Inquiry into the Duration*

of Doctoral Study. Atlanta, GA: Southern Regional Education Board.

Youn, T. I. K. (2005). The academic job market is bad for all of us. *Academe, 91*(6),

    27-30. Retrieved from http://www.jstor.org/stable/40252860

Zhao, C-M., Golde, C. M., & McCormick, A. C. (2005). *More than a signature: How*

    advisor choice and advisor behavior affect doctoral student satisfaction. Paper

    prepared for the Conference of the American Educational Research Association.

    Montreal, Canada.

Information Sheet for Research

The Role of Faculty Expectations of Degree Completion on Doctoral Students' Success

You are invited to be in a research study of the role an advisor's expectation for degree completion, and the relationship that follows, plays in distinguishing between "all but dissertation" (ABD) students who finish a Ph. D. and ABD students who do not complete a Ph. D. You were selected as a possible participant because you are listed on your university's web site as a graduate faculty member in a social science field from one of four U. S. doctorate-granting institutions with very high research activity. Please read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Nan Kalke, doctoral candidate in Higher Education in the Department of Organizational Leadership, Policy, and Development at the University of Minnesota, Twin Cities campus.

Procedures:
If you agree to be in this study, you will be asked to do the following:
Participate in a telephone interview of approximately 60 minutes duration between September 1, and the end of October, 2015. The interview will be audio-taped.

Confidentiality:
The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only I will have access to the records. Tape recordings of the interview will be transcribed by a professional transcription service. Transcripts and the recording tapes will be kept on a secure University server. All materials, including interview recordings and transcripts, will be erased within two years.

Voluntary Nature of the Study:
Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any questions or withdraw at any time without affecting those relationships.

Contacts and Questions:
The researcher conducting this study is Nan Kalke. Darwin Hendel is her advisor. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact them at the University of Minnesota. Nan Kalke can be reached at 612-385-4231; nkalke@umn.edu. Dr. Hendel can be reached at 612-625-0129; hende001@umn.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

This is your copy of this information to keep for your records.

Appendix B

Recruitment E-mail to Participants

Dear Professor,

My name is Nan Kalke and I am a doctoral student in Higher Education in the Department of Organizational Leadership, Policy, and Development at the University of Minnesota. I am sending you this email message to invite you to participate in my research study designed to explore the role an advisor's expectation for degree completion, and the relationship that follows, plays in distinguishing between "all but dissertation" (ABD) students who finish a Ph. D. and ABD students who do not complete a Ph. D.

Although much is known about doctoral student attrition, most of the research done from the perspective of the advisor of doctoral students has been based on asking advisors about their perceptions of why students do not complete the Ph. D. and about their advising practices with doctoral students in general. Research is lacking on the variance in approach and frequency of contact an advisor conducts among different categories of advisees, including the degree completion expectation held by the advisor for a particular student. For example: Why does one advisee meet frequently with the advisor while another works independently over periods of time?

I hope you are willing to help me address this question.

Eligible participants are faculty members who meet the following criteria:
- Have been a tenure-track, tenured, or emeritus faculty member of your current institution for at least ten years;
- Have experience at your current institution as a doctoral student advisor
- Have advised some doctoral students who have completed and some who have not;
- Are not personally acquainted with me.

If you meet the above criteria, and are selected as a participant, I will request an interview with you of approximately 60 minutes in length sometime between September 1st and the end of October, 2015. The interview will be conducted remotely by telephone and will be audio recorded for transcription purposes. No personally identifying information about you or your institution will be included in any external report, including my dissertation. Participants will be identified only by a pseudonym selected to represent gender but not any other individual characteristics (i.e., culture, ethnicity, age). Institutions will be identified only by approximate size and the region of the country where they are located (e.g., Midwest, Northeast, etc.).

If you are interested in participating in this research study, please click on this LINK. You will be directed to an online survey and asked the following questions:

- Your name
- Your current institution
- Your current department
- Your current title (i.e., professor, associate professor, assistant professor)
- The number of years you have been a faculty member at the current institution
- Confirmation you have advised doctoral students, some who have completed, and some who have not.

Please let me know if you are interested by clicking on this LINK at your earliest convenience. If you have any questions, contact me at nkalke@umn.edu, or my advisor Dr. Darwin Hendel at hende001@umn.edu.

Thank you very much for considering this invitation,

Nan Kalke

Appendix C

Thank you, Request to Schedule Options

Thank you for agreeing to interview with me for my research study designed to explore the role an advisor's expectation for degree completion, and the relationship that follows, plays in distinguishing between "all but dissertation" (ABD) students who finish a Ph. D. and ABD students who do not complete a Ph.D.

Please reply to this email with the following information.
Available times to interview:
Option 1: Date _____   Time _____   Time Zone _____

Option 2: Date _____   Time _____   Time Zone _____

At the scheduled interview time, I will call you. What is the best number for me to call? Your phone number _____

Thank you again for agreeing to interview with me!
Nan Kalke

Appendix D

Interview Confirmation

Dear

Thank you for sending me your available times to schedule an interview!

I am confirming the following time for the interview:
DATE and TIME

I will call you at the following telephone number:
TELEPHONE NUMBER

I've attached an INFORMATION SHEET FOR RESEARCH that will explain interview procedures, confidentiality, voluntary nature of the study, and provide you with contacts. Please review this information and feel free to contact me with any questions.

Before the interview on DATE and TIME, it would be helpful if you can identify an advisee who represents each of the following four categories listed below. I'd like to ask you a few questions about each of them.

> **Type 1:** An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation and did graduate.
> **Type 2:** An advisee who upon passing their preliminary examinations appeared to be well on the way to completing their dissertation but did not graduate.
>
> **Type 3:** An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph.D. program but did graduate.
>
> **Type 4:** An advisee who upon passing their preliminary examinations appeared to be struggling with the final dissertation stage of the Ph.D. program and did not graduate.

Thank you again for agreeing to interview and let me know if you have any questions,
Nan Kalke

Appendix E

Interview Questions

1)   In general, how do you define your role as an advisor and what is your typical

approach to advising?

2)   In what ways is your typical practice and approach different from what you

experienced from your doctoral advisor?

3)   How would you characterize (or describe) the student you chose to represent the

following category (one of the four categories will be identified).

4)   How did it come to be that you were this person's advisor?

5)   Describe what you can recall about what formed your belief that the student was

or was not likely to complete within an expected period of time.

6)   Tell the story of your experience with this student.